Annual Report of the University, 1967-1968

University of New Mexico
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One of the tasks of a university president is to examine the strengths and weaknesses of his institution and, on the basis of this evaluation, recommend directions for the future course of the university. Accordingly, during the months since I took office on July 1, I have given a great deal of consideration to existing conditions and to the formulation of objectives which I believe will be of prime importance to the University of New Mexico in the years immediately ahead. There are four goals which I believe are basic—maintaining the autonomy and integrity of the University, enhancing and improving the quality of undergraduate education, expanding the opportunity for education to all in New Mexico, and taking advantage of our fortunate urban setting to help solve, through research, teaching and services, some of the most serious problems of our times—the problems of cities, large and small. These subjects serve as the focus for this, my first report as President of the University of New Mexico.
School of Business and Administrative Sciences.
DIFFERENT people are inclined to hold differing views of a university and the case of this university is no exception. Some people see a university as an ivory tower, withdrawn, isolated, out of touch with the so-called "real world." Others view it as a transmitter of the cultural heritage of our civilization, or as a center for the preparation of specialists in an increasingly complex society, or as a seat of research to add new knowledge to our stockpile. And there are those who see a university as being an institution for direct political and social action. There are yet other views of a university—as a corrupt agent of an immoral society which needs complete recasting; as a haven for advocates of disorder, disruption, and subversion; or as a beleaguered institution without adequate protective resources against internal and external assaults.

Actually, there are elements of justification in all of these viewpoints. Certainly a university does play a major role in the transmission of the cultural heritage of a society from generation to generation. Research has a highly important place in a university, as does the teaching of students in preparation for specialized careers. No human society is perfect and the institutions of a given society often reflect some of its evils, with universities being no exception.

But all of this is only to say that none of the views I have expressed is the complete or the correct view of a university in the latter part of the 20th century. Nor do all of the foregoing views, in sum, reflect an accurate picture of a university.

Today's university—and while I am speaking generically, I am talking about the University of New Mexico as well—is not a static institution. It is undergoing quite rapid change as it seeks to accommodate the various publics it serves, themselves caught up in swift-moving transition from old patterns into ways often not yet clearly defined.

A public institution of higher learning such as the University of New Mexico is a service organization. To each of its constituencies it supplies a special service—to students, to alumni, to the society which created it, to the community surrounding it, to the taxpayers who are its patrons. The services in which it deals are the accumulation, interpretation, transmission, and application of knowledge, which makes the university a very special kind of service institution.

Universities always have been engaged in this occupation. However, only since World War II has a university education become commonplace for a large segment of American society, and only recently have business, industry, and government come to make widespread use of the knowledge resources of the university. The increasingly complex technological nature of our society has placed a premium on available knowledge and also on the search for that which is new. Social
scientists are referring to the contemporary period as one of transition from an industrial economy to one they call “post-industrial” for lack of a better definition. The new economy, they say, places more emphasis on such nonproduct-oriented engagements as service-rendering, leisure-enjoying, and the like, and heightens the salience and power of knowledge. Thus, it follows that universities, as repositories of knowledge and knowledge-seekers and transmitters, become also repositories of power. This increases public awareness of and concern about the operation of universities. In turn, this concern is reflected by new and heavier pressures on the university in areas of overall control and program direction. One need only pick up the average daily newspaper or view a regular television newscast to realize that higher education is much in the public mind.

Since universities have never before been so widely and directly involved in human affairs through their teaching, research, and service functions, they are now being subjected to new stressful situations for which there exist few precedents for action. Many individual institutions are being forced to redefine both their goals and their methods for attainment of their goals.

Here at the University of New Mexico we have built what I believe is a solid premise for dealing with the new societal pressures. At the core is academic freedom—freedom of inquiry, freedom in instruction, freedom of expression. These are the essence of a university. Historian Richard Hofstadter of Columbia University puts it well when he says, in part: “The very possibility of civilized human discourse rests upon the willingness of people to consider that they may be mistaken... Similarly, the possibility of the modern free university rests upon the willingness of society to support and sustain institutions, part of whose business it is to examine, critically and without stint, the assumptions that prevail in that society... The delicate thing about the university is that it has a mixed character... The university does in fact perform certain mundane services of instruction and information to society—and there are those who think it should aspire to nothing more. It does in fact constitute a kind of free forum—and there are those who want to convert it primarily into a center of political action. But above these aspects of its existence stands its essential character as a center of free inquiry and criticism—a thing not to be sacrificed for anything else.”

Clearly we must protect the University against threats to its autonomy and integrity, whether these threats come from external or internal sources. This, however, does not mean that we cannot or should not be receptive to new ideas which might involve substantial departure from past procedure but which are not inimical to the essential character of the University.

Groups and individuals—whether they be students, alumni, legislators, parents, or others—who would have the university adopt a given point of view on matters of social concern do not discern that a university, as a corporate entity, cannot have an official position in these matters. If it did, its usefulness as critic and analyst to the community it serves would be obviated and it could become only an advocate.

The feature of the campus scene that currently attracts more controversy than any other seems to be social activism. To
say that it requires great self restraint on the part of university authorities to resist temptation to put a damper on activism when touchy issues are at stake is to put it mildly. When the headlines are large and black, when letters to the editor appear, when irate parents, legislators and even other faculty members and students phone or write in protest, when there seems to be a basis for suspecting that the social activists themselves are far from unhappy to have their identification with the university emphasized—the inclination is to look for a way to relieve the pressure. But the university that is determined to preserve its integrity must resist, and must take every precaution to assure that its judgments on faculty and students are conscientiously based on evaluation of performance in the academic world and not on the degree or form of participation by the professor or student as a citizen.

This University's position with regard to maintenance of its basic integrity is well-grounded in the policy statement adopted by its Regents in October, 1965, parts of which I quote:

"The Regents recognize and approve the right of free speech and honest expression of opinion on any subject by any member of the University community, whether the subject relates to on- or off-campus issues, but those who speak or act shall not do so in the name of the University or any of its organizations unless there has been specific authority to do so.

"Off-campus speakers, if approved in accordance with University regulations, should be allowed free expression of their views. Students with diverse points of view should permit such speakers to be heard without harrassment.

"The Regents note with approval the provision in the Student Standards Policy adopted by the Faculty in 1964 which calls for disciplinary action if a student acts in such a way as to affect adversely the University's educational function or disrupt community living on campus. No student has the right to interfere with others in their pursuit of an education. It is assumed that a student who so disregards the rights of others will be disciplined appropriately.

"The rights and responsibilities of each member of the University community, the same as every other citizen, are measured by the laws of our country. Respect for the law is fundamental and necessary for the preservation of our form of government. The Regents will take action to enforce this principle if it should be necessary."
Concentration in a lecture course.
Another major objective of the University of New Mexico, as I have noted, should be to strive to revitalize the teaching mission of the University, especially as it is directed at the liberal education of undergraduates. This does not imply a low priority for graduate and professional education or to University-based research programs. The University of New Mexico almost inevitably will develop further strength as a center for advanced study and research, and this is much to be desired. During the year a new position—that of Vice President for Research—was established, with responsibility for providing guidance and assistance for research efforts at the University, particularly sponsored research that has now reached a volume of over eight million dollars per year in obligated funds. Several new programs for advanced study have been launched or are definitely planned, in such diverse fields as philosophy, Romance languages, art history, political science, and public administration. Expansion along these lines will require careful planning and will make major demands on our resources, but is essential for further development of the university.

When we consider the problem of undergraduate teaching, we must recognize that it will take conscious sustained effort at this university, and at others of our size and larger, to identify and encourage teaching excellence at the undergraduate level, in view of a network of factors during the last two decades that have tended to de-emphasize and dilute undergraduate instruction.

Several changes in university life in America during the past twenty-five years have been adverse to undergraduate teaching. Some of these changes are of themselves highly commendable, such as the rising percentage of college-eligible youth actually attending college; the advance in status, prestige, and recognition of the academic profession; the heavier involvement of the faculty member in the local, national, and international scene; and the expanding support of the national government for a wide range of research and service activities.

Nevertheless, when these changes work to the serious disadvantage of the undergraduate student, as has been intimated by manifestations of disaffection on campuses across the country, it is high time that the student be rescued. And the rescue operation should be a joint one with the students themselves taking part, along with faculty members, university administrators, and government officials.

There are a number of possible courses of action. The most potent incentive that a college or university can offer to encourage teaching excellence is through its system of recognition for the achievements of faculty members. Specifically, this means decisions on initial appointments, promotions, salary increments, and tenure. Improvement on this front de-
mands different and better ways of ranking teaching performance, including a more systematic input of student judgment than either our faculty members or our students are accustomed to. Achieving this will take more adjustment on the part of the professors than the students, but it must come.

Other approaches to the problem include: encouragement of curricular innovation and the use of new teaching techniques, with organization arrangements and supporting services within the university to make this possible; maintenance of a faculty-student ratio that does not force additional overcrowding and the turnover of more of the task of undergraduate teaching to graduate assistants; further utilization of honors programs, residential colleges, and other devices for humanizing the multiversity; and provision from national government and foundation sources of non-categorical support to be used for rewarding teaching excellence as well as excellence in research.

I am pleased to say that at UNM, we have not been unaware of this problem, and have, in fact, made more headway than many other institutions. Four years ago the Greater UNM Fund established a $1,000 annual cash prize for excellence in teaching. The award is based on the judgment of both students and the faculty member's colleagues. The award is symbolic in that it acknowledges the importance of the ideal of good teaching and it is concrete in that it provides a tangible reward for at least one of the University's fine teachers.

This year a systematized experiment in student evaluation of professors was attempted during the first semester. Participation by teachers was entirely volun-

10 25 per cent of the faculty members took part. Questionnaires were carefully prepared by a student group, with assistance from interested faculty members, and were submitted to classes taught by the participating instructors. Results were published after the close of the fall semester. It seems likely that the program will be expanded in the future.

The faculty, as well as the students and administration, are concerned about improving the teaching of undergraduates. A University-wide faculty Committee on the Enhancement of the Educational Process is working in this direction as are groups of faculty members in the individual colleges, such as the College of Arts and Sciences with its Committee on the Improvement of Instruction. From their discussions with students, these groups have indicated that if the students had three wishes having to do with undergraduate instruction, they would be: a closer student-faculty relationship, a better advisement process, and curricular and course content changes to make their studies more relevant to the burning issues of our times.

On the faculty side, there is recognition of the need for more experimentation in teaching techniques, more innovation, better use of the new educational technology, and more explicit preparation in teaching techniques for those graduate students who will become college teachers and who now are teaching some lower level drill or quiz sections of classes.

It might be well to examine these objectives in some detail. First, there is the matter of closer ties between faculty and students. This is a most desirable purpose for both parties. One generation of stu-
In a student opera.

The Engineering Center, one of the newest buildings on campus, completed this year.
In a classroom of the School of Business and Administrative Sciences.
dents often is different from the next. It is well for a professor to know the "mind" of the generation he is dealing with, just as it is desirable that he know his students in a personal context. Students, of course, want to be known as individuals. And they feel that personal contact is not a one-way street—they believe that they have worthwhile ideas and perspectives to offer their teachers.

The two major factors militating against such a desirable objective are size and budgetary limitations. If money were available to lower the University's unusually high student-to-faculty ratio, problems created by the size of the student body probably would be largely alleviated. As it stands now, neither the State Board of Educational Finance nor the State Legislature has found it possible to reverse the policies which have brought us to a student-faculty ratio of 21.2:1, one of the highest in the nation. At most major public universities the ratio is around 16- or 17-to-one and at large private universities it is yet lower, about 11- or 12-to-one. To fulfill our teaching mission we have been forced to use the large lecture hall approach for many classes. Nevertheless, faculty and students are seeking effective avenues of closer personal communication outside the classroom as well as in the teaching situation.

An informal student-faculty association, formed about two years ago, has been conducting general discussion luncheons on a regular basis and this year expanded their plan with a series of informal talk-fests in the homes of faculty members. All of the groups meet on the same night but in several different homes, and much in the discussions to date has been concerned with more effective and stimulating teaching.

The student advisement arrangement at UNM is quite simple. Each student is assigned a faculty adviser, generally drawn from the field of his major program of studies. The adviser's function is to counsel the student about academic matters, primarily—class scheduling, courses that would be advantageous to him, and the like. The rub is that there are far more students than faculty advisers, with the result that one faculty member may have as many as five or six dozen advisees. Obviously, this limits the time he can spend with each student. Moreover, many students feel that they need or could use more time than their advisers have to give them for counseling about matters that do not directly pertain to their academic pursuits. Recognizing this to be true, the University has in the past few years steadily expanded its staff of professional counselors whose services are available to all students. Once again, budgetary limitations on staffing prevent this program from being as effective as it might be.

The Arts and Sciences Committee on the Improvement of Instruction, the Committee for the Enhancement of the Educational Process, and the Committee on the University—which has student, faculty, administrator and alumni members—all find the matter of advisement and counseling to be one of particular concern. The Committee on the Improvement of Instruction is making a special study of advisement procedures in the College of Arts and Sciences, the largest of the University's undergraduate degree-granting colleges. The findings will be most carefully studied.
An ad hoc committee on psychological services appointed earlier this year has prepared a survey questionnaire dealing with University services in counseling and advising for circulation among the entire student body later in this calendar year.

While it is impossible to anticipate the findings, it seems likely that some of the data may be valuable in designing future counseling-advising programs. Emotional and personal problems often present a career obstacle to the student. It is proper that the University should offer whatever help it can on a practical basis.

The matter of relevance of academic pursuits to issues of the moment is one that has been argued for generations on college and university campuses. The relevance of academic material, or its immediate application, to matters of social, political, or economic concern is not always readily discernible. At times the relationship between the two is indirect. Sometimes it requires a different perspective from that of a student for the relevance of college studies to "life" to become recognizable. Beyond that, some of the problems of our times lie in a territory as yet largely unexplored by competent scholars who could develop a solid teaching base. To help overcome this deficit, researchers and teachers here and at other universities are conducting studies and carrying out experimental programs seeking new ways to apply knowledge, to make it relevant. The College of Education is deeply involved in several such programs, especially those having to do with minority groups—programs dealing with language gaps and cultural differences.

Courses in the law as it applies to poor people, civil rights, and Indian tribal affairs have been introduced recently into the curriculum of the School of Law. Many departments, such as Journalism and Sociology, make it a regular practice to select as special lecturers persons from off-campus who have a direct contribution to make to the points under consideration in the classroom.

At the same time, all of the departments are well aware of the danger of concentrating on the present to the exclusion of the past and the future, the fallacy of stressing practice and obscuring theory. The university-trained graduate should not be just a technician. He should be a person with a broad range of understanding and a depth of perception which permits him to see distant goals and effects as well as those close at hand and to make decisions on the basis of what has gone before and what may lie ahead as well as on what is current.

Several innovations by the faculty in the interest of undergraduate education are in the advanced planning stage; many others are being widely discussed. One of the concrete proposals from the Committee on the Enhancement of the Educational Process is the creation of a new degree, Bachelor of University Studies. This degree, as the name implies, calls for no major and would permit the student a free range of studies in all colleges, if he chose. Although this is a rather wide departure from the traditional, it is one way of offering an additional option to the student who has neither need for nor interest in the specialization usually associated with a degree program. The proposal is being considered by the faculty as a whole.

Another promising innovation initiated by the faculty this year is a University-
In an engineering laboratory.

In the Associated Students Bookstore.
In Zimmerman Library.

In an architecture classroom.

In the Counseling Center.
wide day of self-study to be held later this spring. Group discussions, talks, seminars, informal meetings—all involving students, faculty, members of the administration, and others—will be held throughout the campus, concentrating on the teaching-learning process at UNM. It is hoped that from this institutional introspection may come some fresh insights into the needs of undergraduate education and that these may be found useful in strengthening the teaching mission.

A number of departments already have begun sharpening the teaching skills of graduate students employed as instructors in undergraduate drill sections or laboratories. The Department of Psychology, for example, this year introduced a seminar in teaching techniques for its graduate teaching assistants. These students benefit from the counsel of experienced professors in basic teaching skills and are given the opportunity to develop their own philosophies of learning and teaching, necessary tools for their work here and later as teachers at other colleges and universities.

The University is making some use of closed circuit television for lectures and for introducing special materials into the classrooms. In biology, as an example, a microscope may be interconnected with a television closed circuit so that the slide may be magnified and displayed to the class on a TV screen. Two complete courses in Electrical Engineering and one in Sociology are available on video tape. The electrical engineering lectures are played several times a day at stipulated times in a specially equipped room, enabling students to bring their notes up to date, go over points that may not have
been clear to them the first time around, or make up a class that they might have missed. Other innovative uses of the new educational media will be introduced in the months ahead.

New vistas for undergraduate as well as graduate students were opened this year with the establishment in Quito, Ecuador, of the UNM Andean Study and Research Center. Through the Center, students get a valuable introduction to a different culture and have the advantage of studying subjects relating to Hispanic America in a Latin American setting. Students may take classes at Ecuadorian universities in Quito in addition to courses offered at the Center.

The University of New Mexico has evidenced concern for undergraduate education in another important area by opening this year in Gallup its first two-year branch. The Gallup branch, offering core courses that will permit the students to transfer to the main campus at the end of two years of study, if they wish, opened with a full-time equivalent enrollment of about 75 students. Since most of the students are carrying only part-time course loads, the total enrollment stands at 135. The course structure at present is geared for students interested in academic degree programs. However, we are studying the possibility of implementing a technical curriculum to help meet an important educational demand.

While the Gallup school is the only UNM branch, we are exploring—together with interested persons from the region—the feasibility of establishing one or more branches in northern New Mexico in the Los Alamos-Espanola-Santa Fe area. A survey, to be completed later this spring, will investigate the possibility of interrelated academic-technical programs which will permit students who have no clear-cut career choices when they enter to move easily to one or the other at a later time.

The branch college law limits such programs to the first two years of education beyond high school. The branches are designed to bring the first years of a university education to young men and women living at home, enabling many students to attend college who otherwise might not be able to do so.

There is a strong possibility that a junior college of some type may be established in Bernalillo County. The proposal has had the support of the University from the beginning. Many students who, for a variety of reasons, do not do well in their freshman year in a university setting and have to drop out, often are able to do much better in a two-year college, especially one which offers them alternatives to a straight academic degree program. Other students, lacking confidence in their scholastic abilities, have a chance to prove their competence under less competitive conditions in a junior college, and can go on to complete their degrees by transferring to a university in their junior year.

There are several options for the organization of a two-year college in Albuquerque. One would be to place it under the aegis of the University with provisions for cross-transfer between academic and technical curricula. Similar programs at other major universities have been operating successfully for many years.

In any event, a properly accredited junior college, under whatever plan of organization is deemed best by the community, will have the support of the
University of New Mexico as part of our commitment to students at the undergraduate level.

The programs I have reviewed as examples of this commitment do not answer all of the questions or solve all of the problems. But they do represent some steps in the direction we should be traveling during the years ahead.
In a Tolatchi, N.M. classroom where UNM-prepared materials are in use.
expanding educational opportunity

Providing more college opportunity for students from disadvantaged backgrounds and minority population groups has been the focus nationally of much discussion and no little action during recent years. Much of the concern has centered on the nation’s Negro population, the largest single minority group. Our situation in New Mexico is somewhat different, but it presents unique problems and, at the same time, exceptional opportunities to build upon a history of ethnic tolerance and cultural interpretation.

The University can contribute directly and indirectly to the equalization of educational opportunity. Its first obligation, of course, is to see that admission to and advancement in the University itself continue to be without taint of discrimination. We have the further obligation to provide educational enrichment programs for those whose high school experience puts them at a competitive disadvantage academically. Less directly, the University of New Mexico can prepare teachers for classroom situations where there are cultural differences among students and where English is not the native language of many of the youngsters. In this latter area, since we must also continue teacher preparation for the schools of the majority of the population, new ventures require “new” money—funds in addition to those allocated for established, on-going courses. The primary source of money for these innovative and experimental programs is the federal government.

With federal funding, the University has been able to undertake a diversity of programs for both teacher candidates and in-service teachers. One of these utilizes U.S. Job Corps Centers in Albuquerque and Mountainair, N.M., to give student teachers an insight into some of the problems associated with teaching students who have not been able to adjust to and learn in the usual school setting. Student teachers in this program spend most of their time for an entire academic year in the Job Corps classrooms and counseling offices, supplementing this experience with evening and weekend seminars to satisfy methodology requirements for certification. What they learn should stand them in good stead as teachers in ghetto schools where instructors with a special understanding of the social and environmental problems are desperately needed.

Next year a newly funded program will permit UNM to train 28 teachers to conduct their classes in both English and Spanish and to teach English as a second language. It is hoped that the Bilingual Education Institute will be continued in future years.

Another new program calls for the College of Education to administer a federal project to enhance the education of minority groups in New Mexico schools. This applies especially to Spanish-speaking stu-
ents. University specialists work with the schools to develop curricula and teaching materials for the minority group students. A somewhat similar venture involving social studies materials for Navajo students already is well-developed in the College of Education. New curricular materials developed in the project are being field tested in Bureau of Indian Affairs schools in the Navajo Reservation this year.

A college enrichment program, working directly with students, is now in the developmental stage and will become operative with the start of the next academic year. It will provide 45 high school graduates from poverty backgrounds in New Mexico with an intensive educational experience in the course of three successive summer sessions in order to help them gain the skills and attitudes necessary for graduate-level education. Students will be selected from all ethnic heritages. The program is designed for students who need financial, motivational, and academic aid, but who have the potential for academic success.

The School of Law is in its third year of a program designed to pave the way to legal careers for American Indians, a program already successful enough to have been chosen as a model for similar undertakings for other minority groups in law schools at Harvard University, the University of California at Los Angeles, the University of Denver, and Emory University. The UNM program brings to campus each summer Indians who have the requisite academic background and who aspire to a law career. They are given special work in preparation for entering law school and then, in the fall, may enroll in the UNM School of Law or at other schools. This fall, five were enrolled at UNM and seven at four other universities.

While its major thrust is in the area of services, the Indian Community Action Project offers the opportunity of undergraduate and graduate education to its Indian staff members at UNM.

The new Andean Study and Research Center has a special value for our Spanish-speaking students. Their experience at the Quito Center, coupled with their native language ability, will open many doors to international careers in fields such as education, diplomacy, journalism, and technical and service posts in industry and government. One of the requirements for students attending the Andean Center is a degree of fluency in Spanish, a condition readily met by young men and women who have grown up speaking both Spanish and English.

The programs I have mentioned here are a strong beginning. The University should continue to seek new and better ways to bring the benefits of education to all New Mexicans, regardless of income, race, creed, or ethnic background. The ideal of public education in a democratic society demands no less.
In UNM’s legal education program for American Indians.

In Head Start, one of the constituents of UNM’s Indian Community Action Program.

In an Albuquerque school where UNM students teach
New this year—the two-building complex housing the Institute for Social Research and Development and the School of Business and Administrative Sciences
The final basic objective that I listed was the full use of our resources and location in service to the urban community that surrounds us and to cities throughout the state. Despite its wide open spaces and its colorful ranching and farming traditions, New Mexico is now a largely urbanized state. Approximately 70 per cent of the state's population lives in communities that are, by definition, cities. Rapid urbanization with its attendant pressures and problems is the sociological phenomenon chiefly characteristic of the second half of the 20th century. Abandoned farmsteads, wind whistling through the broken windows of unused schoolrooms, empty shells that once housed stores and other business ventures at country crossroads—these tell the story in New Mexico as elsewhere.

While the world has always known cities, it has never really understood them. In the main they have just grown in response, apparently, to certain laws of economics and human nature. It is of grave importance that we now begin in-depth studies of the dynamics of city life and development; that we learn as much as possible about all facets of urban living—social, political, economic, cultural. Only by doing this can we hope to find more than stop-gap solutions to the serious problems created by rapid and continuing urbanization. Attention has been focused on the almost overwhelming problems of the megalopolis, but smaller cities also are faced with knotty problems of finance, education, and community development. As the University of New Mexico develops as a center for urban studies, it should look to the needs and peculiarities of small urban communities as well as those of large metropolitan areas. Early planning has this end in view.

One of the most promising steps guaranteeing greater involvement by UNM in urban affairs was the recent selection of Albuquerque for inclusion in a pilot program of "Urban Observatories"—centers for research and services dealing with specific problems of particular cities. The University is a major participant in the program, together with the city and county government, the city public schools, and the University of Albuquerque. One of the important reasons for Albuquerque's selection by the National League of Cities as one of six urban centers for the project was the ability and willingness of the University to work cooperatively with the city and other agencies in the type of program outlined.

The University's Institute for Social Research and Development, established at the start of the current fiscal year, is designed to expand and coordinate all of our activities in problem-oriented research and developmental services in the field of the social sciences. The University has been involved in work of this nature for many years, but never before on a University-wide, coordinated basis. The Institute represents an additional commitment of the
University to the social and economic development of New Mexico, the Southwest, and the nation. Its services are not—nor are they intended to be—oriented solely to urban life. The function of ISRAD and its agencies is to provide a mechanism through which all of the University's talents may be brought to bear as needed and available on major societal problems.

The makeup of ISRAD at present incorporates a number of pre-existing and newly created research and service agencies.

The Bureau of Business Research, long offering valuable service to the state's business and industrial community, is part of the ISRAD group. In addition to its on-going publication activities and its Data Bank of New Mexico information, the Bureau has added a new service—Community Economic Education and Development. The aim of this program is to assist leaders in New Mexico communities to learn more about the processes and techniques of community development. The service is available on request and at this point two communities, Artesia and Taos, have made arrangements for Bureau staff members to work with them.

The Division of Government Research, another long-standing UNM service agency specializing in the publication of studies in government and politics at local, state, and national levels, is now an arm of ISRAD. So is the Technology Application Center, providing valuable services to state and regional industries. Under a cooperative agreement with the National Aeronautics and Space Administration, TAC supplies to private industry reports, analyses, and interpretations of scientific and technological developments unfolded by NASA-directed research. The Center also operates a national program specializing in the application of new technology to firms interested specifically in natural resources. TAC is one of six NASA-supported dissemination centers.

Other Institute agencies include the Center for Community Action Services, the College Enrichment Program for disadvantaged students, the Home Improvement Project, teaching fundamental building and home repair skills as well as basic education courses to school dropouts; the Indian Community Action Program, providing technical assistance and training in career and community development for Indian tribal groups in New Mexico and Arizona; the New Careers Program whose aim is to provide the training that will offer new career opportunities to persons now unemployed; and the Public Finance Research Program, a research and technical assistance program designed to analyze problems of public finance.

The Urban Observatory will be added to the ISRAD group. Other programs which have a potential value for New Mexico, such as a Center for the Study of Leisure Activities, are being considered. Undertakings of this nature generally are possible only if funding is available through special state appropriations or grants from outside sources such as the federal government or private foundations.

While ISRAD is a new organism providing diverse services in the area of societal problems, the University's extra-mural response to people's needs by no means ends there. Perhaps the greatest potential for the betterment of life in New Mexico is offered by the University's School of Medicine. As the School con-
In a meeting of the Regional Advisory Committee to the Program for Advanced Study in Public Science Policy and Administration.

continues to develop its continuing education programs for professionals in practice throughout the state, as the specialized abilities of its faculty members are put to use in referral cases, and as the New Mexico Regional Medical Program for Heart Disease, Cancer, Stroke and Related Diseases expands its capabilities, all New Mexicans will benefit from the availability of improved medical care. This, of course, is in addition to the School’s basic mission of educating new physicians and directing the training of interns and residents.

Only recently the School inaugurated a pilot program in Estancia which holds promise for isolated rural communities which are without physicians and which often have little hope of attracting a doctor as a permanent resident. A registered nurse was given six months of special training at the School to enable her to make critical observations of patients and deal with certain health problems under long distance supervision of physicians, in this case the School of Medicine faculty members. The nurse, whose office is in a medical clinic building in Estancia, has direct-line telephone connections with the medical school. Twice a week, members of the medical faculty travel to the clinic to provide additional supervision and consultation on more difficult problems. The service, hopefully, will meet a need in the community for on-the-spot care for lesser injuries and minor diseases which could develop into major problems if left unchecked. The plan has the approval of the New Mexico Medical Society and the New Mexico Health and Social Services Department, and the enthusiastic support of the community. It is being supported
with private funds from the Sears, Roebuck Foundation and federal monies through the Regional Medical Program.

Some of the other direct services of the School include pre-natal clinics in low income areas of Albuquerque, cancer-screening tests for Navajo women and other groups, and professional care at the new Bernalillo County Mental Health Center.

The School of Law also is deeply involved in service to the community. Its Institute of Public Law and Services has worked closely with the Legislative Council and the State Supreme Court on a number of matters. Law students are serving as assistants to the local magistrates' courts and operate as screening agents for recommendations that prisoners charged with lesser offenses be released from jail without bond pending court action. The School's Indian Law Center currently is working with the Navajo Tribe on a program to help revise the Navajo Tribal Court structure. The Center has conducted seminars and workshops on Indian civil rights legislation for government attorneys and is working with the Pueblo Indians on a study of their legal structure. The School each year conducts several seminars outside Albuquerque for practicing attorneys, in addition to a regular continuing education program on campus.

The programs in medicine and law are a strong blend of instruction, research, and service, as are many others on campus. A year ago the University launched a unique graduate program in Public Science Policy and Administration. Situated among several major scientific research and development installations, we are quite aware of both the need for well trained science administrators and the opportunity to call upon some of the nation's outstanding science executives for assistance. The Program for Advanced Study in Science Policy and Administration does both. The first year of the program has been devoted to defining curricular needs and gathering teaching materials. A Regional Advisory Committee composed of ranking executives of most of the Southwest's major scientific installations is making significant contributions to the program's development. It will be asked to continue its work as the program goes into its instructional phase next fall when 10 graduate fellowships will be awarded for a year's study. Additional fellowships will be awarded in succeeding years with the support of a program grant from the National Aeronautics and Space Administration.

The examples I have listed here give ample evidence, I believe, that the University of New Mexico feels strongly about its mission of service to New Mexico. However, as the University grows and as funding is made available much more can be done in areas in which UNM has a depth of talent, such as medical care, urban life, and economic development.

The objectives which I have set forth in this report are, I believe, in keeping with the overall University goal of excellence in teaching, research, and service. The objectives which I have set forth in this report are, I believe, in keeping with the overall University goal of excellence in teaching, research, and service. The University of New Mexico can become an effective resource for the solution of many of the state's problems. We hope that the Legislature and the people of New Mexico will recognize the importance of providing the financial support essential to this mission.

[Signature]
In Albuquerque's Child Guidance Clinic where medical students work with the professional staff.

At work in the Home Improvement Project.

In the Technology Application Center, nationwide distributor of NASA photographs.
Activities of the College of Arts and Sciences during the 1967-68 academic year will be summarized in this report under the following main headings:

I. Significant Events of the Year
II. Enrollment Statistics and Trends
III. Students
IV. Faculty Promotions, Separations, and Appointments
V. Excellence in Teaching
VI. Achievements in Research
VII. Recommendations for the Future

I. SIGNIFICANT EVENTS OF THE YEAR

Of many important developments in the College during 1967-68, the following are especially notable:

1. The department of mathematics and statistics was awarded a three-year NSF Science Development Grant, totaling $560,000, to support research and graduate instruction in "applicable" analysis. Five senior appointments for the fall of 1968, made possible by the grant, are listed below under additions to the staff. The new computing laboratory for students in the calculus sequence, partly funded by another substantial grant from the National Science Foundation, was set up in the fall of 1967. Student response during the first year of operation was very gratifying.

2. Joining the College faculty in September, 1968, as the University's second Distinguished Professor will be Dr. G. Robert Grice, an experimental psychologist now at the University of Illinois. The first such appointment was that of Dr. James Spuhler, Leslie Spier Professor of Anthropology, who came to UNM from the University of Michigan in September, 1967. Fuller details on Dr. Grice's career and interests are given under staff additions later in this report.
3. The department of philosophy admitted the first candidates under the new Ph. D. program approved by the Board of Educational Finance last summer. New doctoral programs in Political Science and Romance Languages were approved by the College faculty, the Graduate Committee, and the University faculty. The proposals have been transmitted to the BEF, which is expected to consider them in the fall of 1968.

4. The new biology building, providing almost 70,000 square feet of additional office, laboratory, research, and museum space, was occupied at the beginning of the academic year. Architectural design of a new chemistry building was completed and construction is scheduled to begin in the fall of 1968. Programs for a psychology building to be constructed in the science-engineering complex and a humanities classroom-office building on the Zimmerman Field site, most of which will be occupied by the department of modern and classical languages, were also finished and approved. They will be funded from the 1969 state bond issue and federal allocations.

5. Thanks to the interest of several members of the state legislature, the University's appropriation for 1968-69 includes a small line item toward the costs of establishing and operating the new Andean Research and Study Center in Quito, Ecuador. Some 40 to 50 UNM students are expected to enroll there next year, pursuing a regular course of study in history, Spanish, Latin American Studies, or other subjects. First director of the Center will be Dr. Sabine Ulibarri, department of modern languages, who will be in Quito for the full academic year. Other instructors will be Professor Karl Schwerin, anthropology, and Professor Robert Norris, a member of the history faculty at the University of Arizona. Much of the credit for creation of the Center is due to the tireless efforts of Professor Marshall Nason, director of the Language and Area Center for Latin America.

6. The Institute of Meteoritics, established in 1946, has been relatively inactive since the retirement in 1962 of its long-time director, Dr. Lincoln La Paz. A young meteoriticist,
Dr. James D. Wray, was engaged in full-time research in the Institute during 1966-67 but left at the end of the year to accept an appointment at Northwestern. He was not replaced in 1967-68, but in the course of the year it was decided to reorganize the Institute and place it under the administrative supervision of the department of geology. Dr. Klaus Keil, presently a research scientist at the NASA-Ames Research Center in California, will join the faculty next September as Professor of Geology and Director of the Institute. The museum collection, including the unique Norton County stony meteorite, will remain in the Physics building on Lomas Avenue until new space can be provided in Geology.

7. Late in the spring, after extended study and discussion, creation of a new Institute for Social Research and Development was approved by President-elect Ferrel Heady. Incorporating existing budgets and functions of the Bureau of Business Research, the Division of Government Research, and other research and service programs, the Institute will seek to coordinate and expand the University's work on state and regional problems of a socio-economic nature, including basic and applied research as well as developmental programs. In somewhat different form, the Institute should provide the vehicle for research and service activities in the social sciences which the departments of political science, economics, and sociology have been trying to establish for several years.

8. Three Danforth Visiting Committees reviewed Arts and Sciences departments during the year and submitted recommendations for improvement of their programs. The committee for economics was on campus for three days in October, the chemistry team made its visit February 29 to March 2, and the department of modern and classical languages was visited April 4-6.

9. The Museum of Anthropology received gift accessions valued at approximately $125,000, which will greatly enhance its already fine collections. Gifts totaling $50,000 toward
the cost of an addition to the building were received from private donors, with a similar amount promised for the near future. Almost 60,000 people visited the Museum during the year. Thirteen hundred Navajo school children were among those participating in 442 guided tours.

10. A five-year grant from the National Aeronautics and Space Administration permitted the establishment of a program in Public Science Policy and Administration, to be directed by Professor Albert H. Rosenthal of the department of political science. The first year will be devoted to planning and preparation of teaching materials, with the assistance of regional and national advisory committees. Fellowships for ten or twelve graduate students in 1969-70 will be funded under the grant. It is hoped that the project will facilitate the early development of an interdisciplinary master's degree program in public administration or public affairs.

11. The clinical program in speech therapy and audiology, which has been strengthened greatly in the last few years through federal training grants and cooperation between the Medical School and Professor Lloyd Lamb, audiologist in the department of speech, was further strengthened during 1967-68 by several developments. Supplementing previous support from the U.S. Office of Education, the Vocational Rehabilitation Administration, the Elks Club, and other agencies, a substantial new grant for training in medically related communication disorders was awarded to the department by the U.S. Public Health Service. These grants not only support traineeships but also permit additions to the professional and clerical staffs of the clinic. A large program for testing and training Indian schoolchildren with speech and hearing difficulties is currently under discussion with the Bureau of Indian Affairs. In September, 1968, Dr. Samuel Fletcher, chairman of the department of audiology-speech pathology at Utah State, will become director of the UNM Center for Speech Pathology and Audiology. He succeeds Fred M. Chreist, who founded the clinical program here and directed it with meager resources for many years. Dr. Chreist,
who will continue to teach in the program, asked to be relieved of his administrative duties at the end of the 1967-68 academic year.

II. ENROLLMENT STATISTICS AND TRENDS

After five years of very rapidly increasing enrollments, the University's rate of growth began to slow down in the fall of 1966. Student enrollments in the College showed a similar trend, as the following table indicates, though the rate of increase was still substantial, averaging approximately ten per cent annually. The number of students enrolled has doubled in the last five years.

Table I

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Sem. I</th>
<th>% Inc. over Prev. Year</th>
<th>Sem. II</th>
<th>% Inc. over Prev. Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962-63</td>
<td>1,059</td>
<td>15.1</td>
<td>1,136</td>
<td>18.0</td>
</tr>
<tr>
<td>1963-64</td>
<td>1,270</td>
<td>19.9</td>
<td>1,296</td>
<td>14.1</td>
</tr>
<tr>
<td>1964-65</td>
<td>1,438</td>
<td>13.2</td>
<td>1,532</td>
<td>18.2</td>
</tr>
<tr>
<td>1965-66</td>
<td>1,667</td>
<td>15.9</td>
<td>1,860</td>
<td>21.4</td>
</tr>
<tr>
<td>1966-67</td>
<td>1,993</td>
<td>19.5</td>
<td>2,032</td>
<td>9.2</td>
</tr>
<tr>
<td>1967-68</td>
<td>2,239</td>
<td>12.3</td>
<td>2,248</td>
<td>10.6</td>
</tr>
</tbody>
</table>

5-Year Total Increase: 1,180 (111.4%) 1,112 (97.9%)

The reduced rate of growth during both of the last two years is more evident in the number of student credit hours taught in the College and the University as a whole. The A&S percentage of the total has decreased slightly, but the College continues to produce approximately two-thirds of all student credit hours taught. The dean likes to remind the President from time to time that this is accomplished with only a little more than half of the University's instructional budget.
TABLE II
STUDENT CREDIT HOURS TAUGHT, UNM AND A&S

<table>
<thead>
<tr>
<th>YEAR</th>
<th>STUDENT CREDIT HOURS</th>
<th>A&amp;S PER CENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNM</td>
<td>A&amp;S</td>
</tr>
<tr>
<td>1962-63</td>
<td>194,543</td>
<td>132,646</td>
</tr>
<tr>
<td>1963-64</td>
<td>214,123</td>
<td>145,965</td>
</tr>
<tr>
<td>1964-65</td>
<td>248,253</td>
<td>168,552</td>
</tr>
<tr>
<td>1965-66</td>
<td>290,852</td>
<td>194,863</td>
</tr>
<tr>
<td>1966-67</td>
<td>317,490</td>
<td>208,845</td>
</tr>
<tr>
<td>1967-68</td>
<td>336,749</td>
<td>219,298</td>
</tr>
</tbody>
</table>

One-year Increase 19,259 10,453
6.1% 5.0%

Five-Year Increase 142,216 86,652
73.1% 65.3%

Perhaps the most significant measure of scale in an educational institution is the number of degrees awarded, since those figures represent the successful achievement of curricular objectives for both the College and its students. At the bachelor's, master's, and doctoral levels, the degrees awarded in June, 1968, considerably exceeded the numbers granted at any previous commencement.

TABLE III
DEGREES AWARDED, 1963-68 (A&S only)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>No. of Degrees</th>
<th>% Inc.</th>
<th>Master's (a)</th>
<th>Doctor's</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bachelor's</td>
<td></td>
<td>Advanced</td>
<td>Degrees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dates</td>
<td>%</td>
<td>Degrees</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prev. Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>230</td>
<td>3.1%</td>
<td>58</td>
<td>-22.2%</td>
<td>18</td>
</tr>
<tr>
<td>1964</td>
<td>301</td>
<td>30.9</td>
<td>76</td>
<td>31.0</td>
<td>14</td>
</tr>
<tr>
<td>1965</td>
<td>361</td>
<td>16.3</td>
<td>89</td>
<td>17.1</td>
<td>29</td>
</tr>
<tr>
<td>1966</td>
<td>396</td>
<td>12.3</td>
<td>112</td>
<td>25.8</td>
<td>20</td>
</tr>
<tr>
<td>1967</td>
<td>423</td>
<td>6.8</td>
<td>130</td>
<td>16.0</td>
<td>41</td>
</tr>
<tr>
<td>1968</td>
<td>511</td>
<td>20.8</td>
<td>171</td>
<td>31.5</td>
<td>47</td>
</tr>
</tbody>
</table>

5-Year Inc. 281 122.2 113 194.8 29 161.1 142 186.8

(a) These figures do not include Master of Arts in Teaching and Master of Education in Science degrees.
For purposes of comparison, Table IV shows the number of bachelor's and advanced degrees awarded by the College of Arts and Sciences, by the eight professional colleges or schools, and by the whole University in 1963 and 1968, as well as the percentage increases during the same period.

**TABLE IV**

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>BACHELOR'S DEGREES</th>
<th></th>
<th>ADVANCED DEGREES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1963</td>
<td>1968</td>
<td>% Inc.</td>
<td>1963</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>230</td>
<td>511</td>
<td>122.2</td>
<td>76</td>
</tr>
<tr>
<td>Other Colleges</td>
<td>461</td>
<td>802</td>
<td>74.0</td>
<td>240</td>
</tr>
<tr>
<td>UNM</td>
<td>691</td>
<td>1313</td>
<td>90.0</td>
<td>316</td>
</tr>
</tbody>
</table>

There are many variations of scale and rate of growth among the College's seventeen departments and twenty-five baccalaureate degree programs. As measured by percentage increase in student credit hours, the smallest department in the College, journalism, has experienced by far the highest rate of increase in the last five years. Apart from the department of speech, whose SCH production has grown by 91.3 per cent, the other programs which have increased most rapidly are all in the social sciences. In terms of degrees awarded, the departments of history, English, and biology produced the largest number of bachelor's degrees, mathematics and modern languages the most master's degrees, and English the most doctorates. These differences and tendencies are summarized in Tables V and VI on the following pages.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anth.</td>
<td>7,631</td>
<td>7,945</td>
<td>8,505</td>
<td>10,523</td>
<td>12,380</td>
<td>13,139</td>
<td>72.2</td>
</tr>
<tr>
<td>Biol.</td>
<td>12,102</td>
<td>13,553</td>
<td>15,195</td>
<td>17,122</td>
<td>17,816</td>
<td>18,665</td>
<td>54.2</td>
</tr>
<tr>
<td>Chem.</td>
<td>8,256</td>
<td>8,950</td>
<td>9,709</td>
<td>11,270</td>
<td>12,227</td>
<td>12,620</td>
<td>52.9</td>
</tr>
<tr>
<td>Econ.</td>
<td>5,203</td>
<td>5,346</td>
<td>5,986</td>
<td>7,482</td>
<td>8,347</td>
<td>9,609</td>
<td>84.7</td>
</tr>
<tr>
<td>Eng.</td>
<td>21,870</td>
<td>24,937</td>
<td>28,331</td>
<td>32,841</td>
<td>33,069</td>
<td>35,014</td>
<td>60.1</td>
</tr>
<tr>
<td>Geog.</td>
<td>2,188</td>
<td>2,833</td>
<td>2,474</td>
<td>2,829</td>
<td>3,165</td>
<td>4,017</td>
<td>83.6</td>
</tr>
<tr>
<td>Geol.</td>
<td>5,014</td>
<td>5,533</td>
<td>6,196</td>
<td>7,385</td>
<td>7,328</td>
<td>7,858</td>
<td>56.7</td>
</tr>
<tr>
<td>Hist.</td>
<td>12,092</td>
<td>13,774</td>
<td>16,884</td>
<td>19,612</td>
<td>21,672</td>
<td>23,058</td>
<td>90.7</td>
</tr>
<tr>
<td>Journ.</td>
<td>569</td>
<td>648</td>
<td>884</td>
<td>1,060</td>
<td>1,392</td>
<td>1,601</td>
<td>181.4</td>
</tr>
<tr>
<td>Math.</td>
<td>15,435</td>
<td>16,963</td>
<td>19,810</td>
<td>22,269</td>
<td>24,517</td>
<td>24,733</td>
<td>60.2</td>
</tr>
<tr>
<td>M&amp;CL</td>
<td>13,868</td>
<td>14,438</td>
<td>16,357</td>
<td>17,346</td>
<td>18,479</td>
<td>19,397</td>
<td>39.9</td>
</tr>
<tr>
<td>Phil.</td>
<td>3,027</td>
<td>3,243</td>
<td>3,638</td>
<td>4,215</td>
<td>4,589</td>
<td>5,198</td>
<td>71.7</td>
</tr>
<tr>
<td>Phys.</td>
<td>5,440</td>
<td>6,065</td>
<td>6,529</td>
<td>7,265</td>
<td>7,608</td>
<td>8,091</td>
<td>48.7</td>
</tr>
<tr>
<td>Pol.Sc.</td>
<td>4,583</td>
<td>5,061</td>
<td>6,991</td>
<td>8,232</td>
<td>8,436</td>
<td>7,892</td>
<td>72.2</td>
</tr>
<tr>
<td>Psych.</td>
<td>8,382</td>
<td>9,266</td>
<td>10,976</td>
<td>12,623</td>
<td>13,634</td>
<td>13,911</td>
<td>66.0</td>
</tr>
<tr>
<td>Socio.</td>
<td>3,589</td>
<td>3,933</td>
<td>5,702</td>
<td>6,995</td>
<td>8,171</td>
<td>6,843</td>
<td>90.7</td>
</tr>
<tr>
<td>Speech</td>
<td>3,397</td>
<td>3,477</td>
<td>4,385</td>
<td>5,761</td>
<td>6,015</td>
<td>6,497</td>
<td>91.3</td>
</tr>
<tr>
<td>Inter-Dept.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,155(a)</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>132,646</td>
<td>145,965</td>
<td>168,552</td>
<td>194,830</td>
<td>208,845</td>
<td>219,298</td>
<td>65.3</td>
</tr>
</tbody>
</table>

(a) This figure represents student credit hours earned in an experimental no-grade interdisciplinary course taught during Semester I, 1967-68. The course attracted many students who would ordinarily have enrolled in introductory courses in political science, sociology, and other departments.
TABLE VI
BACHELOR'S AND ADVANCED DEGREES AWARDED, 1966-68

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>B.A., B.S.</th>
<th>M.A., M.S.</th>
<th>Ph. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>29 21 37</td>
<td>2 7 9</td>
<td>- - 1</td>
</tr>
<tr>
<td>Biology</td>
<td>45 54 60</td>
<td>11 14 18</td>
<td>1 1 1</td>
</tr>
<tr>
<td>Chemistry</td>
<td>14 18 29</td>
<td>7 3 9</td>
<td>2 6 6</td>
</tr>
<tr>
<td>Comp. Lit.</td>
<td>1 1 -</td>
<td>1 1 0</td>
<td>- - -</td>
</tr>
<tr>
<td>Economics</td>
<td>10 16 18</td>
<td>1 4 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Econ-Philos.</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>English</td>
<td>56 49 61</td>
<td>21 22 18</td>
<td>3 7 12</td>
</tr>
<tr>
<td>Engl-Philos.</td>
<td>1 4 7</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>For. Studies</td>
<td>17 12 22</td>
<td>1 3 4</td>
<td>- - -</td>
</tr>
<tr>
<td>Geography</td>
<td>3 3 4</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Geology</td>
<td>8 4 10</td>
<td>2 7 9</td>
<td>3 4 2</td>
</tr>
<tr>
<td>History</td>
<td>43 48 72</td>
<td>15 11 19</td>
<td>6 6 3</td>
</tr>
<tr>
<td>Journalism</td>
<td>13 12 15</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Mathematics</td>
<td>30 29 24</td>
<td>11 3 22</td>
<td>1 5 6</td>
</tr>
<tr>
<td>M&amp;CL</td>
<td>34 40 37</td>
<td>14 14 21</td>
<td>- 3 -</td>
</tr>
<tr>
<td>Philosophy</td>
<td>7 10 10</td>
<td>4 4 4</td>
<td>- - -</td>
</tr>
<tr>
<td>Physics</td>
<td>8 8 13</td>
<td>8 10 7</td>
<td>2 4 7</td>
</tr>
<tr>
<td>Pol. Science</td>
<td>26 42 41</td>
<td>2 3 3</td>
<td>- - -</td>
</tr>
<tr>
<td>Psychology</td>
<td>47 40 40</td>
<td>4 9 8</td>
<td>0 2 6</td>
</tr>
<tr>
<td>Sociology</td>
<td>14 19 21</td>
<td>1 3 1</td>
<td>- - -</td>
</tr>
<tr>
<td>Speech</td>
<td>5 16 12</td>
<td>7 12 12</td>
<td>- - -</td>
</tr>
<tr>
<td>Medical Tech.*</td>
<td>2 - 2</td>
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<td>- - -</td>
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<tr>
<td>Art*</td>
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<td>- - -</td>
</tr>
<tr>
<td>American Studies**</td>
<td>- - -</td>
<td>1 2 1</td>
<td>- - -</td>
</tr>
<tr>
<td>Ibero-American Studies**</td>
<td>- - -</td>
<td>1 1 2</td>
<td>- - -</td>
</tr>
<tr>
<td>Home Economics*</td>
<td>- 3 1</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>M.A.T. (Spanish)</td>
<td>- - -</td>
<td>16 18 10</td>
<td>- - -</td>
</tr>
<tr>
<td>M. Ed. Science</td>
<td>- - -</td>
<td>30 18 20</td>
<td>- - -</td>
</tr>
</tbody>
</table>

| TOTALS | 414 451 540 | 158 166 201 | 20 41 47 |

*Not departments of the College of Arts and Sciences, but major or minor is allowed under certain conditions.

**Interdisciplinary programs at the doctoral level.
III. STUDENTS

Approximately one-eighth of all students enrolled in the College are normally on probation for unsatisfactory academic performance during the fall semester, with a somewhat smaller percentage in the spring. Figures for 1967-68 were not significantly different from those in earlier years, except that the number earning release from probation was higher than usual—a gratifying development which we hope will continue.

### TABLE VII

COMPARATIVE PROBATION AND SUSPENSION FIGURES

<table>
<thead>
<tr>
<th></th>
<th>SEMESTER I</th>
<th></th>
<th>SEMESTER I</th>
<th></th>
<th>SEMESTER I</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1965-66</td>
<td>1966-67</td>
<td>1967-68</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>No.  %</td>
<td>No.  %</td>
<td>No.  %</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Probation</td>
<td>207 12.5</td>
<td>262 13.1</td>
<td>283 12.6</td>
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</tr>
<tr>
<td>Suspension</td>
<td>37 2.2</td>
<td>48 2.4</td>
<td>44 2.0</td>
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</tr>
<tr>
<td>Released from</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Probation</td>
<td>32 1.3</td>
<td>50 1.7</td>
<td>68 3.0</td>
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<tr>
<td>SEMESTER II</td>
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<td></td>
</tr>
<tr>
<td>Probation</td>
<td>199 10.7</td>
<td>244 12.0</td>
<td>245 10.9</td>
<td></td>
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</tr>
<tr>
<td>Suspension</td>
<td>32 1.2</td>
<td>45 2.2</td>
<td>47 2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Released from</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probation</td>
<td>28 1.5</td>
<td>54 2.6</td>
<td>73 3.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The grade-point average of all A&S students during the year was slightly higher than in recent years: 2.628 in Semester I and 2.697 in Semester II, a mean indicating that in the middle range of academic achievement students earned more B's than C's.

Students on the dean's list constitute approximately the upper fifth in achievement. The number earning straight A grades, 39 in the fall semester, is the largest the College has ever had.
TABLE VIII

STUDENTS ON DEAN'S LIST

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semester I</td>
<td>Semester II</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>4.00</td>
<td>20</td>
<td>1.0</td>
</tr>
<tr>
<td>3.50-3.99</td>
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<td>5.0</td>
</tr>
<tr>
<td>3.00-3.49</td>
<td>260</td>
<td>13.0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>379</td>
<td>19.0</td>
</tr>
</tbody>
</table>

Among many noteworthy individual achievements by A&S students, Robert L. Mercer was awarded honorable mention in the twenty-eighth annual William L. Putnam Mathematical Competition, placing him among the top 15-20 seniors in the country. He and other UNM students participating in the competition were coached by Professor Abraham P. Hillman. Mr. Mercer earned his bachelor's degree with distinction and summa cum laude in mathematics, and he was also elected to both Phi Kappa Phi and Phi Beta Kappa.

Honors awarded to graduating seniors (and to some outstanding juniors) are summarized below.

TABLE IX

FINAL UNDERGRADUATE HONORS (A&S only)

<table>
<thead>
<tr>
<th>Honors in General Studies</th>
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</tr>
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<tbody>
<tr>
<td>Cum laude</td>
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<tr>
<td>Magna cum laude</td>
<td>10</td>
<td>17</td>
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<tr>
<td>Departmental Honors</td>
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<tr>
<td>Mathematics</td>
<td>1</td>
<td></td>
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<tr>
<td>Philosophy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Graduated with Distinction</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Elected to Phi Kappa Phi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>
Elected to Phi Beta Kappa
Juniors 13
Seniors 28 41

The first Tom L. Popejoy Dissertation Award, administered by the Graduate School, was won by James L. Dean of the department of English for his doctoral dissertation, "Howells' Travel Writing: Theory and Practice." It will be published by the UNM Press.

The second John F. Kennedy Prize Fellowship for outstanding research on the southwest was awarded to Theodore R. Reinhart of the department of anthropology for his extensive investigation "Late Archaic Cultures of the Middle Rio Grande Valley: a Study in the Process of Culture Change."

IV. FACULTY PROMOTIONS, SEPARATIONS, AND APPOINTMENTS

ADMINISTRATIVE CHANGES

The appointment of Richard F. Tomasson as chairman of the department of sociology was announced in last year's report. He earned his doctorate at the University of Pennsylvania and comes to New Mexico from the University of Illinois. He assumed his new duties in September, 1967.

Barrett Beer of the department of history, assistant dean of the College for the past two years, resigned from the faculty at the end of 1967-68 to accept an appointment at Kent State University in Ohio. He will be succeeded as assistant dean by Frederick B. Warner, Jr., assistant professor of English.

Three chairmen of A&S departments will be on leave during 1968-69 and will be replaced temporarily by colleagues serving as acting chairmen. Robert M. Duncan will replace R. R. MacCurdy in the department of modern and classical languages, Iven Bennett will assume the administrative responsibilities of Richard Murphy in geography, and Melbourne G. Evans will be acting chairman of the department of philosophy during the absence of Paul F. Schmidt.
Since Professor MacCurdy has resigned as chairman and will devote full-time to research and teaching after his return from sabbatical leave, an extensive search for a new permanent chairman of the department of modern and classical languages, effective in September, 1969, is already in progress.

At a meeting of the University faculty on March 12, 1968, a motion by the Policy Committee to establish five-year terms of office for department chairmen was tabled. It was opposed by Dean Trowbridge, who believes that strong leadership by able chairmen is essential in a developing university, and who knows how difficult it is to persuade fine teachers and first-class scholars to accept such responsibilities.

PROMOTIONS IN RANK

Associate Professor to Professor

Seven members of the college faculty were promoted to the highest academic rank, effective at the end of the 1967-68 academic year.

NED DAVISON (Modern Languages). A member of the UNM faculty since 1963, Professor Davison is one of the most prolific scholars on the UNM faculty, having made dozens of scholarly contributions to the study of Spanish literature. He has been especially active in the creation of programs to improve the teaching of Spanish at all levels in the State of New Mexico.

DONALD W. DUBOIS (Mathematics). Mr. Dubois has been a member of the UNM faculty since 1955. He earned all his degrees at the University of Oklahoma. He has been very active in recent years in programs to improve the quality of instruction at UNM.

LAMBERT H. KOOPMANS (Mathematics). A member of the UNM faculty since 1959, Professor Koopmans is chairman of the mathematics department undergraduate program, has published several scholarly articles, and has been a frequent guest lecturer at other universities throughout the United States.

GERALD D. NASH (History). A member of the UNM faculty since 1961, Professor Nash has published extensively, and has most recently edited two texts, one dealing with Franklin D. Roosevelt
and the other with Conservation in the United States. In April of the past year he was named as a professor of the month, and has been named recently as chairman of the membership committee of the Organization of American Historians.

ABRAHAM ROENZWEIG (Geology). A member of the UNM faculty since 1954, Professor Rosenzweig has published widely and served in various positions at UNM, including service as Assistant Dean of the Graduate School, Acting Dean of the Graduate School, consultant to the Sandia Corporation, and visiting staff member, Los Alamos Scientific Laboratory.

KATHERINE G. SIMONS (English). Professor Simons has been a member of the UNM faculty since 1939 and has served the University and the English department in a large and complex number of ways. In addition to establishing a fine reputation as teacher and scholar, she has served as President of the UNM chapter of Phi Beta Kappa, Chairman of the English Department Committee on Undergraduate Majors, Chairman of the Committee for the Improvement of Instruction of the College of Arts and Sciences, and Coordinator of the Career Scholar Program. She has been named frequently as Professor of the Month, and in 1963 was designated Professor of the Year.

SABINE R. ULIBARRI (Modern Languages). A member of the UNM faculty since 1952, Professor Ulibarri has published not only numerous scholarly articles but also his own poetry and prose fiction. He is currently working on an annotated anthology of Spanish poetry. Last year he was elected vice president of the American Association of Teachers of Spanish and Portuguese. In the past, he served for six years as the pro-secretary of the International Institute of Ibero-American Literature. He has served as the Director of the NDEA Language Institutes at UNM and at the University of Ecuador.

Assistant Professor to Associate Professor

Eight members of the faculty were promoted to the rank of associate professor as follows:
Assistant Professor to Associate Professor, continued

PHAM CHUNG (Economics)
CLIFFORD S. CRAWFORD (Biology)
PAUL B. DAVIS (English)
GARY C. HUFBAUER (Economics)
LLOYD E. LAMB (Speech)
KARL H. SCHWERIN (Anthropology)
HARRY P. STUMPF (Political Science)
LEE A. WOODWARD (Geology)

SEPARATIONS FROM THE FACULTY

The department of history and his many old friends throughout the faculty regretted the death on December 31, 1967, after a long illness, of Professor Emeritus FRANK D. REEVE.

Two members of the College faculty retired at the end of the 1967-68 academic year.

VICTOR V. SEARCY, instructor in chemistry, was for many years in charge of the freshman laboratory program in General Chemistry. She had been a member of the faculty since 1944.

ALBERT R. LOPES, professor of modern languages, came to the University in 1939 as an assistant professor. The program in Portuguese language and literature, which he first established at UNM, has become one of the largest in the country. Dr. Lopes also taught Italian and Spanish. He was on terminal sabbatical leave during 1967-68.

Fifteen faculty members of professorial rank resigned at the end of the year to accept appointments at other institutions:

BARRETT BEER, assistant professor of history and assistant dean of the College.
COLSTON CHANDLER, Assistant professor of physics.
CALVIN DEPASS, assistant professor of economics.
JACK L. DYER, assistant professor of sociology.
HAMLIN L. HILL, associate professor of English.
LAWRENCE LITWIN, assistant professor of political science.
SEPARATIONS FROM THE FACULTY, Continued

JORG MAYER, associate professor of mathematics  
HEINZ T. RENGLI, associate professor of mathematics  
JUDAH ROSENBBLATT, associate professor of mathematics  
JOAN SATO, assistant professor of economics  
ACYR SALGARELLO, assistant professor of modern languages.  
ANN K. STEINER, assistant professor of mathematics.  
EUGENE F. STEINER, associate professor of mathematics.  
ROBERT WEBER, assistant professor of journalism.  
HENRY E. WHITE, assistant professor of mathematics.

ADDITIONS TO THE FACULTY

Forty-three new assistant, associate, and full professors, appointed during the year, will be joining the A&S faculty in full-time positions in the fall of 1968. The department of mathematics and statistics had by far the heaviest and most difficult task in recruitment, with six replacements to hire and five new appointments under its Departmental Development Grant from the National Science Foundation. There were also six appointments in English, five in history, and from one to three each in other departments of the College.

Of eleven additions to the faculty at the rank of professor, the appointment of G. ROBERT GRICE as Distinguished Professor of Psychology was especially notable. A member of the faculty at the University of Illinois for the last twenty-one years, he spent the 1967-68 academic year in full-time research as an associate, University of Illinois Institute for Advanced Study. He earned his doctorate at Iowa. He has held a number of offices in national and regional professional organizations, including membership on the Council of Representatives, American Psychological Association, 1964, and election to the highly selective Society of Experimental Psychologists. He has published some thirty-five experimental and theoretical papers. His research
and teaching have centered on learning, learning theory, and motivation. In recent years he has been engaged in a theoretical effort, attempting to relate response evocation to stimulus intensity and other variables. The hope is to bridge some of the gaps between learning theory and the area of sensory psychophysics.

Other appointments at the rank of professor were the following:

DEBABRATA BASU (Mathematics). M.S. Decca University of Pakistan; Ph.D. University of California; formerly taught at University of Chicago; major interest classical statistical inference.

GERALD J. BOYLE (Economics). B.S. Colorado College; M.A. University of New Mexico; Ph. D. Syracuse University; formerly engaged as Chief, Fiscal Analysis Staff, U.S. Bureau of the Budget; his field of special interest is government finance.

ROBERT CREELEY (Visiting, English). B.A. Black Mountain College; M.A. University of New Mexico; Professor of Creative Writing, University of New York at Buffalo; recipient of Fulbright and Guggenheim Fellowships.

SAMUEL G. FLETCHER (Speech). B.S. Utah State University; M.S., Ph. D. University of Utah; recently on faculty of Utah State; area of special interest is scientific processes of speech and hearing.

GEORGE W. F. HALLGARTEN (Visiting, History). Ph. D. University of Munich; special interest is European history since the French Revolution.

EINAR HILLE (Visiting, Mathematics). Master of Philosophy, Licentiate of Philosophy, Doctor of Philosophy, all from the University of Stockholm.

LEON HOWARD (Visiting, English). B.A. Birmingham; M.A. University of Chicago; Ph. D. Johns Hopkins University; on leave from UCLA; special interest American Literature.
KLAUS KEIL (Geology; Director of the Institute of Meteoritics). M.S. Friedrich Schiller University; Ph. D. Johannes Gutenberg University; most recently a staff research scientist for NASA; major research interests are mineralogy, petrology, and geochemistry of meteorites.

CURTIS A MANCHESTER (Visiting, Geography). A.B., M.A., Ph.D. University of Michigan; on leave from the University of Hawaii; primary interests are geography of Eastern Asia, historical geography, and cultural geography.

HAROLD RIED (Speech). Professor Ried returns to his former position in the speech department after serving for several years as Director of the University Extension Division.

SHELEMYAHU ZACKS (Mathematics). B.A. Hebrew University; M. Sc. Israel Institute of Technology; Ph. D. Columbia University; formerly on faculty of Kansas State University; special interest is sequential procedures for fractional replications and statistical control and stochastic processes.

Additions to Faculty at rank of Associate Professor

LEWIS and SALLY BINFORD (Anthropology). Mr. Binford received his Ph. D. from the University of Michigan; Mrs. Binford received her Ph. D. from the University of Chicago.

HARJIT S. AHLUWALIA (Physics). B.S., M.Sc. Panjah (India); Ph. D. Gujarat University (India); formerly on faculty of Laboratoria de Fisica Cosmica, La Paz, Bolivia; special interest is cosmic ray physics.

RALPH E. DeMARR (Mathematics). B.S. University of Idaho; M.A. University of Washington State; Ph. D. University of Illinois; previously on the faculty of the University of Washington, special fields are functional analysis, matrix theory, differential equations, and probability theory.

ODD T. GRANDE (Sociology). Oslo University; Agricultural State College of Norway; M.S. Cornell University; most recently on faculty of Cornell University; area of special interest is the sociological aspect of agricultural cooperatives.

THEODORE GUINN (Mathematics). A.B. Fresno State College; Ph.D. UCLA; formerly on faculty of Michigan State University; special interests are calculus of variations and optimal control theory.
ARTHUR M. HANHARDT (Visiting, Political Science). B.A. University of Rochester; M.A. Colgate University; Ph. D. Northwestern University; on leave from the University of Oregon; special interest is comparative politics.

ROBERT SICKELS (Visiting, Political Science). B.A., M.A. University of Chicago; Ph. D. Johns Hopkins University; on leave from Purdue University; special interests are American government and public administration.

RODMAN SNEAD (Geography). Professor Snead formerly on faculty of Clark University; special interests are geomorphology and the geography of the Middle East.

BERNARD SPOLSKY (Joint appointment in Anthropology and Secondary Education). B.A., M.A. Victoria University of Wellington, New Zealand; Ph. D. University de Montreal; formerly on faculty of Indiana University; Professor Spolsky is to establish a program in the teaching of English as a second language; his major interests are psycholinguistics, sociolinguistics, and language testing.

New Assistant Professors

RICHARD C. ALLEN (Mathematics). B.S. Murray State University; M.A. University of Missouri; Ph. D. University of New Mexico.


SCOTT CATLETT (English). B.A., M.A. University of Texas, Ph. D. (in progress) University of Wisconsin.


SUSAN V. DEWITT (English). B.A. Whitman College; Ph. D. (in progress) University of Washington.

RICHARD N. ELLIS (History). B.A., M.A., Ph. D. University of Colorado.

JAMES D. FINLEY (Physics). B.S., B.A. University of Texas; Ph. D. University of California.


ARCHIE GIBSON (Mathematics). B.S., Ph. D. University of Colorado.
LIANG-SHIN HAHN (Mathematics). B.S., Ph. D. Stanford U.

RICHARD J. HARRIS (Psychology). B.S. University of Wisconsin; M.A., Ph. D. Stanford University.

ROBERT HERRON (Modern Languages). B.A. University of Richmond; M.A., Ph. D. University of Wisconsin.

ROBERT W. KERN (History). B.A. Antioch College; M.A., Ph.D. University of Chicago.

J. DAVID LIGON (Biology). B.S. University of Oklahoma; M.S. University of Florida; Ph. D. University of Michigan.

JOAQUIN O. LOUSTAUNAU (Mathematics). B.S., M.S. Oklahoma State University; Ph. D. University of Illinois.

GILBERT W. MERKX (Sociology). A.B. Harvard University; M.A. Yale University.

NOEL PUGACH (History). B.A. Brooklyn College; M.A., Ph. D. University of Wisconsin.

JANET ROEBUCK (History). B.A. University of Wales; Ph. D. University of London.

ELLEN SPOLSKY (English). B.A. McGill University; M.A., Ph. D. Indiana University.

ROBERT E. TAPSCOTT (Chemistry). B.S. University of Colorado; Ph. D. University of Illinois.


ANTHONY UGALDE (Sociology). B.A. University of Madrid; M.A. Stanford University.


EDWARD WALTERS (Chemistry). B.S. Pacific Lutheran University; Ph. D. University of Minnesota.
V. EXCELLENCE IN TEACHING

HONORS FOR GOOD TEACHING

TROY S. FLOYD, associate professor of history, was chosen for the third annual Outstanding Teacher Award, sponsored by the Alumni Association through the Greater UNM Fund. He has been teaching Latin American history at UNM since 1959. His excellence in scholarship as well as in teaching is attested by the publication this spring of his new book, The Anglo-Spanish Struggle for Mosquitia, listed under faculty research achievements later in this report.

PROFESSORS OF THE MONTH: SELECTED BY LAS CAMPANAS

Frank Hibben (Anthropology)
Pham Chung (Economics)
Roy Caton (Chemistry)
Gerald Nash (History)
James Thorson (English)

Mr. Thorson was also selected as the Professor of the Year.

COMMITTEE ON THE IMPROVEMENT OF INSTRUCTION

There were several changes in the membership of the A&S Committee on the Improvement of Instruction. Sidney Rosenblum (Psychology) took over the chairmanship from Katherine Simons (English), who had served during the first two years of the Committee's existence. Charles Beckel (Physics) and Patricia Sanborn (Philosophy) replaced Roy Caton (Chemistry) and Paul Sonnino (History). Continuing as members of the Committee are John M. Campbell (Anthropology), Donald Dubois (Mathematics), and Helen Ingram (Political Science).

Two Committee projects, begun earlier, were carried out during 1967-68:

1. Small Class Project

For obvious reasons of scale and funding, the Committee has recognized from the beginning that large lecture classes,
especially at the freshman level, are "here to stay." To offset the impersonality of large sections, to permit the use of essay examinations, student papers, and class discussion, and to provide an alternative for the minority of students who feel lost or short-changed in lecture classes, the Committee recommended, as a pilot project, that during the 1967-68 academic year five departments should offer one special enriched section each, limited to 25 students, of freshman courses normally taught in large sections. The small sections would be open to all students on a first-come, first-served basis. They would cover the same subject matter as the standard sections of the same course but would be more demanding for both students and teachers. They would be taught by regular instructors without the aid of graduate assistants.

By arrangement between department chairmen and the Dean of the College, the following small classes were offered during the year:

**Semester I**

- Anthropology 102. Development of Culture (taught by Professor Philip K. Bock).
- Chemistry 101. General Chemistry (Professor Milton Kahn).
- Political Science 100. American Government (Professor Albert H. Rosenthal).

As a supplement to the small-class project, Professor William Dabney also taught one quiz section in a large section of History of the United States, in which he was the lecturer.

**Semester II**

- Geology 101. Physical Geology (Professor Paul Fitzsimmons).
- History 102. Western Civilization (Professor Louis Tulga).
- Political Science 100. American Government (Professor Helen Ingram).

An informal evaluation of the pilot project, based in part on student questionnaires and reports by the instructors who taught small sections during the fall semester, was prepared by
Assistant Dean Beer in consultation with the participating teachers. His findings were as follows:

(a) With a few exceptions, student reaction to the experience was highly favorable. Over 90 per cent stated that the small class had improved the quality of their education and that the plan should be continued.

(b) Faculty opinion was mixed. The participants favored the project in general, but felt that the process of self-selection had not worked satisfactorily. The classes all filled early in the first day of registration, when only students admitted to degree-granting colleges could enroll; freshmen, for whom the project had been primarily designed, were automatically excluded as a result. (An attempt to correct this situation was made in the spring semester, when the departments involved were asked not to open the small sections until the second day of registration.) The instructors reported that some of the students were not sufficiently mature or self-reliant to take advantage of new educational opportunities requiring more activity and initiative on their part. Relatively few students came to special help sessions or asked for individual conferences with their instructors, though strongly encouraged to do so. Some believed that the small classes would be more effective if limited to students most capable of benefitting, rather than being open to anyone.

(c) The project was "a weak effort to deal with a massive problem." It was a noble experiment but too small in scope to have any significant impact on undergraduate instruction. The small sections were staffed from existing departmental faculties, without special funding, and any expansion would require a substantial financial outlay for staff additions. The value of the present token program is open to question, but with full administrative support the offering of a range of small sections in standard freshman courses, as an alternative to large lectures for some students, would undoubtedly improve the quality of undergraduate instruction at UNM.

2. Classroom facilities

In the spring of 1967, the Committee submitted a report on the results of a questionnaire circulated among the faculty by Professor Caton earlier in the year. Several minor recommendations, such as the removal of vending machines in Mitchell Hall and the elimination of motorcycle parking across the street, were passed on to the University administration by the Dean and were put
into effect. With the help of Assistant Dean Beer, the Committee also drew up a list, based on the questionnaire, of audiovisual equipment and other teaching aids to improve facilities in seven large classrooms widely used for freshman and sophomore courses. A total of 13,296 students was taught in these classrooms in the fall of 1967.

Items of equipment with a total cost of $10,133 were incorporated in the University's annual request for a grant under Title V1A of the Higher Education Act of 1965. The proposal was approved by the State Board in June, 1968, and the equipment will be purchased and installed in the fall of 1968.

The Committee on the Improvement of Instruction also initiated three new projects during the 1967-68 academic year, with a subcommittee chiefly responsible for each. Interim reports at the end of the year included the following information:

1. Subcommittee on the Drop-out Problem (Professors Beckel and Dubois)

In cooperation with the staff of University College, a study of students who drop out of UNM without earning a degree was begun, with special emphasis on the reasons for attrition. Of particular significance for the College of Arts and Sciences was a preliminary analysis of students entering the University as freshmen in the fall of 1963, which showed even among those who had successfully passed through University College and had been admitted and enrolled in A&S, the drop-out rate was approximately 30 per cent. The study will continue next year.

2. Subcommittee on Student Advisement and Counseling (Professors Ingram and Campbell)

A questionnaire on procedures for advisement of undergraduate majors in the College was sent to the chairmen of all A&S departments in February, 1968. The results showed a general satisfaction with existing arrangements, but with a variety of suggestions for improving the process. A by-product of the subcommittee's work was a preliminary study of the academic and social problems of Indian students on the campus.

3. Subcommittee on Dissemination of Information (Professors Rosenblum and Ingram)

The Committee has felt from its inception three years ago
that one of its most important contributions would be to provide a flow of information and promote continuing discussion throughout the College of ways to improve the quality of instruction. As a new device toward this end, the subcommittee initiated a printed news-letter-memorandum to the faculty, entitled CLUE (Comments on Learning in Undergraduate Education). The first two issues, distributed in March and May, 1968, were devoted to factual information and digests of recent research on the questions of class size and types of course examinations. The Committee hopes to bring out four issues of CLUE during 1968-69.

VI. ACHIEVEMENTS IN RESEARCH

Professor Archie J. Bahm of the department of philosophy was selected as the fifteenth annual Faculty Research Lecturer. His talk, "Philosophy - 1968," was delivered in May.

Achievements of the College faculty in research during the year are listed in detail in the departmental reports. Scholarly publications by members of the seventeen A&S departments totaled 18 books or monographs (an increase of seven over 1966-67), 194 articles or chapters in books (up 27), and 102 notes, abstracts, reviews, etc. (up 38). The most productive departments in article-length publications were mathematics with 33 papers, anthropology with 24, chemistry with 20, and psychology with 19. Members of the history and modern language faculties both produced five books or monographs during 1967-68.

New book-length scholarly publications (omitting revised editions and reprints) are listed below.

BOOKS PUBLISHED BY MEMBERS OF THE COLLEGE FACULTY, 1967-68


In those fields in which support for research is available from federal or other outside agencies, the number and size of grants and contracts provide a different measure of scholarly
activity. As usual, the department of physics and astronomy had by far the highest level of outside funding, with 27 grants totaling $675,885 during the year. Chemistry followed, with psychology's excellent and rapidly growing program not far behind. Economics and mathematics also received substantial support.

**OUTSIDE FUNDING OF RESEARCH, 1967-68**

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>NO. OF GRANTS</th>
<th>TOTAL REIMBURSEMENT</th>
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</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>7</td>
<td>$47,287</td>
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<tr>
<td>Biology</td>
<td>14</td>
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<tr>
<td>Chemistry</td>
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<tr>
<td>Economics</td>
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<tr>
<td>Geology</td>
<td>6</td>
<td>46,855</td>
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<tr>
<td>History</td>
<td>2</td>
<td>53,641</td>
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<tr>
<td>Mathematics</td>
<td>6</td>
<td>94,029</td>
</tr>
<tr>
<td>Physics &amp; Astron.</td>
<td>27</td>
<td>675,885</td>
</tr>
<tr>
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<td>Psychology</td>
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<tr>
<td>Sociology</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$1,639,482</strong></td>
</tr>
</tbody>
</table>

This year as always, much excellent work, carried out as part of a professor's normal activity and without specific recognition or funding, was accomplished by faculty members throughout the College. It is recorded in the annual supplements to individual biographical records, and is not overlooked in merit evaluations by either the departments or the Dean's office.
VII. RECOMMENDATIONS FOR THE FUTURE

1. A University with 15,000 students is not very large by present standards, but in less extreme forms it has all the problems of the great multiversities. A period of slower growth, such as we are now experiencing, reduces budgetary flexibility for development but can be turned to good use through a thoughtful reexamination of objectives, priorities, and methods.

2. Undergraduate instruction continues to be the most essential and demanding responsibility of the College and its departments. Even without additional funding, much can be done to strengthen and enliven teaching.

3. Faculty teaching loads have been reduced over the last five or six years in most of the A&S departments, but this has been achieved largely by increasing the average size of classes and the overall student-faculty ratio. The need for additional staff to reverse this trend is obvious, but the departments must also seek ways to teach more economically. The introductory course in sociology will be offered next year in televised form, and several other departments are experimenting with a variety of audio-visual techniques. Similar possibilities should be explored in all fields.

4. In the dean's opinion, the development of new doctoral programs will benefit undergraduate instruction as well as advanced teaching and research. Only a few fields remain to close the circle of basic liberal disciplines at that level. Recently approved doctoral programs in economics, political science, and romance languages (French and Portuguese) will need continuing support. The department of sociology, under its new chairman, will be gradually built up over the next few years until it is ready to offer a sound Ph. D. program, the last of the social sciences to reach that level. A doctoral program in speech should be expected in the early 1970's.
5. A continuing problem has been the inadequacy of budgets for supplies and equipment in science departments. Some progress has been made in previous years, but it was impossible to increase these items in the 1968-69 budgets. The departments will be seriously hampered in both teaching and research unless additional funding is provided in the near future.

6. Recruitment of new talent for the faculty has been eminently successful in recent years. The quality of appointments can be improved still further, in the buyer's market which is beginning to appear in several fields, if departments are energetic and imaginative in their searches for candidates.

7. Recent additions to the University's physical plant have been for the most part in professional fields, but the benefits of the ten-year series of bond issues for educational facilities, voted by the people of the state in 1966, will provide badly needed space for several A&S departments in the next few years. A major addition to the chemistry department will be completed next year, and the department of psychology will finally get out of the Administration Building a year later. Particularly gratifying are plans for a new humanities building, housing modern languages and history, which will be the first unit in a large complex to be constructed by stages on the Zimmerman Field site in the heart of the campus.

8. More money would resolve or mitigate many of our problems, but in building a great College there will always be a need for human enterprise and ingenuity.
X. General departmental information.

A. Significant achievements during the academic year, 1967-68.

During the year 1967-68, twenty-eight students received the Bachelor of Arts degree in Anthropology and an additional eight who were awarded baccalaureate degrees, minor in Anthropology. Eleven students received the Master of Arts degree in Anthropology. One Ph. D. candidate, who received his degree in June 1968, was hired as Assistant Professor of Anthropology at the College of William and Mary, beginning Semester I, 1968-1969, and another, who will receive his degree in June 1969, was hired as Assistant Professor of Anthropology at Colorado State College beginning Semester I, 1969-1969.

The 37th Annual Field Session in Anthropology was held on the site of Sapate near Abiquiu, Rio Arriba County, New Mexico. This was the fourth season of excavations by the University of New Mexico at this locality. The work was directed toward examinations of a Pueblo IV settlement, the largest Pueblo ruin known.

Graduate and undergraduate students in Anthropology participated in, or conducted research projects in the states of Alaska, Arizona, California, Colorado, Michigan, New Mexico, Washington, Wyoming, and also in British Columbia, the Dominican Republic, Manitoba, and Mexico.

One undergraduate major in Anthropology was initiated into Alpha Chapter of New Mexico, Phi Beta Kappa. One graduate student in Anthropology was advanced to full membership in the New Mexico Chapter of Sigma Xi. During the period covered by this report, the following numbers of Anthropology graduate students either were notified of awards of grants-in-aid or received grants-in-aid from the organizations listed:
Arctic Institute of North America research grant, three; Clover Enterprises, Inc., grants for American Indian Historical Project, six; the Explorers Club research grant, two; B. H. Falls, Co., research assistantship, one; Ford Foundation grants for Social Revolutionist Process in Latin America, two; John D. Kennedy Memorial Fellowship, one; National Defense Education Act Title IV Fellowships, five; National Defense Education Act Title VI Fellowship, one; National Institutes of Mental Health Fellowships, two; National Science Foundation Cooperative Fellowship, one; National Science Foundation Dissertation grants (awarded to faculty members for graduate student research), two; National Science Foundation Summer Training Fellowship, one; National Science Foundation Traineeship, one; University of New Mexico Graduate Fellowships, four. It is significant that during the academic year 1967-1968, thirty-two of a total of sixty-one graduate students in Anthropology were supported by fellowships or assistantships of one kind or another. This represents a percentage increase over previous years and it is expected that this percentage will continue to grow.

The following visiting scholars presented lectures or led seminars in the Department: Gerald Horner (Northeastern University); Erik K. Reed (University of New Mexico - Visiting Professor); David Hicks (England); Professor Cynthia Rubin-Hilliges (Eastern New Mexico University).

Numbers 2, 3, and 4 of Vol. 23 and No. 1 of Vol. 24 of the Southwestern Journal of Anthropology were published. This publication is sponsored by the Department and edited by Dr. Barry Basin and Dr. Stanley Kunitz. The Southwestern Journal now has a total of 2250 subscribers, 429 of whom reside in foreign countries. Between July 1, 1967 and June 30, 1968, subscriptions increased by 135 over the same period for the preceding year.

-2-
The Museum of Anthropology continues to grow impressively, both in its acquisitions of valuable collections, and in services offered to the University and to the community. In my report to you of June 1, 1967 I noted that Museum attendance during the period of July 1, 1966 to May 30, 1967, was approximately 52,385, and that that represented an increase of about 8,534 visitors over the same period in 1965-1966.

Museum attendance during the period July 1, 1967 to May 30, 1968, was as follows:

- Attendance in guided groups: 16,255
- Other attendance (approximate): 65,000
- Total: 59,255
- Number of guided tours: 442

This represents an increase of about 6,870 Museum visitors over the same period in 1966-1967.

Most Museum visitors participating in guided tours were from the Albuquerque Public School system. Attendance from grades 4, 5, and 6 remained steady, inclusion of a social science element in the third grade curriculum led to a dramatic increase in third grade classes.

Thirteen hundred Navajo schoolchildren from boarding schools throughout the reservation, as well as school groups from Española, Grants, Socorro, Gallup, Los Alamos, Los Lunas, Bernalillo, Edgewood, and Tomé, New Mexico and from Arizona, Colorado, and Illinois were guided through the Museum. In addition, 2000 residents of the New Mexico State Penitentiary were Museum guests.

Museum Collections - From the period July 1, 1967 to June 1, 1968 there were 329 acquisitions, including 2611 objects. The approximate value of the gift acquisitions totaled $125,536.00. The most notable acquisitions to the Museum included the Kidd collection of musical instruments, two extensive collections of Pre-Columbian materia...
given by Mr. and Mrs. William of Santa Fe and Mr. and Mrs. Gilbert
Maxwell of Farmington, a collection of southwestern ceramics was
also given by the Maxwells, and a basketry collection was given by
Mr. Jordan.

Museum Exhibitions - The major, new exhibit, entitled
"Pueblo Pottery A.D. 400-1967" was the largest and most comprehensive
survey of Pueblo ceramics ever organized. A sixteen-page explanatory
brochure, which accompanied this exhibit, was widely distributed to
other museums and universities in the United States and Canada. Other
new semi-permanent exhibits included two cases on the Navajo and one
on the Apache, and one case each on ancient Mediterranean civilizations,
Early Man in the New World, Southwestern Archaic cultures, the Pueblo
IV Period, a modern (c. 1900) Pueblo Kitchen, a case on North American
Indian basketry, one on the Moundbuilder cultures, and one on Melanesia.

Museum Sales Desk - A Museum Sales Desk continued in its
second year in the main gallery. It has proved successful to the
extent that its profits have permitted the purchase of a number of new
specimen for the Museum collections.

As noted most recently in the 1967-1968 Catalog Issue and
Graduate Bulletin, significant revisions of our curriculum and our
undergraduate and graduate requirements have been and are being inaugurated.
At the undergraduate level we believe that these revisions are resulting
in broader, more comprehensive training which serves equally the liberal
arts goal of the student who may not continue in Anthropology beyond
the B.A., and the student who intends to pursue graduate work in the
discipline.

At the graduate level these revisions have resulted, for the
successful M.A. student, in the attainment of that degree in an actual
average time of very slightly more than two years, as compared with
an estimated average time of four years or thereabouts under the old
program. At the Ph.D. level, while the necessary figures are not yet available, we have every hope that the revisions will result in that degree being attained by the successful student in an average of four or five years from the time the student enters the program. If this proves to be true or even approximately true the average time required to attain the Ph.D. in this department will be half that of the national average in Anthropology. At the same time the student will have received excellent training, both in his subdiscipline, and broadly within the field in accordance with the generalist philosophy of this department.

Within the past year, on your authority and on the authority of the Dean of the Graduate School, we have radically restricted the number of entering students. Our aim is to maintain a ratio of four students per professor. This has permitted us to be highly selective, and the rapidly increasing quality of our graduate student body in part reflects this new policy.

In addition to these several changes, we are also emphasizing our Ph.D. program and to a degree de-emphasizing the M.A. program. While we recognize a responsibility to produce a certain number of terminal M.A.'s, our major graduate goal is to contribute outstanding professional anthropologists at the Ph.D. level. This goal has resulted in our giving preference to the entering student who is committed to the higher degree.

D. Significant plans and recommendations for the future.

I refer to my reports to you of June 1, 1967; June 1, 1966; and June 1, 1965. Most of our recommendations as stated in those reports have been or are being met. In particular, in addition to revising and enlarging the anthropology curriculum, we are attracting excellent graduate students, and we are hiring additional high caliber faculty members. Several innovative recruiting and advertising procedures, as
All as changes in our graduate program have resulted in a measurably improved graduate student body. This faculty is excellent, and the additions of Associate Professors Lewis R. and Sally H. Binford, and the joint appointment of Associate Professor Bernard Spolsky promise to add further general luster to the staff and to specifically strengthen our resources in archaeology and linguistics. It is intended that future appointees will continue to reflect a national expansion of an anthropological program which aims at building and maintaining strength in archaeology, general ethnology, linguistics, and physical anthropology.

As I have remarked to you in previous annual reports, a continuing and increasingly crucial need is that of expanding our physical plant. As you are aware, with your permission, and with the permission of other appropriate University authorities, we have, this year, embarked on a program of raising a building fund from a number of sources. To date we have obtained more than $50,000 from private donors, and have verbal promises of an additional $50,000 from individuals. National Science Foundation is encouraging us to submit a proposal to that organization for approximately $275,000.

In view of the critical need for additional anthropological facilities, and in view of our not insconsiderable efforts to raise money from outside sources, it is my earnest hope and request that you and other University administrators will afford us all possible early aid in raising the required balance of the total of $300,000 necessary for the expansion.

C. Appointments to staff.

Lewis R. Binford (Ph.D., University of Michigan) and Sally H. Binford (Ph.D., University of Chicago): Associate Professors of Anthropology, effective February 1, 1969. Bernard Spolsky (Ph.D., Universidad de Montreal, Canada): Associate Professor of Linguistics.
effective September 9, 1968 (joint appointment with the College of Education).

D. Separations from staff.

None.
1. Advanced Study
   J. J. Brody
   -Course work toward Ph. D. in American Studies, 15 hours
   Frank C. Hibben
   -State Department Representative at the London Conference.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc. during the period
   Phillip Karl Rock
   -Visiting Professor of Anthropology, Columbia University, N. Y., Summer, 1967.
   J. J. Brody
   -To Pecos Conference, Tucson, Arizona, August 1967; to Tulsa, Oklahoma to garner materials for Pueblo Pottery Exhibition; to Twentynine Palms, California, to pick up collection of Pre-Columbian materials for museum. Navajo Centennial Committee, Window Rock, Arizona.
   John M. Campbell
   -Travel to Arctic Alaska, month of August, 1967, for field research; travel to Univ. of Washington, Oregon, California at Berkeley, California at Los Angeles to recruit graduate students; travel to Washington, D. C., April, 1968, to raise money for anthropology building addition; travel to Santa Fe, May, 1968, to attend 33rd Annual Meeting of Society for American Archaeology.
   Marie L. Gonzales
   -Leave of absence in the Dominican Republic, June 1967-August 1968; field research
   Karl H. Schwerin

3. New Scholastic honors, fellowships, etc.
   Phillip K. Rock
   -Continued as Danforth Associate, U. M.
   Florence H. Ellis
   Karl H. Schwerin
   -Fulbright-Hays Center Faculty Fellowship for advanced research abroad. Fellow American Association for the Advancement of Science.
James M. Spuhler  
- Sesquicentennial Award and Medal, University of Michigan (citation for distinguished service in Anthropology and Population Genetics). Induction into Sigma XI.

4. Publications

Harry W. Basshart  

Philip E. Bock  

J. J. Brody  

John M. Campbell  


James H. Schriber - *The relations of physical anthropology with the biological sciences*, (with F. B. Lindeswame)

In: David G. Henselmann, Gabriel H. Lederer, and Melvin H. Albert, ed., *The Teaching of Anthropology*. -11-
Genealogical Analysis, New York: Academic-Press, 1957; 
Evolution in small human populations (with K. Morgan) Yearbook of Physical 
Anthropology, 1965, 13: 216-222, 1967; The 
Insect taboo and the eating patterns of 
animals (with D.F. Aberle, et al.) In: 
Paul Bohannan and J. Middleton, eds. A 
Sourcebook in Marriage, Family, and Residence, 
Garden City: Natural History Press, 1958; 
Genetics, III. Race and Genetics, International 
Encyclopedia of the Social Sciences, 6:102-113, 
1968; Socio-cultural and biological inheritance 
In man. In: D.C. Glass, ed., Biology and Behavior: 
Genetics, pp. 102-110. New York: The Rockefeller 
Univ. Press, 1958.
5. Other Research Projects or Creative Work in Progress or Completed during period.

Harry N. Rosehart
- Comparative study of village organization among the Motungo of Tannamia, in progress;

Philip E. Rock
- Completed ES of textbook (Modern Cultural Anthropology) and plans for anthology of readings to accompany it (Culture Shock), to be publ. by A. A. Knopf, 1969. Edited collection of original essays on "peasants in the modern world" to be published by UWM Press, Fall 1969. Reviewed 2 manuscripts for UWM Press.

J. J. Brody

John M. Campbell
- Works in progress - paper on the Kavik archaeological site, Brooks Range, Alaska; monograph on the Animist Rohimos.

Florence E. Ellis

Frank C. Hibben
- Abancita Valley Paleo-Indian Project
Stanley Bloom
- Preparation of Paper, "A Comparative Study of Salish Lexical Suffixes," to be presented at the 3rd International Conf. on Salish Languages, Univ. of Victoria, Aug. 1963; Analysis of grammatical field data and writing of linguistic description of Bella Coola, a Salish language of British Columbia.

Bruce J. Rigby

Earl H. Culbertson

Bruce R. Spuhler
- During the period completed first drafts of 15 chapters of a book in progress on human evolution.

Hildam T. Saunt
- Continued progress on two volumes report on Human Population Resettlement.

6. Activities in learned and professional societies.

Harry W. Hecht
-
Harry W. Dettbrett (continued)

- Anthropological Association, President, New Mexico chapter, Society of Sigma Xi.

Philip K. Reck


J. J. Brody


John H. Campbell


Florence H. Billie

- Pottery Conference (attended); Pecco Conference (attended); Society for Amer. Archaeology, May 1968, paper read "The Surprising Degree of Parallelism...Freeble," Society for Amer. Ethnohistory, October 1967.

Frank C. Biibon

- Paper on Rio Ranch "Polvus Man" Site - read at the SAA meeting in Santa Fe, May 1969.

Bruce J. Bigsby

- Prepared and read a paper "A Sketch of Esko-Atichkan Phonology" for the 3rd International Salish Conference in Seattle, Aug. 1967; delivered the paper "Edw Reeks Vowel and Proto-Salishan Vowel Harmony" as a guest lecture.
Bruce J. Rigby (continued)

- Before the Linguistics Club at the University of Texas, Austin, Jan. 1968.

Karl H. Schurrin


Jolene N. Spuhler


William T. Stuart

- American Anthropological Association (annual meetings attended); Society for Applied Anthropology (meetings attended; paper read); Association for Social Anthrop. In Eastern Guiana (symposium participant).

7. Other professional activities.

Raye W. Ruppert

Harry U. Bouchard (continued)

- 1967; Stanford, California March 1968;

J. J. Brody

- Five lectures to Albuquerque Service Organization
  (Fortun, church groups, etc.); EMI program
  publicizing pottery exhibit; Judging Arts and
  Crafts, Gallup Ceremonials, Gallup, N.M.
  August, 1967.

John M. Campbell

Lecture entitled "Primitive Man in Arctic
Alaska" at Rio Rancho Estates, May 1967;
Member of Executive Board, New Mexico Oro-
thological Society.

Florence H. Ellis

- Talk to AAM, November 1967, on "Early Neo-
  Home Architecture and Statues."

Frank C. Hibben

- Special Consultant on Archaeology for
  Encyclopaedia Britannica and Life magazine.

Stanley S. Howan

- Reviewer of two research proposals submitted
  to the National Science Foundation, of
  one proposal submitted to the Arctic Institute
  of North America. Consultant on projects for
  Teaching English as a 2nd Language: for
  Navaho and Spanish-speaking children (continua-
tion), for Teco children: Lecture to Guam,
  on Foreign Languages, HAW meetings on campus:
  "Linguistics & 2nd Language Learning."

James H. Spuhler

- Served as consultant in Anthropology, National
  Science Foundation and on site visit panels
  for the National Institute of General Medical
  Sciences.

William T. Stuart

- Consultant to Bureau of Indian Affairs (BIA);
  Conference on Community Development.
Harry M. Baecht - Chairman, Publications Committee; Graduate Advisor, Anthropology; University Committee on Human Subjects; Co-Editor, Southwestern Journal of Anthropology; Acting Chairman, Anthropology, Summer 1967.

Philip K. Beck - University college advisor; Cultural Committee; Editorial Board, E.N. Quarterly, Departmental Committee: student aide; comprehensive exams.

J.J. Exddy - University college advisor, Art Seminar. Advisory Board, Committee on Gifts to Libraries and Museums.

John H. Campbell - Committee on the University, Chairman: Comm. on University Utilization of Farrar Property; Comm., for Selection of Annual Research Lecturer; Department of Anthropology, Chairman.

Florence E. Eillo - University college advisor.


Bruce J. Rigby - Faculty advisor to some 200-odd Anthropology undergraduate majors.

Karl E. Schurrin - Faculty advisor; Committee on the College Branch of the University.


James E. Spalding - Consultant, Regional Medical Program. Member of Building Committee, Department of Anthropology.

William T. Smith - Anthropology faculty secretary for Faculty meetings.

Florence H. Hildre
- One week seminar for Ghost Ranch (Presbyterian Church), Southwestern Archaeology, Ghost Ranch, New Mexico.

Frank C. Hibben
- Chairman, State Game Commission; Chairman, Rio Grande Zoo Board.

Bruce J. Rigby
- Organized the ushering of the 1968 New Mexico State High School Basketball Tournament in Albuquerque Laphouse of the P. Indian Guides.

Earl H. Schuster
- Volunteer Fireman, Los Ranchos de Albuquerque. Vice-President, New Mexico Cactus and Succulent Society.

10. Personal Information.

James M. Schriner

James E. Spahr
I. General Departmental Information

A. Significant Achievements During the Academic Year 1967-68:

Most outstanding was the expansion into the new addition of 69,000 square feet and the readjustment into the renovated old section of 42,000 square feet. The expansion of 3 teaching laboratories in General Biology to 8, allowance for better scheduling, extra laboratories for testing purposes and separate rooms for each of the 4 different freshmen courses taught in the Fall Semester provided a welcome relief and improved instruction. The addition to laboratory space allowed for scheduling without conflict with lecture sections. The lecture space still remains critical, and the Biology Department must arrange lectures to large classes to conform to the availability of Geology 122.

There are now 340 biology majors including sophomores, juniors and seniors. The most serious enrollment pressure is in the upper division courses. At this level there is no problem in the lectures, but the addition of a second section of laboratory in an advanced course usually doubles the faculty load; and there is reason to be hesitant to use Graduate Assistants as laboratory instructors. With the shortage of faculty it is not possible to shift courses and usually the result is an increased teaching load on the existing faculty. In addition, the graduate majors have now increased to 93, which is an excessive load for 16 faculty members, one of whom is an instructor and does not advise graduate students. Yearly there is an increase in the number of doctoral candidates who take additional time of each faculty advisor. The heavy load of advisees is, for example, 10 advisees plus full-time teaching load leaves little time for research.

The new biology addition is a facility of which the university can be justly proud. Its teaching laboratories and research laboratories set a new standard in quality, lighting, and an excellent compromise in effectiveness and aesthetics. Hundreds have toured the building and have been most complimentary, often seeking copies of the plans. Development of the greenhouse as a central core has proven to be a most attractive feature, providing a unique facility of broad educational value. It is
difficult to explain the effect of the release from overcrowded laboratory space or none at all, to the new facility with its additional equipment, well-arranged space, and ancillary facilities. Laboratory teaching has improved. Research has expanded and graduate students now have a place to conduct their research investigations.

The department has made great strides in overcoming provincialism by greatly increasing its program of interchange of ideas by bringing to the campus speakers in the departmental seminars, speakers to Phi Sigma, the honorary biological society, and as special guest lecturers. This program under the guidance of Dr. William Johnson has done much to expand the interest of the academic body, of associated scientists and in some cases, the public. Guest lecturers have included:

Dr. Lancelot Law White, England, Science history;
Dr. Estella Leopold, U.S.G.S., Denver, Paleocoeology;
Dr. Burt Thomas, Colo. St. Univ., Radiocoeology;
Dr. Paul Martin, Univ. of Ariz., Pleistocene extinctions;
Dr. Horton Laude, Univ. of Calif., Davis, Plant physiology;
Dr. Stanley Cain, U.S. Dept. Interior, Population and natural resources;
Dr. Ronald Rustad, Western Reserve, Radiobiology.

In addition to the above faculty from the department and the Medical School have presented lectures and seminars.

Most outstanding this year was a symposium on "Physiological systems in semiarid environments," supported by the National Science Foundation and the University of New Mexico, applied for and directed by Dr. Marvin L. Riedesel. Four internationally famous physiologists gave principal addresses and conducted panel discussions. About 40 scientific papers on physiological adaptations were presented by physiologists and ecologists from all over the United States. The symposium on November 9-11 was coincident with the dedication of the new biology building and added greatly to its recognition by the scientific community. The success of the symposium was a real tribute to Dr. Riedesel's foresight, personal planning, and effort and was important in building an increased respect and prestige for the University.

The cooperative research program of ARMI has resulted in the appointment of several Graduate Students who are conducting research at Lovelace Foundation in Physiology and Radiation Biology.
The Thirteenth Radiation Biology Institute under the direction of Dr. Marvin L. Riedesel was approved by NSF and AEC for 1968 to include 20 college teachers plus 4 past participants who are to return to conduct research projects during the summer. To date, about 290 teachers, high school and college, have been trained in this institute program which was started by Dr. Martin W. Fleck in 1957.

The Cooperative Research Program between the Biology Department and the U.S. Forest Service Rocky Mountain Forest and Range Experiment Station continues with a cooperative research grant under Dr. Loren D. Potter for a 2-year study of the germination of browse species in forests and woodlands of New Mexico.

A cooperative research grant has been awarded to Dr. William Degenhardt for a herpetological study in the Big Bend National Park by the National Parks Service. One graduate student was supported in the summer of 1967 to study the ecology of plant communities in the Guadalupe Mountains under a National Parks Service grant made to Dr. Loren D. Potter.

The National Science Foundation has awarded a 2-year research grant to Dr. James Findley for a world-wide study of the biology of a genus of bats. The Atomic Energy Commission has continued support of a radiobiological investigation by Dr. Marvin Riedesel.

Through the assistance of institutional NSF funds and an increased allotment from Title I funds it was possible to add a Hitachi 11-A Electronmicroscope to the Biology Department. Under the direction of Dr. Earl W. Bourne a new facility is expected to open up a variety of new fields of investigation.

During 1967-68, 93 graduate majors were enrolled. masters degrees and doctoral degrees have been completed during the academic year.

B. Significant plans and recommendations for the near future:

For the first time in many years there will be an adequacy of faculty and graduate offices, teaching laboratories, research laboratories and ancillary facilities such as animal rooms, stock room and store-rooms. The new building does not add, however, any new lecture and the acute problem of lecture space for large classes still exists. There appears to be no
solution short of immediate attention toward the con-
struction of a large science lecture auditorium with
a capacity of 900 to 1000 students. Until that time,
the Biology Department will be using the inadequate
Geology Lecture Hall every hour it is available with
the accompanying high costs of faculty time with less
efficiency and less effectiveness than would be possible
in a well equipped science lecture auditorium. Furth­
more, the scheduling problems are greatly increased
by the multiple of lecture sections required.

C. Appointments to staff:

The equivalent of 34-2/3 Graduate Assistants were
appointed in 1966-67. Appointments were made for two
NSF traineeships, 3 NDEA Title IV traineeships, and
one NASA traineeship.

An appointment of Assistant Professorship was made
for the academic year 1968-69 to Dr. J. David Ligon, as
a specialist in ornithology and animal behavior.

An exception to the usual rule of not appointing
our own doctorates was made with the appointment of
Dr. Gerald Traut as Assistant Professor because of his
truly outstanding record as a teacher in the intro­
ductive course and in the training of graduate assistants.

With the retirement of Mr. Edgar Evinger, Botanist,
who is largely responsible for the development and
arrangement of the greenhouse and botanical plantings,
Mr. Frank Feather was appointed one-half time as
Departmental Botanist to continue the horticultural
and greenhouse development.

Mr. Harold Haas was appointed as Administrative
Assistant in the Department of Biology effective
July 1967.

D. Separations from staff:

Mr. Fred Fessler retired from the University because
of sudden illness in midyear.

Mr. Edgar Evinger, voluntarily retired for personal
reasons.

Mr. Harold Haas voluntarily terminated for personal
reasons, will accept employment in Pennsylvania.
II. Composite of Information Requested on Individual Biographical Supplements:

1. Advanced Study

   Booth, James S., 1) Completed Ph.D. dissertation

2. Sabbaticals, leaves, etc.

   Degenhardt, Wm. G., 1) Herpetological collecting in N.M.; 2) Studies in Big Bend National Park

   Findley, James S., 1) Visits to Museums in New York and London for study of bats

   Fleck, M. W., Sabbatical Semester II, 1966-67, but previously unreported, 1) Conducted series of seminars at University of Liege, Belgium; 2) Visited Radiation Laboratory at Univ. of Bergen, Norway; 3) Visited Radiation Laboratory at Institut de Chimie, Paris, France; 4) Visited laboratories of Britisle Atomic Energy Authority, Abingdon, England; 5) Visited University of Paris; 6) Visited University of Nice; 7) Also traveled to Oslo, Copenhagen, Stockholm and Brussels.

   Potter, Loren D., Sabbatical leave Semester II, 1967-68. 1) Expedition to Anaktuvuk Pass and Brooks Range, Alaska; 2) NSF-USAID consultant to Institute for College Teachers of Ecology and International Biological Year, Varanasi, India.


3. New Scholastic Honors, fellowships, etc.

   Bourne, Earl W., 1) Elected full member Society of the Sigma Xi.

   Findley, James S., 2-year NSF grant for study of evolution in bats.

4. Publications


5. Other research projects in progress

Beakley, John W., 1) Revision of laboratory manual for Pathogenic Bacteriology; 2) Laboratory manual for paramedical microbiology; 3) The effect of Rickettsia Typhi on 14CO2 release via metabolism of glucose 14C by chick embryos; 4) Writing section on Control of Microbiol Contamination in Handbook for Contamination Control for NASA

Bourne, Earl W., 1) Setting up laboratory for tissue culture; 2) Preparing laboratory for electron microscopy.
Crawford, Clifford S., 1) Directing research of graduate students; 2) Temperature and light intensity-oviposition studies with Crambus teterellus; 3) Field recordings of oviposition rhythms in several crambine moths.

Degenhardt, Wm. G., 1) Herpetofauna studies in New Mexico and Big Bend National Park.

Dittmer, Howard J., 1) Studies of morphological and anatomical characteristics of root systems of plants in arid environments.

Findley, James S., Continuing studies on 1) geographic variation in the bat Pipistrellus; 2) brain size in bats; 3) zoogeography of S. W. montane mammals; 4) mammals of New Mexico; 5) plains pocket mouse; 6) biosystematics of bats of genus Nyctis.

Hoff, C. Clayton, 1) Continuing research on pseudoscorpions.

Johnson, Gordon V., 1) Study on influence of gibberellin on the metabolism in plants; 2) Writing manuscript on influence of soil contact time on extractability and availability of radiostrontium.

Johnson, Wm. W., 1) Distribution of recessive lethal genes in 2nd chromosome of Drosophila melanogaster; 2) courtship behavior of high mating ability male Drosophila melanogaster.

Kidd, David E., 1) Continuing studies on algae, Grant No. 4248 - Penrose Fund., $1000.

Koster, Wm. J., 1) Continuing studies in ichthyology.

Martin, Wm. G., 1) Systematic studies with genera Draba and Ribes.

Potter, L. D., 1) U.S. Forest Service Coop. Res. Agreement, 1967-69 ($3,5000) "Germination and natural establishment of browse species in woodland and forest, N.M."
2) U. S. Nat'l Park Ser. Res. Grant ($4,000) "Ecology of relict upland forests communities, Guadalupe Mtns.;
3) AEC res. grant ($1480) "Radioanalysis of biotic materials from Brooks Range, Alaska;" 4) UNM res. grant, ($1542) "Biological investigations in the Brooks Range, Alaska; 5) Cesium analysis of arctic plant samples Kirtland Radiation Effects Lab.;
6) Identification of plant specimens from Brooks Range; 7) Manuscript on "stream transport of pollen."

6. Activities in learned and professional societies.

Beakley, John W., 1) Presented paper at annual symposium of Rio Grande Chapter of Amer. Ass'n. for Contamination Control; 2) Member of discussion panel for Amer. Ass'n. for Contamination Control.


Degenhardt, Wm. G., 1) Read paper on "Reptilian Distribution in Big Bend Nat'l. Park" at symposium sponsored by Ecological Society of American and Nat'l. Park Service.


Findley, James S., 1) Board of Directors, Amer. Soc. of Mammalogists; 2) Editorial Board, Jour. of Mammalogy and Chairman of Index Comm.; 3) Editorial advisor of Southwestern Nat.; 4) Read paper at meeting of Am. Soc. Mammalogists, Nags Head, N.C.

Fleck, M. W., 1) Participant in Conference on Bioastronautics sponsored by NASA, held at Virginia Polytechnic Institute, August, 1967; 2) Paper at UNM Seminar, "Biological Problems of Space Travel."

Hoff, C. Clayton, 1) Fellowship Committee SW&RM Division, AAAS.
Johnson, Gordon V., Attended 1) Pacific Division AAAS, Los Angeles, June, 1967; and 2) Southwestern Division AAAS, El Paso, April, 1968.


Kidd, David E., 1) Acting historian-custodian of American Microscopical Society; 2) N.M. State Director for Outstanding Biology Teacher Award for the National Association of Biology Teachers; 3) Attended meetings of American Microscopical Society; and 4) The National Association of Biology Teachers.

Koster, Wm. J., 1) Membership Committee of Society of Sigma Xi; 2) AAUP ad hoc committee on public school cooperation.

Potter, L. D., 1) Board of Directors WSW&RM Div. AAAS.


7. Other professional activities.

Beakley, John W., 1) Consultant to Planetary Quarantine Department of Sandia Corp.

Bourne, Earl W., 1) Presented seminar at Okla. State University.

Crawford, Clifford S., 1) Reviewed a number of manuscripts for MacMillan Publishing Co.

Degenhardt, Wm. G., 1) Member of committee for selection of outstanding biology teacher of N.M.; 2) Consultant to National Park Service; 3) On Research Advisory Council for Big Bend National Park.

Dittmer, Howard J., 1) Judge for Youth for the Atom Contest for which Public Service Co. gave UNM $50; 2) Chairman of judges for Plant Science exhibits at State Science Fair, and for NASA awards, Socorro; 3) Judge McArthur School Science Fair; 4) Lecturer for Visiting Scientist program.

Findley, James S., 1) Reviewed two proposals for Systematic Biology section of NSF.
Fleck, M. W., 1) Large number of addresses which included Commencement Exercises, Awards banquet for Boys Club, Dedication ceremonies at BCMC, Mortar Board Convention, Honor Assemblies at High Schools, and professional groups; 2) Tour of Strategic Air Command facilities at Offutt Air Force Base, Nebraska; 3) Participant in UNM ROTC Awards ceremony; 4) Participant in Air Force Awards Ceremony, KAFB; 5) Guest lecturer at AEC-NSF Radiation Biology Institute.

Hoff, C. Clayton, 1) Reviewed applications for research grants for NSF; 2) Reviewed manuscripts for American Midland Naturalist; 3) Editing book for UNM Press; 4) Judge at Science Fair.

Martin, Wm. C., 1) Judge for Regional Science Fair; 2) Many talks to local groups.

Potter, L. D., 1) Guest lecturer to NSF Institute, N. Dakota State College; 2) Consultant for Nat'l Park Service on ecology and land use; 3) Lecture to Phi Sigma; 4) Paper read before NSF symposium on semiarid environments.

Riedesel, M. L., 1) Participant in AIBS program of Visiting Biologists to Colleges; 2) Participant in N.M. Academy of Science Program of Visiting Scientists.

8. Non-teaching University service.

Beakley, John W., 1) Medical Technology Advisor; 2) Prospective faculty screening committee; 3) Graduate advisory committee, Biology Dept.; 4) Faculty Advisor Baptist Student Union at UNM; 5) Graduate Assistant Selection Committee, Biology Dept.

Bourne, Earl W., 1) Curriculum Committee; 2) A & S Advisor; 3) Pre-medical club sponsor; 4) Pre-medical advisor.

Crawford, Clifford S., 1) Faculty advisor for department majors and 3 graduate students; 2) Coordinator of Conservation Roundtable sponsored by Biol. Dept.

Degenhardt, Wm. G., 1) University College Advisor; 2) Advisor for Graduate Students in Herpetology; 3) Curator of Reptiles and Amphibians in Museum of Southwestern Biology; 4) Advisor to N.M. Herpetological Society; 5) Departmental Seminar Committee.
Dittmer, Howard J., 1) Assistant Dean College of Arts and Sciences; 2) Senior Foreign Scientist Fellowship Committee; 3) Chairman A & S Scholarship Committee; 4) Attended meetings of committees on Entrance and Credits, Summer School and Registration; 5) Visiting Scientist Committee; 6) Statistician for football team.

Findley, James S., 1) Curator of Birds and Mammals, Museum of Southwestern Biology; 2) Academic Freedom and Tenure Committee; 3) Chairman Research Allocations Committee; 4) Advisor to graduate students in mammalogy.

Fleck, M. W., 1) Acting Chairman Biology Department Feb. 1 to Sept. 1, 1968; 2) Pre-medical advisor; 3) Advisor for Biology majors; 4) Chairman of committee for dedication ceremony for new biology building; 5) Member UNM Alumni Board; 6) Chairman Biology Curricula Committee; 7) Member of committee to select teacher of year award; 8) Biology seminar committee.


Johnson, Gordon V., 1) Advisor for University College; 2) University Library Committee.

Johnson, Wm. W., 1) Chairman Biology seminar committee; 2) Phi Sigma faculty advisor; 3) Student Standards Committee; 4) UNM-Sandia Colloquium Committee; 5) UNM Science Colloquium Committee; 6) Supervisor of Biology Sectioners at Registration; 7) Sigman Xi Admissions Committee; 8) Judge at State Science Fair and MacArthur School Science Fair.

Koster, Wm. J., 1) Departmental Advisor; 2) Curator of fish collection; 3) Charge of department photographic darkroom; 4) Several committees - Faculty and Graduate Assistant selection Committees for department, Biology building committee, University curriculum committee and Pharmacy College committee for Research on human subjects.

Martin, Wm. C., 1) A & S Advisor; 2) Biology Department building committee; 3) Summer session committee.
Potter, L. D., 1) Graduate committee; 2) Member Technical Applications center; 3) Member Lawrence Ranch committee; 4) Member committee on gifts; 5) Member Student-Faculty Association; 6) Advisory Committee on teacher education; 7) Faculty advisor UNM Ski Club; 8) Advisor for graduate students; 9) Chairman of committee on Farrar property.

Riedesel, M. L., 1) Committee on radiological control; 2) A & S committee for research on human subjects; 3) Biology Department committee on graduate program; 4) President UNM Chapter of AAUP; 5) Advisor for graduate students.


Beakley, John W., 1) Deacon in Baptist church; 2) Member of training department of a Baptist Sunday School.

Crawford, Clifford S., 1) Member of Save Grand Canyon Committee.

Degenhardt, Wm. G., 1) Supplied information on organisms when requested by various individuals.

Dittmer, Howard J., 1) Number of speeches to local groups; 2) Lecturer in Landscape Design School.

Findley, James S., 1) Conducted tours for grade school classes through Museum.

Fleck, M. W., 1) President Albuquerque Rotary Club 1967-68; 2) Delegate to Rotary International meeting in Nice, France; 3) Member Presidents' Council of Albuquerque Service Clubs; 4) Chairman N.M. Technical Radiation Advisory Council; 5) Member Metropolitan Health Advisory Board; 6) Vice President Board of Trustees for BCMC; 7) Member Scientific Staff BCMC; 8) Member Albuquerque Little Theatre Board; 9) Various others.

Johnson, Gordon V., 1) Judge for regional Science Fair; 2) Board member of UNM Geneva House; 3) Board member Sombre Del Monte Christian Church.

Johnson, Wm. W., 1) Judge at State Science Fair; 2) Judge MacArthur School Science Fair.

Koster, Wm. J., 1) Education Committee St. Paul's Lutheran Church; 2) Consultant for various agencies and individuals on fish and aquatic biology.

Martin, Wm. C., 1) Committee on Stewardship and Finance of Central Methodist.
Riedesel, M. L., 1) Member United Campus Christian Fellowship; 2) Member Finance Committee Boy Scout Troop 166; 3) Member Building and Maintenance Committee of Thunderbird Little League.
The Report of the Department of Chemistry
July 1, 1967 - June 30, 1968
R. N. Castle, Chairman

I. General Departmental Information

A. Significant Achievements during the Academic Year 1967-68.

Nine undergraduate chemistry majors received the B.S. degree and 18 received the B.A. degree. Six students received the M.S. degree and 6 students received the Ph.D. degree.

An E.S.R. Spectrometer less the magnet, power supply and revolving base was given to the department by Sandia Corporation. The University has allocated the additional funds necessary to purchase the magnet, power supply and revolving base, which is scheduled for delivery in August.

Other equipment acquired by the department includes:

A spectrophotofluorimeter and a fluorescence decay-time instrument were constructed and a Packard Model 115 400 channel analyzer was purchased for the study of fluorescent organic compounds which may be used as liquid scintillation solutes. The ARCO Chemical Co. donated a Brice-Phoenix Universal Light Scattering Photometer, Model 1000-D, complete with recorder and fast sampling oscilloscope. This apparatus can be used by graduate students studying the fields of polymers as it is designed especially for measurement of micro-scattering, microfluorescence, microluminescence and very low transmittance and reflectance of dark materials.

A Lourdes Refrigerated Centrifuge Model A-2 Beta Fuge was purchased for the investigation of mitochondria.

A Varian C-1024 Time Averaging Computer was obtained to supplement determinations with our present N.M.R. Spectrometer.

A Perkin-Elmer-900 Gas Chromatograph was purchased by the department for use in teaching courses Chem 352L and 454L in Instrumental Analysis.
It is hoped that the new addition to the Chemistry Building will be started before September 1, 1968 with a target date of September 1969 for completion.

A Danforth Committee composed of Dr. I. Shain of the University of Wisconsin, Dr. F. Basolo of Northwestern University, Dr. A. Wahl of Washington University, and Dr. H. Wassermann of Yale University visited the Department on February 29 – March 2. Two meetings of the chemistry faculty and Dean Trowbridge were held to discuss the Danforth Committee report. Additional meetings have been scheduled for the 1968-69 academic year.

The undergraduate and graduate curriculum committees have been active during this current academic year. The committee on Freshman Chemistry has completed plans for major revisions of the Chemistry 101-102 laboratories. A graduate student relations committee has been formed with Guido H. Daub as the only faculty member. The balance of the committee will be graduate students selected by the students. The committee will be activated September 1968. Other departmental committees are functioning.

B. Significant Plans and Recommendations for Near Future.

With the completion of the addition to the Chemistry Building two additional faculty members should be added to the chemistry department for fall semester 1969. Funds for several expensive pieces of equipment are urgently needed as well as additional funds for supply and expense. With the completion of the chemistry building addition an electronics man, a machinist and a glass blower who has a degree and who could offer courses in glass blowing should be added to the department.

C. Appointments to Staff.

Dr. Robert E. Tapscott has been appointed as Assistant Professor of Chemistry. Dr. Tapscott received his B.S. degree from the University of Colorado and the Ph.D. degree from the University of Illinois.
Dr. Edward A. Walters has been appointed as Assistant Professor of Chemistry. Dr. Walters received the B.S. degree at Pacific Lutheran University and the Ph.D. degree at the University of Minnesota.

Mr. T. R. Duffin was added to the department as Administrative Assistant. At present, Mr. Duffin is involved in the planning and expediting of the new addition to the Chemistry Building, and in setting up new inventory control procedures.

Mr. Winston C. Sandvold has been hired as stockroom clerk to replace Harry Mauger. He will begin work at the start of summer school.

D. Separations from Staff.

Miss Victor V. Searcy retired from the faculty after 24 years of service.

Mr. Harry Mauger retired as stockroom clerk after 20 years.
II. Composite of Information Requested on Individual Biographical Supplements.

1. Advanced Study.
   (a) WILLIAM M. LITCHMAN: Post-doctoral Fellowship at the University of Utah, 1 June - 1 September, 1967.

2. Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere, Travel, etc.
   (a) RAYMOND N. CASTLE: Traveled to France, Italy, Austria, Yugoslavia, Germany, and Belgium. (a) Lectured at the University, Montpellier, France, July 10, 1967, "New Condensed Six-membered Nitrogen Heterocycles with two Nitrogen Atoms Adjacent." (b) Lectured at Union Carbide Research Laboratories in Brussels, Belgium, July 14, 1967 on "New Condensed Six-membered Nitrogen Heterocycles with two Nitrogen Atoms Adjacent." (c) July 2, 1967 held a conference with Professor M. Tisler and Dr. Stanovnik on plans for writing a comprehensive volume on pyridazines, Ljubljana, Yugoslavia.
   (b) ROY D. CATON, JR.: Summer Teaching at Oregon State University, 7 weeks, National Science Foundation Institute for College Teachers, Summer 1967.
   (c) LEE DUANE HANSEN: Research Associate at Brigham Young University from June 15 to September 1.
   (d) MIRIAM P. MALM: Summer travel to Guaymas, Mexico.
   (e) DONALD R. McLAUGHLIN: Associated Western University faculty orientation fellow at Los Alamos Scientific Laboratory, June - August 1967.
   (f) NICHOLAS E. VANDERBORGH: Summer 1967: Staff member at Sandia Corporation Analytical Methods Division 1121.

3. New Scholastic Honors, Fellowships, etc.
   (a) ROY D. CATON, JR.: Professor of the Month (February) Las Campanas.
   (b) DONALD R. McLAUGHLIN: Elected a member to the Society of the Sigma Xi, May 1968. Listed in "American Men of Science."
4. Publications:

(a) RAYMOND N. CASTLE:


(5) 1-(2-Mercaptoethyl)phthalazines and Related Compounds, *J. Heterocyclic Chem.*, 5, 89 (1968) w. S. Takano (5 pages)


(7) A One-step Synthesis of 1,4-Diaminophthalazine from Phthalonitrile, *J. Heterocyclic Chem.*, 5, 111 (1968) w. L. DiStefano (2 pages)

(8) The Ring Opening of N-(1-Phthalazyl)- and N-(4-Quinazolyl)-aziridines, *J. Heterocyclic Chem.*, 5, 113 (1968) w. S. Takano (2 pages)


(b) GUIDO H. DAUB:


(c) LEE DUANE HANSEN:

(a) ULRICH HOLLSTEIN:


(e) MILTON KAHN:

2. Two Quarterly Progress Reports for Lawrence Radiation Laboratory, Contract No. 2196507, No. 1, 31 pages, No. 2, 50 pages (w. H.A. Boyd)

(f) WILLIAM M. LITCHMAN:

1. The Effect of Polar Substituents upon $^{13}C-^{13}$ Coupling Constants, J. Am. Chem. Soc., 89, 6775 (1967)
3. Turnbull's Blue and Prussian Blue; KFe(III)[Fe(II)(CN)₆], J. Chem. Ed., in press.

(g) NICHOLAS E. VANDERBORGH:

3. An Evaluation of the Lanthanum Fluoride Membrane Electrode Response, Talanta, accepted for publication.

(h) BRUCE D. WEST:

5. Other Research Projects or Creative Work in Progress or Completed during the Period.

(a) RAYMOND N. CASTLE:


(b) ROY D. CATON, JR.:

(1) Reduction of tetrakis-beta-diketone complexes of europium(III).

(2) Effect of Na₂O/P₂O₅ ratio on diffusion transport of electroactive ions in molten metaphosphate glasses.

(c) GUIDO H. DAUB:

(1) Liquid Scintillators. Steric effects, p-quaterphenyls and binaphthyls.

(2) Liquid Scintillators, trans-Stilbenes, steric effects.

(3) Liquid Scintillators. Effects of ultraviolet and visible light on liquid scintillators; photooxidation of PPO, POPOP and others.


(5) Synthesis of condensed polycyclic hydrocarbons for use in cancer research.

(6) Synthesis of azabenzo[a]pyrenes and study of their effects as carcinogens and anticarcinogens.

(7) Grant: Continuation of grant of $21,000 plus $15,000 supplemental equipment funds for total of $36,000 from U.S. A.E.C. for period of September 15, 1967 to September 14, 1968. Title of Project: The Synthesis and Properties of Compounds which May Be Used as Scintillator Solutes in Liquid Scintillators.

(8) Grant: One-year grant of $11,500 to synthesize 14 selected polycyclic aromatic hydrocarbons for the Federal Drug Administration to be used in development of analytical procedures for carcinogenic hydrocarbons. Period of grant: June 1967 to June 1968.
(d) LEE DUANE HANSEN:


(3) Thermodynamics of Proton Ionization in Dilute Aqueous Solution. X. \( \Delta H^o \) and \( \Delta S^o \) Values for Proton Ionization from Amines at 25°C," paper submitted to the Journal of American Chemical Society.

(4) Thermodynamics of Proton Ionization from some Substituted 1,2,3-Triazoles in Dilute Aqueous Solutions," paper submitted to the Journal of the American Chemical Society.

(5) Turnbull's Blue and Prussian Blue: KFe(III)[Fe(II)(CN)\(_6\)]," paper submitted to the Journal of Chemical Education.

(6) Thermodynamics of Proton Ionization from Arsonic Acids," work in progress.

(7) Completed construction of an apparatus for measurement of volume changes for reactions in solution.

(8) Began writing on a freshman-level chemistry textbook.

(9) Several research proposals were written and submitted to various agencies.

(e) ULRICH HOLLSTEIN:

(1) NSF Grant $17,000 In vivo oxidative coupling of anilines, Sept. 1, 1966 to Aug. 31, 1968.


(3) National Institutes of Health Grant $18,676 Investigation of alkaloids of some New Mexico plants, Jan. 1, 1968 to Dec. 31, 1970.

(f) MILTON KAHN:

(1) Electrochemical Oxidation of Carrier-free Iodide-\( ^{131} \) (with Darryl Jackson) work completed.

(2) The Kinetics of Isotopic Exchange of Iodine Atoms between Tetra- butylammonium Iodide and Methyl Iodide in Nitrobenzene-Carbon Tetrachloride Mixtures (with Chien-chang Lin) work completed.

(3) Distribution of Molecular Iodine between Organic Solvents and Aqueous Solutions (with G. Van De Steeg) work completed.
(4) Recovery of Iodine-131 Incorporated in Soil and Organic Material as a Result of a Nuclear Detonation (with H. A. Boyd) work in progress.

(5) Determination of Nitrogen in Organometallic Compounds via Activation Analysis (with N. Stalnaker and B. Kenna) work in progress.

(6) Isotopic Exchange of Titanium Atoms between Ti(III) and Ti(IV) in Aqueous Media (with C. Orth and J. Knight) work in progress.

(7) Isotopic Exchange of Vanadium Atoms between V(III) and V(IV) in Aqueous Media (with C. Orth and J. Knight) work in progress.

(8) Grants Received:


(g) WILLIAM M. LITCHMAN:

(1) $^1$H chemical shifts of long chain amines and acids.

(2) Effect of charge on orientation of alkyl chains in substituted alkanes by N.M.R.

(3) $^1$H chemical shifts of alkyl substituted phosphonic, phosphinic, arsonic, and arsinic acids (with C. Millner).

(4) IR study of matrix isolated free radicals.

(5) EPR study of matrix isolated free radicals (with T. Rivera).


(7) X-ray study of high-pressure shock wave fronts (with J. Osborne).

(8) Preparation of a manuscript for a general chemistry textbook (with L. Hansen).

(h) DONALD R. McLAUGHLIN:

(1) During this period Jay Rhee and Jerry Kerrisk graduated with Ph.D.'s under my direction. Also I acquired a new student, Merle Benson, a NASA fellow.
(1) NICHOLAS E. VANDERBORGH:

(1) Investigation of Solute-Solvent Interactions in Non-Aqueous Solvents, Supported by Sandia Corporation, $17,000.00.

(2) Proposal submitted to "Instructional Scientific Equipment Program," The National Science Foundation, $14,000.00.

(j) BRUCE D. WEST:


(2) Sandia Corporation, $42,000, Organic thermochromic materials (still in progress), July 1966 - June 1969.

(3) Research Corporation, $3,500 (+$3,500 UNM) Thermochemistry of DNA (no time limit) (with L. Hansen).

6. Activities in Learned and Professional Societies.

(a) RAYMOND N. CASTLE:

(1) Attended ACS meeting in San Francisco, March 30 - April 5, 1968.

(2) Attended 5th International Congress of Chemotherapy in Vienna, Austria, June 26 - July 1.

(3) Attended 3rd International Meeting of Chimie Therapeutique, Paris, July 5-7. Presented paper entitled "Synthetic Approaches to the Pyridazino[4,3-c]pyridazine Ring System, a Heteroaromatic Ring Isomeric with the Pteridine Ring."

(4) Attended the annual meeting of the American Association of Basic Science Boards and made a report of the activity leading up to the abolishment of the New Mexico Board by the 1968 session of the Legislature, February 10, 1968, Chicago.

(b) ROY D. CATON, Jr.:

(1) Meetings attended:
   (a) Conference on Analytical Chemistry, University of Arizona, Tucson, Arizona, March 16-17.
   (b) Gas Chromatography Workshop, Denver, Colorado, Nov. 15-16.

(c) GUIDO H. DAUB:


(2) Member - Sigma Xi, Phi Kappa Phi, Phi Lambda Upsilon, ACS, AAAS (fellow), Blue Key, Alpha Chi Sigma.
(d) LEE DUANE HANSEN:

(1) Attended the 22nd annual Calorimetry Conference.

(2) Served on an award committee for the National American Chemical Society.

(e) ULRICH HOLLSTEIN:

(1) Attended National Meeting of the American Chemical Society in San Francisco, April 1968.

(e) MILTON KAHN:


(f) WILLIAM M. LITCHMAN:

(1) Traveled to the national American Chemical Society meeting in San Francisco, Calif. 30 March - 5 April, 1968.


(g) MIRIAM P. MALM:

(1) Attended national American Chemical Society meeting in San Francisco, March 31 - April 5, 1968.

(2) Member American Chemical Society.

(h) DONALD R. McLAUGHLIN:

(1) Attended Orientation Conference at Lawrence Radiation Laboratory sponsored by Associated Western Universities.

(i) NICHOLAS E. VANDERBORGH:

(1) Attended the Southwestern Analytical Academic Chemists, University of Arizona, Tucson, February 1968.

(2) Member American Chemical Society, American Chemical Society - Division of Chemical Education, The Chemical Society, London.

(j) BRUCE D. WEST:

(1) American Chemical Society member.
7. **Other Professional Activities.**

(a) **RAYMOND N. CASTLE:**

1. Editor, Journal of Heterocyclic Chemistry.


3. Vice-President, N.M. State Board of Examiners in the Basic Sciences and Representative of the Board to the 1968 Legislature.

4. Presented a seminar on the "Chemistry of New Six-membered Nitrogen Heterocycles" at the Dept. of Chemistry, New Mexico State University, May 23, 1968.

5. Served as General Chairman for the First International Congress of Heterocyclic Chemistry held at U.N.M. Albuquerque June 12-15, 1967. Attendance was 365 from 17 countries. Eight invited speakers presented hour-long lectures during four mornings. There were 120 contributed papers presented of 20 minutes duration in the afternoons.


(b) **ROY D. CATON, Jr.:**


2. Consultant:
   
   (a) Toys by Boys, Albuquerque, N.M.

   (b) FMC Corporation, Colorado Bureau of Mines, Research Foundation, Golden, Colorado.

(c) **GUIDO H. DAUB:**


(d) LEE DUANE HANSEN:
(1) A seminar entitled "Thermodynamics of Proton Ionization" was given to the Chemistry Dept. UNM.
(2) A Seminar entitled "Thermodynamics of Denaturation of DNA and Proteins" was given to the Physics Dept. UNM.

(e) ULRICH HOLLSTEIN:
(1) Seminar talk at Eastern New Mexico University, March 1968.

(f) MILTON KAHN:
(1) Consultant to University of California, Lawrence Radiation Lab.

(g) WILLIAM M. LITCHMAN:
(1) Reviewed two papers for the Journal of Heterocyclic Chemistry.

(h) MIRIAM P. MALM:
(1) Technical Editor for Journal of Heterocyclic Chemistry.

(i) DONALD R. McLAUGHLIN:
(1) Served as a judge of the Northwestern New Mexico Regional Science Fair.
(2) Reviewed three scientific publications (one for Tetrahedron, two for the Journal of Heterocyclic Chemistry).

(j) NICHOLAS E. VANDERBORGH:
(2) United States Patent Application: "Disappearing Compound used as a Toy Printing Ink," (co-inventor R. D. Caton), marketed as "Disappearo."
(3) Member Ad Hoc Committee to Improve Science Education in New Mexico.


(a) RAYMOND N. CASTLE:
(1) Faculty advisor for sophomores, juniors, seniors.
(2) Faculty advisor for graduate students.
(3) Member, Dept. Undergraduate Curriculum Committee.
(b) ROY D. CATON, Jr.:

(1) Faculty advisor to University College.
(2) Member of Registration Committee (Univ.).
(3) Chairman, Dept. committee on Undergraduate Curriculum.
(4) Member, Dept. committee on Graduate Curriculum.
(5) Member, Dept. committee on Freshman Chemistry.
(6) Co-author of NSF Undergraduate Equipment Proposal (with N. Vanderborgh).
(7) New Mexico Regional Science Fair Judge.
(8) Represented Department at Annual High School Senior Day.

(c) GUIDO H. DAUB:

(1) Chairman, Athletic Council.
(2) Engineering Doctorate Committee.
(3) Faculty Representative to Western Athletic Conference, UNM Delegate to National NCAA meetings (Jan. 1968).
(4) Faculty Advisor to sophomore, junior, senior chemistry majors and to graduate students (with R. N. Castle and W. M. Litchman).
(6) Member, Departmental Committee on Graduate Curriculum.
(7) Member, Departmental Committee on Freshman Chemistry.
(8) Member, Departmental Committee on Graduate Student Recruitment.

(d) LEE DUANE HANSEN:

Serving on several department committees and on the Research Committee of the University.

(e) ULRICH HOLLSTEIN:

(1) Faculty Advisor to University College.
(2) Member, Committee on Radiological Control.
(f) MILTON KAHN:
(1) Member of Woodrow Wilson National Fellowship Foundation Committee.
(2) Member of several departmental committees.
(3) Advisor to Honor Students.

(g) WILLIAM M. LITCHMAN:
(1) Member, Dept. committee on Graduate Curriculum.
(2) Member, Committee on Departmental Seminars.
(3) Member, Dept. Honor's Committee.
(4) Member, Dept. committee on Freshman Chemistry.
(5) Member, Dept. committee on Summer Undergraduate Research.
(6) Faculty Advisor to sophomore, junior, senior chemistry majors and to graduate students (with R. N. Castle and G. H. Daub).

(h) MIRIAM P. MALM:
(1) Member of Student Affairs Committee of UNM.

(i) DONALD R. McLAUGHLIN:
(1) Active member of the Committee on Computer Use.
(2) Chairman, Graduate Recruitment Committee.
(3) Chairman, Graduate Curriculum Committee.

(j) VICTOR V. SEARCY:
(1) Faculty Advisor to University College.

(k) NICHOLAS E. VANDERBORGH:
(1) Faculty Advisor to University College.
(2) Chairman, University Safety Committee.
(3) Member, University Library Committee.
(1) BRUCE D. WEST:

(1) Faculty Advisor to University College.
(2) Member, Dept. committee on Graduate Curriculum.
(3) Member, Dept. Safety Committee.
(4) Member, Dept. Seminar Committee.
(5) Member, Dept. Stockroom Committee.


(a) RAYMOND N. CASTLE:

(1) High Councilman in the Albuquerque Stake of the Church of Jesus Christ of Latter-Day Saints.

(b) GUIDO H. DAUB:

(1) Member of Governor's Scientific Advisory Committee, State of New Mexico.
(2) Advancement Chairman, Boy Scout Troop 9; Committee member, Boy Scout Post 9.
(3) Consultant - Action Line, Mr. Fixit.

(c) LEE DUANE HANSEN:

(1) Serving as Ward Clerk (Historian) of the Albuquerque Fourth Ward of the Church of Jesus Christ of Latter-Day Saints.

(c) WILLIAM M. LITCHMAN:

(1) Professional square dance caller and member of the Central New Mexico Caller's Association.

(d) MIRIAM P. MALM:

(1) Team mother in Thunderbird Little League.

(e) DONALD R. McLAUGHLIN:

(1) Active in church.

(f) VICTOR V. SEARCY:

(1) Active in church.

(g) NICHOLAS E. VANDERBORGH:

(1) Member, Immanuel Presbyterian Church.
10. Personal Information.

(a) DONALD R. McLAUGHLIN:

(1) A child (David Paul) was born on May 4, 1968.
I. General departmental information

A. Significant achievements during academic year.

During the past year the department made further progress in revising and extending its graduate program. Experimentation with teaching Economics 200 and 201 continued and a first step was taken in the use of graduate students as quiz section instructors. A visiting committee consisting of Edward Mason, Henry Rosovsky, and Malcolm Davisson was on the campus in October, 1967, and their report has been used as a basis for department planning.

B. Significant plans and recommendations.

Our plans for the future turn mainly on further experimentation with the principles course, introduction of individualized work with seniors, and additional attention to statistics and econometrics, with special emphasis on training in computer uses. We also want to expand our offerings in Latin American economics and natural resource, urban, and regional studies.

We hope to initiate a research program in state and local finance under the leadership of Professor Boyle. If present expectations are fulfilled this program will be supported in part by a grant from the Albuquerque Public Schools. While the Computer Center and the Library are not administratively a part of the economics department, they constitute an integral part of its scholarly activity--teaching and research. We find seriously handicapping the inadequate programming staff of the computer center and the deplorable state of the Library's collection of government documents.
For further progress of the department improvement in these facilities are as important as improvements in our own staff.

C. **Appointments to staff**
   1. T. Norman Van Cott, Assistant Professor, September, 1968
   2. Allen V. Kneese, Visiting Professor, September, 1968
   3. Gerald Boyle, Professor, June, 1968

D. **Separations from staff**
   1. Joan Sato, June, 1968
   2. Calvin dePass, June, 1968
   3. Tracy Murray, June, 1968

**II. Composite of information requested on individual biographical supplements**

1. **Advanced Study:**
   Professors Parker and d'Arge hope to complete Ph.D. dissertations by the end of August, 1968. Professor Liepe has been on leave working on his Ph.D. dissertation.

2. **Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere:**
   Professor Liepe has been on leave under a Social Science Research Council grant. He plans to return February, 1969. Professor Hufbauer has been on leave in Pakistan with the Development Advisory Service of Harvard University. He plans to return September, 1969.

3. **New Scholastic Honors**
   Professor DePass has been awarded a Fulbright Lectureship at the Universidad Autonoma de Guadalajara, Mexico, from September, 1968 to June, 1969.

4. **Publications:**
   **Wollman, Nathaniel**
COHEN, SANFORD

"Review of A. Touraine, Worker Attitudes Toward Technological Change", Kyklos, Summer, 1967.

HAMILTON, DAVID


GISSER, MICHA

"Introduction to Price Theory", International Textbook Company
"The Benefit-Cost-Analysis of Investment in Schooling", accepted by Journal of Farm Economics

JONAS, PAUL

Soviet and East European Foreign Trade, (ed.) International Arts and Sciences Press

TAILBY, DONALD


THERKILDSEN, PAUL T.

d'ARGE, RALPH

Book Reviews - Review of Colin Clark, "Economics of Irrigation", in Technology and Culture, April, 1968

MURRAY, TRACY W.


5. Other Research projects or creative work in progress or completed during period:

WOLLMAN, NATHANIEL

Continuation of study supported by RFF

HAMILTON, DAVID

Member of Joint University Education Study Committee; Completed report on graduate and continuing education at Holloman Air Force Base and White Sands Missile Range (Mimeographed), under Air Force Contract F29600-67-C-0037 (290-826)

CHUNG, PHAM

Manuscript of the book on Money, Banking, and Income: Theory and Policy, expected to be completed by mid-summer.

JONAS, PAUL

"The redistribution of the Product-Mix in a Centrally Planned Economy", Forthcoming Southern Economic Journal, (July 1968)

"Spatial Competition in a Two Dimensional Market". Forthcoming, Annals, Regional Science Association

TAILBY, DONALD

In Process - Article on Externally Constrained Growth Rate of a National Economy
THERKILDSEN, PAUL T.


d'ARGE, RALPH

Pecos River Basin Project continued through next year. Received second research grant of $16,000.00 for the next two years. Research on Economic Decision Models - Water Resources Research - Office of Water Resources Research, U.S. Department of Interior.

6. Activities in learned and professional societies:

COHEN, SANFORD


HAMILTON, DAVID

Member of Executive Council, Rocky Mountain Social Science Association; Member of Executive Board, Association for Evolutionary Economics.

JONAS, PAUL


TAILBY, DONALD


d'ARGE, RALPH

DePASS, CALVIN L.
American Economic Association Meetings, Washington, D.C.
December, 1967.

MURRAY, TRACY W.
Paper Read at Winter ASSA Meetings, 1967, "Effects of
Mass Layoffs on Local Unemployment Rates".
"Administration of the Escape Clause under TEA
of 1962", Read at SW Economic Association, April, 1968-
co-author Mike E. Edgmond.

7. Other Professional Activities

WOLLMAN, NATHANIEL
Testimony before New Mexico Senate, February, 1968, on
state finances.
Seminar, University of Texas, April, 1968.

COHEN, SANFORD
Faculty Director, U. S. Department of Labor, International
Manpower Institute, Summer, 1967;
Lecturer, Manpower Course, Organization of African States,
Dakar, 1967;
Consultant Secretariat of the S.E. Asia Ministries
of Education Conference, Bangkok, September, 1967 -
presented closing address of conference.

CHUNG, PHAM
Faculty Advisor

JONAS, PAUL
"What Happened Behind the Iron Curtain", Ch. 13 Educational
Television, Albuquerque, June, 1968.
Book reviews: National Welfare Economics, UNM Press,
Carson-Paquet, Comparative Systems, International Textbook
Company.
Associated Students Panel on Communism, UNM

TAILBY, DONALD
Consultant to New Mexico State Planning Office - Sept.
Off-Campus participation in Community Development Seminar
for Raton, New Mexico held under auspices of UNM Bureau
of Business Research and New Mexico Department of Development.

THERKILDSEN, PAUL T.
Governor's Committee of 100 on Aging.
d'ARGE, RALPH
Consultant - Uranium Mining Lawsuits for Marron & Houk, Albuquerque.

PARKER, ALFRED L.
TV appearance, KNME, Channel 5, Albuquerque, discussion of the gold problem.
Radio Appearance, KGGM Radio, discussion of the gold problem.
Guest speaker, Kiwanis Club, "The Role of Gold in Our Monetary System".

8. Non-Teaching University service
WOLLMAN, NATHANIEL
Chairman, Committee on the Enhancement of the Educational Process at the University of New Mexico

COHEN, SANFORD
Ad Hoc Committee on Promotions; A & S, Graduate Committee; Graduate Committee Sub-Committee; Various Department of Economics Committees.

HAMILTON, DAVID
Chairman, Library Committee, Second Semester

GISSER, MICHA
Graduate Program, M.A. Examinations, etc.

JONAS, PAUL
Committee on Mathematics.
Coordination Committee between the School of Business and Department of Economics.
Coordination Committee between the Department of Mathematics and the Department of Economics.

TAILBY, DONALD
Served on several M.A. Thesis Committees and Chaired several others.
Served on Ad Hoc Committee of Economics Department and College of Business Administration to consider course offerings.

THERKILDSEN, PAUL T.
Committee "B" College of Education.
Graduate Fellowship Committee
Academic Tenure & Freedom Committee - Student Union Board
Interdisciplinary Program for the Aging
d'ARGE, RALPH
Faculty Advisor - Economics Club, Students for Peace
DePASS, CALVIN L.
Faculty Advisor, University College, Semesters I and II.
MURRAY, TRACY W.
Faculty Advisor to Delta Sigma Pi, Business Fraternity
PARKER, ALFRED L.
Member of Athletic Council;
Chairman, Economics Department Principles Committee;
Chairman, Economics Department Committee on Teaching Load and the teaching of lower division courses.
Participant, Ad Hoc Committee to explore the possibility of establishing a New Mexico Council on Economic Education.

9. Public service
COHEN, SANFORD
Advisory Board, Concentrated Employment Program, Albuquerque, EOB
DePASS, CALVIN L.
Speech to the Pan-American Round Table of Albuquerque on the Central American Common Market, March, 1968.

10. Personal Information
GISSER, MICA
Family increased by one girl - Dalit
DePASS, CALVIN
Divorced - June, 1967
MURRAY, TRACY W.
A son was born - July 5, 1967.
The Report of the Department of English
July 1, 1967 - June 30, 1968
Joseph Frank, Chairman

I. GENERAL DEPARTMENTAL INFORMATION

A. SIGNIFICANT ACHIEVEMENTS DURING THE ACADEMIC YEAR 1967-68

In last year's report I characterized 1966-67 as transitional. The same adjective can, I think, be applied to 1967-68, though the tempo of change has been a little slower and the element of consolidation greater. However, as Section B will indicate, the Department is still planning several significant modifications and innovations. Moreover, those changes which we implemented this year seem, in general, to be working well. As a result, this annual report will make more sense if it is read in close connection with last year's.

1. ENROLLMENT TRENDS

**Semester I (See appendix for details)**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Freshman Writing</td>
<td>2759</td>
<td>3200</td>
<td>2916</td>
<td>2427</td>
</tr>
<tr>
<td>LD Wrtg. &amp; Ling.</td>
<td>465</td>
<td>375</td>
<td>363</td>
<td>202</td>
</tr>
<tr>
<td>LD Lit.</td>
<td>1047</td>
<td>1211</td>
<td>1480</td>
<td>1653</td>
</tr>
<tr>
<td>UD &amp; Grad.</td>
<td>807</td>
<td>933</td>
<td>1079</td>
<td>1274</td>
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<tr>
<td>General Studies</td>
<td>81</td>
<td>69</td>
<td>42</td>
<td>58</td>
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<tr>
<td>English 010</td>
<td>228</td>
<td>212</td>
<td>291</td>
<td>188</td>
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**Semester II (See appendix for details)**

<table>
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<tr>
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<tbody>
<tr>
<td>Freshman Writing</td>
<td>2007</td>
<td>2420</td>
<td>2308</td>
<td>2397</td>
</tr>
<tr>
<td>LD Wrtg. &amp; Ling.</td>
<td>404</td>
<td>346</td>
<td>246</td>
<td>146</td>
</tr>
<tr>
<td>LD Lit.</td>
<td>1144</td>
<td>1256</td>
<td>1486</td>
<td>1589</td>
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<tr>
<td>UD &amp; Grad.</td>
<td>788</td>
<td>1036</td>
<td>1003</td>
<td>1166</td>
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<tr>
<td>General Studies</td>
<td>51</td>
<td>45</td>
<td>67</td>
<td>38</td>
</tr>
<tr>
<td>English 010</td>
<td>526</td>
<td>359</td>
<td>435</td>
<td>166</td>
</tr>
</tbody>
</table>

A few comments on the above figures seem appropriate:

a. The 7½% drop in Freshman Writing was partly predictable and largely based on factors beyond the control of the English Department.
On the other hand, the more than 40% decrease in Lower Division Writing and Linguistics was entirely predictable and deliberate: the result of the phasing out of English 255.

b. The approximately 10% increase in Lower Division Literature enrollments reflects, I think, the greater diversification and broader appeal of the departmental offerings at this level.

c. The 17% increase in Upper Division and Graduate courses is mainly the result of our expanded and strengthened graduate program, particularly at the Ph.D. level. The following table, showing the number of M.A. and Ph.D. degrees granted in English in the last four years, illustrates this gratifying trend.

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th></th>
<th>1966</th>
<th></th>
<th>1967</th>
<th></th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.A.</td>
<td>20</td>
<td>M.A.</td>
<td>20</td>
<td>M.A.</td>
<td>26</td>
<td>M.A.</td>
<td>15</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>1</td>
<td>Ph.D.</td>
<td>5</td>
<td>Ph.D.</td>
<td>7</td>
<td>Ph.D.</td>
<td>12</td>
</tr>
</tbody>
</table>

d. The dramatic decline in 010 is the result of the weakness of our current remedial program. As outlined below (B-1), this situation will begin to be rectified next year.

2. 1967 NDEA INSTITUTE IN ENGLISH

During the Summer Session of 1967, the Department of English sponsored a Title XI NDEA English Institute for twenty-seven high school English teachers. The Institute, directed by Professor Roy Pickett of UMM's Department of English, consisted of a workshop and two graduate courses -- linguistics and rhetoric -- taught respectively by Professor Robert White of the College of Education and Professor Joseph Zavadil of the Department of English. Guest lecturers in the Institute included Professors Miles Zints and Peter Prouse of the College of Education and
and Professor Laurence Lerner of the University of Sussex. Because of an interest in year-long institutes, the English Department did not apply for a grant to offer a summer institute in 1968.

3. D. H. LAWRENCE FELLOWSHIP

For many years the holder of the D. H. Lawrence Fellowship lived for two or three months in the summer in the small house on the Lawrence Ranch property which Lawrence himself occupied briefly. This house, however, was so close to the burial place of Frieda and D. H. Lawrence that the many visitors frequently interrupted the Fellow in order to see the "little house which D. H. Lawrence actually occupied." But about a year ago a separate cottage was purchased in Albuquerque, moved to the ranch, and set up at a sufficient distance from the burial place to assure a much greater degree of privacy for the Fellow. This new (prefabricated) cottage provides excellent living quarters with a magnificent view.

Plans are now set to provide a very modest stipend and free residence in the original Lawrence house (the one formerly assigned to the Lawrence Fellow) to a graduate student who, with other members of his family, will serve as a kind of custodian and guide to the house and the burial place during the three summer months when visitors are most numerous. A few interesting mementos (for example, the old Remington portable once owned by Lawrence) can be displayed in a case which the University maintenance department has secured. Thus a graduate student will find this kind of subvention for a summer quite advantageous.

The D. H. Lawrence Fellowship for the summer of 1968 was awarded to Henry Roth, author of Call It Sleep, a novel first published in 1934. A most unusual revival of interest in this novel occurred in 1962 to 1964. In the intervening years Mr. Roth raised ducks in Maine and published little or nothing. Since the Roth revival he has returned to his writing.
4. FESTIVAL OF POETS

<table>
<thead>
<tr>
<th>Poet</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawrence Ferlinghetti</td>
<td>October 20, 1967</td>
</tr>
<tr>
<td>Robert Bly</td>
<td>November 1, 1967</td>
</tr>
<tr>
<td>Larry Goodell</td>
<td>November 3, 1967</td>
</tr>
<tr>
<td>William Eastlake</td>
<td>November 10, 1967</td>
</tr>
<tr>
<td>John Logan</td>
<td>November 17, 1967</td>
</tr>
<tr>
<td>Charles Tomlinson</td>
<td>November 27, 1967</td>
</tr>
<tr>
<td>Thomas Kinsella</td>
<td>February 9, 1968</td>
</tr>
<tr>
<td>Jonathan Williams</td>
<td>February 23, 1968</td>
</tr>
<tr>
<td>Keith Wilson</td>
<td>March 15, 1968</td>
</tr>
<tr>
<td>Stephen Rodenfield</td>
<td>April 5, 1968</td>
</tr>
<tr>
<td>Denise Levertov</td>
<td>April 22, 1968</td>
</tr>
<tr>
<td>Thomas McGrath</td>
<td>March 29, 1968</td>
</tr>
</tbody>
</table>

The Department also sponsored several poetry readings on campus throughout the year. Professors Frumkin, Johnson, and Rodefer arranged this program.

5. DEPARTMENTAL GRANTS-IN-AID

The Departmental Grants-in-Aid Committee distributed $3,500 ($3,000 from NDEA, $500 from the Commonwealth Fund) to members of the staff and to graduate students - with the former getting the lion's share - during 1967-68. This sum, divided among about two-dozen people, was allocated mainly to stimulate and assist a variety of research projects.

B. SIGNIFICANT PLANS AND RECOMMENDATIONS FOR THE NEAR FUTURE

1. UNDERGRADUATE

a. Freshman English - Remedial

With the elimination of the EPE requirement, we plan radically to change our remedial program. We have dropped 015, and changed 010 from a traditional and negative cram course to what we hope will be a new and affirmative experiment. Freshmen scoring below 17 on the ACT English exam will now be placed in small sections (a maximum of 20) where, for five weeks, they will be given work in remedial reading. Then, for the rest of the term, the emphasis will be on what can be called creative expression. Instead of being penalized for split infinitives and misspelled words, they will be encouraged to say something, almost anything. If necessary, they can start with drawings or oral fumblings or "happenings."
In short, the chief pedagogic technique will be a pat on the back, not a red pencil. In any case, the results cannot be worse than those we are currently getting.

The key to this new program will be the training and supervision of the seven GA's who will be doing the teaching. Professor Fickett and Joanne Cockleiras, along with Visiting Professor Creeley and myself, will be involved, and we hope to get additional help from Professor Huber and his staff. I have also received an encouraging response from the NEH, and there is a distinct hope of federal funds for this program, if it is at all successful, in future years.

Finally, if it can be arranged in time, we hope to have a special section or sections for those low-scoring students whose native language is not English.

b. Freshman English - Regular

As in 1967-68, we hope that, by keeping the contents and techniques flexible and minimally restrictive, English 101 and 102 will continue to improve, will continue to become more of a challenge and less of a chore.

c. New Courses - Undergraduate

In Term II we will offer a course in Negro literature. The contents and nature of this course are now being worked out, and we have had several informal meetings with interested students.

In Term I we are adding, in cooperation with the College of Fine Arts, a course in the film: Introduction to the Cinema.

Less innovative is the new English 350: Old English Literature in Translation. But this course will, we think, both fill a gap and prove much more than a monument to dead ideas.

Because of the variety of our undergraduate courses and the increasing sophistication of our students, we are dropping English 140 and 255.
2. NEW PROGRAMS - GRADUATE

a. MAT in English

In order not to duplicate the report of the College of Education, I am here giving only a one-page summary of the proposed curriculum. The full preliminary prospectus of Nov. 17, 1967, is Appendix B of this report.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 492</td>
<td>Introduction to Linguistics</td>
<td>3</td>
<td>(New 392)</td>
</tr>
<tr>
<td>English 494</td>
<td>English Grammars</td>
<td>3</td>
<td>(New)</td>
</tr>
<tr>
<td>English 512</td>
<td>Critical Approaches to Literature</td>
<td>3</td>
<td>(New)</td>
</tr>
<tr>
<td>English 490 or a 600-Level English course</td>
<td>3 or 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>a course in recent British or Amer. lit.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English 5xx</td>
<td>Writing in the Secondary School (to be crosslisted in Secondary Education)</td>
<td>3</td>
<td>(New)</td>
</tr>
<tr>
<td>English 528</td>
<td>Studies in Reading and Literature for Secondary Teachers (to be crosslisted in Secondary Education)</td>
<td>3</td>
<td>(New title)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec. Educ. 5xx</td>
<td>Advanced Instructional Theory</td>
<td>3</td>
<td>(New)</td>
</tr>
<tr>
<td>Sec. Educ. 5xx</td>
<td>Language Problems of the Bilingual/Sublingual Student</td>
<td>3</td>
<td>(New)</td>
</tr>
<tr>
<td>Sec. Educ. 5xx</td>
<td>Seminar in English Curriculum and Instruction</td>
<td>2-5</td>
<td>(New)</td>
</tr>
</tbody>
</table>

Elective: Any course upon advisement

| Elective 3 | 3 |

Alternative programs:

| English 21 | English 24 | English 21 |
| Sec. Educ. 8 | Sec. Educ. 8 | Sec. Ed. 11 |
| Elective 3 | 32 | 32 |

b. M. A. in English for those planning to teach in junior or community colleges.

The following statement will be inserted in the forthcoming Graduate Catalogue. This revised program will be under the direction of Assistant Professor Ivan Melada.
"Candidates for the Master of Arts in English who intend to
teach at the junior or community college level should consult with the member
of the departmental faculty designated to advise them. The candidate's
program will conform to the regular Plan II Master of Arts program in terms
of appropriate coverage (including some work in Linguistics), total number
of hours, language requirement, and comprehensive examination. It will
differ from Plan II in that the candidate will, under close supervision,
intern in a freshman review or composition course for one semester and in
a sophomore literature course for another semester. For interning in both
semesters he will receive three hours of credit."

c. We expect that the arrangement with the Albuquerque Academy,
whereby two of their teachers are given a stipend and time off to pursue
graduate work in English, will be implemented in 1968-69.

d. In various minor ways, we are ironing out the wrinkles
in our revised Ph.D. program, and it seems to be functioning well.

3. DEPARTMENT-STUDENT RELATIONS

a. Despite certain goofs, our revised advisory and committee
system seems to be working at least adequately on both the undergraduate
and graduate levels. Also, a party in the Desert Room last winter for our
majors seems to have been a success.

b. Two undergraduate majors will be added to the annual Ad Hoc
Committee on the Undergraduate Curriculum, and one graduate student to the
Graduate Committee.

4. MISCELLANEOUS

Arrangements are now well along for the Association of Depart-
ments of English to hold its summer seminar for about fifty new chairmen
at UWM in June, 1969. It is expected that this will be financed by the
federal government.
C. APPOINTMENTS


D. SEPARATIONS FROM STAFF

1. Hamlin Hill, Associate Professor
2. William Eastlake, Lecturer
3. Mary Loubris Jones, Instructor
4. Jessie Morris, Instructor
5. Carole Van Der Voort, Instructor
6. David Johnson, John Martin, and George Ridenour will be on leave the entire academic year of 1968-69; George Arms will be on leave for the Fall Semester, 1968-69.
II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

Robert E. Fleming

David Johnson

Mary Loubris Jones
Twelve hours earned credit toward Ph.D.

Ivan Melada

Stephen Rodefer
Work in progress on Ph.D. dissertation.

James L. Ruff
Ph.D. completed October, 1967, at Northwestern University.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, etc.

George Arna
Research at the Bowells Center, Indiana University, June-August, 1968.

Paul B. Davis
Received "outstanding teaching award" ($1,000 prize), and used money to take his family to England for a year's sabbatical.

Hamlin Hill
"Introduction to America" Seminar, Mora, Sweden, August, 1967; Coe Professor of American Studies, U. of Wyoming, summer, 1968.

Willis Dana Jacobs
Travel in Mexico (Sinaloa), Summer, 1967.

Dorothy M. Logan
Travel in U.S.

John S. Martin

Mary Jane Power
Travel in Europe, Summer, 1968.

James L. Thorson
Summer of 1967 in London and on the continent, pursuing research
into publishing in 17th Century England.

Mary Bess Whidden
Summer research at the Huntington Library.

Joseph B. Zavadil
Sabbatical leave, 1967-68, spent using libraries at Berkeley and Stanford, with residence in Oakland, California.

3. New scholastic honors, fellowships, etc.

George Arms

Paul B. Davis
"Outstanding Teacher" Award at UVM.

Hamlin Hill
American Council of Learned Societies grant-in-aid, 1967-68.

John S. Martin
Appointment as Fulbright lecturer in American Literature at University of Salzburg, 1968-69.

James L. Thorson
Greater University of New Mexico Fund grant for the summer of 1967. Professor of the Month in December, 1967, and Professor of the Year (1967-68) by Las Campanas.

4. Publications

George Arms

Jane Baltrzeml
Book manuscript on medieval poetic accepted by Mouton & Co., publishers.

Ernest W. Boughman

Joanne Cockelreas
Norton B. Crowell

Paul B. Davis
"Beginning with Experience in Literature," Samplings, No. 2, August, 1967

Franklin Dickey

Gene Franklin

Hamlin Hill

Joanne Field Holland

Willis Dana Jacobs

Roy G. Pickett

Stephen Rodefer

E. W. Tadlock, Jr.
5. Other research projects or creative work in progress or completed during period

George Ayres
Continuing work on W. D. Novello letters.

Jane Bertsell
Transcription and translation of British Museum BL. Royal 12 B XVII, a modern paper, "Ars amatoria from Ovid to Andreae Cappelletus," completed.

Joanne Galanopoulos

Norton B. Crowell

Franklin Diskey
Film research for course next Fall, Fine Arts/English. Essays on Southern Drama. Editor: prepress. 2. Shakespeare Association and Renaissance Society, etc.

Joseph Fouch
H继续Famem - a very long book; a descriptive bibliography of what English poetry of the mid-eighteenth century; to be published by BMI Press early in the Fall of 1966 - it is now in the works. A review article on a new edition of Milton's Poems, to be published in the next issue of Seventeenth-Century Essay. Edited, and manuscript: the lead article for, the Winter issue of New Mexican Quarterly. A textbook on essays, at al, for Franklin English to be published by Little, Brown in 1969; a book on a Cambridge Society literary chameleon (Monarch of Bright) which is in the embryonic stage.

Gene Franklin
Novel in progress, as well as some poems.

Willie Jean Jacobs
Work on the poetry of W. C. Williams continues steadily. Several articles are new well under way.

David H. Johnson
Just getting started on a three-part study of literary criticism since 1960; the major criticism since 1960; the major criticism since 1960; and the role of the belief in criticism since 1960.
Joseph M. Kuntz

Dorothy M. Logan
Work in progress on book to be used as text for teaching Freshman English literature.

John S. Martin

Ivan Mekada
In progress: 1. A study of Carlyle's influence upon English fiction of the 1840's. 2. A study of radical Victorian fiction of the 1840's.

Roy G. Pickett
Director of 1967 NDEA (Title XI) Institute in English for Secondary School Teachers, June 19 to August 5, 1967.

David A. Remley

George M. Ridenour
Textbook of second generation Romantic Poets (in progress).

Katherine G. Simons
Personal project continued: Medieval and Renaissance thought and backgrounds, with relevance to my Shakespeare and honors courses.

E. H. Tedlock, Jr.
Novel THE LIBERAL SUMMER completed.

James L. Thorson
I am continuing research into 17th Century publishing, the Restoration theater and drama, American literature, Samuel Butler, and others.

Mary Dean Whidden
Edition of sonnet sequences, two articles about Shakespeare's poetry.

Joseph D. Zavadil
6. **Activities in learned and professional societies**

George Arms  

Jane Balz diet  
Chairman, MLA Conference 39 on Geoffrey of Vinsauf, December 28, 1967. Chairman-elect, General Literature Section of Philological Association of the Pacific Coast. Chairman, RMMLA Section on Classical Literature.

E. W. Baughman  

Edith Buchanan  
Secretary-treasurer University of New Mexico Chapter of Phi Beta Kappa. Vice President, New Mexico Association of Phi Beta Kappa. Delegate to Triennial Meeting of Phi Beta Kappa (United Chapters), Duke University, August, 1967.

Robert E. Fleming  

Joseph Frank  

Hamlin Hill  
Willis Dann Jacobs
   Member, American Association of University Professors; Modern Language Association; National Council of Teachers of English.

Mary Loubris Jones

Joseph M. Kuntz
   Attended RMMLA meeting, October, 1967.

Dorothy M. Logan
   Attended annual meeting of RMMLA.

John S. Martin

Roy G. Pickatt
   Attended Rocky Mountain Modern Language Association, Denver, October, 1967; Conference on College Composition, Minneapolis, April, 1968.

Katherine G. Simons
   Membership Committee, Alpha Chapter, 1967.

E. W. Todlock, Jr.
   Chairman, Section II, Contemporary Literature, Modern Language Association. (Meeting in Havana, November, 1967.)

James L. Thorson
   Local committee on arrangements for meeting in Albuquerque on October 13-16, 1967; attended that meeting. I was program chair, an exceptional of the American Association of Teachers, RMMLA chapter, and attended annual meeting in Washington, as the chapter leader, April 26-27, 1968.

Mary Boss Uncken
   Attended RMMLA meeting and MLA meeting.

7. Other professional activities

George Arms
   Editor, The Latin American Review.
   Editor, Americas.
   Guest editor, The Expatriate.
   Member, American Literature, MLA Board, Abstracts of English Dissertations.
   Board of Urologists, American Society of Urology.
E. W. Baughman
Folklore Talk, Shriners Luncheon Group, April, 1968.

Joanne Cockermoun

Joseph Frank
Two local TV appearances in behalf of the candidacy of Eugene McCarthy; a short radio interview on Robbed Pegase.

Hamlin Hill

John S. Martin
Reader-consultant in American Studies for ROCKY MOUNTAIN SOCIAL SCIENCE JOURNAL.

Roy G. Pickett

Stephen Rodefer
Poetry reading in UNM poetry series, April 5, 1968.

3. Non-teaching University service

George Amu
Chairman of Committee on American Studies. Member of University Graduate Committee. Elective member of Department of English Policy and Personnel Committee. Member of Graduate School Committee on Visiting Lecturers.

Jane Balzsell
Departmental Policy and Personnel Committee. Chairman, Committee in Charge of Comparative Literature.

E. W. Baughman
Academic Freedom and Tenure Committee, Student Affairs Committee, Department Master of Arts Ad Hoc Committee, Department Ad Hoc Space Allocations Committee. Acting Director, Graduate American Studies Committee, 1968-69.

Edith Buchanan
Departmental Policy and Personnel Committee, Graduate Committee, Ad Hoc Undergraduate English Committee (Chairman). Graduate Faculty-Student Liaison Committee, Graduate Advisor.
Joanne Cockleman
Faculty advisor - University College

Morton B. Crowell
I have served as Chairman of the Departmental Graduate Committee and shall continue to serve.

Franklin Dickey
Graduate advisor; Secretary, Phi Kappa Phi; Honors Committee Chairman; Policy and Personnel Committee.

Robert E. Fleming
Undergraduate Advisement Committee

Joseph Frank
President of the UWM Faculty Club; member of the Publications Committee; elected to the Administrative Committee; Committee to advise the College of Education.

Gene Frankin
Chairman, English Department Creative Writing Thesis Committee; chairman, Poetry Reading Series Committee.

Joanne Field Holland
University Speakers' Committee; Advisory Committee on the UWM Art Museum; AAUP Chapter Committee; Departmental Committee on advisement of majors; faculty advisor of English majors.

Willie Dana Jacobs

Mary Loubris James
University College advisor.

Joseph M. Kunts
Faculty advisor, English majors. A&S Scholarship Committee.

Dorothy M. Logan
Faculty advisor to University College; Freshman English Advisory Committee.

John S. Marcin
American Studies Committee, UWM. Departmental Grants-in-Aid Committee; direction of sectioning for Department.

Ivan Holada
Committee on Junior College Programs; Ad Hoc Committee on the Undergraduate Curriculum; Undergraduate Majors advisor; Chairman, Committee on Multiple Courses, English 250; M.A. examiner.
Roy G. Pickett
Director of Freshman English. Chairman of Freshman English Committee. Member of the New Student Orientation Committee.

David A. Remley
Phi Beta Kappa Membership Committee

Stephen Rodefer
Faculty Advisor; teacher in free university.

James L. Ruff
Undergraduate Advisor for English Majors

Katherine G. Simons
Chairman, Departmental Committee on Undergraduate Majors.

E. W. Tedlock, Jr.
Creative Writing Committee (departmental), including administration of D. H. Lawrence Fellowship.

James L. Thorson
University fellowship awards committee, and the University Library Committee. I am faculty advisor to graduate students, and a member of the department Graduate Committee.

Fred B. Warner, Jr.
Director of Registration; MAT Inter-departmental Committee; Policy and Personnel Committee; appointed Assistant Dean of Arts & Sciences to begin July 1, 1968.

Mary Bess Whidden
Department Honors Committee; Honors advisor; Chairman, Phi Beta Kappa banquet committee.

Joseph B. Zavadil
National Newman Outstanding Faculty Advisor Award for 1967.

9. Public service

Jane Baltzell
Co-chairman of banquet and initiation arrangements for Phi Beta Kappa.

E. W. Baughman
Chairman; Division 35A, Democratic Party

Edith Buchanan
Friends of the University of New Mexico Libraries; New Mexico Opera Guild.
Robert E. Fleming  
Member, Education Committee, Aquinas Newman Center

Joseph Frank  
Member, New Mexico state board of the American Civil Liberties Union; service on the steering committee of McCarthy's presidential campaign; New Mexico Democrats for Eugene McCarthy.

Willis Dana Jacobs  
Chairman and Pronouncer, Annual Scripps-Howard Spelling Bee for the State of New Mexico, sponsored by the Albuquerque Tribune, April, 1968.

Mary Louise Jones  
Albuquerque Pre-School Cooperative

Ivan Helada  
Cubmaster, Cub Scout Pack #1, Sandia District; Committee member, Cub Scout Pack #1, Sandia District; Chairman of Awards, Cub Scout Pack #1, Sandia District.

David A. Remley  
Sierra Club; Isak Walton League of America; Albuquerque Urban Progress.

James L. Thorson  
Executive committee of Albuquerque Urban Progress, a civic action committee, and I have testified in that capacity before various city and state bodies. I am also on the nominating committee for the state ACLU.

10. **Personal Information**

Willis Dana Jacobs  
Major, United States Air Force Reserve

James L. Thorson  
Received my discharge from the USNR in March, 1968.
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I. General Departmental Information

Building on the reorganized major in geography which was effected last year, the Geography Department is now able to offer an undergraduate major of comparable quality to that of other state universities. There are now thirty-nine majors in geography, an increase from twenty last year and from seven just two years ago. This year the first group of seniors to benefit from the new program was graduated. Significantly, three of the seven seniors have received graduate assistantships for work on advanced degrees at other institutions. Not only has the number of majors risen rapidly, however, but total enrollment in geography courses has continued to show a very high rate of increase, indicative of growing interest and the attraction of additional course offerings.

Although the primary reorganization of course offerings was made last year, two new developments in this vein should be noted. One of these resulted from agreements with the Department of Civil Engineering and the Department of Geology for joint listing in the Catalog of Civil Engineering 380L - Cartography and of Geology 481 - Geomorphology. In the 1968 - 69 Catalog, in addition to the listing of these two courses under the offerings of the two departments respectively, the courses also are included in the listing for the Geography Department as Geography 380L - Cartography and Geography 481 - Geomorphology. Thus they are immediately evident to anyone considering a geography curriculum.
The other development was the addition to the offerings of the department for the fall semester of two courses not presently in the Catalog, namely Geography 336 - The Middle East and the Indian Subcontinent and Geography 373 - Map Reading and Air Photo Interpretation. Both courses were taught by a visitor, Dr. Rodman E. Snead, Associate Professor at the Graduate School of Geography of Clark University. Through a series of unexpected circumstances, Dr. Snead came to this department for the fall term. Both courses were popular, and the latter was particularly useful for geography majors. Since Dr. Snead has accepted an offer to join the staff of our Geography Department in February, 1969, these two courses are being requested for addition to the geography offerings in the Catalog.

Furthermore, since Dr. Snead is well qualified to teach geomorphology, arrangement has been made with the Department of Geology to have Dr. Snead teach this course in alternate years when it is not offered by the Geology Department.

A temporary additional offering for the summer session of 1968 is Geography 429 - Workshop in the Principles of Geography. This course is being offered at the request of teachers in the Albuquerque Public Schools who need training in geography to cope with revisions in the social studies curriculum in the schools. The lecture room in Hodgin Hall with its new equipment and adequate desk space should be of considerable help in conducting this class.

The relocation of the Geography Department in the recently refurbished Hodgin Hall has proven to be of great benefit. The new facilities and the convenience of map room and lecture room proximity have greatly increased the use of maps and slides in classroom lectures. The map room was especially indispensible in the laboratory work connected with
the course in Map Reading and Air Photo Interpretation. Map displays, working space, and the availability and posting of materials on graduate school and employment opportunities have all served to heighten student interest. The assurance of additional space as needed is a great help in planning for the next several years.

The Geography Department has developed to a point now where serious plans are being made for the inauguration of a master's degree program, hopefully in the fall of 1969. The matter was thoroughly discussed in staff meetings during the fall semester, when the staff could benefit from the participation of Dr. Snead in planning courses and requirements. When Dr. Snead joins the staff of our department in February, 1969, he will bring with him experience with one of the leading graduate schools in geography in the country where he not only was involved with all phases of graduate work but also ran the Clark Field Camp, both in various parts of the United States and in Puerto Rico. Associate Professor Bennett and Professor Murphy likewise have had a large measure of research and graduate experience, and Mr. Ayala has conducted groups of students on field trips in the United States and Mexico. While the staff is not large, it should be very adequate for the inauguration of a sound program.

The addition of a master's program has been discussed with the Dean of Arts and Sciences who has approved the submission of a formal request. The request is to be prepared during the summer session for submission during the 1968-69 academic year. The University Secretary has formally approved the use by the Geography Department of the remaining space on the main floor of Hodgin Hall whenever the master's program is approved. This will provide for a student workroom and space for graduate assistants.
With the addition of Professor Snead to the staff in February, 1969, the department will have four full time faculty. The fourth position this past year has been filled by Dr. John A. Johnson who was a visiting assistant professor for the academic year, coming to us from the University of Nevada in Reno. When the opportunity arose for Dr. Snead to be here for the fall semester, he was brought in as a fifth staff member for that semester only.

One other staff appointment should be noted. Since Professor Richard E. Murphy will be on a leave of absence for the 1968 - 69 academic year, Professor Curtis A. Manchester of the Department of Geography of the University of Hawaii will be here for the academic year, as his replacement. The department is fortunate in securing the services of Dr. Manchester who will teach courses on the Far East and on the Geography of Exploration. In both he has done a large amount of research and has spent years in the Orient as a teaching and research scholar. Dr. Bennett will serve as Acting Chairman.
II. Composite of Information Requested on Individual Biographical Supplements.

Activities of departmental members covered a rather wide range, particularly in research. These are summarized below from the material in the annual supplements to the biographical records of the individual staff members.

Advanced study.

During the summer of 1967, June to August, Instructor Reynaldo Ayala completed his field research in Mexico for his doctoral dissertation on the Historical Geography of Parras de la Fuente Coahuila, Mexico. Presently he is completing the writing of the dissertation for submission at the end of the summer of 1968.

New scholastic honors, fellowships, etc.

The Institute of Geography at Tohoku University in Sendai, Japan has invited Professor Richard E. Murphy to lecture there during 1968 - 69. Professor Murphy has received a Fulbright grant to enable him to accept this invitation and will be on leave for the 1968 - 69 academic year.

Publications.

"Landforms of the World" by Professor Murphy was published as Map Supplement Number Nine of the March, 1968 issue of the Annals of the Association of American Geographers. The map is being listed under "Distinctive Recent Maps" by Dr. Walter W. Ristow, Chief of the Geography and Map Division of the Library of Congress, in Surveying and Mapping.

-5-
Other research projects or creative work in progress or completed.

Associate Professor Iven V. Bennett has three research projects in various stages of completion. One of these is an investigation of opaque sky cover as a predictor of insolation. Research on this project has been completed, and a paper thereon is being prepared for presentation in the near future. The second project is a study of annual, seasonal, and monthly rainfall in Thailand based on an analysis of fifty years of data from forty-five Thai stations. The data is presently on punch cards to be subjected to computer analysis. The third project is an analysis of frequency of hail, sleet, and freezing rain in the United States. The data is being assembled from 300 stations and will be punched on cards for computer analysis.

Professor Murphy and Professor Rodman E. Snead, in cooperation with the director and assistant director of the Technology Applications Center, prepared a pilot study for a project recommended to the National Aeronautics and Space Administration for classification and catalog presentation for prospective users of photographs from space flights.

Professor Snead is currently involved in two additional projects. He is preparing an Atlas of Landforms under contract for publication by John Wiley and Sons, and he is engaged in a study of the coastal morphology of Iran. Research for the latter is being conducted under a grant from the Office of Naval Research, and Dr. Snead will be doing field work in Iran during the first half of the coming academic year.

Activities in learned and professional societies.

Mr. Ayala presented a paper entitled "Free and Slave Mulattos in the Colonial Population Structure of a Northern Mexico Settlement -- Santa
Maria de las Parras" at the meeting on April 12 of the Southwestern Division of the Association of American Geographers in Dallas. On May 3 and 4 he attended the Rocky Mountain Conference on Latin American Studies in Albuquerque, and on May 10 - 11 he took a group of students to Santa Fe for the session on "Contacts between the Old World and the New World" of the annual meeting of the Society for American Archaeology. On June 14 - 15 Mr. Ayala is scheduled to participate as a discussant of a paper on "Urbanization in Baja California" to be presented by Professor John A. Price at the Conference on Urbanization in the United States - Mexico Border Region meeting in El Paso.

Dr. Bennett attended the joint meeting in Denver on May 3 - 4 of the Rocky Mountain Social Science Association and the Great Plains - Rocky Mountain Division of the Association of American Geographers. Dr. Bennett is a member of the Program Committee of the Albuquerque Chapter of the American Meteorological Society, and his membership in the national society has been changed from associate to professional member. He has been appointed a member of the Editorial Review Board of the Solar Energy Society and has reviewed for publication three papers dealing with the climatology of insolation.

Dr. Murphy was a panel member for a section meeting on "The Disadvantaged Learner in the Geography Classroom" at the annual meeting of the New Mexico Council for the Social Studies in Santa Fe on April 20. Dr. Murphy and Dr. Bennett are board members of the New Mexico Geography Council, an organization formed at the instigation of New Mexico teachers to encourage and help in the development of geography in the public schools of the state.
Other Professional Activities.

Several lectures have been given by various staff members through the year. Dr. John A. Johnson presented a lecture on "The Development of Transportation on the Mississippi River; A Study in Cultural Geography" at the April 25th meeting of the UNM Geography Club. Dr. Snead addressed the same organization on February 29. The subject of his talk was "Tracing the Route of Alexander the Great Across Baluchistan." On April 9, Dr. Bennett gave a lecture on "Geographic Problems of Thailand" to the UNM Anthropology Club. Mr. Ayala gave two lectures on aspects of Mexico. On January 19 he spoke on "The Roots of Modern Mexico" at the Acoma School, and on February 28 he addressed the Latin American Desk on the subject of "The Ethnographic Composition of the Colonial Population of Northern Mexico." Dr. Murphy has accepted an invitation to present a lecture on the topic of "The World Resources Gap" to be given during the summer, 1968, program series called "Crisis: Nineteen Sixty-eight" of the First Unitarian Church of Albuquerque.

Mr. Ayala participated in the Consortium on Interuniversity Cooperation of Latin American Efforts held in Albuquerque on April 5 and 6. He was involved in discussions among scholars from several southwestern universities who were assembled to examine the matter of cooperative effort in academic work pertaining to Latin America.

At the request of the publisher, Dr. Bennett reviewed Weather Elements: A Text in Elementary Meteorology by T. A. Blair and R. C. Fite (5th ed. Prentice-Hall, 1965). The purpose of the review was to assist the authors and publisher in the preparation of a new edition.

Dr. Murphy likewise reviewed a book for a publisher. In this case, it was a pre-publication review of Cultural Geography by Joseph E. Spencer and B. E. Thomas which will be published by John Wiley and Sons. Dr.
Murphy has also completed editorial review for geographical content of the third and fourth volumes of Our World Today Series under contract with Allyn and Bacon publishers and in cooperation with the author, Professor Harold D. Drummond of the University of New Mexico.

**Non-teaching University Service.**

In addition to serving as Chairman of the Geography Department, Professor Murphy served on three committees, the Interdepartmental Committee on the Master's Program in International Affairs, the Committee on Russian Studies, and the Committee on Western European Studies. Mr. Ayala was advisor and sponsor of the UNM Geography Club, and Dr. Bennett and Dr. Murphy served as advisors to majors in geography.
The Report of the Department of Geology
July 1, 1967--June 30, 1968
Vincent C. Kelley; Chairman

I. GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements

The Department of Geology granted 10 bachelor's degrees, 9 master's degrees, and 2 doctor of philosophy degrees. This compared with 6, 8, and 4 degrees respectively of the previous year.

Enrollment at the graduate level was about the same as the previous year. Beginning course enrollments were up about 8 percent for the full year. Enrollments in our important major courses at the sophomore and junior levels were up slightly and signs of revived interest in geology as a profession was quite evident. Demand for graduating seniors and for advanced degree recipients was far greater than the supply. This was due to (1) sharp expansion in mineral exploration, (2) expansion of the fields into which geologists may find employment, and (3) shortage caused by the draft.

The number of formal applications for admission to the graduate program was up about 50 percent. There was a noticeable slight increase in the number who could come
without financial aid from UNM, and one or two who were returning with G.I. benefits. At the same time the number of available nonservice awards declined from the previous year. Service awards from the College rose by two.

Graduate students receiving nonservice fellowships, scholarships, or traineeships were as follows:

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Grant Type</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Pao-Chin Chao</td>
<td>UNM Fellowship</td>
<td>$1900</td>
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<tr>
<td>William M. Turner</td>
<td>UNM Fellowship</td>
<td>$1900</td>
</tr>
<tr>
<td>Sandra C. Feldman</td>
<td>NDEA Fellowship</td>
<td>$2400</td>
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<tr>
<td>Richard L. Squires</td>
<td>NDEA Fellowship</td>
<td>$2200</td>
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<tr>
<td>Eugene I. Smith</td>
<td>NDEA Fellowship</td>
<td>$2400</td>
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<tr>
<td>Tim Schowalter</td>
<td>NDEA Fellowship</td>
<td>$2000</td>
</tr>
<tr>
<td>John Petersen</td>
<td>NDEA Fellowship</td>
<td>$2000</td>
</tr>
<tr>
<td>Fred W. Bachhuber</td>
<td>NASA Traineeship</td>
<td>$2800</td>
</tr>
<tr>
<td>Fred R. Cagle, Jr.</td>
<td>NASA Traineeship</td>
<td>$3300</td>
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<tr>
<td>William McNulty</td>
<td>NASA Traineeship</td>
<td>$3100</td>
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<tr>
<td>Ronald Geitgey</td>
<td>NSF Summer Traineeship</td>
<td>$700</td>
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<tr>
<td>Constance Harris</td>
<td>Herrick Scholarship</td>
<td>$600</td>
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<tr>
<td>Anne Colberg Sigleo</td>
<td>Albuquerque Gem and Mineral Club Scholarship</td>
<td>$250</td>
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<tr>
<td>Steven L. Getz</td>
<td>Aztec Oil Scholarship</td>
<td>$400</td>
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<tr>
<td>James R. Grainger &amp; Alfred C. Gomez</td>
<td>Harry Leonard Scholarship</td>
<td>$250</td>
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<tr>
<td>Peter J. Coney</td>
<td>Research Associate</td>
<td>$3000</td>
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<tr>
<td>Rodney C. Rhodes</td>
<td>Research Assistant</td>
<td>$500</td>
</tr>
<tr>
<td>Dasharatham Sayala</td>
<td>Research Assistant</td>
<td>$500</td>
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<tr>
<td>Pilsum P. Master</td>
<td>Research Assistant</td>
<td>$500</td>
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Cash prizes were given for the best presentation of student talks before the weekly Graduate Conference. These were given to J. Michael O'Neill ($60) and Dennis Irwin ($40).

The New Mexico Geological Society contributed $220 in the form of "Grants in Aid of Research" to graduate students for
such items as field expenses, thin sections, and thesis reproduction. The grants were awarded to:

Charles A. Bandoian  $120.00
Klyne Headley  $100.00

The following staff research grants were in effect.

R. Y. Anderson and E. F. Cruft, NSF Grant GA-922, "Climatic Cycles and Patterns in Varved Sediments and Geochemistry of Evaporites, Castile Project"  $49,900

W. E. Elston, NASA 32-004-011, "Comparative Study of Lunar Craters and Earth Volcano-Tectonic Depressions"  $25,000

E. F. Cruft, American Chemical Society
"Nucleation Kinetics in CaSO₄-H₂O System"  $13,097

R. Y. Anderson, NSF Student Seminar  $3,195

Further indication of research activities of the staff is shown by the following grants made to them by the UNM Research Committee.

V. C. Kelley  $1,800
A. M. Kudo  $1,200

The Visiting Lecture Program continued to bring in outstanding lecturers as follows:

Dr. Gilbert Fielder, London University
Dr. Robert F. Black, University of Wisconsin
Dr. Brian Mason, Smithsonian Institution
Dr. Preston Cloud, University of California, Los Angeles, Sigma Xi
Dr. Warren Hamilton, U. S. Geological Survey

Close cooperation of the U. S. Geological Survey continues to be enjoyed. During the year, geology students and staff have spent hundreds of hours in their library in connection
with studies and research. Some part-time employment has been obtained also. Consultation on numerous geological problems of our students has been given by many of the Survey professionals. They have freely allowed our students and staff to use photogrammetric, photographic, field and other equipment.

Two fine gifts came to the Department during the year in support of education and research.

Mobil Foundation $500
Atlantic Richfield $1,000

Dr. Kudo completed his phase equilibrium laboratory this year and was preparing for research on the crystallization histories of igneous rocks. In this connection he submitted a research proposal (NSF A004428) for $31,403 to support the work. This included an item for $90,000 for an electron microprobe. Later when it became apparent that this item was to be extremely important to the establishment of a top quality meteoritics program in the department he agreed to withdraw temporarily the part of the proposal supporting his own research in high temperature-pressure fields. Later he submitted a new proposal for this work but by the end of the year it had not been acted upon by NSF. The sacrifice, however, was not in vain for on May 28, Dr. Kudo received
the good news that $55,000 in matching funds had been granted by NSF for the purchase of the microprobe.

In the meanwhile the UNM administration had agreed to incorporate the Institute of Meteoritics within the Department of Geology and back this with the matching funds for the microprobe, a director, probe operator, research assistant, and operating budget. The department was very fortunate in obtaining Dr. Klaus Keil of Ames Research Laboratory to come as Director of the Institute beginning the 1968-69 year.

Early in the year the department was notified that it could expect to have the third floor space when the Civil Engineering Department moved into their new building some time during the winter of 1968-69. Plans for Geology's immediate and 1977 needs were submitted to Dr. Sherman Smith of the University Space Committee. It was demonstrated that our immediate needs especially with the Institute of Meteoritics would be nearly double the third floor space being vacated by Engineering. As a consequence the Space Committee decided that Geology could add to the building and recommended that the addition be built above the east wing second floor. As the year ended the staff submitted a room list plan to the UNM Space Committee for the purpose of
estimating cost of the addition and renovation of present space.

One of the high lights of the year was the NSF sponsored Student Seminar in "Sedimentary Processes and Environments". Seniors and first-year graduate students were invited to participate. These top students were selected by chairmen or heads of 26 universities around the country. Complete expenses were paid for the students. Several of our graduate students participated and Fred Cagle and Fred Bachhuber of our group handled most of the arrangements. The Seminar covered one and a half days followed by a half-day field trip. The study and discussions centered around talks given by Dr. T. R. Walker (University of Colorado), Dr. J. W. Harbaugh (Stanford), Dr. R. N. Ginsburg (Johns Hopkins), Dr. R. Y. Anderson (UNM), and Dr. E. F. Cruft (UNM). The Seminar was quite informal and directed towards the nature and method of graduate research. It was highly successful as one could judge by the eagerness and vitality of student response. The visiting speakers were quite complimentary of the organization and effectiveness of the program.

B. Plans and Recommendations

1. Next year should see the culmination of plans for expansion into new building space.
2. Every effort must be made to obtain a full-time chemical analyst.

3. Cheap unheated or uncooled space should be found for storing some of little used well and other rock and mineral samples in order to free B-1 for more current collections and for certain large lay out type of activities.

4. We should try to get an electronics technician perhaps shared by chemistry and biology.

C. No resignations or additions to staff took place.

II. COMPOSITE OF INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study


2. Sabbaticals, etc.

Roger V. Anderson. Travel to west coast in summer 1966 in connection with research. Travel to central Mexico Spring 1968 to study playas.

Edgar F. Cruft. American Geological Field Institute, Japan, June-July 1967. South East Asia, Australia,

**Wolfgang E. Elston.** Summer field work on NASA-sponsored research, southwestern New Mexico. Conducted tour of work area for researchers from NASA, Jet Prop. Lab., U. S. Geological Survey, University of Arizona and University of Utah.

**Vincent C. Kelley.** Summer teaching, summer session University of Hawaii - 6 weeks. Travel in Hawaiian Islands and Channel Islands, California.

**Albert M. Kudo.** Summer travel to Canada (visited McMaster University, and University of Toronto and Expo 67). Participated in Geology Field Trip to Four Corners Area (led by Dr. S. A. Wengerd). Travel to New Orleans to read paper and attend Geological Society of America meeting. Travel to San Francisco-Palo Alto (May 15-17) for research consultation and discussion with fellow worker.

**Sherman A. Wengerd.** Travel to Colorado, Utah, Arizona, California, Texas, Oklahoma, Mexico, Florida, Louisiana for Geologic Research, Field Work, Conferences, Symposia, Scientific Meetings. Flew to St. Thomas, Virgin
Islands, for seven day boat charter and diving studies of coral reefs and modern reef sedimentation along Virgin Island chain. Flight of 2,000 miles by private plane in Mexico and southwestern U. S. for geological photographs to be used in lecturing. Geologic and Scout expedition down Havasupai Trail of Grand Canyon (geologic guide for Boy and Girl Scouts), October 26-29, 1967. Geologic and coastal study field trip, Guaymas region of Sonora, Mexico, June 12-23, 1967 (photographs and geologic collections).

Lee A. Woodward. Travel to Montana during summer of 1967.

3. New Scholastic Honors, etc.


4. Publications.


Cruft, E. F., Dean, W. E., Jr., and Anderson, R. Y., Chemical variation in the varved Castile: Geol. Soc. America annual meeting, New Orleans, 1967 (abs.).


Elston, W. E., 1967, Road logs, Safford, Arizona to Silver City, N. M.; Silver City to Gila Cliff Dwelling National Monument, San Lorenzo, east side of Black Range, Santa Rita, and return; Silver City, N. M. to Steins, N. M.: ibid., p. 252-305.


Wengerd, S. A., 1967, "Who's the Boss around here" (Editorial the New Mexico Certified Geologist, v. 1, No. 3, p. 3.


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5. Other Research Projects, etc.

Roger Y. Anderson. Principal Investigator on NSF Grant GP 4200-cont. two years, $49,900: Climatic Cycles and Patterns in Varved Sediments-Geochemistry of Evaporites.

Edgar F. Cruft. Continued work on Geochemistry of evaporites, NSF sponsored with R. Y. Anderson. New grant awarded, American Chemical Society for $13,097 to study nucleation kinetics in CaSO₄-H₂O system, started February 1968. Grant from Sandia Corporation for $5,000 to do materials analysis and research, February 1968 - July 1968.

Wolfgang E. Elston. Wrote proposal for 3-year step-funded renewal of NASA grant (Volcanological approach to the interpretation of lunar features). Listed as collaborator on AEC contract AT(11-1)-689, Correlation of ore deposits and volcanic rocks (Univ. of Arizona, Dr. P. E. Damon, Principal Investigator). Cooperated with NSF grant GA-455 (part of Upper Mantle Project; Dr. Kenneth Cook, University of Utah, Principal Investigator). Cooperative
program with U. S. Geological Survey Wilderness Project.


Vincent C. Kelley. Pajarito Mountain; Permian Stratigraphy of Pecos Slope; Petrology of Lincoln County Porphyry Belt; Tularosa South Fork Graben; Diatreme of Canjilon Hill; Buckles of the Pecos Slope; Tinnie Fold Belt; Albuquerque's physical setting.

Albert M. Kudo. Bomb lab in operation (except for a few minor bugs). Research in plagioclase geothermometry: paper presently in preparation for publication. Received grant (Organized Research) to study Cabezon Peak and other volcanic necks around Mt. Taylor; continuing research on it. Submitted proposal to NSF for microprobe funding and for research on Mogollon volcanics. Preparing another proposal for submission to NSF (work on rapakivi granites).


A. Rosenzweig. Work on the crystal structure of
$(\text{NH}_4)_4 \text{UF}_8$ with D. T. Cromer; the crystal structure of $(\text{NH}_4)_4 \text{ThF}_8$ with R. R. Ryam; the phase diagram of Au -Sn - Pb with M. M. Karnowski.


6. Activities in Learned and Professional Societies


J. Paul Fitzsimmons. Trip leader on 18th Annual Field Conference of New Mexico Geological Society. Secretary
Vincent C. Kelley. Member Advisory Board of
U. S. Bureau of Land Management; Member U. S. Geological
Survey; Registered New Mexico Professional Engineer; Chair-
man Grants and Aid Committee of New Mexico Geological Society;
Member Board of Directors New Mexico Mining Association;
Member of New Mexico Mining Association Committee on Educa-
tion; Invited to be Master of Ceremonies Geological Society
of America banquet; invited to present a paper to the "Idea
Conference" at New Mexico Tech; Attended New Mexico Geologi-
cal Society at Hobbs, May 10-11; Attended Geological Society
of America Cordilleran Section Meeting at Tucson, April 11-13.

Albert M. Kudo. Attended National Meeting of
the Geological Society of America in November 1967 (New
Orleans) and read paper. Became member of the Sigma Xi
Society. Attended several Sigma Xi sponsored talks.

Stuart A. Northrop. Attended 18th Field Confer-
ence of New Mexico Geological Society, Defiance-Zuni-Mt.
Taylor region, October 19-21, 1967. Read paper (by invita-
tion), "New Mexico Earthquake Record," at New Mexico Sec-
tion of American Society of Civil Engineers, Albuquerque,
February 16, 1968.

Chapter, May 15, 1968, Western Skies Hotel. Member of
the Speakers Bureau, National Oceanography Association,
Washington, D. C. State Editor, New Mexico Section of
the American Institute of Professional Geologists, June -
November 1967.

Lee A. Woodward. Attended Geological Society of
America meeting in Tucson, April 1967. Chairman of Petrology
Session, Geological Society of America Cordilleran Meeting,
Tucson, April 13, 1968.

7. Other Professional Activities.

Roger Y. Anderson. Project Director for NSF
Grant, $3,195, "Student Seminar in Geological Sciences —
Sedimentary Environments and Processes" (an experimental
new program in undergraduate education — final report avail-
able. Correspondent, Rocky Mountain Region for Micro-
paleontology, National Journal. Preparation of news reports.

Edgar E. Cruft. Geological Consultant, Norá
Corporation, mineral survey in Southern Africa.

Wolfgang E. Elston. Visiting Scientist, American
Geophysical Union, Feb. 11-21, 1968. Visited Oklahoma City
University, Washington University (St. Louis), University
of Cincinnati, Rutgers University, Montclair, New Jersey
State College. Lecture topics: The Moon's Face; Clue to

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the evolution of the earth; Non-orogenic granitic magmas in ash flows and ring-dike complexes; Catastrophism and uniformitarianism in astrogeology. Visiting Geological Scientist, American Geological Institute, February 25-28, 1968. Visited Eastern New Mexico University and Sul Ross State College (Texas). Lecture topics as above. Several newspaper interviews and one TV talk in connection with American Geophysical Union and American Geological Institute tours. Also spoke before Albuquerque Geological Society on Volcanic rocks and ore deposits of the Silver City - Santa Rita area, New Mexico. Also spoke before graduate colloquia in UMH Physics and Chemistry Departments, and classes in Albuquerque public schools. Reviewed paper for Geological Society of America and parts of a textbook on tectonics by J. G. Dennis.


Vincent C. Kelley. NSF Consultant on Institutional Facilities Program; NSF Consultant on Departmental Development Program; Talk on October 24, to Albuquerque Geological Society "Geology of Hawaii", Talk on November 13,
to Retired Teachers Association on "Highlights of New Mexico Geology"; Member Information and Education Committee of New Mexico Mining Association; Two talks to UNM Geology Graduate Conference on Geology of Hawaii; NSF Site visit to Stanford University February 21-23, 1968.


A. Rosenzweig. Two lectures at New Mexico Highlands University.

Sherman A. Wengerd. Critic and editor (April 12-17, 1968) for chapter on Oil Fields of New Mexico in Dr. Landis' book entitled "Geology of the United States" to be published late 1969; Critic and editor (April 15, to May 20, 1968) for chapter on Physical and Chemical
8. Non-teaching University Service


Edgar F. Cuff. Member University Research Allocations Committee. Organizer of Departmental Library. Member Geology Space Committee.


J. Paul Fitzsimmons. Chairman of one thesis committee, member of six others. Member of five dissertation committees.

Vincent C. Kelley. Chairman, Department of Geology; Chairman nine dissertation and thesis committees and member of 19 dissertation and thesis committees.

Albert M. Kudo. Non-degree advising during spring registration. Advising for Dr. A. Rosenzweig during his absence during spring semester. Member of nine Master's
committees and four Ph.D. committees (Chairman of one M.S. and one Ph.D.).

**Stuart A. Northrop.** Curator, Geology Museum. See separate report on Museum. Member, Committee on Gifts to Libraries, Museums, and Galleries.

**A. Rosenweig.** Member of Registration Committee.


**Lee A. Woodward.** Director of NSF grant, $17,400 during 1967-69 for undergraduate equipment. Faculty advisor
to Sigma Gamma Epsilon, earth science honorary.

9. Public Service


Wolfgang E. Elston. Leader, Cub Scout Pack 115.

Vincent C. Kelley. Member Albuquerque Rotary Club.

Albert M. Kudo. Boy Scouts Merit Badge Councillor. Volunteer judge at New Mexico Science Fair.

Stuart A. Northrop. Identified fossils, minerals, and rocks for the public including school children visiting the Geology Museum

Lee A. Woodward. Gave talks to Scout groups.

10. Personal Information

Roger Y. Anderson. Son, Michael Schwerner Anderson.


Albert M. Kudo. Obtained Immigrant Visa to become a permanent resident of the U.S.A. and to pave way to obtain U.S. citizenship. Obtained V-A Draft Classification.


The Geology Museum
July 1, 1967--June 30, 1968
Stuart A. Northrop, Curator

PURPOSE AND SCOPE

The Geology Museum has a double purpose: it is designed to serve the general public and to supplement the instructional program. The Museum has 26 cases, 14 of which are one-way and 12 of which are two-way, providing a total of 38 exhibit areas. In addition there are 15 glass-covered map-frames and several low tables.

Exhibits include a systematic series of minerals (in 6 two-way cases), a stratigraphic series of fossil plants and animals (6 one-way cases), a paleontologic series of fossil and modern plants, invertebrates, and vertebrates (6 two-way cases), and series of igneous, sedimentary, and metamorphic rocks (2 one-way cases).

Other notable features are an exhibit illustrating how fossils are preserved (1 case); an exhibit of metallic and non-metallic ores of New Mexico (1 case); an exhibit of modern pelecypods and gastropods (1 case), an exhibit of modern corals (1 case); and a geologic cross section through the Sandia Mountains, Albuquerque, and Mount Taylor, together with numerous rock samples (1 case). There is also a dark room for
viewing fluorescent and phosphorescent minerals under white light and both long-wave and short-wave ultraviolet light.

The Albuquerque Gem and Mineral Club maintains a case with rotating exhibits of specimens, including gems and precious stones. A visual seismic recorder, connected to a seismograph at the U. S. Coast and Geodetic Survey's Seismic Center in the Manzano Mountains southeast of Albuquerque, shows major earthquakes—both natural and man-made—as they occur throughout the world. In corridors adjoining the Museum are 15 large map-frames for exhibiting geologic materials such as maps, cross sections, seismograms, and other pictorial items.

The Museum is generally open 8 a.m. to 9 p.m. Monday through Saturday.

ACCESSIONS

Members of the departmental staff, graduate and undergraduate students, alumni, and others have donated individual specimens or suites of fossils, minerals, rocks, and ores. Some of these specimens are of museum calibre and eventually will be placed on exhibit. The remainder will be added to departmental teaching or reference collections. A growing problem is the lack of adequate storage facilities, especially for the reference and research collections.
CURATORIAL WORK

Numerous specimens donated to the Museum during the past several years are as yet uncatalogued. Practically no cataloguing was accomplished this year because of the curator's teaching load. In addition to this backlog of cataloguing, another task is checking identifications of the Katharine Balcomb collection of modern shells, some of which are already on exhibit without labels. Several dozen labels need to be added to the systematic mineral exhibit. Recent revision of the classification of fossil fishes will necessitate changes in the fish exhibit.

NEW EXHIBITS

One low 2 x 8 ft. table was added this year to permit displaying several large heavy fossil specimens. New items placed on exhibit include the following.

1 whale vertebra, 40 in. high x 45 in. wide, modern, South America
1 opalized juniper root, Miocene-Pliocene, La Joya, New Mexico
4 genera of ammonites, Upper Cretaceous, Rio Puerco and Galisteo, New Mexico; individual weights of 30, 34, 53, and 81 pounds
3 large slabs of dinosaur tracks, Triassic, Massachusetts

The following were added to the Paleontologic Series.

1 exhibit in table-top case of 13 showy specimens of modern corals from Tonga
1 "organ-pipe" coral, 34 pounds, Pennsylvanian, Placitas, New Mexico
2 clams exhibiting pearly luster, Upper Cretaceous, southeastern Colorado
1 large ammonite with chambers painted to bring out complexity of suture patterns, Cretaceous, Mexico
1 fish, new genus and new species, Pennsylvanian-Permian, New Mexico
1 small fish, Pleistocene, Nevada

Two specimens were added to the Modes of Preservation case.
1 dinosaur bone replaced by uranium minerals, Jurassic, Marquez uranium mine, Grants, New Mexico
1 block of lava bearing imprint of pine tree bark, Pleistocene, Grants lava flow, New Mexico

To the Stratigraphic Series, for each of the nine geologic systems from Cambrian through Jurassic, a set of three paleogeographic maps was added. Four such maps were added to the Cretaceous exhibit, making a total of 31 new maps. These maps show the distribution of land and sea at certain times in the geologic past. New explanatory text labels with revised absolute age dates in millions of years were prepared for each system. Two specimens were added to the Stratigraphic Series.

1 calcareous alga, Precambrian, Franklin Mountains, El Paso, Texas
1 colonial coral, Mississippian, Kentucky

A small elementary exhibit of certain metallic and non-metallic mineral resources together with products manufactured from these was installed in the Ores of New Mexico case to attract interest of younger children. This exhibit includes
the following:

galena: lead: BB shot
graphite: "lead" pencil
cassiterite: tin: plating and solder
hematite: iron: spike, pipe, horseshoe
chalcopyrite: copper: pot scraper, pipe, wire, pennies
halite: table salt: salt shaker
selenite: gypsum: plaster of Paris
muscovite: mica: insulator
kaolinite: clay: pottery plate

To lend interest to the fine large 10-foot mammoth tusk which has been on exhibit for many years, Joan Marie Camp has painted in oil a 4 x 6½ foot pictorial reconstruction showing woolly mammoths in Alaska toward the end of Pleistocene time.

The Albuquerque Gem and Mineral Club has installed several rotating exhibits of lapidary and jewelry work in its case during the year. The current exhibit is of more than usual scientific interest in that it consists of about fifty specimens illustrating the varied crystal forms and habits of a single mineral, gypsum.

For about forty years the Department of Geology has had a 1928 geologic map of New Mexico on display—first in the old Science Building (1928-1936), later in the Administration Building (1936-1953), and eventually in the present Geology Building (1953-1967). This year the new geologic map of New Mexico was framed under glass in the corridor adjacent to the north door of the Geology Museum. This 5 x 6 foot map, prepared by the U. S. Geological Survey with the cooperation of
the Department of Geology, acknowledges contributions of 39 alumni and 5 faculty members. Information from 19 unpublished U.N.M. masters' theses is embodied in the map. The 39 alumni acquired a total of 56 degrees (26 bachelors', 29 masters', and 1 doctoral) from U.N.M. during the years 1941 to 1962. A framed parchment scroll bearing the names of these alumni is mounted next to the map. To provide a permanent record, the roster is repeated here.

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Year(s)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Bachman, George O.</td>
<td>B.S., 1948</td>
<td>1948</td>
<td>(co-author of map)</td>
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<tr>
<td>Baltz, Elmer H., Jr.</td>
<td>B.S., 1950; M.S., 1953; Ph.D., 1962</td>
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<td>Beaumont, Edward C.</td>
<td>M.S., 1948</td>
<td></td>
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<tr>
<td>Bowers, William E.</td>
<td>M.S., 1960 (thesis used)</td>
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<tr>
<td>Bushnell, Hugh P.</td>
<td>B.S., 1951; M.S., 1953 (thesis used)</td>
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<tr>
<td>Disbrow, Alan E.</td>
<td>M.S., 1953 (thesis used)</td>
<td></td>
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<tr>
<td>Dixon, George H.</td>
<td>B.A., 1950; M.S., 1954</td>
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<tr>
<td>Emmanuel, Robert J.</td>
<td>M.S., 1950 (thesis used)</td>
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<td>Givens, David B.</td>
<td>B.S., 1950; M.S., 1952</td>
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<td>Harbour, Robert L.</td>
<td>B.S., 1948</td>
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<td>Harrison, Earl P.</td>
<td>B.S., 1944; M.S., 1949 (thesis used)</td>
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<td>Hayes, Philip T.</td>
<td>B.S., 1949; M.S., 1951</td>
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<td>Hill, John D.</td>
<td>M.S., 1956 (thesis used)</td>
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<td>Hutson, Oser C.</td>
<td>M.S., 1958 (thesis used)</td>
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<td>Jacobs, Richard C.</td>
<td>B.S., 1952; M.S., 1956 (thesis used)</td>
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<td>Johnson, Ross B.</td>
<td>B.S., 1946; M.S., 1948</td>
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<td>Koogle, Richard L.</td>
<td>B.S., 1955</td>
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<td>Lookingbill, John L.</td>
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<td>McCleary, John T.</td>
<td>M.S., 1960 (thesis used)</td>
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<td>McRae, Otis M.</td>
<td>M.S., 1958 (thesis used)</td>
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<td>Mohar, John, Jr.</td>
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<td>Noble, Edwin A.</td>
<td>M.S., 1950 (thesis used)</td>
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<td>O'Sullivan, Robert E.</td>
<td>M.S., 1953</td>
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<td>Peterson, John W.</td>
<td>B.S., 1952; M.S., 1958 (thesis used)</td>
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<td>Rawson, Donald E.</td>
<td>M.S., 1957 (thesis used)</td>
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<td>Repenning, Charles A.</td>
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<td>Reynolds, Charles E.</td>
<td>B.S., 1953; M.S., 1954</td>
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<td>Rich, Ernest L.</td>
<td>B.A., 1949</td>
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<tr>
<td>Seager, William R.</td>
<td>M.S., 1961 (thesis used)</td>
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<tr>
<td>Sears, Richard S.</td>
<td>B.S., 1949; M.S., 1953 (thesis used)</td>
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</table>
Silver, Caswell, B.S., 1940; M.S., 1946
Soister, Paul E., B.A., 1950; M.S., 1952 (thesis used)
Stevenson, Ralph G., Jr., B.S., 1949; M.S., 1950
Thompson, Samuel, III, M.S., 1955 (thesis used)
Wanek, Alexander A., B.S., 1949
Weir, James E., Jr., B.S., 1950
Wilson, Grant W., B.S., 1949
Wood, Gordon H., Jr., B.S., 1941
Ziegler, Donald L., B.S., 1950

Faculty members:
   Elston, Wolfgang E.
   Kelley, Vincent C.
   Northrop, Stuart A.
   Read, Charles B.
   Reiche, Parry

VISITORS

The Museum was visited by a large number of persons, including children, teachers, parents, laymen, students, amateur collectors, prospectors, and professional geologists. During 1967-68 there were, by actual count, 230 organized groups, chiefly children from the Albuquerque schools, involving 6,852 individuals, and a grand total of about 8,400 persons. These figures do not include the hundreds of University students who use the Museum each semester in conjunction with certain undergraduate courses, such as physical geology, historical geology, mineralogy, and paleontology.

Prior to 1961, no attempt was made to count Museum visitors. Figures for the last seven years are as follows:

-7-
<table>
<thead>
<tr>
<th>YEAR</th>
<th>GROUPS</th>
<th>INDIVIDUALS</th>
<th>GRAND TOTAL</th>
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<tr>
<td>1961-62</td>
<td>57</td>
<td>1,408</td>
<td>1,600</td>
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<tr>
<td>1962-63</td>
<td>67</td>
<td>1,547</td>
<td>1,800</td>
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<tr>
<td>1963-64</td>
<td>75</td>
<td>2,100</td>
<td>2,600</td>
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<tr>
<td>1964-65</td>
<td>117</td>
<td>3,264</td>
<td>4,000</td>
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<td>1965-66</td>
<td>140</td>
<td>4,411</td>
<td>5,300</td>
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<tr>
<td>1966-67</td>
<td>133</td>
<td>3,953</td>
<td>5,400</td>
</tr>
<tr>
<td>1967-68</td>
<td>230</td>
<td>6,852</td>
<td>8,400</td>
</tr>
</tbody>
</table>

Thus, the past year shows an increase of 73 percent in the number of organized groups compared with the preceding year, and the same increase in the number of individuals.

Although most of the organized groups are from the Albuquerque area, it may be noted that last year we had school groups from Bernalillo, Socorro, Bluewater, Fort Wingate, and from both New Mexico and Arizona portions of the Navajo Indian Reservation. Most public school teachers and other group leaders request a guide to direct attention to the several series of exhibits, to explain certain special features, and particularly to answer numerous questions. As in the past, we have generally called on graduate assistants to perform this chore; certain other students, both graduate and undergraduate, were also pressed into service.

ACKNOWLEDGMENTS

The assistance of Joan M. Camp, student aide during Semester II, in preparing and installing a number of exhibits is gratefully acknowledged. The staff of the U. S. Coast and Geodetic Survey's Albuquerque Seismic Center has on several
occasions repaired the seismic recorder and their efforts are hereby acknowledged. Special thanks are due all students who served as Museum guides for group tours.

NEEDS AND RECOMMENDATIONS

1. Early next fall, a new curator should be appointed to take over about June 1, 1969. This brings up the question as to whether a staff member can be persuaded to take over this job without some sort of compensation, such as a reduction in teaching load.

2. For several years I have been urging the Administration to consider adding "a room adjoining the Museum to the west in order to be able to exhibit some of the meteorites of the former Institute of Meteoritics, which are not at present accessible. These should be available for viewing by the public during the dawn of the space age."

I understand that the University architect objects to this proposal to add a room on the west wall and the only remaining solution seems to be to expand the Museum southward into Room 106, presently the paleontology-stratigraphy laboratory. The three cases of the Stratigraphic Series of exhibits now lining the south wall of the Museum might be shifted to the east wall of Room 106 and one large or two small archways might be cut in the wall between the Museum and Room 106.
Meteorite exhibits can then be placed in the expanded southern end of the Museum.

3. Two additional table-top type cases should be purchased. One of these is needed for a contemplated exhibit of small models of extinct animals. The other is needed for rotating exhibits of special items.

4. Expanded storage facilities for reference and research collections are urgently needed.

5. A graduate assistant should be assigned to assist in curatorial work, especially in cataloguing. I do not think that we can rely on undergraduate student aides for this important task.

6. A brochure should be prepared to serve as a guide for teachers and other group leaders. This would help relieve some of the pressure on our graduate assistants.

7. As noted in several preceding reports, the Museum needs a budget of several hundred dollars for the occasional "emergency" purchase of high-quality specimens not otherwise obtainable.
I. General Departmental Information

A. Significant Achievements

1. The following courses were added to the curriculum effective Semester I, 1968-69:

   History 348 Modern Russia, 1689 to 1917
   History 569 Seminar in the Military History of World War II

2. Activities beyond the formal curriculum:

   a. Sponsored a public lecture on November 7 by Philosopher Lancelot Law Whyte.

   b. Sponsored a public lecture on December 7 by Professor Armin Rappaport of the University of California, San Diego.

   c. Sponsored a public lecture on December 15 by Professor Norman Graebner, Edward R. Stettinius Professor of History at the University of Virginia.

   d. Sponsored a public lecture on April 22 by Professor Engel Sluiter of the University of California, Berkeley.

   e. Host for the Western Conference of the Association for Asian Studies, October 20 and 21. Guest
Speaker, Professor John Hall, Yale University.

f. Phi Alpha Theta, History honorary, sponsored the Sixth Annual Southwestern Regional Conference on April 5-6. Major address was given by Professor Philip Jordan of the University of Minnesota.

g. Host for Rocky Mountain Conference of Latin American Studies, May 2, 3, and 5. Dr. Richard Greenleaf of the University of the Americas, Mexico City, main speaker.

3. Honors:

   a. Two UNM, one new NDEA Title IV and one new NDEA Title VI fellowships awarded to department.

   b. Professor Emeritus France V. Scholes named Visiting Professor of History at Tulane University for academic year 1968-69.

   c. Professor Gerald Nash named "Professor of the Month". April 1968.

   d. Nancy Johnson, History Major, elected to Phi Beta Kappa.

B. Significant Plans and Recommendations for the near future

1. Addition of staff members in Far Eastern and European history fields.

2. Additional graduate assistants -- one for each 3% increase in history enrollment.
C. Appointments to Staff

1. Noel Pugach appointed Assistant Professor of U.S. Diplomatic History, effective September 1, 1968.

2. Robert W. Kern appointed Assistant Professor of Iberian History, effective September 1, 1968.

3. Janet Roebuck appointed Visiting Assistant Professor of British History, effective September 1, 1968.

4. Richard N. Ellis appointed Assistant Professor of U.S. Western History, effective September 1, 1968.

5. George W. F. Hallgarten appointed Visiting Professor of European History effective September 1, 1968.

D. Separations from Staff

1. Barrett L. Beer resigned, effective June 30, 1968, to become Associate Professor of History at Kent State University.


3. Professor Emeritus Frank D. Reeve passed away, after a long illness, on December 31, 1967.

F. Promotion

1. Gerald D. Nash promoted to Professor of History, effective July 1, 1968.
II. Composite of information requested on individual biographical supplements:

1. Advanced Study
   a. EWING, A. Ph.D. Dissertation (University of California, Berkeley) in progress.
   c. TULGA, L. Ph.D., Ohio State University, awarded September 1, 1967.

2. Sabbatical, Summer Teaching, Travel, etc.
   a. CUTTER, D. Fulbright lecturer, Summer Session at Universidad Autonoma de Guadalajara, Mexico.
   b. EWING, A. Research travel during summer to Cambridge, Mass. and Washington, D.C.
   c. LIEUWEN, E. Summer research at Library of Congress, Bancroft Library (Berkeley, Calif.) and Hoover Institute (Stanford, Calif.).
   d. SKABELUND, D. Taught Western Civilization and History of Science at Utah State University Summer School.
   e. SULLIVAN, D. Taught during Summer Session at San Diego State College, California.
   f. TOBIAS, H. Summer research in New York City.

3. New Scholastic Honors, Fellowships, etc.
   a. DOLKART, R. UNM Latin American Research Fund grant for research in Buenos Aires, Argentina.
b. ROTHENBERG, G. American Council of Learned Societies Summer Research Grant.

d. TOBIAS, H. American Philosophical Society grant for summer research.

4. Publications

A. Books and Monographs


B. Articles

1. CUTTER, D. "New Mexico" in Collier's Encyclopedia Yearbook, 1968:

3. CUTTER, D. Forward for Thurman, The Naval Department of San Blas.


5. DABNEY, W. "Frank D. Reeve," New Mexico Historical Review, April, 1968, 87-89.


8. IKLÉ, F. Abstracts for the American Bibliographical Center from the Journal of Social & Political Ideas in Japan.


C. Book Reviews


3. CUTTER, D. Gardiner (ed.), Prescott's History of Mexico in NMHR.


6. CUTTER, D. Nasatir & Loomis, Pedro Vial and the Roads to Santa Fe, Hispanic American Historical Review.

7. CUTTER, D. Chipman, Nuño de Guzman and Pañuco in New Spain, 1518-1533, in Pacific Historical Review.


9. CUTTER, D. Smith, Rocky Mountain Mining Camps: The Urban Frontier in Pacific Historian.


11. CUTTER, D. Nasatir, Spanish War Vessels on the Mississippi in American Historical Review.

12. CUTTER, D. Urrutia, Descripción del Nuevo Reino de León, 1733-1740 in Hispanic American Historical Review.

13. CUTTER, D. Terrill, Estevanico, the Black in Southern California Quarterly.


5. Research

A. Completed


2. CUTTER, D. American Indian Historical Research Project (Director); sponsor Doris Duke; support, $67,500 for 1967-68. (renewed for 1968-69)

3. CUTTER, D. Completed manuscript on "The Lost Nentwig Maps."

4. DABNEY, W. "Charles Cochrane's Career in the American Revolutionary War"

6. DULLES, F. "The Civil Rights Commission" accepted for publication by Michigan State University Press.

7. IKLÉ, F. "Sir Aurel Stein: A Victorian in the Tracks of Alexander," accepted by ISIS.

8. NASH, G. "U.S. Oil Policies, 1890-1964," accepted for publication by Univ. of Pittsburgh Press.

9. NASH, G. "American Administrative History," accepted for publication by Institute of Governmental Studies, Univ. of California, Berkeley.


11. SKABELUND, D. Paper--"Mathematical Treatment of Qualities in Fourteenth Century Alchemy" (a revised version prepared in response to referee's comments)

12. SULLIVAN, D. Dissertation "Nicholas of Cusa and Church Reform in the German Empire"


16. WAGAR, W. Anthology--"The Idea of Progress since the Renaissance" for Wiley.

B. In Progress

1. CUTTER, D. "Maquinna, Chief of Nootka"

2. DOLKART, R. Monograph--"Leopoldo Lugones: A Political Biography"

3. DULLES, F. "American Policy Toward China"

4. EWING, A. "The Use of Graphic Art as Propaganda in England, 1603-1685"
5. FLOYD, T. "The Spanish Catholic Church in the Late Middle Ages"

6. IKLÉ, F. Book--"A Diplomatic History of the Far East"

7. LIEUWEN, E. Continuing research on Ford Foundation project on Social Revolutions in Latin America.

8. NASH, G. "History of Twentieth Century America" under contract to Allyn & Bacon.

9. NASH, G. "Government and Economy in America" under contract to D.C.Heath Co.

10. NASH, G. "The American West in the Twentieth Century" under contract to Prentice-Hall.


12. NASH, G. "Herbert Hoover" to be prepared for Blaisdell Publishing Co.


15. SKABELUND, D. Paper on the structure of scientific theory.

16. SKABELUND, D. Outline for a book on the development and structure of scientific theory.

17. SULLIVAN, D. Monograph--"Fifteenth Century Reform Efforts in the German Church"


20. TULGA, L. Research of the process of social control in Roman society in the first century A.D.

21. WAGAR, W. Book on the recent history of the idea of progress.

6. Activities in Learned and Professional Societies


c. IKLÉ, F. Regional Chairman, Western Conference of the Association of Asian Studies, October, 1967.


f. SZASZ, F. Attended Organization of American Historians meeting in Dallas.


7. Other Professional Activities


b. CUTTER, D. Spoke to 1) Indian Journalism Conference; 2) UNM Geography Club; 3) UNM Phi Alpha Theta; 4) ABQ Corral of Westerners; 5) Chm. of session, Phi Alpha Theta Regional Conference, ABQ. Speaker and Discussion Leader, 9th Conference of Higher Education in the Americas.


g. ROTHENBERG, G. Consultant for Historical Evaluation and Research Organization.


8. Non-teaching University Service

a. BEER, B. Assistant Dean, College of Arts & Sciences. Secretary, University Library Committee. Chairman, Sub-committee on Federal Grants. Chairman, Committee for Members in Course, Phi Beta Kappa. Advisor to University College Students. Advisor to Phi Alpha Theta.
b. CUTTER, D. Director, American Indian Historical Research Project. Advisor for History majors. Head, Board of Editors, NMHR. Prepared Correspondence Course for History 261C.


d. FLOYD, T. History Major Advisor. Scholarship Committee, 1967-68.

e. LIEUWEN, E. Academic Freedom & Tenure Committee.

f. NASH, G. Undergraduate American Studies Advisor. History Majors Advisor.

g. ROTHENBERG, G. Chairman, Visiting Lecturers Committee, Graduate School. Member, Research Allocations Committee. Graduate Advisor, European History.

h. SKABELUND, D. Member, Honors Council.

i. SMITH, G. U.S. History Graduate Advisor.

j. TOBIAS, H. Advisor History Majors, Western European Studies Majors, Russian Studies Majors. Chairman of Western European and Russian Studies Programs. Chairman, Scholarships and Prizes Committee.


9. Public Service

a. CUTTER, D. Deacon & Chaplain of Mariners, Immanuel Presbyterian Church. Spoke to Family Night and 7th High group at same church. Spoke to First Presby. Mariners; Spoke to Pueblo Indian Youth Council, ABQ.

b. DABNEY, W. Various activities with a church group, including occasional lecturing. Board of Review for Eagle Scouts, Kit Carson Council.
c. FLOYD, T. Teacher, Young Adults' Class, Immanuel Presbyterian Church. Geneva House Board.

d. ROTHENBERG, G. Talks at Temple Albert, First Methodist Church, Marine Corps Reserve.

e. WAGAR, W. Gave the Sunday morning sermon at First Unitarian Church, Albuquerque, December 3, 1967. Chairman of the Summer Service Committee, same church, 1968.

10. **Personal Information**

   a. BEER, B. Appointed Associate Professor of History, Kent State University, effective September, 1968.

   b. NASH, G. Married Marie Louise Norris, August 1967.

   c. SKABELUND, D. Daughter born April 17, 1968.
I. General Departmental Information

A. 1. The department's new television-radio emphasis was strengthened by the addition of Journalism 388, Cinematic Photography. The department provided the equipment necessary for this new offering and the Department of Fine Arts provides the instructor. The course is cross-listed as Art 388.

2. Journalism 100, Introduction to Mass Communications, and 494, Mass Media as a Social Force, were substantially modified during the year. Journalism 100, which had been taught as a survey of the profession, is now being taught by Professor Crow as an introduction to the theories, problems and social implications of mass communications. Journalism 494, which had been a course in practical newsroom problems, has been broadened into a study of the authoritarian, libertarian and social responsibility communications systems; the nature of the last system as it now exists in the United States, and the social impact of radio, television and the press in modern society.

These changes were made to fill what we feel is our responsibility to offer courses tailored not for the professionally-oriented major but for all university students who seek an understanding of mass communications and effects of the media on a democratic society. Our own majors would benefit from such courses in other areas--criminal and constitutional law and astronomy.
3. In cooperation with Professor Marshall Nason, the department added Journalism 495, The Mass Media as a Social Force in Latin America, to the curriculum of the Andean Study Center at Quito, with the course to be taught by Nelson Davila, General Secretary of the National Union of Journalists of Ecuador and international editor of El Comercio of Quito. The department hopes to develop a concentration in Latin American Reporting based on the new minor in Latin American Studies approved by the College of Arts and Sciences and on the program at the program at the Andean Study Center.

4. Professor Hillerman joined the Magazine Publishers Association as an associate member, thereby making the department eligible for the MPA magazine internship program initiated last year. To date, the department has placed three students in the program—which has taken a total of 60 of the nation's outstanding journalism students to New York for three months of supervised work on magazine staffs. No other University has placed as many. The department continues to press efforts to place students in newspaper summer internships. This year it became the first non-Texas department accredited for participation in the Texas Daily Press Association program.

5. Students of the Department brought home $1,900 of the total of $50,000 offered in the year-long writing competition sponsored by the Hearst Foundation. The department placed tenth nationally, ahead of such big (and big name) schools as Missouri and Northwestern.

6. The New Mexico Broadcasters Association, which had concentrated all its support on New Mexico State University in the past, was persuaded to grant its Joe Little Scholarship to our department this year.
B. Significant plans and recommendations for the future.

We hope as soon as possible to offer a better-rounded curriculum—restoring a course in advertising theory which was dropped from the catalog some years ago and adding a course in media management. We also hope to initiate (in the fall, 1968, semester if possible) a publications laboratory course which would allow one hour credit per semester (maximum 3 hours) for graded staff work on the student newspaper.

We hope to correct a weakness in newswriting courses by using videotapes of news events to replace workbook materials which present the facts as words-on-paper. Some other departments have been experimenting with films to meet this problem, but this solution appears too expensive, and too inflexible, for our purposes.

C. Appointments to the staff.

Everton Conger, who taught in the period between 1948 and 1952, has been appointed instructor for the fall semester. Mr. Conger received his B.A. in Journalism from the University of Montana, his M.S. in Journalism from Columbia University and has done additional graduate work at the University of Denver. He is Publications Manager of Dikewood Corporation. He previously served as editor for the RAND Corporation, as assistant to the President of the Asia Foundation and was for three years chairman of the Department of Journalism of Nagpur University, Nagpur, India.

D. Robert Weber, has resigned as Assistant Professor effective at the close of the current academic year.
II.

1. Professor Crow will complete his course work toward the Ph.D. degree in Mass Communications at the University of Iowa this summer.

2. No sabbaticals, leaves, or travel to report.

3. No scholastic honors.

4. Professor Hilleman published several editorials in The New Mexican, including the newspaper's front page statement of policy relative to the court-imposed "gag rule" in the Reies Tijerina case.

Also published by Hilleman during the academic year:


"The U.S. Stole Our Land," Americana Section, TRUE Magazine, January, 1968: An account of the development of the Reies Tijerina land grant movement in New Mexico and the conditions which led to the raid on the Tijera Amarilla courthouse.

"In the Capitol," a guest political column under the Fred Buckles syndication, published in most New Mexico newspapers, the El Paso Times and Amarillo Globe-News.

5. Professor Hillerman is engaged in a continuing investigation of the impact of pre-trial publicity guidelines imposed by the U.S. Department of Justice and New Mexico Attorney General on news coverage of criminal cases. Professor Jermain continued his collection of court cases involving libel.

6. Professor Jermain was active in the New Mexico Professional Chapter of Sigma Delta Chi and attended the regional meeting of SDX. Professor Crow was panelist at the regional meeting of SDX. Professor Hillerman was elected treasurer of the UNM chapter of Phi Kappa Phi. He was elected president of the Albuquerque Press Club and appointed as New Mexico Press Association representative on the joint committee formed by the association, the New Mexico Judicial Council, the New Mexico Bar Association, and the Sheriffs and Police Chiefs Association, to resolve problems in the area of pre-trial publicity. He attended the national convention of the Association for Education in Journalism, the summer and winter conventions of the New Mexico Press Association, and was speaker at the annual meeting of the AP Managing Editors Association.

7. Professor Crow, in his role as consultant for the DonRey Media group, spoke at the Group's editorial conference and at its annual General Managers' Meeting. He conducted editorial content analysis services on the Las Vegas, Nevada, Review Journal, the Las Vegas Sun, and the Guymon and Frederick, Oklahoma, newspapers.
Professors Hillerman and Jermain served, respectively, as director and consultant on a summer workshop for Indian newsletter editors. Professor Jermain judged the annual Matrix publicity contest and Hillerman judged the award competition of the Albuquerque Press Club.

Hillerman was also moderator-host of the KNME-TV Legislative Press Conference and Congressional Press Conference program series; helped organize and direct the first annual New Mexico Interscholastic Press Association workshop, and addressed the annual meeting of the New Mexico Municipal League and the Albuquerque Quill & Scroll initiation banquet.

8. All faculty members served as either University College or College of Arts and Sciences advisors. Jermain served as advisor to student chapters of both Sigma Delta Chi and Theta Sigma Phi. Hillerman was chairman of the Student Radio Board, technical advisor to the Board of Student Publications, and participated in planning and conducting the Community Leaders Conference at Lawrence Ranch.

9. Professor Crow was coach-manager of the Altamonte Little League baseball team. Professor Hillerman served on the Gridiron Banquet committee.
I. General departmental information.

A. Significant achievements.

1. A program for minor study at the B. A. level was developed and approved by the college faculty.

2. A new course, 551-552, Problems, was added to the graduate program.

3. The Miguel Jorrín Book Prize, to be awarded to the student or students compiling the best academic record during the first semester of graduate work, was instituted. The books awarded are new publications in the Latin American field which arrive as complimentary copies to the Director, and are thus without cost to the university. The Dr. Reginald Fisher award continues to be given to the outstanding graduating senior.

4. Four M. A. degrees were awarded. This represents an improvement for the second successive year, but
falls short of the six degrees annually that can reasonably be expected on the basis of graduate enrollment.

5. A proposal for a 3-year project on the social and political effects of migration in Ecuador was developed and submitted to NSF for funding, without success. Due to the emergence of an unsettled and unfavorable political climate in Ecuador it was decided not to proceed further with the project at this time, although it may be revived at some future date.

6. The Graduate School agreed to defray the cost of a reprint series of articles published by faculty members in professional journals, which will be inaugurated when a sufficient number of appropriate articles are at hand.

7. There was encouraging progress along two lines of policy inaugurated last year, to encourage graduate students to do field work in Latin America for their M.A. theses, and to place M.A. recipients in jobs appropriate to their skills and training. One student did field research in Nicaragua, and one in Guatemala; and M.A. recipients or near-recipients took professional positions in the Foreign Service, AID, private development work overseas, and teaching at the college level. Other students entered secondary teaching, military service, and doctoral training.

8. There was some progress in establishing cooperative
relationships with institutions for graduate study and research outside the United States; informal arrangements were arrived at with CIDOC (Centro de Documentación Intercultural) in Cuernavaca and CEISA (Centro de Enseñanza e Investigación) in Madrid. One student in the Division did thesis research at CIDOC during the year.

9. The Division participated actively in the development of the University's Andean Center, and in discussions of a proposed consortium of Southwestern universities in the Latin American field.

10. Two Foreign Service officers of middle rank, one from USIS, were assigned to the Division for Latin American area training, after an inspection trip from the Foreign Service Institute had resulted in a favorable report. At the end of the year USIS expressed itself as very pleased with the results in the case of the officer it had assigned, and announced it planned to assign another FSO to the Division for the coming academic year. This was significant not only as a mark of recognition of the quality of the program, but also because the experience of the FSO students proved very valuable to other students in class and seminar discussions.

11. The tendency noted last year, for the number of graduate students to increase, while undergraduate enrollment
decreased slightly, continued. Enrollment during the year stood at 67 undergraduates and 32 graduate students.

12. The Division participated in the program of the Language and Area Center, helping to select nominees for NDEA Title VI fellowships and to organize the Center lecture series. The Division presented one lecturer, Luis Roberto Bahía, head of the staff of the governor of Guanabara state in Brazil, under its own sponsorship, using Center funds.

B. Present problems and future plans.

1. As the number of graduate students has risen sharply over the last two years - approximately doubling - and as efforts have been made to encourage students to finish their degree work instead of hanging on aimlessly till they drop out, a considerable burden was placed on faculty time for thesis direction and the administration of comprehensive exams. This is especially true since the Division does not have its own staff, but must beg, borrow, or steal faculty time from other departments. In recognition of this problem, the comprehensive exam was made written instead of oral, and Graduate School approval of a Plan II option (M. A. without thesis) was requested.

2. The financial aid situation became more acute. Previously,
nine tuition scholarships (in-state or out-state) were earmarked for students in the Division. This served to compensate for the fact that the Division is assigned only one graduate assistantship, although its graduate enrollment is greater than that of some departments awarding five or six assistantships. During the current year, however, these nine awards were transposed into money terms on the basis of the former in-state tuition charge of $300 each. Given the recent tuition increase, this means that in effect the nine awards have become, on a full-tuition basis, four: two in-state and two out-state. The situation was aggravated by the discontinuance of earmarked Peace Corps fellowships, since perhaps half the graduate enrollment consists of Peace Corps returnees, and the termination of the Peace Corps Training Center, a source of part-time employment for several students.

The resulting financial aid gap has been partly made up in several ways. Two work-study positions were secured, for research assistants. The Walter B. Fuente Loan Fund was reactivated, and small loans were made to several students. Graduate assistantships were secured for two students in other departments. However, the situation is less than satisfactory, and the Director has felt it necessary to advise students that if they
enroll in other departments their chances of financial aid may be better.

3. Attempts have been made to include New Mexico in the Partners of the Alliance program of person-to-person contacts between U. S. states and regions of Latin America. So far these efforts have been defeated by the lethargy and apparent incompetence of the State Department office administering the program.

C & D. There were no personnel changes during the report period.

II. The professional activities of the Department's only faculty member, its Director, have been reported through the Political Science Department.
During the academic year 1967-68 the Department of Mathematics and Statistics provided instruction to a total number of 6,726 students, representing 24,220 student credit hours. This amounts to an increase of 483 students and 1032 student credit hours respectively.

I. GENERAL DEPARTMENTAL INFORMATION.

A. SIGNIFICANT ACHIEVEMENTS.

Undoubtedly the most important event during the academic year 1967-68 was the award by the National Science Foundation of a Departmental Development Grant to the Department of Mathematics amounting to approximately $560,000. This was the first such award made to any mathematics department in the United States and among the first three awards made to any department nationally. The primary purpose of this grant is to help develop the quality of the faculty of the department to a level of excellence, and, as will be seen later, we have taken several significant steps towards achieving this goal. The grant is for a total period of three years with a possibility of renewal if this seems necessary. Another significant achievement was a $50,000 grant by the National Science Foundation with matching funds from the University to set up a mathematics computation laboratory. The purpose of this laboratory is to enable each student in the calculus sequence to spend approximately two hours a week at a console connected with the IBM 360 computer and thus to be able to apply the theoretical concepts required in the classroom to the numerous problems requiring computational skill.
This program was initiated for two of the four calculus courses during the past academic year and it is expected that it will be in full operation by the end of 1968.

The graduate program continued to expand, both in quality and quantity, and six Ph.D's were awarded this academic year. In addition, five more students have completed their course work for the doctorate and are working on their dissertation. Twenty-two of our graduate students received the Master's Degree in Mathematics at the June commencement.

At the undergraduate level our efforts also continued in a very satisfactory manner. The annual Mathematics High School contest administered by Professor Hillman attracted some five hundred students from Albuquerque, Santa Fe, Los Alamos, Socorro, and a few from considerably more distant locations, such as Las Cruces. One of our undergraduates placed among the top twenty-five in the annual Putnam Intercollegiate Mathematics Competition and was awarded a Post Graduate NSF Fellowship at Harvard University.

With regard to new course offerings and new programs, we have initiated a number of new courses, primarily concerned with computing science. We have a new one year sophomore sequence, Elementary Computing Science. A Master's Degree in Applied Mathematics with emphasis in Computing Science has just been approved by the Faculty and it is expected that some ten or twelve students will enter this program this Fall. Several new senior level and graduate level courses were also added in connection with this program.
Research productivity also continued at a satisfactory rate. A number of research papers authored by members of the Department were published in various journals of excellent reputation. On a somewhat more popular level, Professor Hersh co-authored two papers which are to appear in Scientific American. His co-author for one of these papers was Professor Griego of this Department.

In recognition of the active research going on in the Department the National Science Foundation has renewed the two major grants under the supervision of Professors Epstein and Blum. Also, Professors Dubois and Zacks have been awarded research grants by the NSF for the summer of 1968. As in previous years, the NSF is continuing to support the Summer Institute for High School Teachers under the direction of Professors Mitchell and Kao.

B. PLANS AND RECOMMENDATIONS.

The most urgent task over the next two years will be to try to implement the goals of the Departmental Development plan. That is to bring in faculty of outstanding stature so as to bring the Department to a level of excellence. Since this will involve considerable growth of the Department over the next two or three years this brings us to an immediate and urgent need. The Department is currently housed in Marron Hall, which is inadequate to provide office space for all of the senior faculty and graduate and teaching assistants. Consequently, I recommend that immediate plans be made for a new building to house the Department of Mathematics.

With regard to curricula plans, it is expected that within a few years the Computer Science Program will develop into a Ph.D. program. In addition, it is very likely that we shall be starting a Ph.D. program
in Bio-statistics in cooperation with the Medical School. Beyond that no major curricula changes are anticipated within the next few years.

C. APPOINTMENTS TO STAFF.

In the Fall of 1967 Associate Professor L. F. Shampine and Assistant Professors H. Davis and C. Qualls joined the staff. Eleven new appointments have been made for the coming year. They are: Professors Hille (visiting 1968-69), Basu, Zacks; Associate Professors DeMarr, Guinn; Assistant Professors Allen, Derr, Gevirtz, Gibson, Hahn and Loustenau. One position remains unfilled at the time of this writing and it is very unlikely that we shall be able to fill it this year.

D. SEPARATIONS FROM STAFF.

The following people have resigned: Associate Professor Heinz Renggli, to University of Wisconsin, Milwaukee, Wisconsin; Associate Professor J. Mayer, to George Mason College, University of Virginia; Associate Professor Judah Rosenblatt, Case Western Reserve University, Cleveland, Ohio; Associate Professor Eugene Steiner and Assistant Professor Anne Steiner, to Iowa State University, Ames, Iowa; and Assistant Professor H. E. White, Jr., location unknown.
II. INFORMATION FROM BIOGRAPHICAL SUPPLEMENTS.

1. ADVANCED STUDY.

None.

2. SABBATICALS, Leaves of absence, etc.,

Dr. R. C. Entringer, summer teaching at North Dakota State University, sabbatical leave second semester.

Dr. Bernard Epstein, Senior Faculty Participant at Symposium on Ordinary Differential Equations, Summer, 1967, at Univ. of Colorado.

R. Hersh - spent summer 1967 in California.

J. V. Lewis - Sabbatical, Semester II.

3. NEW SCHOLASTIC HONORS.

L. H. Koopmans - elected Fellow of the Institute of Mathematical Statistics.

4. PUBLICATIONS.


'Stepouoff and Weyl AP Functions on Locally Compact Groups,' Duke Math. J.


'Non-cantorian Set Theory', w/F. Cohen)


'On the number of zeros of a stationary Gaussian random Trigonometric polynomial' UNM TR 158, March 1968.

'Towards an Improved Math Curriculum (w/J. R. Blum) Samplings, 1967.


'Concerning Periodic Solutions of y' + f(t,y,y') = 0.' w/Bailey, Journal of math. Anal. and Appl.
'Error Bounds and Variational Methods for Nonlinear Boundary Value Problems.' Numerische Mathematik.

Anne Steiner: 'Topologies with $T_1$-complements', Fundamenta Mathematicae, Vol. 61 (1967)
'Prec compelx Uniformities and Wallman Compactifications,' Indagationes Math (1968)
Eugene Steiner: Topologies with $T_1$-Complements, Fundamenta Mathematicae 1967.

A $T_1$-Complement for the Reals,' Proceedings of Amer. Math. Soc. (1968)
Precompact Uniformities and Wallman Compactifications, Indagationes Math (1968)


5. OTHER RESEARCH PROJECTS.

R. Bierstedt: Two papers and one book in progress.

J. R. Blum: Two papers submitted and one book in progress.

Henry Davis: Paper in progress and one submitted.

Jeffrey Davis: Two reports in progress.

D. W. Dubois: Three papers in progress.

R. C. Entringer: Five papers submitted for publication.

Bernard Epstein: Principal Investigator on NSF Grant in Analysis and Topology.

Richard Griego: Two papers in progress.

Reuben Hersh: Three papers in progress.

Simon T. Kao: Research on Geometry - paper in progress NSF Grant $2000, 2 yrs

L. H. Koopmans: Two papers in progress.

J. V. Lewis: Research on inequalities for Mikusinsks' Operational Calculus, submitted for publication.

J. Mayer: Book on algebraic topology in progress.

C. Qualls: Current work to find optimal truncated sequential life test plan, in the exponential case.

J. Rosenblatt: Two papers submitted and one book in progress.

A. Steiner: Four papers submitted for publication.

E. Steiner: Four papers submitted for publication.

G. M. Wing: Research on eigenvalue problem.
6. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES.

a) Meetings attended:

Professional meetings in various cities were attended by the following people: S. Bell, H. Bentley, R. Bierstedt, J. R. Blum, H. Davis, R. Entringer, E. Epstein, R. Griego, R. Hersh, A. Hillman, S. Kao, L. Koopmans, J. V. Lewis, J. Mayer, R. Metzler, M. Mitchell, C. Qualls, J. Rosenblatt, L. Shampine, A. Steiner, E. Steiner, G. M. Wing.

b) Offices held:

J. R. Blum - chaired session, IMS Meeting.
R. Griego - chaired session, IMS Meeting.
S. T Kao - Secretary-Treasurer, Southwestern Section MAA.
J. V. Lewis - Nomination committee member for New Mexico Chapter, Sigma Xi.

c) Papers read, invited addresses, etc.

R. Griego - presented talk at American Math. Society Regional Meeting.
R. Hersh - Colloquium talk at Stanford University.
S. Kao - Paper read at MAA Southwestern Section Meeting.

7. OTHER PROFESSIONAL ACTIVITIES.

S. Bell - Visiting Scientist Lecturer at various high schools.


H. Davis - Trip to Duke University on May 8 to consult on research.

R. Entringer - Guest lecturer at South Dakota State University. Reviewer for Zentralblatt fur Mathematik.

B. Epstein - Presented four talks to Mathematics Clubs of various high schools.

R. Hersh - Consultant to Scientific American Magazine on Mathematics articles.

L. H. Koopmans - Consulted at Sandia Corporation; Keynote speaker at Colloquium on Times Series Anal., Univ. of Kansas. Edited a book on Reliability Theory with J. and L. Rosenblatt.


G. M. Wing - Invited lecture, joint colloquium of Elec. Eng. and Physics Dept. Univ. of Southern Calif.; Consultant, LASL.

8. NON-TEACHING UNIVERSITY SERVICES.

During the year most of our faculty served on various Doctoral Committees and were advisors at one level or another. Various members served on the
following committees: Master's Oral Committee, Departmental Advisory Committee, Committee on Studies, Dean's Improvement of Instruction Committee, Scholarship Committee, Library Committee, College Enrichment Program Committee, Computing Science Committee, Retirement and Insurance Committee, Math. Dept. Undergraduate Program Committee, Student Standards Committee, Graduate Committee, and University Graduate Committee.

9. COMMUNITY SERVICE.

S. Kao - Chinese Alliance of American Citizens, President.

L. H. Koopmans - Member of Board of Deacons, First Congregational Church.

J. V. Lewis - Albuquerque Urban Progress - sponsor of Rio Grand State Park Conservation Round Table at UNM. Boy Scout Troop 432 Committee.

Richard Metzler - Member, Board of Directors, Rio Grande Chapter of the Sierra Club.

Merle Mitchell - President, Board of Directors, Martineztown House of Neighborly Service.

C. Qualls - Member and youth leader: First Assembly of God.
I. General departmental information

A. Significant achievements

1. New programs.
   a. A proposed Ph. D. program in Romance Languages was approved by the Graduate Committee, the faculty, of the College of Arts and Sciences, the general faculty of the University, and by the Board of Regents. The proposal will soon be considered by the BEF.
   b. The Andean Study and Research Center of the University, directed by the Language and Area Center for Latin America, was approved to begin operations in Quito, Ecuador in September, 1968. Professor Sabine Ulibarri has been appointed Director of the Center for 1968-69.

2. Cultural activities.
   a. The department continued to sponsor the lecture series "Aspectos de la cultura hispánica," financed by NDEA Title IV fellowship overhead funds. A different system was employed this year to select lecturers for the series. Heretofore, speakers have usually been selected by the department chairman, but this year the chairman proposed that each member of the graduate faculty in Spanish invite a well-known specialist in his field to give the public lecture
and to conduct a seminar for students in his advanced classes. The eight lectures presented during the year were:


b. In addition to the Hispanic lectures in the "Aspectos" series, the department sponsored two general lectures pertinent to the learning and teaching of all foreign languages: (1) Donald D. Walsh, "The Four Skills and Ten Years: The Foreign Language Sequence," February 26, 1968; (2) Mario Pei, "How
to Learn Foreign Languages and What Languages to Learn," March 26, 1968. Professor Pei's lecture was financed by the speakers' committee of the Graduate School. Not reported here are the lectures sponsored and financed by the Language and Area Center for Latin America.

c. M. Jean Harzic, French deputy cultural attaché in New York, gave the lecture at the annual distribution des prix to French students on May 17, 1968. The title of the lecture was "Le nouveau cinéma français." Several French faculty members also participated actively in the cultural programs of the Alliance Française.

d. A series of informal poetry readings and literary soirées was highlighted by a dramatic reading of José Zorrilla's Don Juan Tenorio, directed by Professor Sackett.

3. The Language Laboratory.

Extensive improvements, both technical and instructional, were made in the language laboratory under the supervision of Mr. Neddy Vigil, director, and Professor Jespersen, chairman of the Language Laboratory Committee. Vigil and Jespersen made an extensive trip to examine the installation and operation of language laboratories in other institutions. The Laboratory is probably operating more efficiently now than it ever has in the past.
4. Building plans.

The ad hoc Building Committee, of which Professor Holzapfel is chairman, consulted extensively with the Planner of the University Architect's Office and with other administrative officers concerning space allocations and facilities in the projected Humanities Building. Tentative agreement has been reached on the space requirements in the building.

5. Library.

The department Library Committee, of which Professors Davison and Sackett are co-chairmen, concerned itself with filling gaps in our present library collection, with a view toward improving our holdings in order to support the proposed Ph. D. program in Romance Languages. An NDEA Title I grant of $14,000 helped greatly toward the fulfillment of this goal.

6. Danforth Visiting Committee.

The committee composed of Professors Dwight Bolinger of Harvard (chairman), Edward Sullivan of Princeton (French), Jack Stein of Harvard (German), and Lawrence Kiddle of Michigan (Spanish), visited the campus on April 4-6, 1967. The committee consulted with administrative officers of the university, the department faculty, and numerous graduate and undergraduate students. It also examined the administrative organization of the department, studied the curriculum, and visited some classes. The committee's recommendations, incorporated in a report
to President Popejoy dated May 6, 1968, were received too late to permit consideration by the department for possible implementation in 1968-69.

B. Significant plans for the near future

1. A major change was made in the policy of placing freshmen in language courses, such change to take effect in September, 1968. For the last five years, students who had two years of foreign language in high school were not permitted to take the first semester of an elementary course in the same language for credit. The new policy will eliminate that restriction.

2. Beginning with Semester I, 1968-69, new students who wish to take French or German will be given the MLA Cooperative Test and placed according to their performance. For the present Spanish students will be placed according to their high school records, although it is hoped that beginning with 1969-70 Spanish students will also take the MLA Cooperative Test for placement purposes (as recommended by the Danforth Visiting Committee).

3. The dual track in elementary German and Spanish (that is, reading emphasis and oral emphasis courses) will be eliminated beginning in 1968-69.

4. The lecture-drill structure will also be eliminated in first-year German, effective in 1968-69, in favor of four regular classes per week. It is possible that the same change will be made in first-year Spanish beginning with Semester II, 1968-69, or Semester I, 1969-70.
C. Appointments to staff

1. Mr. Robert Herron has been appointed assistant professor of Portuguese beginning in September, 1968.

2. Miss Marilyn Metcalf has been appointed instructor in Russian beginning in September, 1968.

3. Mrs. Maria Brisk has been appointed part-time instructor in Spanish beginning in September, 1968.

D. Separations from staff

1. Professor Albert Lopes, on terminal sabbatical leave during 1967-68, will be retired in June, 1968.

II. Composite information on individual biographical supplements.

1. Advanced study.

a. Mrs. Claude Book submitted her doctoral dissertation on "Le Théâtre de Théophile Gautier" to the University of Paris and will defend it in June, 1968.

b. Robert Holzapfel had a Fulbright Summer Grant to attend the Goethe Institute in Munich during the summer of 1967.

c. George Jocums continued work on his doctoral dissertation, "The Dialectics of Law and Justice in Brecht's Plays."

d. Patricia Murphy completed her doctoral dissertation, "A Study of the Narrative Techniques of the Abbé Prévost," and received the Ph. D. from the University of Wisconsin.

e. David Thompson completed his doctoral dissertation, "Dante and the Allegorized Epic," and will be awarded the Ph. D. by Cornell in September, 1968.

2. Sabbaticals, leaves of absence, etc.

a. Mrs. Claude Book spent the year on sabbatical leave at
the University of Paris.


c. Theodore Sackett taught English to Latin American scholars at the Economics Institute in Boulder, Colorado during the summer of 1967.

d. Albert Lopes was on terminal sabbatical leave during the year.

3. New scholastic honors, fellowships, etc.

a. Robert Jespersen, Patricia Murphy, and Theodore Sackett received summer research grants from the Greater UNM Fund.

4. Publications.


i. Sabine Ulibarri, "Culture of the Southwest," (New
Mexico State Department of Education, 1968), 9 pp.;
"El relleno de Dios," short story in Paul Rogers, ed.
Florilegio del cuento hispanoamericano (New York,

j. Julian White "Phèdre is Not Incestuous," Romance Notes,
IX (1967), 89-94; edition of Geoffrey de Villehardouin,
La Conquête de Constantinople (New York, Appleton-

5. Research in progress or completed (not previously reported)

a. Truett Book is working on a book to be entitled Points
de vue français.

b. Ruben Cobos has edited the Barreras text of Los Pastores
and compiling a book of New Mexican proverbs, both to be
published by the Museum of New Mexico in Santa Fe.

c. Ned Davison has completed a book, Eduardo Barrios, for
Twayne Publishers, and has also submitted several poems,
translations, and photographs to various journals.

d. Pelayo Fernández is working on a book on the Spanish
novelist, Ramón Pérez de Ayala.

e. Jack Kolbert has signed contracts to prepare student
guides to Camus' L'Étranger and Stendhal's Le Rouge et
le Noir.

f. Raymond MacCurdy is completing an anthology of twelve
seventeenth-century plays, with introduction and notes.

g. Donald McKenzie is revising his translation of Johann
Gottfried Seume's Spaziergang nach Syracuse, which is
being considered for publication by the UNM Press.
h. Patricia Murphy is continuing research on the Abbé Prévost and Diderot.

i. Theodore Sackett is preparing various studies on Benito Pérez Galdós, including a book-length critical work.

j. Jack Tomlins has signed a contract to write a book on Mário de Andrade for the Twayne World Author Series.

k. Julian White is editing Racine's Phèdre for Macmillan and is making a verse translation of Corneille's Polyeucte for Barrons. He is also preparing study guides on Dante's medieval literature, and the troubadours.

6. Activities in learned and professional societies.

a. The following persons participated in the RMMLA meeting held in Albuquerque, October 14-16, 1967: Ned Davison (chairman of the Romance Literature Section), R. M. Duncan (co-president), Robert Holzapfel (chairman of the Committee on Local Arrangements), Robert Jespersen (chairman of the German Literature Section), George Jocums, Jack Kolbert, Raymond MacCurdy, Patricia Murphy, Theodore Sackett.

b. The following persons attended the annual meeting of the MLA and the American Association of Teachers of Spanish and Portuguese in Chicago, December 27-30, 1968: R. M. Duncan (read a paper, "Names in the Documentos lingüísticos de España"), Pelayo Fernández, Sabine Ulibarri (vice-president of the AATSP).
c. The following persons were active in the New Mexico Chapter of the American Association of Teachers of German:
   Robert Jespersen (president), Robert Holzapfel (treasurer),
   George Jocums (read paper). Holzapfel also attended two international meetings in Europe.

d. Truett Book served as president of the Alliance Française.

e. Rubén Cobos read a paper at the Latin American Folklore Conference at UCLA in June, 1967.

f. Jack Kolbert served as president of the New Mexico Chapter of the American Association of Teachers of French.


h. Marshall Nason served as conference chairman of the Latin American Consortium meetings, and on the planning committee of the Ninth Seminar on Higher Education in the Americas, both held on the UNM campus in April, 1968. He also gave an address, "A New Dimension in Area Studies," to the RM Council for Latin American Studies, May 3, 1968.

7. Other professional activities.

a. Truett Book gave a lecture at the Alliance Française of Santa Fe.

b. Pelayo Fernández gave a series of talks to various groups on bi-cultural problems in New Mexico.

c. Jack Kolbert gave several off-campus lectures and served on various state language committees.
d. Enrique Lamadrid conducted workshop for Spanish teachers in Scottsdale, Arizona and Tacoma, Washington. He also served on various state and municipal language committees.
e. Sabine Ulibarri gave an address at the President’s Cabinet Committee Hearings on Mexican American Affairs held in El Paso. He also gave several talks to various organizations on cultural, economic, and social problems in the Southwest.

8. Non-teaching University service (only new items are reported).
   a. R. M. Duncan and Jack Kolbert served on the UNM Policy Committee.
   b. George Jocums served as an University College advisor.
   c. Patricia Murphy served as secretary of the College of Arts and Sciences, and as the faculty advisor to the French for children program.
   d. Theodore Sackett served as chairman of the department Library Committee.

   a. Truett Book participated in fund-raising drives for the Heart Association and the Community Chest.

   a. Professor and Mrs. Enrique Lamadrid had a new son, Antonio Luis, born on July 17, 1967.
The Report of the Department of Philosophy  
July 1, 1967 - June 30, 1968  
Paul F. Schmidt, Chairman

1. General Departmental Information

A. At a re-hearing before the Board of Educational Finance in June, 1967, final approval was given for the new doctoral program in philosophy. This approval enabled the department to proceed with its plans. Notice of this approval was sent to all prospective students and included information about the program.

The principal activity of the department for this year, 1967 - 68, has been the inauguration of the program, further detailed planning, and careful evaluation of the program. The cycle of four required Ph.D. seminars was initiated in the fall with "Theory of Knowledge" taught jointly by Professors O'Neil and Schmidt. In November, 1967, the first set of Ph.D. Qualifying Examinations were given, five passed and three failed. The staff gained valuable experience and insight from these examinations (cf. later section on new developments). During the second semester we offered the required Ph.D. seminar in logic taught by Professor Evans and Schmidt. This seminar revealed a very inadequate preparation in logic by students. More than half had to
drop the seminar and will need another course to prepare them for it the next time. Some of these graduate students were disappointed to discover this gap or weakness.

In the light of our experience with the Ph.D. Qualifying Examination and the logic seminar, the staff devoted considerable time to discussion of questions they provoked. The staff decided to replace the Qualifying Examinations by an advisement examination in order to help the student find his gaps or weaknesses early in his graduate program, thus enabling his advisor to plan courses with him to remedy his situation. We believe this will benefit our graduate students who come with widely differing preparations, and will take away the academic pressure of the Qualifying Examinations.

In the course of a series of weekly departmental meetings in the second semester, the entire staff planned the details of our Ph.D. Comprehensive Examinations. They will consist of six examinations: five written examinations in epistemology, metaphysics, logic, ethics, and a choice of field (i.e., philosophy of history, or religion, of art, of science, of law, Indian philosophy, or Chinese philosophy), and one oral examination in the history of philosophy. They will be taken at the end of the student's course work. An oral examination will be given on the dissertation. An option was added to the language requirement allowing the student the traditional two languages for the Ph.D., while retaining the other option of one language with a high degree of proficiency.

The new undergraduate major and minor programs begun this
year have proceeded very well. Enrollments have increased in every category. Five majors have completed the new Departmental Honors program and three were elected to Phi Beta Kappa. The staff reports that the academic quality of our students has risen markedly, and we expect this to improve the quality of our graduate students.

The new Plan II, M.A. degree program, has proved an attractive option to graduate students. More than half of our M.A. students have chosen this route, which coordinates well with the doctoral program.

Our over-all student enrollment continues to increase at a greater rate than the College of Arts and Sciences average and near the top of the ranking of increase by departments. New staff to handle this will be needed.

Our new quarters in Hodgin Hall have been very satisfactory. We like the building. It gives us fine, quiet, faculty offices. We hope it will be allowed to stand for some years.

The department sponsored two distinguished speakers: President John C. Bennett of Union Theological Seminary and Professor Joseph Pieper of the University of Münster, West Germany.

Professor of Philosophy, Brand Blanshard, Emeritus, Yale University, was nominated for an honorary degree by the department, to be conferred in the June, 1968, commencement exercises.

Three annual meetings were held at the University of New Mexico with the help of the department: Southwestern Philosophical Society, November, 1967; Phi Sigma Tau (National
Philosophy Honorary) April, 1968; and the New Mexico and West-Texas Philosophical Society, April, 1968.

Professor Melbourne Evans will be Acting-Chairman in 1968-69, during the sabbatical leave of the chairman, Paul Schmidt.

B. Significant Plans and Recommendations

No significant new plans have been made. We believe that our primary goal for the immediate future should be the implementation and stabilization of our present new programs. Our first year has produced a normal share of growth problems which we shall smooth out.

We recommend additions to the staff to meet our enrollment increases.

C. Appointments to the Staff

One new part-time addition to the staff was made for 1968-69. Dr. Hanna Zacks was appointed part-time Assistant Professor; A.B. and M.A. Hebrew University, Israel; Ph.D. from Columbia University, 1966 with distinction. She has taught at Kansas State University, Manhattan, Kansas, 1966-68.

D. Separations from the staff

None.

II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

Howard Tuttle, Ph.D., Brandeis University, June, 1967.

Brian O'Neil, Ph.D., University of California at Berkeley, December, 1967.
2. Sabbaticals, Leaves of Absence, Travel, etc.

None.

3. New Scholastic Honors

Archie Bahm: UNM Annual Research Lecturer, 1968.

Howard Tuttle: Danforth Associate Fellow, 1968 - 70.

4. Publications

(a) Books


(b) Articles


5. Other Research Projects or Work in Progress

(a) Books


__________, *Chung Yung (Genuine Living) and Ta Haeuh (Great Wisdom) By Confucius*, new edition, ms. pp. 85, submitted to publishers.


Hassett, J.D., Research in progress: Historical study of the notion of "conscience" and the term "freedom of conscience"; *Freedom, Authority, and Responsibility -- Problems in Modern American Society*, ms. for book almost complete.


Tuttle, H.N., *Wilhelm Dilthey and the Problem of Historical Knowledge*. Accepted by Brill, Holland.

(b) Articles

Alexander, H.G., Fifty page contribution for the Philosophical Forum in connection with invitations to serve on staff of the Philosophical Institutes at the University of Pacific (June, 1968) and Northern Illinois University (July, 1968).


(2) "Creativity Through Interdependence" *The Personalist*, accepted for publication.


(6) "Organicism as a Way of Integrating Knowledge" Proceedings of the XIVth International Congress of Philosophy, Vienna, Sept. 2 - 9, 1968. Accepted for publication.

(7) "Philosophy -- 1968" accepted for publication. (UNM Annual Research Lecture, 1968).


6. Activities in Learned and Professional Societies

Alexander, H.G., Organized National Convention of Phi Sigma Tau with New Mexico and West Texas Philosophical Society, April, 1968, Secretary-Treasurer of latter.


7. Other Professional Activities

Bahr, A.J., Seven Lectures at Kansas State University, Manhattan, Kansas, April 28 - 30, 1968.

________, Philosophy editor for The Journal of Thought.

8. Non-teaching University Service

Alexander, H.G., Policy Committee, Chairman; Graduate Committee; Advisory Committee; Presidential Selection Committee; Ad-Hoc Vice-President Selection Committee.

Evans, M.G., General Honors Council; Academic Freedom and Tenure Committee.

O'Neil, B.E., Assistant Dean, Graduate Schools; Graduate Committee; Entrance and Credit Committee; Graduate Student Council.

Sanborn, F.F., American Studies Committee; Committee on the Improvement of Instruction.

9. Public Service


Bahr, A.J., Three public lectures on University of New Mexico campus.

10. Personal Information.

The Report of the Department of Physics
and Astronomy
July 1, 1967 - June 30, 1968
Victor H. Regener, Chairman

I. General Departmental Information

A. Significant Achievements During the Academic Year 1967/68

1. Departmental Operation

The following table shows student credit hours in Semester I for this department over the last three years, the number of graduate students in the department, and the number of degrees granted. Campus faculty participated in the teaching at the Los Alamos Graduate Center, with three faculty members commuting each semester.

Student Credit Hours, Physics and Astronomy
(Semester I figures)

<table>
<thead>
<tr>
<th></th>
<th>1965-66</th>
<th>1966-67</th>
<th>1967-68</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,529</td>
<td>3,803</td>
<td>4,117</td>
</tr>
<tr>
<td>Increase</td>
<td>7.8%</td>
<td>8.3%</td>
<td></td>
</tr>
</tbody>
</table>

Number of Graduate Students Enrolled
(Semester I figures)

<table>
<thead>
<tr>
<th></th>
<th>1965-66</th>
<th>1966-67</th>
<th>1967-68</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>
### Number of Degrees Granted

<table>
<thead>
<tr>
<th></th>
<th>June 1966</th>
<th>June 1967</th>
<th>June 1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.</td>
<td>12</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>M.S.</td>
<td>8</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

The heavy involvement of the department in research and the growth of this involvement, is shown in the following table for 1965-66 through 1967-68. Starred figures for 1967-68 include extrapolations for the last few months for which final data are not yet available.

<table>
<thead>
<tr>
<th>Description</th>
<th>1965-66</th>
<th>1966-67</th>
<th>1967-68</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Departmental budget, original figures</td>
<td>$188,100</td>
<td>$233,000</td>
<td>$263,400</td>
</tr>
<tr>
<td>(2) Departmental budget, actual expenditures</td>
<td>$179,798</td>
<td>$233,000</td>
<td>257,604*</td>
</tr>
<tr>
<td>(3) Sponsored research expenditures</td>
<td>$537,383</td>
<td>$965,415</td>
<td>606,000*</td>
</tr>
<tr>
<td>(4) Overhead to University from grants and contracts</td>
<td>$73,027</td>
<td>$93,071</td>
<td>106,000*</td>
</tr>
<tr>
<td>(5) Money for grants and contracts received during the year from outside sources</td>
<td>$1,083,163</td>
<td>$190,168</td>
<td>536,855</td>
</tr>
<tr>
<td>(6) Active grants and contracts at end of year</td>
<td>$2,137,735</td>
<td>$2,192,770</td>
<td>1,846,640</td>
</tr>
</tbody>
</table>
2. Reorganization of course offerings

Courses at all levels were scrutinized in the fall of 1967. Two astronomy courses were added, one course suitable for both physics and astronomy, and one special course on the advanced graduate level. These courses are:

- Astronomy 425 Galactic Nebulae and Interstellar Matter (Peterson)
- Astronomy 426 Dynamical Systems in Astronomy (Campbell)
- Physics 437 Introduction to Space Physics (Leavitt, Peterson)
- Astronomy 437
- Physics 539 Selected Topics in Laser Physics (Alpert)

B. Significant Plans and Recommendations for the Near Future

Our most urgent need for our physical plant remains a building for physics instruction. New instructional laboratories for the department were recommended by the Building Committee in April, 1968.

C. Appointments to Staff

- Alan W. Peterson, Associate Professor of Astronomy
- Mohammad Shafi, Lecturer
- Harjit S. Ahluwalia, Associate Professor of Physics (Sem.II)
- Stuart Hayes, Lecturer (part-time, Sem.II)

For 1968-69: James Daniel Finley, III, Assistant Professor of Physics. Mohammad Shafi continues as a Visiting Assistant Professor.
D. Separations
Robert B. Koch, Associate Professor of Astronomy, resigned at the end of the Academic Year 1966-67. Colston Chandler, Assistant Professor of Physics, resigned at the end of the report year.

E. Sabbaticals
Howard C. Bryant, Associate Professor of Physics, to be on professional leave without pay for 1968-69 at Stanford University. This follows sabbatical leave during the report year.

II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

Colston Chandler, Ph.D., University of California, Berkeley; Sept., 1967; Thesis title: "Macroscopic Causality Conditions and Properties of Scattering Amplitudes."

David S. King, Received Ph.D. degree in June, 1967.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc., during the period.

John G. Breiland

Howard C. Bryant
Sabbatical leave, September, 1967 to June, 1968 at Stanford University. Subject of research during this period: Muon-Proton Scattering at 6, 10, 12 BeV.
Christopher P. Leavitt
Several trips on research projects.

Victor H. Regener
Numerous trips on research projects.

Derek B. Swinson
Traveled to Canada for four weeks.

3. New scholastic honors, fellowships, etc.

None.

4. Publications

Seymour S. Alpert
"Fourier Analysis of a Square Wave Using a Simple Tuned Circuit Amplifier," accepted for publication by Amer. J. Phys.

Charles L. Beckel

John G. Breiland

Howard C. Bryant
Philip M. Campbell

John L. Howarth
"The Acute Response of Germfree and Conventional Mice to Ionizing Radiation," In course of publication.

David S. King

Alan W. Peterson

Victor H. Regener

Mohammad Shafi

Derek B. Swinson
"The Density Spectrum of Extensive Air Showers at 1^75m and 4300m," Canadian J. of Phys. 1968 (with J. R. Prescott).
5. Other research projects or creative work in progress or completed during period

Harjit S. Ahluwalia
  A Research Proposal has been submitted to: AFOSR, AFOSR, NSF, NASA, for support in the field of Cosmic Radiation.
  Investigation of some recent Forbush Decreases and Intensity Variations is in progress.

Seymour S. Alpert
  Sandia Corporation Grant, $15,042, July 1, 1967 to June 30, 1968. Title: "An Investigation into the Cause of Self-Induced Divergence of Laser Light in Liquids."

Charles L. Beckel
  Sandia Corporation Grant, $19,650, July 1, 1967 to June 30, 1968. Title: "Theoretical Analysis of the Vibrations and Rotations of Diatomic Molecules."
  Math Methods for Scientists and Engineers — In Progress.

John G. Breiland
  NSF Grant GA-426, $51,000, 24 months plus 15-month extension, title: "The Vertical Distribution of Atmospheric Ozone in Various Weather Systems."

Howard C. Bryant
  New Mexico Water Resources Research Institute, $8,340, July 1, 1967 to June 30, 1968, title: "Fluctuations in Water-Droplet Evaporation Rates."

Philip M. Campbell
  U. S. Air Force Special Weapons Laboratory, $12,158.78, June 17, 1968 to August 30, 1968, title: "A Research Grant to Catalog Basic Radiation Transport Methods."

Colston Chandler
  Thesis issued as Lawrence Radiation Laboratory Report UCRL-17734 and submitted to the Journal of Mathematical Physics.

Christopher Dean
  NSF Grant, continuing, "Thermal Effects in Nuclear Quadrupole Resonance Spectra."

John R. Green
  Continued research work on plastic solids with support of NSF Grant GP-5089.
John L. Howarth

David S. King
Continued research under NSF Grant GP-6374 on "Stellar Pulsation Theory."

Christopher P. Leavitt
NASA, $550,000, "High Energy Neutron Flux in Space"
NASA, $131,000, "High Energy Neutron Detector"
NSF, $64,054, "Balloon Measurement of Solar Neutrons"

Alan W. Peterson
Space Sciences Research Center, NASA, University of Missouri, $4,137, June 1 to September 15, 1967, "Infrared Photometry of Solar Aureole."
Completion of Eclipse data analysis.
NASA NGR 32-004-003, $36,755, April 1, 1968 for one year, aircraft observations of Thermal Radiation from Interplanetary Dust.

Victor H. Regener
NASA satellite project for ultraviolet solar radiation, since 1966, $503,000.
AF project on atmospheric ozone, since 1966, $180,000.
NSF project on cosmic rays underground, $25,800, since 1967.
New NSF grant on cosmic rays received, $120,100, 1968-1970.

Mohammad Shafi
Prediction of Dissociation Energies of Diatomic Molecules from their Vibrational Properties.
Prediction of the Spectrum of the Hydrogen Molecular Ion.
Prediction of the Potential Energy Curves for the Diatomic Molecular Ions of Alkalies.

Derek B. Swinson
6. Activities in learned and professional societies

Seymour S. Alpert
Attended meeting of Associated Western Universities, Berkeley, California, February 15-16, 1968.

Charles L. Beckel
Attended American Physical Society Meeting in Berkeley, California, March 18-21, 1968. Presented two papers:
2. Comparison of Actual and Linearly Extrapolated Dissociation Energies of Diatomic Molecules. Co-author for both.

John G. Breiland
Member of U.S. delegation (appointed by American Geophysical Union) to the 14th General Assembly of IUGG, Switzerland, 25 September to 7 October, 1967. Presented paper: "Comparison of the Vertical Distribution of Atmospheric Ozone in Various Weather Situations with the Vertical Distribution of Hydrostatic Stability."

David S. King
Advanced to full membership in the American Astronomical Society.
Became member of American Association for Advancement of Science.

Alan W. Peterson

Victor H. Regener
Papers read: one on cosmic rays at international meeting in Calgary, June, 1967; also in Switzerland in September, 1967; paper on atmospheric ozone also in Switzerland, same time.

Mohammad Shafi
10

Derek B. Swinson
Attended and presented two papers at 10th International Cosmic Ray Conference, Calgary, Canada, June, 1967.

7. Other professional activities

Harjit S. Ahluwalia
Science Fair Judge, Socorro, New Mexico

Charles L. Beckel
"Excited Vibrational and Dissociation Energies of Diatomic Molecules" presented on September 29, 1967 at New Mexico Academy of Science Atmospheric Research Symposium.
"Vibrations of Diatomic Molecules" UNM Chemistry Seminar, April 26, 1968.
Consultant: (1) Institute for Defense Analysis
            (2) Dikewood Corporation

Howard C. Bryant
Visiting Staff Member, Los Alamos Scientific Laboratory.

Christopher Dean
Science Fair Judge

John L. Howarth
Consultant: Veterans Administration Hospital
            Lovelace Clinic
            Lovelace Foundation for Medical Education and Research
            New Mexico Academy of Sciences Visiting Scientist Program - Lectured to High Schools
            Abstractor for Physics in Medicine and Biology

Alan W. Peterson
Answers to numerous Albuquerque Journal "Action Line" questions.
Evaluated two Zodiacal Light Research Proposals for NSF.

Roy Thomas
Consultant at Kirtland Weapons Laboratory

8. Non-teaching University service

Seymour S. Alpert
Advisor to Physics Club
Phi Beta Kappa Visiting Scholar Committee
Judge, New Mexico Science Fair
Charles L. Beckel  
Faculty Advisor - UNM Student Section, American Institute of Physics  
Arts and Sciences Committee on Improvement of Instruction

John G. Breiland  
Research and Allocations Committee

Philip M. Campbell  
Advisor for undergraduate physics majors;  
Two Ph.D. and two M.S. committees  
Four graduate students in problems courses

Colston Chandler  
Departmental advisor to graduate students  
Ad hoc committee for the Lawrence Ranch Conference, April 26-28 (UNM Community Leaders Conference)

Christopher Dean  
Enterance and Credits Committee

John R. Green  
Academic Freedom and Tenure Committee, Research and Patent Committee, ad hoc Committee for Interdisciplinary Graduate Studies

John L. Howarth  
Member: Committee on the Enhancement of the Educational Process  
Medical Radioisotope Committee (School of Medicine)  
Student Publication Board

David S. King  
Served as member of Library Committee, and as Faculty Advisor in the University College.  
Serving as member of subcommittee on Astronomy to the Rocky Mountain Science Council.

Christopher P. Leavitt  
Graduate Committee.  
Los Alamos Advisor for Graduate Students.  
Participated in 9th Seminar of Higher Education in the Americas.

Victor H. Regener  
Department Chairman
Mohammad Shafi
Advisor to Islamic Society
Advisor to Arab Students Association

Derek B. Swinson
Faculty Advisor to Ski Club
Faculty Advisor to Physics Club

Roy Thomas
Library representative for the department

9. Public service

Charles L. Beckel
President Pro Tem, Kidney Foundation of New Mexico (pro tem pending affiliation with National Kidney Foundation)

Stuart Fleming Hayes
Occasional preaching in local church
Indoor Program Committee, Boy Scout Troop 6

John L. Howarth
Teacher in Religious School - Temple Albert
Treasurer and Member of Board of Directors, Albuquerque Pre-School Cooperative

Derek B. Swinson
Ski instructor, Sandia Peak Ski Area

10. Personal Information

Mohammad Shafi
First child, a son, born October 18, 1967

Derek B. Swinson
A son, Brian Edward Swinson, born January 10, 1968
The Report of the Department of Political Science
July 1, 1967 - June 30, 1968
E. C. Hoyt, Chairman

I. General Departmental Information

A. Planning to offer the Ph.D. eventuated in a proposed program which has been approved by the faculty and the Regents, and which is now before the State Board of Educational Finance for its approval.

New courses, to be inaugurated next year included the following:

*312. The American Presidency. (3) Ingram

*410. The Policy Making Process. (3) Staff

*425. Public Personnel Administration. (3) Rosenthal

*457. Government and Politics of the Soviet Union II. (3) Neuweld

*467. Governments and Politics of Germany. (3) Hanhardt

*531. Pro-Seminar in Political Theory. (3) Staff

Also worthy of note is the new program for advanced study in Public Science Policy and Administration, for which the University has received a five year grant from the National Aeronautics and Space Administration. The program will be initiated in the fall of 1969, with Professor Albert H. Rosenthal of this department as director.

B. Tentative planning has been inaugurated which looks to a prospective interdisciplinary M.A. in Public Administration or in Public Affairs. This would be a 2-year professional training program to prepare future public employees. It would enlist the cooperation of the College of Business Administration and the other Social Science departments. It is felt that we will
be in a good position to start such a program after our Ph.D. program gets underway.

C. Three new appointments have been made to our staff, effective September 1, 1968. These are:

Robert J. Sickels, Associate Professor, now teaching at Purdue University and a specialist in American Government, with emphases in Public Administration and Public Law.

Arthur M. Hanhardt, Jr., Associate Professor, now teaching at the University of Oregon and a specialist in Comparative Politics.

William J. Brisk, Assistant Professor, now teaching at the Inter-American University, San German, P. R., and a specialist in International Relations and Comparative Politics, with emphasis on Latin America.

D. Separations from staff. Lawrence Littwin has resigned effective June 30, 1968 to accept appointment as Assistant Professor of Political Science at San Fernando Valley State College, California. Professor Emeritus Charles B. Judah, who retired last June, returned to teach for the spring semester when Visiting Professor Jewell Cass Phillips was forced to resign due to ill health. Professor Judah's employment terminated May 31, 1968.

II. Composite of Information requested on individual biographical supplements.

1. Advanced Study:

INGRAM, HELEN. Ph.D. awarded August, 1967.

2. Sabbaticals, etc.:

HOYT, EDWIN C. Sabbatical for academic year 1966-67

INGRAM, HELEN. One course reduced load — research, Fall, 1967.

NEEDLER, MARTIN C. UNM Latin American research grant for Ecuador,
July 1967; Visit to Haiti and the Dominican Republic, November,
1967.

NEUWELD, MARK. Visiting Associate Professor of Political Science,
University of California at Berkeley — Summer Quarter, 1967.

3. New Scholastic Honors:

INGRAM, HELEN. Grant offered — Water Resources Research Institute,
Las Cruces, Patterns of Politics in Water Resources Development.

NEUWELD, MARK. A grant by the UNM Faculty Allocations Committee
for a research trip to the Soviet Union.

ROSENTHAL, ALBERT H. Received additional symbols concerning the
Rockefeller Public Service Award previously received.

4. Publications:

HOYT, EDWIN C. National Policy and International Law: Case Studies
from American Canal Policy. The Social Science Foundation and
Graduate School of International Studies, University of Denver,
Book review: R. Y. Jennings, Cambridge Essays in International

INGRAM, HELEN. Article accepted for publication — "The Impact
of Constituency in the Process of Legislating," Western Political

NEEDLER, MARTIN C. Latin American Politics in Perspective, Van
Nostrand, 1968, 2d edition; "The Dominican Republic", Reader's
Digest Almanac, 1968; "Mexico as a Case Study in Political
Development", International Development Review, March 1968;
previously published articles reprinted in 3 anthologies;
book reviews.

RHODES, HAROLD V. Utopia in American Political Thought,

ROSENTHAL, ALBERT H. The Social Programs of Sweden: A Search
for Security in a Free Society, University of Minnesota Press,
December 1967; "Intergovernmental Relations", Public Administration
Review, February 1968, article and served as editor of symposium,
pp. 3-29.
WOLF, T. PHILLIP. (a) "Urbanization in New Mexico," in Clyde Wingfield, ed. Urbanization in the Southwest (El Paso: Public Affairs Series #1, University of Texas, 1968), pp. 10-23. (Notice: this was reported in my 1966-67 record but at the last moment, it was decided to publish these papers in a monograph rather than as an issue of Southwestern Studies.) (b) Book review: "Joseph L. Bernd, ed. Mathematical Applications in Political Science" in Rocky Mountain Social Science Journal (Oct., 1967), pp. 170-171.

5. Other research projects:


INGRAM, HELEN. Article in circulation, "A Question of Representation: The Impact of Urban Congressmen and Housing Legislation." Research project begun - Analysis of House Interior Committee as a Bargaining Unit.

NEEDLER, MARTIN C. "Urbanization in Mexico" - paper presented at conference in St. Thomas, V.I.; Preparation of article on Ecuador for new edition of Encyclopedia Americana; Work on 3 journal articles on problems of urbanization and political development; Beginning of book on U. S. policy toward revolutionary governments in Latin America, in collaboration with Edwin Lieuwen, under Ford Foundation sponsorship.

NEUWELD, MARK. A study of political and organizational changes in the Brezhnev-Kosygin period, with emphasis on the growing role of governmental organs (Soviets).

ROSENFELD, ALBERT H. "Evaluation of Internships at The Manned Space Center", initiated during the Summer of 1967. Article to be prepared for The Public Personnel Review.

WOLF, T. PHILLIP. (a) Continuing research (w/H.P. Stumpf) on public attitudes toward U. S. Supreme Court. (b) Book chapter on New Mexico politics (w/H.P. Stumpf). (c) Editorial reading of 12 manuscripts for Rocky Mountain Social Science Journal. (d) Editorial reading of manuscript for UNM Press ($50.00). (e) Editorial reading of R. Tomasson's Swedish Society.
6. Activities in learned and professional societies:

CLINE, DOROTHY I. Participated in meetings, Albuquerque Chapter, American Society for Public Administration. (Unable to accept three invitations to present papers at regional conferences).


INGRAM, HELEN. Paper presented to Rocky Mountain Social Science Convention, May 4.

NEEDLER, MARTIN C. Panel chairman, annual meeting of American Political Science Ass'n, September 1967; ditto, Rocky Mountain Council for Latin American Studies, May 1968; Member, National Advisory Council, Institute for Mediterranean Affairs.


WOLF, T. PHILLIP. (a) Member of two panels at Western Political Science meeting, Seattle, March, 1968. (b) Program chairman, political science, at Rocky Mountain Social Science meeting, May, 1968. (c) Member of: American Political Science Assoc., International Political Science Assoc., Southern Political Science Assoc., Western Political Science Assoc., Rocky Mountain Social Science Assoc., American Society for Public Administration. (d) President and Program Chairman, New Mexico ASPA Chapter. (e) Attended Conference on Professional School and World Affairs, March, 1968. (f) New Mexico correspondent for the National Civic Review. (g) Albuquerque correspondent for the Metro-Urban Newsletter.

7. Other professional activities:


NEUWELD, MARK. A campus panel discussion on the Soviet Revolution. A lecture at the Unitarian Church on the Fifty Years of the Soviet Union.


WOLF, T. PHILLIP. Consultant work: (a) Kirschner & Associates, study of state labor agencies; (b) Bay Area Study of Legal Programs for the Poor (H.P. Stumpf); (c) NBC News 1968 election supervisor for New Mexico. Speeches: (d) League of Women Voters (Election Reform), Santa Fe, September, 1967; (e) Manzano Kiwanis (Presidential Nominations), April, 1968. KNME-TV: (f) June, 1967 (Yugoslav political science); (g) Oct. 2 & 10, 1967 (Albuquerque elections); (h) November 7, 1967 (Constitutional Amendment). Panel Member: (i) (and chairman) OEO fact-finding board, October, 1967; (j) Social Concerns Committee, Albuquerque Council of Churches (Urban Renewal), January, 1968; (k) Central Methodist Church (Public Careers) January, 1968.

8. Non-teaching University service:

CLINE, DOROTHY I. Adviser, Student Lobby. Member of Committees on Extension, Academic Freedom & Tenure, Professor of the Year, Institute of Social Research; jury critic, Department of Architecture.

HOYT, EDWIN C. Adviser to University Association on the United Nations. Member — Administrative Committee.

INGRAM, HELEN. Advisor — Young Republicans; Member — Deans Committee on Improvement of Instruction.

NEEDLER, MARTIN C. UNM representative at meetings on inter-university cooperation on Latin America; Committee on international programs; Language & Area Center Committee; Latin American Research Committee; Chairman, M.A. program in international affairs.

NEUWELD, MARK. Committee on Russian and West European Studies.

RHODES, HAROLD V. Member, American Studies Committee.

ROSENTHAL, ALBERT H. Member of Arts and Sciences Faculty Promotion Committee, Second Semester 1968; Faculty Adviser in Political Science and for 2 Ph.D. candidates and 8 M.A. candidates.
WOLF, T. PHILLIP. (a) Publications Committee. (b) A & S Committee on Research on Human Subjects (Secretary). (c) Campus advisor, state summer intern program. (d) Faculty advisor, Pi Sigma Alpha. (e) Wesley Foundation Board of Directors and Nominating Committee.

9. Public Service:

CLINE, DOROTHY I. Panelist: State Conference, Status of Women; State Conference of Social Work; UNM on Kloner Report. Commencement speaker job corps; opened LWV campaign on Constitutional Revision; Speaker for Delta Kappa Gamma, KNME; assisted with organization of Humphrey Campaign.

ROSENTHAL, ALBERT H. Member of National Board of Trustees, American Medical Center, Denver, Colorado.

WOLF, T. PHILLIP. Advisor to: (a) Richard Heim & Jerry Baker of Senator Anderson's staff, and (b) Alfonso Gonzales of Senator Montoya's staff on problems of public opinion analysis in New Mexico.

10. Personal information:

None
The Report of the Department of Psychology  
July 1, 1967 - June 30, 1968  
Frank A. Logan, Chairman

I. **General Departmental Information**

A. **Undergraduate education.** At the undergraduate level, the department handled a total enrollment of 2447 in introductory lectures (of whom over 908 participated in the optional additional laboratory hour), and 1613 in advanced courses (of whom 72 participated in the advanced laboratory courses). The graduating class of 1968 included 44 psychology majors, of whom 2 were awarded General Honors, and 54 psychology minors. Departmental honors were awarded to 3 graduates: Shirley Nowacki, Kathleen York, and Roger White. Based on a FTE staff of 11, the above figures represent approximately a 40:1 student-faculty ratio.

Three new courses were introduced to enable students to study educational, child, and neuropsychology at a more advanced level than heretofore possible. Our principal problem at the undergraduate level centers on the introductory course where we have exceeded the limits of the capacity of Anthropology 101 meeting in two sessions. Some imaginative solution to this problem is necessary before next Fall.

B. **Graduate education.** At the exclusively graduate level, the department handled a total enrollment of over 252, distributed among 50 registered students. The doctoral degree was conferred upon five candidates:
Thomas LeRoy Bennett, Jr., Hippocampal EEG Correlates of Behavior  
Advisor: John M. Rhodes

Zane Barry Lowenkron, Non-Outcome Trial Behavior as a Predictor of Solution Shift Performance  
Advisor: Peder J. Johnson

Allen Netick, Differential Effects of Limbic Lesions on Avoidance Behavior in the Cat  
Advisor: John M. Rhodes

George Vernon Pegram, Jr., Changes in EEG, Temperature, and Behavior as a Function of Prolonged Sleep Deprivation  
Advisor: John M. Rhodes

Edward Joseph Rickert, Role of Feedback Stimuli in Response Discrimination and Differentiation  
Advisor: Frank A. Logan

Master's degrees were conferred upon eight candidates: Victor Bogo (Advisor: Frank Logan), Terry Daniel (Advisor: Henry Ellis), Barry Gruber (Plann II), Dieter Jahns (Advisor: Henry Ellis), Dean Lee (Advisor: Ralph Norman), Douglas Muller (Advisor: Henry Ellis), David Perkins (Advisor: Douglas Ferraro), and Phillip Wootton (Advisor: Frank Logan). Based on a FTE staff of 11, the above figures represent approximately a 3:1 student-faculty ratio.

New seminars were introduced in the Teaching of Psychology (Benedetti), Research Methods in Child Development (Price), Developmental Abnormalities (Rosenblum), Discrimination Learning (Logan), and Treatment of Disturbed Children and Adolescents (Ruebush). Committees reviewed our developing programs in Clinical and Developmental Psychology and long-range plans were made to guide future progress toward these goals. Our training grant in experimental psychology from the National Institute of Mental Health was expanded
and now includes a faculty position which can be filled next year.

The number of graduate students receiving financial support increased substantially during the year. The number of graduate teaching assistants remained at 10 but the number of research assistants supported by extramural funds increased from 11 to 14. The number of fellowships and traineeships increased from 8 to 14, one of which was held at the Aeromedical Research Laboratory at Holloman A.F.B. in conjunction with Professor Rhodes' program. We are thus beginning to approximate the desiderata of supporting all qualified graduate students.

C. Staff. The full-time staff during the 1967-68 academic year was composed of Professors Benedetti, Ellis, Logan and Norman; Associate Professors Price, Rhodes and Rosenblum; and Assistant Professors Bessemer, Ferraro, Johnson and Koenig. Our staff was thus eleven, with one budgeted position not filled. In addition, Associate Professor Ruebush was active in departmental affairs although his major commitment is to the Department of Psychiatry. There were no losses to the staff during the year.

Two new appointments were made for the 1968-69 academic year. Most notably, G. Robert Grice (Ph.D. 1947, University of Iowa, and more recently at the University of Illinois) was appointed as Distinguished Professor of Psychology. With this appointment, our intended coverage of the Psychology of Learning will be complete except for mathematical models of human learning, a position now possible on our training grant. When another appointment can be made in the sensory-psychophysics area, our coverage of the general experimental area with a concentration on learning will be sufficient to provide an outstanding program.
Richard Harris (Ph.D. 1968, Stanford University) was appointed as assistant professor, thus completing our currently authorized staff. Additional positions in experimental psychopathology and experimental personality are necessary to provide the intended increasing opportunities in the clinical area.

Dr. Douglas Spanier taught on a part-time basis during both semesters, and Dr. Robert Webster taught during the second semester.

Our faculty continues to be active in regional and national affairs. They recorded 19 convention attendances. Professor Ellis served as president of the Rocky Mountain Psychological Association and Professor Norman as president of the New Mexico Psychological Association. Professor Logan served on the Executive Committee of the Division of Experimental Psychology of the American Psychological Association.

D. Colloquia. An excellent colloquium series was presented during the year. Assistant Professors Bessemer and Johnson of our staff spoke, and informal talks were given by candidates being interviewed for positions: Daniel Kalikow (Brown University), Michael Humphreys (Stanford University), Richard Harris (Stanford University), Fred Hornbeck (U.C.L.A.), William Claiborn (Syracuse), and David Landy (Texas). Distinguished visitors were: G. Robert Grice (University of Illinois), Lyle Bourne (University of Colorado), Michael Warren (Pennsylvania State University), Frank A. Beach (University of California, Berkeley), and Darwin Hunt (New Mexico State University).

This series is a very important adjunct to our regular graduate program and was enabled by special funds made available to the department for this purpose. It is strongly urged that comparable arrangements be made for the future.
E. Research. The department faculty published 21 articles or monographs during the 1967-68 year and delivered 10 convention papers or invited research lectures. Extramural research support totalled over $170,000 during the year, and $9600 was made available from the N.S.F. Institutional Grant to acquire trailers for experimental child research. The resources for research in a variety of behavior situations thus continued to expand markedly.

F. Space. During the year, arrangements were made to move Professor Rhodes' research from temporary building T-17 to the Bureau of Business Research building when vacated, and to occupy a portion of temporary building Y-1 for the laboratories of Distinguished Professor Grice. The first steps in the design of a new Psychology Building were effected with the first draft of the written plans for this building completed.

G. Administration and Support. During the year, Eleanor Orth continued as Departmental Executive Secretary, Elna Parks as Research Secretary, and Edith Johnson as secretary to Professors Ellis and Logan. Jack Cochran and Bill Marshall worked as shop technicians.
II. Composite of information requested on individual biographical supplements.

1. Advanced study.

Ruebush, Britton K. -- Certified Psychologist (Clinical, Child), New Mexico State Board of Psychologist Examiners.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel.

Ellis, Henry C. -- Visiting faculty, Washington University, Summer 1967.

Price, Louis E. -- Visiting Associate Professor, University of Southern California, Summer, 1967.

3. New scholastic honors, fellowships, etc.


4. Publications.


5. Other research projects or creative work in progress or completed during period.

Benedetti, David T.---Offered new seminar/practicum in teaching for psychology graduate students, Sem. I.

Continuing development of instrument for measuring adjustive styles of humans.

Bessemer, David W.

Job preferences and preference shifts as a function of job information, familiarity, and prestige level. Accepted for publication in *Journal of Applied Psychology* (with R. D. Norman).

Retention of object discriminations during learning set acquisition.

Ellis, Henry C.


5. Other research projects or creative work in progress or completed during period--cont.

Ellis, Henry C.--cont.
Tactual-kinesthetic feedback from manipulation of visual forms and nondifferential reinforcement in transfer of perceptual learning. *Journal of Experimental Psychology*, 1968, in press (with T. Bennett).
Continued research on theoretical interpretations of perceptual learning, transfer, memory, mediation, and visual form perception.

Ferraro, Douglas P.
NSF Renewal grant, $35,800. Transfer of a Differentiation.
$70,000 over 4 years.
Research on punishment in humans supported by UNM Research Allocations Committee.

Johnson, Peder J.

Koenig, Karl P.
False feedback and longevity of the conditioned GSR: Some implications for aversion therapy. *Journal of Abnormal Psychology*, accepted for publication (with D. del Castillo).
Research projects have been supported by UNM Organized Research and by a grant from NIMH, Anxiety Modification, $26,386, Feb. 1967-Feb. 1969.
Two studies have been completed and are being prepared for publication.
Studies in progress include:
(a) Modeled avoidance learning in children at Manzanita Center.
(b) Investigations of the effects of "emotional feedback" upon conditioned emotional responses (apparatus is currently being modernized and automated).
(c) Exploratory research involving auto-imitative principles in psychiatric patients (video tape equipment has been purchased with NIMH funds and BCI hospital cooperation and approval has been obtained).
5. Other research projects or creative work in progress or completed during period—cont.

Logan, Frank A.
NSF Grant, $30,000 d.c. Conditions of Reinforcement.
NIMH Grant, $24,000 d.c. Free Behavior Situation.
AFOSR Grant, $15,000 d.c. Laws of Learning.

Norman, Ralph D.
Job preferences and preference shifts as functions of job information, familiarity, and prestige level. *Journal of Applied Psychology*, accepted for possible publication, Aug. 1968 (with D. W. Bessemer).
Intramural research for Graduate School: (a) An analysis of reactions to graduate doctoral study based on letters of inquiry; (b) A questionnaire for evaluating attitudes toward graduate doctoral study.

Price, Louis E.
Type of verbal label in children's transposition. (Submitted to *Journal of Experimental Child Psychology*).
Associative transfer as a function of list length. (Submitted to *Journal of Experimental Child Psychology*).
Set up Child Behavior Laboratory (Mobile Trailers) with $9600 Grant from NSF Institutional Funds.
$600 grant from University Research Allocations Committee for study of Learning in First-grade Children. Several studies of children's learning in progress.

Rhodes, John M.
Three papers in press; three papers submitted for publication.

Rosenblum, Sidney
Editor, CLUE (Comments on Learning in Undergraduate Education), published by Committee on Improvement of Instruction, UNM College of Arts and Sciences. Two issues: March and May 1968.

Ruebush, Britton K.
Research project on Learning Disabilities in Children (in progress; collection of data was sponsored by University of Minnesota).
Report of research project on personality correlates of perceptual adaptation is in progress.
6. Activities in learned and professional societies.


Bessemer, David W.--Attended Rocky Mountain Psy. Assoc., Denver, May 1968. Read paper: Job preferences and preference shifts as a function of job information, familiarity, and prestige level.

Ellis, Henry C.--Attended meetings and/or presented papers at:
Psychonomic Society, Chicago, October 1967.
Read paper: Associative factors in visual form perception.
Southwestern Psychological Association, New Orleans, April 1968.
Presented paper on Symposium (Perception as Behavior) entitled,
The role of stimulus meaning in generalization gradients of recognition memory: An encoding-variability interpretation.
Midwestern Psychological Association, Chicago, May 1968.
Read paper: Verbal mediation: Acquired distinctiveness and equivalence of cues (with T. Malloy).
Rocky Mountain Psychological Association, Denver, May 1968.
Elected President.
NEA Conference on Higher Education, Attended as representative of UNM.

Papers read by six students on research carried out in my laboratories.

Read paper: Effects on informing feedback trials upon mediational responses.

Koenig, Karl P.--Attended Western Psychological Assoc., San Diego, May 1968.
Officer in New Mexico Psychological Association, 1967-69.

Logan, Frank A.--Attended:
Society of Experimental Psychologists, New York, April 1968.
Midwestern Psychological Assoc., Chicago, May 1967.
Rocky Mountain Psychological Assoc., Denver, May 1968.

Norman, Ralph D.--Attended Rocky Mountain Psychological Assoc., Denver, May, 1968. Read Paper: Job preferences ... (above)
Vice President, UNM Chap., Sigma Xi.
6. Activities in learned and professional societies—cont.

Price, Louis E.—Attended meeting of Western Psychological Assoc., March 1968, San Diego, Calif.


Rosenblum, Sidney—Attended Rocky Mountain Psychological Assoc., Denver, May 9-11, 1968.
New Mexico Psychological Assoc.: Chairman, Nominations and Election Committee.

7. Other professional activities.

Bessemer, David W.—Consulting work for Kirschner and Assoc.

Ellis, Henry C.—Invited Talks and Colloquia:
New Mexico Highlands University, Associative Processes in the Transfer of Stimulus Predifferentiation.
Univ. of South Carolina, Transfer Processes in Perceptual Learning.
George Tech., The Role of Verbal Labels in Mediating Perceptual Performance.

Editing and Reviewing:
Member, Editorial Board—Journal of Experimental Psychology, Psychological Reports, Perceptual and Motor Skills.
Review proposals for NSF.
Appointed Consultant to Sandia Corporation, 1967.

Supervision of Child Therapy Practicum Students.

Logan, Frank A.—Associate Editor: Psychological Bulletin.
Editor for Experimental Psychology: Wm. C. Brown Co.

Norman, Ralph D.—Consultant-examiner, NCA, Comm. on Col. and Univ. Special consultant to Dean of Graduate School.
Unpublished guide, Some Observations on Multiple-Choice Items, translated into Spanish by Dr. Frank Angel, College of Education, for distribution in Latin America.

Price, Louis E.—Two talks to local service organizations.
Albuquerque Public Schools, Fall 1967.
7. Other professional activities—cont.

Invited Talks:
N.M. Employment Securities Comm., Lawrence Ranch and Santa Fe; 
In-service Training on Personality and Performance Evaluation. 
B'nai Israel Congregation, Essentials of a Healthy Self-Concept in Childhood.
State Council, AAUP, Some Irreverent Views of Faculty-Administration Relationships.
Hillel (UNM), Judaism's View of Love, Sex and Marriage. 
Sandia H.S., Mental Subnormality.
St. Charles School, You and Your Adolescent.
N.M. Nurses Assoc., Mental Health Symposium.
Heights Baptist Church, Adolescence: The In-Between Years.

8. Non-teaching University service.

Benedetti, David T.—Member, Lawrence Ranch Committee. 
University College advisor.

Bessemer, David W.—University College advisor.

Ellis, Henry C.—Committees: Chr., UNM—Sandia Colloquium, UNM Science Colloquium, Contract Research and Patent. 
A & S Advancement Committee. 
Member, Executive Committee, Student-Faculty Assoc. 
A & S Advisor. 
Director, Departmental Honors, NSF Undergraduate Research Program. 
Administrative Advisor, College of Nursing. 
Conference Participant, UNM—Community Leaders Conference, Lawrence Ranch, April 1968.

Ferraro, Douglas F.—Publication Board. 
A & S Advisor.

Johnson, Peder J.—University College advisor. 
Departmental Committee on Subject Pool, Dept. Comm. for planning Child Psychology Program.

Koenig, Karl P.—Committees: The Committee on the University; 
Clinical Training and Curriculum Comm. (Departmental); Ad Hoc Committee for Student Psychological Services (NIMH sponsored). 
Consulting once a week with Counseling Center; A & S Advisor.

Logan, Frank A.—Chairman, Graduate advisor. 
University Committee on Human Subjects, Chr.

Norman, Ralph D.—Chairman: A & S Comm. on Human Subjects; Ph.D. 
Clinical Trng. Comm. in Psychology; Ad. Freedom & Tenure Comm., AAUP Chapter. 
Ad Hoc Comm. on Evaluation of Teaching (constructed evaluation scale); Curriculum Committee; Acad. Freedom & Tenure Committee. 
Graduate Advisor.
8. Non-teaching University service—cont.

Price, Louis E.—Graduate Committee, Human Subject's Review Committee, Manzanita Center Policy Committee, Several committees in College of Education, University College Advisor.

Rosenblum, Sidney—Graduate Student advisor.
Chairman, Committee on the Improvement of Instruction, A & S. Member, Outstanding Teacher Award Selection Committee.
Ph.D. Program Committee in Clinical and Developmental Psy.

Ruebush, Britton K.—Director, Child Guidance Center.
Research Committee, Dept. of Psychiatry.
Clinical and Child Psychology Doctoral Programs.


Ferraro, Douglas P.—Youth work with YMCA.

Norman, Ralph D.—Member, Professional Board, Albuquerque Child Guidance Clinic.
Chairman, Division 39F, Democratic Party.

Rosenblum, Sidney—Teacher, Confirmation Class, B'nai Israel Congregation.
Co-Chairman, Scholarship Committee, Fraternal Order of Elks.

A. The department operated this academic year with only five and one half FTE present during the fall semester and only five FTE during the spring semester. (This does not include Visiting Lecturer Raul Rulopez, not paid from departmental funds, who taught two courses the fall semester and one the spring semester.) This is indeed a small staff to offer a broad spectrum of courses in a university of this size. The number of courses taught and staff present was somewhat smaller than last year. This is part of the explanation for the decline in enrollment of 24 per cent for the fall semester and 7 per cent for the spring semester compared with 1966-67. The increase in course enrollment during the spring semester compared with the fall was largely the result of introductory sociology being taught over closed circuit TV by me. It has enabled our small staff to teach a wider variety of courses as other members of the department no longer need to teach introductory.

The presentation of introductory sociology on tape appears to have been successful, though there were a few mishaps this first time through. A good portion of the success of the course, and the acceptance of its being on TV, was the result of the excellent teaching assistants who manned the course. It is hoped that the entire course will be revised by the end of next year.

The requirements for the BA in sociology have been simplified. The only courses to be required for those entering from 1968 will be Introductory Sociology (101 or 401), History of Social Thought (371), and Contemporary Social Theory (471), in addition to the course in Research
Methods (481). A number of untaught courses have been dropped from the catalog, and several new ones added. Two new courses were taught for the first time during the spring term: Social Stratification (215) by Dyer and Comparing Nations (506) by Tomasson.

Closer relations have been established between our department and the College of Education and the Department of Mathematics. The College of Education has hired a sociologist (David Bachelor) who will also have an appointment in the Sociology Department. This gives us four people in the department with an interest in the sociology of education (Maier, Tomasson, Woodhouse, in addition to Bachelor). The decision has been made by the Department that sociology majors entering from September 1969 will be required to take Elementary Probability and Statistics (Mathematics 241-242). This will then be a prerequisite for Research Methods (Sociology 481). A basic knowledge of statistics is becoming increasingly necessary for work in many areas of sociology and for graduate school so it is time that we require it of all our majors. The course, though taught in the Mathematics Department, will be tailored for social science students.

A calculator was taken from the departmental office over the Christmas vacation; it has since been replaced.

I would like to express here an appreciation of the support given me during my first year as chairman by the Administration.

B. The department is now unambiguously oriented toward strengthening the graduate program and reaching the point where we can apply for approval of a Ph.D. program. During the fall semester next year we will offer three graduate seminars. If we are able to hire two faculty at the professor level for the fall of 1969 (one a permanent replacement
for Dyer and the other a new line), I believe we will have reached the point where we can apply for a Ph.D. program with some pride. No longer can the Sociology Department be regarded as only a teaching department with a service function and in a somewhat different category than, say, Anthropology or History. That the cost of instruction in sociology continues to be so much below that of all other departments in the University is an indicator of our presently underdeveloped state. This is mainly a result of a lack of any full professors in our Department and of our generally large classes. Indeed only appointments at the professor level will be considered for 1969; several attractive candidates have made known their interest. One more specific intention is that we advertise our Department next year through sending out flyers so as to get more and better graduate students. However, the quality and diversity of our present graduate students are surprisingly good considering nothing active was done to recruit them.

C. The following appointments to our staff are effective as of September 1968:

Gilbert W. Markx (BA Harvard; Ph.D., Yale), Assistant Professor. Specialties: political sociology, the sociology of economic development, race relations, Latin American studies.

Anthony Uvaldo (BA St. Thomas College, Madrid; Ph.D. Stanford), Assistant Professor. Specialties: community development, social stratification, sociology of religion, primarily a Latin Americanist.

Odd Granda (University of Oslo; Ph.D., Cornell University), presently Fulbright Associate Professor at Cornell, Visiting Associate Professor for 1968-69. Specialties: rural sociology and comparative social organization.
David Bachelor (BA University of Illinois; Ph.D. University of Chicago), Assistant Professor. Joint appointment with the College of Education; salary to be paid entirely by the College of Education. Specialties: sociology of education, particularly comparative educational systems.

The following appointment has been made for the 1968 summer school only:

Caroline Banks (BA Wellesley; MA University of New Mexico). Will teach introductory and the family.

D. We have had the following separations from staff:

Lois Dilatash went full time into the Department of Psychiatry of the Medical School effective February 1, 1968; effective with the close of summer school 1968 Jack Dyer has resigned to become chairman of the Sociology Department at Northern Arizona University.

11. Composite of Information requested on individual biographical supplements.

1. None

2. Nancie Gonzalez has been on leave of absence in the Dominican Republic for the entire academic year.

3. Charles Woodhouse was nominated for the UNM Alumni Outstanding Teacher Award.

4. Publications:

    Morris Forslund: thirteen reviews in the Library Journal.


Charles E. Woodhouse (see above article coauthored with Varley and Maler).

The following have articles presently being considered for publication: Forslund, Måler, Tomasson, and Woodhouse.

5. Current research:

Forslund is working on Negro-white crime differentials. He is also working on a reader in deviant behavior theory and doing a book on southern prison camps with Ed Clemants.

Måler is continuing his study of "student articulation" into campus community and education goals.

Tomasson has submitted six of nine chapters of Swedish Society to Random House. He is also awaiting proofs of Herbert Tingsten, The Swedish Social Democrats of which he is cotranslator and to which he has written an introduction, but needs to add explanatory footnotes to the text.
Woodhouse has continued with his project "Influence of Campus Environment on Student Commitment to a Para-Military Organization."

This project is supported by a grant of $24,000 by U.S. Air Force Office of Scientific Research which terminates August 31, 1968. He is also co-editing (with Henry J. Tobias) the Summer 1968 issue of the New Mexico Quarterly on "Minorities and Politics."

6. Activities in Learned and Professional Societies:

Dyer read papers at meetings of both the Rocky Mountain Social Science Association (May), and the Southwestern and Rocky Mountain Division of the AAAS (April). He also chaired a session at the former.

Forslund read a paper at the Rocky Mountain Social Science Association meeting. He also attended the meetings of the American Sociological Association in San Francisco (August).

Maler read a paper at the Rocky Mountain Social Science Association meeting. He also attended the meetings of the American Sociological Association in San Francisco (August).

Tomasson read papers at both the American Sociological Association in San Francisco (August) and at the Southwestern and Rocky Mountain Division of the AAAS (April).

Woodhouse attended the meeting of the American Sociological Association in San Francisco (August).

7. Other Professional Activities:

Tomasson was interviewed by Kay McDowell on sex roles in Sweden, May 23, 1968, Station KVOD.

Woodhouse was a consultant for the Albuquerque Public Schools, June 1967.

8. Nonteaching University service:

Dyer: Advisor for University College students

Forslund: Advisor for sociology majors

Meier: Advisor for Arts and Sciences sophomores and a member of University Speakers Committee and Arts and Science Committee on Use of Human Subjects in Research.

Tomasson: department chairman, advisor to graduate students in sociology, chairman of advisory committee, institute for Government Research.

Woodhouse: advisor for sociology majors.
I. General Departmental Information

A. Significant Achievements during the Academic Year, 1967-68

1. Enrollment

Enrollment in the Department of Speech during the first semester increased 15% over the corresponding semester in 1967-68. Enrollment during the second semester increased a fraction of 1% [Dr. Chreist was on sabbatical during the second semester]. Graduate enrollment in the department increased during the current year. Thirty-two students were enrolled during Semester I and 29 students during Semester II.

2. New Courses

Six new courses were approved during the year -- one in the field of communication, four in speech pathology and audiology, and one in public address and rhetoric.

3. Communication Area

The curriculum for the communication area now consists of four courses. Enrollment in this area increased 40% over last year. Nine masters and doctorate students from Speech, Business Administration, Educational Administration, and Physical Education are currently working under plans of study with either a major or minor emphasis in communication.

This year saw the establishment of an on-going research program concerning the reduction of hostility in the communication situation. Both the interpersonal and speaker-audience situations were explored using several types of
psychological and physiological measures. Preliminary data have been obtained from both on-campus and off-campus groups. The results of the first phases of this program will be made available this summer in the form of a progress report.

Foundations were also laid for the study of the relationship among Value Orientations and other communication variables within and among various cultural contexts. Several hypotheses will be tested this summer both in the field setting and campus setting.

The initial steps were taken for the formation of a Communication Research Laboratory. An investigation of physical facilities, philosophy, and objectives was undertaken which resulted in an informal statement of general guidelines.

Progress toward giving the communication area a truly interdisciplinary focus was made through discussions with representatives of the College of Business Administration and Department of Educational Administration. These talks resulted in the cross-listing of two communication courses with the College of Business Administration and informal plans for a communication option in Educational Administration.

In conjunction with the Extension Division of the University, a non-credit course in Interpersonal Communication was made available to secretaries in the Albuquerque area. A total of 45 secretaries took part in the course. Also, a communication block was presented in an Extension course for the Legal Secretaries in Albuquerque.
The communication area furnished consultants for several business, professional, and community service organizations throughout the year. Among others, consultants served the Southwest Management Development Programs, Economic Security Commission, Civil Service Commission, American Association of Hospital Accountants, and Albuquerque United Community Fund. Also, the area provided programs for several service organizations in Albuquerque. These included Optimist Clubs, Lions Club, PEO, Ministerial Alliance, League of Women Voters, etc.

In summary, the communication area has witnessed rapid growth this year in terms of teaching, research, interdisciplinary ties, community service, and consultancies.

4. Forensics

Participants in the University of New Mexico Forensics Program competed in seventeen intercollegiate forensics tournaments during the 1967-68 academic year. Approximately twenty-five students represented the University at these events. The tournaments ranged from New Mexico's own Duke City Tournament, which featured some twenty-five schools from eight states, to such nationally attended tournaments as Stanford to the West and the National Delta Sigma Rho-Tau Kappa Alpha Tournament in Washington, D.C., to the East. New Mexico sent ten people to the Western Speech Association Tournament at Sacramento State College. There were nearly one hundred colleges and universities represented at Sacramento, the largest tournament in the history of the Association.
Regular study, practice and extensive participation paid off not only in terms of the invaluable experience accrued but also in terms of decisions. For instance, New Mexico had teams in the elimination rounds, i.e., the top eight or fewer teams, in Senior Division at such strong tournaments as the WSA in Sacramento, Oklahoma State, University of Arizona, and the National DSR-TKA Tournament in Washington, D.C. Likewise on the home front they proved themselves by winning first place in both Junior and Senior Divisions of the New Mexico Intercollegiate Forensics Association Tournament. In addition to their strong performances in debate, the New Mexico students consistently placed in individual events such as Extemporaneous Speaking, Oratory, and Oral Interpretation at those tournaments throughout the country where those events were also offered.

Apart from attendance at regular tournaments, New Mexico participated in an Intercollegiate Television Debate Tournament sponsored by NET affiliates of the Intermountain States. They will engage in the same event, if it can be arranged, again next year.

New Mexico also assisted high schools of the State in the operation of their speech programs. Prof. Robert C. Dick served as State Director for the National University Extension Association, which distributes discussion and debate materials to high schools. Moreover, we hosted the State High School Championship Debate and Forensics Tournament. Finally, the members of our squad provided judging services at tournaments held at local high schools.
Services in the form of judging, lectures, and performances were freely provided by our forensics squad to civic organizations such as Kiwanis, Optimists and the American Legion.

In summary, effort was made to give students the maximum possible learning and experience in forensics. This was made possible, in no small part, by the $7,500 allocated our program by the University administration. Additionally, Prof. Brenda Hancock, forensics assistant to Prof. Robert Dick, and three graduate assistants assigned to forensics in various capacities, afforded invaluable help.

5. **Speech Pathology and Audiology Area**

a. **Elks Cerebral Palsy Program**

The Elks Cerebral Palsy Program at the University of New Mexico conducted 10 Saturday clinics, evaluating 48 cerebral palsied children during the 1967-68 academic year. Many of these evaluations were carried out in connection with the course, Speech 531 - "Communication Problems of the Cerebral Palsied." Students visit other treatment centers such as Carrie Tingley Hospital in order that they may better understand the team approach to cerebral palsy treatment. Under the supervision of Dr. Dolores Butt, several of the students are conducting speech therapy for cerebral palsied children at Manzanita Center in the College of Education, the Day Training Center, and the Rehabilitation Center, Inc., as well as the University Speech and Hearing Center.

Motion picture records are continuing to be made of the children evaluated and trained. Four films have been developed to aid in teaching the cerebral palsy treatment techniques.
Thanks to the Elks funds, it has been possible to build a good library on the topic of cerebral palsy for the Speech and Hearing Center. Our students continue to show a strong interest in this field and many plan to make cerebral palsy rehabilitation their life work.

The major part of the Elks funds has gone toward providing a $2,000 fellowship for a graduate student in speech pathology, Mrs. Paula Lamb. Two students from the Dental Hygiene Program each received $200 fellowships. These students assist with the evaluation of the children and give instructions to the parents for the home program of oral hygiene.

This year scheduling the children for evaluation clinics has been done by the Speech and Hearing Center office rather than by the Elks secretary. Four hundred dollars has gone toward secretarial costs in making appointments and preparing reports for the many agencies who are interested in the welfare of cerebral palsied children.

We have been offering consultation services to several other agencies this year based on the experience gained with the Elks Program. For example, eight of our students and three faculty members spent two days at the Carlsbad Cerebral Palsy Day School testing and making recommendations for the children's training. Others have visited the Farmington Preschool for Retarded Children to make similar recommendations. We have also been able to assist the Department of Guidance and Special Education with their newly established program for training teachers of the neurologically impaired.
Dr. Lloyd Lamb, Audiologist, is continuing his participation in the cerebral palsy clinics. His research will soon be published in a book on hearing testing of cerebral palsied, mentally retarded, and other difficult-to-test populations.

Next year we would like to continue this program of research, evaluation, student training, speech therapy and service to the state. However, a number of changes have taken place recently which may make it necessary to cut back the program. There will be a new director of Speech Pathology and Audiology next year when Dr. Samuel Fletcher of Utah State University will assume the position formerly held by Dr. Chreist. Other changes in staff are being planned and major changes in the clinical program are anticipated. Some of the changes include major commitments to provide research and clinical services to the University of New Mexico Medical School, the Bureau of Indian Affairs, and the Veterans Administration Hospital. Our present staff, including secretaries, graduate assistants, clinical supervisor and faculty, will find themselves with greatly increased responsibilities for the next year or two of area reorganization.

b. Student Training

A diagnostic and therapy program is conducted to provide University students with varied opportunities for supervised practicum. Diagnostic experience was provided primarily within the Speech and Hearing Center although special techniques such as aphasia testing at the Veterans Administration Hospital were also available to graduate students. Students
participated in the following regularly scheduled evaluation clinics:

<table>
<thead>
<tr>
<th>Clinics</th>
<th>Number of Clinics</th>
<th>Number of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Evaluation Clinics</td>
<td>12</td>
<td>37</td>
</tr>
<tr>
<td>Elks Cerebral Palsy Clinics</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>Carlsbad Cerebral Palsy Clinic</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Farmington ARC Clinic</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Medical School Evaluations</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Special Problems (individual)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Summer School testing (individual)</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td></td>
</tr>
</tbody>
</table>

Audiology services associated with the training program included routine hearing evaluations, complete diagnostic evaluations, and hearing aid evaluations. These were administered by Dr. Lloyd Lamb or by graduate students working under Dr. Lamb's supervision. From June 1967 to the present, a total of 175 hearing evaluations and 22 hearing aid evaluations were performed. These included 148 evaluations for children and 49 for adults. In addition, hearing evaluations were performed on each person who received speech and/or language evaluations in the diagnostic clinics and the cerebral palsy clinics.

In addition, two students (enrolled in thesis or problems) administered numerous tests of aphasia to clients at the Veterans Administration Hospital and Rehabilitation Center, Inc.

Opportunities for supervised practicum are provided for both graduate and undergraduate students. Undergraduates do their practicum in the Albuquerque Public Schools or in the UNM Speech and Hearing Center where close supervision is given. Graduate students select the practicum location which offers the particular experience to meet their career goals. A resume of therapy activities follows:
<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Students</th>
<th>Number of Clients</th>
<th>Types of Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNM Speech and Hearing Center</td>
<td>25</td>
<td>7</td>
<td>Rhythm, Articulation, Delayed Speech, Aphasia, Tongue Thrust, Voice, Cleft Palate, Apraxia</td>
</tr>
<tr>
<td>Day Training Center</td>
<td>6</td>
<td>25</td>
<td>Retarded</td>
</tr>
<tr>
<td>Veterans Administration Hospital</td>
<td>12</td>
<td>11</td>
<td>Aphasia, Dysarthria, Laryngectomee</td>
</tr>
<tr>
<td>Albuquerque Hearing and Speech Center</td>
<td>2</td>
<td>18</td>
<td>Hard of Hearing (pre-school), Hard of Hearing</td>
</tr>
<tr>
<td>Public School Class for Acoustically Handicapped</td>
<td>2</td>
<td>13</td>
<td>Hard of Hearing</td>
</tr>
<tr>
<td>Albuquerque Public Schools</td>
<td>12</td>
<td>239</td>
<td>Disordered Speech</td>
</tr>
<tr>
<td>Child Development Center</td>
<td>1</td>
<td>15</td>
<td>Delayed Speech</td>
</tr>
<tr>
<td>UNM Manzanita Center</td>
<td>5</td>
<td>6</td>
<td>Neurologically Impaired</td>
</tr>
<tr>
<td>Rehabilitation Center, Inc.</td>
<td>1</td>
<td>2</td>
<td>Cerebral Palsy</td>
</tr>
<tr>
<td>Type</td>
<td>Number of Students</td>
<td>Number of Clients</td>
<td>Problem</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-----------------------------------</td>
</tr>
<tr>
<td>Child Evaluation Clinics</td>
<td></td>
<td></td>
<td>Disordered Speech</td>
</tr>
<tr>
<td>Cerebral Palsy Clinics</td>
<td>15</td>
<td>40</td>
<td>Cerebral Palsy</td>
</tr>
<tr>
<td>Special Evaluations</td>
<td>2</td>
<td>8</td>
<td>Neurological Disorders</td>
</tr>
<tr>
<td>Special Evaluations</td>
<td>1</td>
<td>15</td>
<td>Delayed Speech and Articulation</td>
</tr>
<tr>
<td>Carlsbad Cerebral Palsy Day School</td>
<td>5</td>
<td>20</td>
<td>Cerebral Palsy</td>
</tr>
<tr>
<td>Farmington Retarded Children's School</td>
<td>1</td>
<td>6</td>
<td>Retarded</td>
</tr>
<tr>
<td>UNM Student Evaluations</td>
<td>8</td>
<td>60</td>
<td>Voice, Articulation, Foreign Accent</td>
</tr>
<tr>
<td>Special Summer Evaluations</td>
<td>4</td>
<td>15</td>
<td>Delayed Speech and Articulation</td>
</tr>
</tbody>
</table>

**SUMMER PROGRAM - 1967**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Students</th>
<th>Number of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNM Speech and Hearing Center</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cleft Palate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neurologically impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delayed speech</td>
</tr>
</tbody>
</table>
c. **Speech and Hearing Service for University Students**

Since speech screening tests for incoming UNM students have been discontinued (by University College), fewer UNM students are receiving speech therapy. Only 60 have been given speech training this year.

d. **Demonstration Therapy**

The professional staff gave therapy to 10 difficult and unusual cases for demonstration purposes.

e. **Community Education**

Members of the faculty and staff have provided radio and television talks and personal appearances to off-campus groups to promote community understanding of the speech and hearing profession and offerings of the UNM Speech and Hearing Center. Groups such as UNM medical students, nursing students, dental hygiene students, and special education majors were also addressed on campus.

f. **Grant Support**

Grant support for the speech pathology and audiology program continues to be provided by the U. S. Office of Education and the Vocational Rehabilitation Administration. The Office of Education grant provides program support including three graduate traineeships of $2400 for the academic year plus remission of tuition and fees. Four V.R.A. traineeships are available and pay $2400 per year plus tuition and fees. The V.R.A. grant also provides support for academic and secretarial personnel and other program costs. Additional support for the speech pathology
and audiology program recently has been made available through a training grant from the U. S. Public Health Service. The purpose of this grant project is to develop the speech pathology and audiology programs along the lines of medically related communication disorders. Teaching, clinical, and research relationships with the University of New Mexico School of Medicine will be emphasized as part of the project. Graduate traineeships paying $3,000 per year plus dependent allowances, and tuition and fees, are available under this grant. Also, two persons will be added to the audiology staff under terms of the grant. The grant project director will be Dr. Lloyd Lamb. A sum of $52,423 has been awarded for 1968-69 with further support in the amounts of $48,880 and $46,758 recommended for 1969-70 and 1970-71 respectively.

Traineeships for advanced graduate students now are available for work at the Veterans Administration Hospital under the direction of Dr. Bruce Porch.

6. Television-Radio

Beginning this coming September, the Department of Speech will offer two graduate internships in broadcasting -- a junior and senior internship. The junior internship will pay $2500, the senior internship $3,000. These grants were made possible through a joint arrangement with the U.N.M. Student Radio Board. This joint arrangement creates a unique opportunity for graduate students in broadcasting to acquire managerial experience in an on-the-air operation while pursuing a master's degree in speech with emphasis in TV-Radio and at the same time provides qualified personnel for Station KUNM-FM operation.
B. Significant Plans and Recommendations for the Near Future

1. Proposed Bureau of Indian Affairs Project

Representatives of the Bureau of Indian Affairs have contacted Dr. Lloyd Lamb regarding the development of a training program for Indian children in New Mexico. The proposed program, one of several the Bureau of Indian Affairs hopes to develop in the United States, will involve screening services for children and adults within an age range of 4 to 21 years. Primary emphasis will be on hearing, speech and language, vision, and psychological testing. According to Dr. Peter Campanelli, Director of Special Education for the Pupil Personnel Services of the Bureau, the program should be designed to reach children in all residential and day schools as well as in mission schools. As nearly as we have been able to determine, this will mean providing services for at least 50 Indian schools with a total population of approximately 12,500 children.

The Bureau of Indian Affairs is anxious to establish contact with universities for this type of service program and feels that the University of New Mexico is in an excellent position, both geographically and in terms of facilities, to undertake such a project. Funds can be obtained from the Bureau for personnel support, travel, equipment, and other program costs. At present there is no way of accurately predicting the contract amount for the New Mexico project but our best estimate is that the sum involved for one year will be between $150,000 and $200,000.
2. Space

For a number of years the Department of Speech has contemplated occupying the space in the front of the building presently occupied by KNME-TV. The relocation of the television station in a new building seems now to be certain. However, the move will probably not occur before late spring or summer of 1969. Therefore, the Department of Speech will not occupy the vacated space before the fall semester of 1969-70 and possibly not before the second semester -- Spring 1970. The rapid development in both programs and student numbers in speech pathology and audiology is putting a terrific strain on our facilities -- a strain that will not be relieved appreciably even when the departmental office along with some professors is moved into the front of the building. We expect continuing progress in securing grant funds as well as additional students in speech pathology and audiology. This will certainly mean that in the near future additional space will have to be provided for this area.

The Albuquerque Hearing and Speech Center has proposed a joint facility to be located on University ground. There seems to be considerable merit in this type of installation and we hope to pursue the possibility of such cooperation.
3. Doctoral Program

In view of increased student enrollment at the graduate level, improvement in the graduate curriculum, and increases in staff for the coming year, the Department of Speech continues to move toward a doctoral program. Although no exact date has been established, the Department of Speech believes that it will be ready for such a program within four or five years at the latest.

C. Appointments to Staff

Dean W. Betz
University of Wyoming
Supervisor, Speech and Hearing Center
Instructor in Speech
February 1, 1968

Samuel Fletcher
Utah State University
Professor,
Will become Director, Speech Pathology and Audiology,
September 1, 1968.

Brenda J. Hancock (nee Robinson)
California State College at Hayward
Instructor in Speech
September 1, 1967

Bruce Porch
Stanford University
Assistant Professor of Speech (part time)
February 1, 1968

Harold Ried
Transfer from administrative offices of the University of New Mexico
Associate Professor
September 1, 1968

D. Separations from Staff

Jack Ferguson
Master Clinician, Speech and Hearing Center
February 15, 1968

Louise Markum
Supervisor, Adult Rehabilitation, Speech and Hearing Center
June 30, 1967
II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

a. E. Wayne Bundy


b. Dolores S. Butt


c. Judith W. Carey

Continued work on dissertation for the Ph.D. degree.

d. Robert C. Dick

Completed research and preliminary draft of doctoral dissertation entitled, "Rhetoric of the Negro Antebellum Protest Movement."

e. Marilyn J. VanGraber


2. Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere, Travel, Etc., during the Period

a. E. Wayne Bundy


Appointed Visiting Lecturer NDEA Summer Institute, Univ. of Idaho, Moscow, Idaho, July 1968.

b. Fred M. Chreist

On sabbatical leave Semester II, 1967-68.

c. Robert C. Dick

Was on a leave of absence during the 1966-67 academic year. During that time he taught half-time as a Lecturer at San Francisco State College and did dissertation research at Stanford University.
2. d. Wayne C. Eubank

Travel to East Africa, Summer 1967.

e. Brenda J. Hancock

Traveling to Spain and Portugal (with short visits in England, France, and Italy), June-September 1968.

3. New Scholastic Honors

None

4. Publications

a. E. Wayne Bundy

"An Application of Teaching Via Television to Engineering Education" (with D. C. Thorn), accepted for publication in Engineering Education.


Publication by Broadcast Media:

"Science Fare," 3/half-hrs, Producer-Director (with George Fischbeck, APS) WHAT'S NEW [N.E.T., N.Y.] on the National Educational Television Network (140 affiliate stations) 420 half-hrs bdcst 1967-68.

"Science Fare," 10/17 min. segments, Producer-Director (with George Fischbeck, APS), WHAT'S NEW [N.E.T., N.Y.] on the National Educational Television Network (140 affiliate stations) 1400 17-min bdcsts 1967-68.

"Conversation," 21/half-hrs, Producer-Director (with Dr. H. G. Alexander, UNM)

KNME-TV Albuquerque: 30 half-hrs bdcst 1967, 3 half-hrs 1968

4. a. E. Wayne Bundy (continued)

"Electromagnetic Waves," [EE-362], 29/half-hrs, Producer-Director (with Dr. M. D. Bradshaw, EE, UNM telecourse) KNME-TV Albuquerque: 58 half-hrs bdcst 1968.

"The Violin Sonata," 12/half-hrs, Producer-Director (with Henri Bittar, UNM) KTCA-TV St. Paul: 12 half-hrs bdcst 1967

"Introductory Circuits," [EE-202], 29/half-hrs, Producer-Director (with Dr. D. C. Thorn, EE, UNM telecourse) Closed-Circuit, Coll. of Engineering, 1967-68.


"Man's Reach," 8/half-hrs, Prod-Dir. (N.M. Acad. of Sci./Nat'l Sci. Seminars project) KNME-TV 24 half-hrs bdcst 1967.

"Visiting Scientist," 6 half-hrs, Producer-Director (N.M. Acad. of Sci.) KNME-TV 18 half-hrs bdcst 1967.

"L'Histoire du Soldat," 1/half-hr, Producer-Director (with Kurt Frederick and UNM Chamber Orch.) KNME-TV 2 half-hrs bdcst 1967.

"Home for Christmas," 1/half-hr, Producer-Director (with Valley H. S.) KNME-TV 2 half-hrs bdcst 1967.

"Festival of Christmas," 1/hr, Producer-Director KNME-TV 2 hrs bdcst 1967.

"Dental Health Special for Teachers," 1/half-hr, Prod-Dir. (In-service training for teachers in APS and state) KNME-TV 1 half-hr bdcst 1968.
4. a. E. Wayne Bundy (continued)

"N. M. Legislature: Opening Joint Session," 1/1-25, 
Producer-Director (Live and remote from Santa Fe) 
KNME-TV 2 hrs 50 min bdcst 1968 
KOAT-TV Alq. 55 min bdcst 1968 

"Legislative School Study Committee Hearing," 1/7-06, 
Producer-Director (Live and remote from Santa Fe) 
KNME-TV 8 hrs 36 min bdcst 1968 

"Joint Appropriations and Finance Committee Hearing," 
1/5-24, Prod-Dir. (Live and remote from Santa Fe) 
KNME-TV 6 hrs 54 min bdcst 1968 

"N. M. Legislature: Ch. 5 Report Special," 1/1-40, 
Producer-Director (with State Representatives Pierce 
and Garcia, Pres. Tom Popejoy and Pres. Sterling 
Colgate NMIMT) 
KNME-TV 2 hrs 10 min bdcst 1968 
KSWS-TV Roswell 30 min bdcst 1968 

"N.M. Legislature: Ch. 5 Report Special," 1/half-hr, 
Producer-Director (Live and remote from Santa Fe) 
(with Majority and Minority Whips from both houses) 
KNME-TV 2 half-hrs bdcst 1968 
KSWS-TV 1 half-hr bdcst 1968 

"Albuquerque Board of Education Meeting," 1/1-21, 
Prod-Dir. (Remote from Admin. Bldg. APS) 
KNME-TV 1 hr 21 min bdcst 1968 

"Veterans Day Special," 1/20, Producer-Director 
KNME-TV 20 min bdcst 1967 

"Senate Committee of the Whole Hearing," 1/9-05, 
Executive Producer (live and remote from Santa Fe) 
KNME-TV 9 hrs 5 min bdcst 1968 

"Legislative Session," 7/half-hrs, Exec. Prod. 
(remote from Santa Fe) 
KNME-TV 15 half-hrs bdcst 1968 

(with U. S. Sen. Joseph Montoya) 
KNME-TV 2 half-hrs bdcst 1967 
KSWS-TV Roswell 1 half-hr bdcst 1967 

"Congressional Press Conference," 1/half-hr, 1 hr, Exec.Prod. 
(with U. S. Rep.'s Tom Morris and Johnny Walker) 
KNME-TV 2 half-hrs, 2 hrs bdcst 1967-68 
KSWS-TV Roswell 1 half-hr bdcst 1967
4. a. E. Wayne Bundy (continued)

(with all City Commission candidates)
KNME-TV 2 hrs bdcst 1967

KNME-TV 2 hrs bdcst 1967

(In cooperation Albuquerque Great Decisions Committee,
Santa Fe Great Decisions Committee and Foreign Policy Assn)
KNME-TV 16 half-hrs bdcst 1968
KOB-TV Albuquerque 8 half-hrs bdcst 1968
KSWS-TV Roswell 8 half-hrs bdcst 1968
KROD-TV El Paso 7 half-hrs bdcst 1968

"Shirtsleeve Session," 44/half-hrs, Exec. Prod.
KNME-TV 74 half-hrs bdcst 1967-68
KOB-TV Albuquerque 44 half-hrs bdcst 1967-68
KSWS-TV Roswell 44 half-hrs bdcst 1967-68

"New Mexico Outdoors," 52 half-hrs, Exec. Prod.
(In cooperation N. M. Dept. of Game and Fish)
KNME-TV 52 half-hrs bdcst 1967-68
KOB-TV Albuquerque 47 half-hrs bdcst 1967-68
KROD-TV El Paso 30 half-hrs bdcst 1967-68
KSWS-TV Roswell 52 half-hrs bdcst 1967-68
KVCM-TV Monahans 22 half-hrs bdcst 1967-68

KNME-TV 390 half-hrs bdcst 1967-68
WOSU-TV Columbus, O. 190 half-hrs bdcst 1967-68
WTGE-TV Toledo, O. 190 half-hrs bdcst 1967-68
WVIZ-TV Cleveland, O. 195 half-hrs bdcst 1967-68
WMUB-TV Oxford, O. 190 half-hrs bdcst 1967-68
WCET-TV Cincinnati, O. 195 half-hrs bdcst 1967-68
WBGU-TV Bowling Green 190 half-hrs bdcst 1967-68
WGSF-TV Newark, O. 190 half-hrs bdcst 1967-68
KTXT-TV Lubbock, Tex. 195 half-hrs bdcst 1967-68
KLRN-TV Austin, Tex. 195 half-hrs bdcst 1967-68
KTCA-TV St. Paul 190 half-hrs bdcst 1967-68
WDSE-TV Duluth-Super. 190 half-hrs bdcst 1967-68
KWCM-TV Appleton, Minn. 190 half-hrs bdcst 1967-68
KULD-TV Moscow, Ida. 190 half-hrs bdcst 1967-68
KOAP-TV Portland, Ore. 190 half-hrs bdcst 1967-68
KOAC-TV Corvallis, Ore. 190 half-hrs bdcst 1967-68
KSPS-TV Spokane, Wash. 190 half-hrs bdcst 1967-68
KWSO-TV Pullman, Wash. 190 half-hrs bdcst 1967-68
KPEC-TV Tacoma, Wash. 190 half-hrs bdcst 1967-68
KQED-TV San Francisco 190 half-hrs bdcst 1967-68
KVIE-TV Sacramento 190 half-hrs bdcst 1967-68
WTVS-TV Detroit, Mich. 190 half-hrs bdcst 1967-68
KUSD-TV Vermillion, SD 190 half-hrs bdcst 1967-68
4. a. E. Wayne Bundy (continued)

"TV Kindergarten," 195/6 half-hrs, Exec. Prod. (cont'd)

<table>
<thead>
<tr>
<th>Station</th>
<th>Broadcasts per Week</th>
<th>broadcast Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>KDPS-TV Des Moines, Ia.</td>
<td>190 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WTVI-TV Charlotte, N.C.</td>
<td>190 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WCES-TV Augusta, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
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<tr>
<td>WGTW Athens, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WETV Atlanta, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WCLF-TV Chatsworth, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WJSP-TV Columbus, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WACS-TV Dawson, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WABW-TV Pelham, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WVAN-TV Savannah, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>WXGA-TV Waycross, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
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<tr>
<td>WDCO-TV Cochran, Ga.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>KUON-TV Lincoln, Nebr.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
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<tr>
<td>KLME-TV Lexington, Nebr.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>KPME-TV North Platte</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>KTNE-TV Alliance, Nebr.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>KMNE-TV Bassett, Nebr.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
<tr>
<td>KXNE-TV Norfolk, Nebr.</td>
<td>195 half-hrs bcst</td>
<td>1967-68</td>
</tr>
</tbody>
</table>

"Elementary Music Orientation," 3 half-hrs, Exec. Prod. (In-service training for teachers in APS and state districts)

KNME-TV 6 half-hrs bcst 1967

"Elementary Science Orientation," 1 half-hr, Exec-Prod. (In-service training for teachers in APS and state districts)

KNME-TV 1 half-hr bcst 1967-68

"Electromagnetic Fields," [EE-361], 29 half-hrs, Exec. Prod. (with Dr. M. D. Bradshaw, EE, UNM telecourse)

KNME-TV 58 half-hrs bcst 1967-68

"Far Eastern Affairs Press Conference," 1 half-hr, Exec-Prod. (with Robert Barnett, Deputy Undersecretary for Far Eastern Affairs)

KTCA-TV St. Paul 1 half-hr bcst 1967


KUSU-TV Logan, Utah 1 half-hr bcst 1967

KRMA-TV Denver 1 half-hr bcst 1967

KUID-TV Moscow, Ida. 1 half-hr bcst 1967
4. Publications

b. Dolores S. Butt

16 mm. film, "Contingency Management in the Speech Clinic," with J. Gonzales, to be released by Westinghouse Research Corp. in May 1968. Award winner at National Convention of Programmed Instruction.


Article to be published, indefinite date: "Transfer Effects of Auditory Discrimination Training on Articulation Learning," *Journal of Speech and Hearing Research*.

c. Fred M. Chreist


d. Wayne C. Eubank

Case study on Benjamin Palmer's "Century Sermon" submitted to *Southern Speech Journal*.

e. Lloyd E. Lamb


5. Other Research Projects or Creative Work in Progress or Completed during Period

a. E. Wayne Bundy

"Science Fare"—WHAT'S NEW—N.E.T., Producer-director for three half-hour programs contracted for production summer 1968.
5. Other Research Projects (continued)

b. Dolores S. Butt

New Approaches to Public School Speech Therapy - support from State Department of Special Education under provisions of Title VI of Elementary and Secondary Education Act.

16 mm film (color and sound) Speech Therapy for the Severely Involved Athetoid Child. Financial support provided by N.M. Elks Cerebral Palsy Commission.

Article in preparation for The Rehabilitation Journal, "Guardianship for the Mentally Retarded."

Article in preparation for The Cerebral Palsy Review, "Motivational Training in Cerebral Palsy Habilitation."


c. Robert C. Dick

Review and suggestions for Second Edition changes in Creative Speech by Keith St. Onge, for Wadsworth Publishing Co.

d. Wayne C. Eubank

Continued research on Benjamin Palmer.

e. J. Douglas Gibb

Co-author with David M. Jabusch (Univ. of Utah), "Humor in Informative Speech."

f. Jim D. Hughey

The Relationship between Extrinsic Credibility Cues and Audience Hostility.

g. Lloyd E. Lamb

Lamb, L. and Norris, T. Relative Impedance Measurements with the Mentally Retarded (manuscript in preparation).

5. **Other Research Projects** (continued)

h. **Cullen B. Owens**

Continuing research in British and American public address, also in persuasion.

i. **Marilyn J. VanGraber**


*Contemporary Rhetoric* (graduate text on the development of current rhetorical theory).

6. **Activities in Learned and Professional Societies**

a. **E. Wayne Bundy**

National Association of Educational Broadcasters.

Educational Television Stations Division:


Member Ad Hoc Committee of Representatives of National and Regional Networks and Libraries

Report from the Rocky Mountain Public TV Network, Denver 1967


Attended ETS Session, San Francisco, Feb. 1968

Attended ETS Session, New York, Apr. 1968

State Educational Television Authorities

"The Rocky Mountain Public Television Network," speaker, SETA meeting, NAEB Annual Convention, Denver, Nov. 1957

Attended NAEB Annual Convention, Denver, Nov. 1967

Speech Association of America

Radio-TV-Film Interest Group—Advisory Board, Member

Freedom of Speech Interest Group, Member

Theatre Interest Group, Member


Western Conference on Instructional Television, attended annual meeting, San Francisco, Feb. 1968.
6. **Activities in Learned and Professional Societies**

a. **E. Wayne Bundy** (continued)

Phi Kappa Phi - Member  
American Association of University Professors - Member

b. **Judith W. Carey**

New Mexico Representative to the Speech Association of America's "Committee of Fifty"

Attended the New Mexico State Speech Association 1967 meeting.

c. **Robert C. Dick**

President of the New Mexico Intercollegiate Forensics Association, 1967-68.

New Mexico Director of the National University Extension Association, 1967-68.

Attended annual meeting of Western Forensics Association, Sacramento, California, November 24, 1967.

d. **Wayne C. Eubank**

National Council member, Delta Sigma-Rho-Tau Kappa Alpha  
Member, Western Speech Association Executive Club  
Attended Western Speech Association Convention  
Speech Association of America Convention  
DSR-TKA National Conference

e. **J. Douglas Gibb**

Attended Western Speech Association convention, Nov. 1967  
Attended Speech Assn. of America convention, Dec. 1967

f. **Jim D. Hughey**

New Mexico Speech Association  
Speech Association of America  
Western States Speech Association, Member of the Legislative Assembly.

g. **Lloyd E. Lamb**

President (1968) New Mexico Speech and Hearing Association  
Member, Committee on Revision of By-laws, American Speech and Hearing Association.

Papers read:  
- Relative Impedance Measurements in Young Children, ASHA Convention, Chicago, 1967.  
6. Activities in Learned and Professional Societies

b. Cullen B. Owens

Delegate-at-large in the Legislative Assembly, Western Speech Association
Research and Publications Committee of Delta Sigma Rho-
Tau Kappa Alpha.
Attended Western Speech Association Convention,
Sacramento, California, November, 1967.

i. Marilyn J. VanGraber

Attended Western Speech Association Convention,
Sacramento, California, November 1967.

7. Other Professional Activities

a. Dean W. Betz

Consultant at V.A. Hospital
Consultant at Carlsbad Cerebral Palsy Clinic, Apr. 1968

b. Edward Wayne Bundy

Federation of Rocky Mountain States:
Chairman, Public Broadcasting Committee, FRMS, re-elected
July 1967.
Acting Chairman, Telecommunications Council, FRMS,
appointed March 1968.
"Report of the Public Broadcasting Committee to the
Board of Directors FRMS, Boise, Idaho, April 1968.
Public Broadcasting Committee:
Meeting, Jackson Lake, Wyo July 1967
Meeting, Denver, Colo., Nov. 1967
Executive Committee, Tempe, Ariz. Feb. 1968
Rocky Mountain Public Broadcasting Network
Meeting, Denver, Nov. 1967
Meeting, New York, April 1967
Program Planning Committee for the Third Rocky Mountain
States Governors Conference on Economic Development,
Albuquerque, Sept. 1967
Meeting, Albuquerque, June 1967
Meeting, Albuquerque, Aug. 1967
New Mexico State Committee
Meeting, Santa Fe, Feb. 1968
Meeting, Albuquerque, March 1968

Rocky Mountain Corporation for Public Broadcasting
Vice-President, Board of Directors, elected May 1968
Member, Board of Directors and Initial Incorporator,
May 1968
7. Other Professional Activities

b. E. Wayne Bundy (continued)

Albuquerque Public Schools
TV Program Director
Member, Driver Education TV Content Committee
Member, Elementary Music-4 TV Advisory Committee
Member, Elementary Music-5 TV Advisory Committee
Member, Elementary Music-6 TV Advisory Committee

National Educational Television (N.E.T.)
Member, Network Allocations Council of the Affiliates Com.
Appointed June 1967
Meeting, New York, June 1967
Meeting, Denver, Nov. 1967
Meeting, New York, Apr. 1968
Affiliates Meeting, Denver, Nov. 1967
Affiliates Program Meeting, New York, April 1968

Western Educational Network (WEN)
Elected to Board of Directors, April 1968
Represented KNME-TV, WEN meeting Denver, Nov. 1967
Represented KNME-TV, WEN meeting San Francisco, Feb. 1968
Represented KNME-TV, WEN meeting New York, April 1968

Consultancy

Speaking Appearances
Annual meeting of the Commissioners of the Western Interstate Commission for Higher Education (WICHE) San Francisco, Aug. 1967
American Association of Retired Persons, Chapter 347, Albuquerque, July 1967
KVOD Radio, Albuquerque, Feb. 1968

c. Dolores S. Butt

Full Day Workshop in Speech and Language Development, presented to Las Vegas County School System, Feb. 1968

Full Day Workshop in Teaching Style and Classroom Atmosphere, presented to the Teacher Corps at New Mexico State Univ., May 1968.


Major address to Council for Exceptional Children State Meeting - October 1967, Albuquerque, "Speech Training for Brain Injured Children."

Speech to State Meeting of N.M. Speech and Hearing Assn., Las Cruces, N.M., March 1968: "Language Development for Disadvantaged Children."
7. **Other Professional Activities**

c. **Dolores S. Butt** (continued)

Radio appearances - 2; interviews on KGGM regarding speech disorders

TV appearances - Jan. KNME program on birth defects
               Feb. KOAT panel discussion on mental retardation

Chairman of Speech and Hearing Section of State Meeting
May 1968 Assn. for Retarded Children and presentation of address at same meeting: "Wait for Me"

Treasurer of N.M. Speech and Hearing Assn.

Member American Speech and Hearing Assn., Council for Exceptional Children, N.M. Speech and Hearing Assn.

Professional Advisory Board - N.M. Society for Crippled Children and Adults (Committee for parent education).

Member Evaluation Team - United Cerebral Palsy

Committee on Pre-School Education of Retarded Children
              - Manzanita Center, UNM

Consultant to Stuttering Research Project, Westinghouse Research Corp.

Consultant to Albuquerque Public Schools Speech Therapy Program - Dept. of Special Education.

Talk to church discussion group, Nov. 1967, Church of Science and Religion, "Why Isn't Learning Fun?"

Coordinator of Speech and Hearing Display, Albuquerque Assn. for Retarded Children Festival, March 1968.

Consultant to Farmington School for Retarded Children, April, May 1968.

Member of Governor's Task Force for Rehabilitation Services.

d. **Robert C. Dick**

Coached UNM debating team participating in an Intermountain College TV Debate Tournament produced and telecast by NET.

Directed UNM debate and forensics squad that participated in 18 intercollegiate tournaments throughout the nation.

Hosted the High School State Championship Forensics Tournament, and hosted two intercollegiate debate and forensics tournaments.
7. **Other Professional Activities**

e. **Wayne C. Eubank**

   Addressed various service organizations, church groups, state and regional professional organizations.

f. **J. Douglas Gibb**

   Off-campus talks: Civitan Community Assn. March 1968
   L.D.S. Institute: Guest lecturer, February 1968
   L.D.S. Firesides

h. **Brenda J. Hancock**

   Served as Assistant Director of Forensics at UNM: directing student speech activities.

   Traveled to forensic tournament in Colorado Springs, Las Cruces, and Greeley, Colorado.

   Supervised individual events in the Duke City Tournament and the New Mexico State Tournament.

i. **Jim D. Hughey**

   Speech Communication Specialist for the Southwest Management Development Program.


   Lecturer for the Civil Services Commission.

   Communication and the Secretary (Course through Extension Division of UNM).

   Lecturer for the American Association of Hospital Accountants.

j. **Lloyd E. Lamb**

   Participant, Conference on Audiologic Measurement with the Mentally Retarded, Parsons, Kansas, April 1968.

   Lecturer, Auditory Evaluation of Children, Univ. of Miami Medical School and Univ. of Miami Child Development Center, Miami, Florida, March 1968.
8. Non-teaching University Service

a. **E. Wayne Bundy**

KNME-TV Channel 5, Program Manager, UNM Program Director  
UNM Radio Board, Member, Chairman-Designate, May 1968  
Graduate Committees  
Doctoral: Betty Benison; Masters: Richard Krause, John Thomas Duncan, Barbara Radovich, David Jackson.

b. **Dolores S. Butt**

University College Advisor  
Demonstration, Speech Therapy at Manzanita Center and UNM Speech and Hearing Center  
Director, Elks Cerebral Palsy Clinic  
Speech Services for UNM Medical School Referrals - bi-monthly clinics  
Supervision of speech pathology practicum in Albuquerque Public Schools  
Acting Director, Speech and Hearing Center (Semester II)

c. **Judith W. Carey**

Judging for forensic events at both the University and high school level  
University College advisor

d. **Fred M. Chreist**

Chairman, Library Committee, Semester I  
University Advisor, Semester I  
Director, Speech and Hearing Center, Semester I

e. **Robert C. Dick**

Director of Forensics  
Speech 255 Curriculum Committee

f. **Wayne C. Eubank**

Chairman, Department of Speech  
Speech Department advisor  
No committee assignment due to leave of absence
8. Non-teaching University Service

g. J. Douglas Gibb
University College Advisor
Chairman, Speech 255 Curriculum Committee

h. Jim D. Hughey
Chairman, Speech 101 Committee
University College Advisor (35)
Graduate Thesis Committees (9)

i. Lloyd E. Lamb
Director, V.R.A. Training Grant (Speech Pathology and Audiology)
Awarded Training Grant in Speech Pathology and Audiology from U.S. Public Health Service (Grant begins Sept. 1968).

j. Cullen B. Owens
Graduate Committee, Dept. of Speech
Charge of registration, Dept. of Speech

k. Marilyn J. VanGraber
University College Advisor
Speech 255 committee; textbook committee
New Mexico State Speech Assn. - Com. for Constitutional Revision, Chm.

9. Public Service

a. E. Wayne Bundy
The Governor's Commission on the Humanities, Member, Commissioned Feb. 1967
The Governor's Commission on Statewide Television for Educational Purposes, Member, Commissioned Nov. 1963
Albuquerque Great Decisions Committee
Member; Director, Broadcast Activity

b. Robert C. Dick
Judged and lectured, and directed forensics assistants in judging and lecturing, on speech activities of local high schools, Optimists Club, Kiwanis Club and the American Legion.
9. Public Service

c. Wayne C. Eubank

First Methodist Church
Kiwanis Key Club
Kiwanis Circle K Club

d. J. Douglas Gibb

Seminary teacher - L.D.S. - 1 hr. each morning, 5 days week
2nd Counselor (Bishopric) L.D.S. Church

e. Jim D. Hughey

Consultant for interpersonal communication for the
Albuquerque United Fund

f. Lloyd E. Lamb

Committee Member, Task Force on Medical and Psychological
Services (New Mexico State Planning Office, Comprehensive
Statewide Planning for Vocational Rehabilitation Services.)
COLLEGE OF BUSINESS ADMINISTRATION
Annual Report for the Fiscal Year Ending
June 30, 1968
Howard V. Finston
Dean

I. PREFACE

Administrative effort within the College focused upon four major program objectives: further development of a comparative organizational approach to the study of administration; implementation of a doctoral program in Business Administration; accreditation of the undergraduate program by the American Association of Collegiate Schools of Business; and acquisition of new instructional and office facilities for the College and Bureau. Program developments in each area are reviewed later in this report.

II. GENERAL INFORMATION CONCERNING THE BUSINESS SCHOOL

A. Existing Program

1. Current statistics

   Enrollment statistics for the College indicate a modest growth pattern at the undergraduate level and a slight decline at the graduate level (Table I). Student credit hours also rose slightly during the 1967-68 academic year (Table II). This slowdown in growth is consistent with enrollment trends for the University as a whole and doubtless reflects recent changes in draft deferment policies as well as more restrictive educational assistance practices of certain local firms.
Table I
Students Majoring in Business Administration

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<tbody>
<tr>
<td>University College</td>
<td>341</td>
<td>375</td>
<td>419</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
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<tr>
<td>College of Business Administration</td>
<td>186</td>
<td>208</td>
<td>268</td>
<td>313</td>
<td>314</td>
<td>370</td>
<td>382</td>
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<tr>
<td>Graduate School</td>
<td>74</td>
<td>79</td>
<td>81</td>
<td>110</td>
<td>122</td>
<td>137</td>
<td>122</td>
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Table II
Business Administration Student Enrollment and Credit Hours

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<tr>
<td>Student Enrollment</td>
<td>1487</td>
<td>1740</td>
<td>2063</td>
<td>2238</td>
<td>2317</td>
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<tr>
<td>Credit Hours</td>
<td>4434</td>
<td>5205</td>
<td>6183</td>
<td>7068</td>
<td>7247</td>
</tr>
</tbody>
</table>

2. Doctoral Program

Considerable effort was devoted to preparing an appropriate doctoral proposal with supporting evidence in accordance with policy guidelines established by the State Board of Educational Finance. This detailed statement was presented to the BEF in early 1968, after being approved by the University Board of Regents in December. In view of the developing financial crisis which confronts all public institutions of higher learning within the State, the University asked the BEF to postpone final review and action on this proposal until the 1968-69 academic year. It is noteworthy that at least 20 students currently registered in the M.B.A. program are prepared to seek admission to the doctoral program once it is established.
3. Accreditation

Efforts to accredit the undergraduate program were channeled in two directions: first, the preparation of voluminous statistical material describing all aspects of College operations, as required by AACSB; and second, employment of both a consultant and a visiting committee to provide further insight regarding program strengths and weaknesses.

In late February, William Voris, Dean of the College of Business and Public Administration, The University of Arizona, devoted one day to an examination of the College program. Later in the spring, a four-man committee under Danforth Foundation auspices(1) devoted three days to discussions with students, faculty, and administration within and outside the College.

Both Dean Voris and the Danforth Committee stressed the need to upgrade the quantity and quality of faculty in order to achieve program objectives at all levels. The unusually high student-faculty ratio within the College was viewed as a serious deterrent to teaching excellence as well as to accreditation.

4. Executive Development Programs

The Southwest Management Development Program recently concluded its 10th year; and once again a variety of

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(1) The Danforth Committee was composed of the following individuals: George Brown, Dean of the Graduate School of Administration, University of California at Irvine; Dr. John Wheeler, Professor of Accounting, University of California at Berkeley; William Carmichael, Dean, College of Business and Public Administration, Cornell University; and Dr. Harold Leavitt, Graduate School of Business, Stanford University. Professor Leavitt served as Chairman.
developmental programs were offered to managers in private business, in public enterprise, in local and State agencies, and to Indian officials concerned with administration of public housing projects. Beyond these joint College-Bureau conference activities, the Bureau of Business Research offered several specialized short courses for engineering management under the Technical Services Act.

In late fall, 1967, the College hosted the annual meeting of the Mountain-Plains Management Association, an organization comprised of management professors from various universities in the Rocky Mountain states and adjacent areas.

5. Organizational Changes

Professor Howard V. Finston resigned as Dean of the College, effective July 1, 1968, and will return to full-time teaching and research. Professor William H. Huber agreed to serve as Acting Dean during the 1968-69 academic year. President Ferrel Heady appointed a five-member screening committee to assist in finding a new Dean. Serving on this committee are Messrs. Daniel M. Slate (Chairman), Ralph L. Edgel, Sanford Cohen, Richard Dove, John Yeakel, and Newman Peery (student representative).

Professor Lothar G. Winter resigned as Assistant Dean, also effective July 1, 1968.

6. College of Business Administration-Bureau of Business Research Building

After many years of dreaming, planning, consulting, exploring, and negotiating, it is gratifying to witness the new
College-Bureau building as a reality. This instructional/off'ice complex was completed in late June and was occupied shortly thereafter.

B. Major Plans and Recommendations

The last several Annual Reports of this College have strongly urged that we build a new professional school of administration at New Mexico . . a program which is distinctive rather than imitative, interdisciplinary rather than unidimensional, oriented toward the broader common problems and processes of administration rather than its more specialized sub-fields; one which brings a productive marriage between teaching and research rather than separation of these two vital functions; and equally important one which places increasing emphasis upon graduate education for administration rather than undergraduate.

Despite protestations to the contrary, it is apparent that this College is at the crossroads. A sharp and significant difference of opinion does exist among the faculty with respect to the normative characteristics of this College. Unless these differences of view are confronted honestly and quickly, it is highly unlikely that the program thrust of the last few years can be sustained.

C. Appointments to staff

Dr. William S. Peters was appointed Professor of Business Administration, effective September 1, 1968. Dr. Robert A. Lenberg was appointed Associate Professor of Business Administration, effective February 1, 1969.
D. Separations from staff

Professors Edward G. Nolan and Everett G. Dillman resigned in order to accept appointments at other institutions. Mr. James Morris resigned in order to pursue doctoral studies at another institution.

III. COMPOSITE OF BIOGRAPHICAL SUPPLEMENTS

1. Advanced study

A. Finston, Howard: Attended a five-day sensitivity training laboratory conducted by Dr. William C. Schutz, Kairos, July 1967.

B. Park, James: Continued doctoral studies at University of Alabama during summer, 1967.

C. Yeakel, John: Continued doctoral research at University of Florida during summer, 1967.

2. Sabbaticals, leaves of absence, etc.

A. Slate, Daniel: Instructor at Graduate School of Business Administration, University of Illinois, summer, 1967.

B. Winter, Lothar: Taught at University of Marburg, Germany, summer, 1967.

3. New scholastic honors, fellowships, etc.

A. Mori, Perry: Received Juris Doctor, supplementary to L.L.B., April, 1968.

4. Publications


5. Other research projects or creative work


D. Edgel, Ralph: The Capital Market and Economic Development in New Mexico; Projections of Population and Employment for New Mexico Counties to the Year 2070 (for the State Planning Office, July - June, $8,000; BBR was contractor); Goals for ARDP; Employment and Personal Income in New Mexico.

E. Finston, Howard: Completed a study of the impact of sensitivity training upon organizational climate and effectiveness within an R & D environment. Editorial consultant to Practice-Mill, Inc. Prepared study on leadership styles, a comparative analysis.

F. Mori, Perry: Computer and data processing applications to basic accounting problems. An Accounting model.
G. Nolan, Edward: H.E.W. Research Study (Health, Education and Welfare), with Dr. Therkildsen, Economics; Second and final year of H.E.W. supported research on 'Changes in Self-Perception and Motivation as a Consequence of a Title V Training Program.' Report on first year of research was submitted September, 1967.


6. Activities in learned and professional societies

A. Brown, James: Southwest Social Sciences meeting, Dallas, April, 1967.


F. Finston, Howard: "Toward Comparative Organizational Theory," an address before the Annual Meeting of the Academy of Management, Southwest Division, Dallas, April, 1968. "Sensitivity Training - A Breakthrough in Human Relations?" an address given before the New Mexico Purchasing Association.


H. Mori, Perry: New Mexico State Society of C.P.A.; American Institute of C.P.A.; Accounting Association, University of New Mexico; American Bar Association.


J. Reva, Virginia: Member, N.M.E.A.; administrator of Certified Professional Secretaries exam; recently appointed to compose various sections of the examination for the National Medical Secretaries Association.

K. Sampley, Gayle: New Mexico Business Education Association; National Business Education Association; AAUW.


7. Other professional activities


C. Christman, Karl: Held several engagements in public accounting practice. Served as moderator - host for a day workshop on The Common Body of Knowledge in Accounting, held with six participating universities. Taught 3 short courses in Accounting and Taxation for Small Business, Community College (co-sponsored by Small Business Administration).


F. Huber, William: Legal and Educational Consultancy, Memphis State University. Group meetings with counselors at several Albuquerque High Schools.


H. Nolan, Edward: Attended Western Psychological Association Meetings in San Diego. Invited to deliver colloquium for Psychology Faculty, San Fernando Valley State College; "Two Contrasting Research Designs: Their Relative Strengths and Limitations."
I. Reva, Virginia: Made ten or eleven talks before professional and academic groups. Bosses' dinner speaker at Los Alamos, etc. Taught two courses in the Community Evening College, UNM.

J. Sampley, Gayle: Invited to participate (dictated shorthand to superior business students) in city-wide Business Education contest held at Rio Grande High School in April, 1968.


L. Winter, Lothar: Regional Export Council, January, 1968; Impact of the Kennedy Round on New Mexico (Albuquerque). Speeches to Rocky Mountain Allied Social Science Conference, Colorado Springs; Management Conference in Lutterback, Germany, Summer, 1967; Marketing and Sales Executive Group, Albuquerque; Southwest Management Development Program; Printing Industry; Mountain-Plains Conference, Forest Service Program.

M. Yeakel, John: Member of Planning Committee of Annual New Mexico Accounting Seminar. Attended Mountain-Plains Management Conference in Albuquerque. Attended Symposium on AICPA Common Body of Knowledge, UNM.

8. Non-teaching University service

A. Brown, James: Policy Committee; Chairman, Ph.D. Task Force Committee; supervisor of two MBA theses; undergraduate faculty advisor.

B. Caplan, Edwin: Head, Division of Managerial Control; Acting Coordinator of Graduate Studies; Member, College undergraduate, graduate, and Ph.D. Committees; graduate and undergraduate student advisor.

C. Christman, Karl: Continued as University College advisor. Served on community-university Accounting Advisory Committee. Faculty sponsor for Alpha Kappa Psi.
D. Dillman, Everett: Faculty advisor, Graduate Association of Business Students.

E. Edgal, Ralph: Committee to form a Faculty Club; Policy Committee; College Graduate Committee; Advisory Committee to select Dean for College of Business Administration; faculty advisor for M.B.A. students. Chairman, one thesis committee; and a member of two others.

F. Finston, Howard: Dean, College of Business Administration; member, Administrative Committee, Committee on Entrance and Credits, CBA-BBR Coordinating Committee; NASA Advisory Committee. Advisor to undergraduate and graduate students. Chairman and member of several M.B.A. thesis committees. Doctoral committees in Education and Economics.

G. Huber, William: Member, Presidential Selection Committee; Committee on Junior College Programs; Business Administration Policy Committee; M.B.A. Task Force Committee in College of B.A.

H. Mori, Perry: Advisor, College of Business Administration and University College, Accounting Association, UNM. Administrative Committee and Insurance and Retirement Committee. President, Board of Directors, Coronado Credit Union; President, Phi Kappa Phi.

I. Morris, James: Undergraduate Task Force Committee.


K. Park, James: Curricula Committee; advisor for University College.

L. Reva, Virginia: Advisor to 47 students in University College. Numerous cuties connected with planning of the business education department in the new CBA building.

M. Sampley, Gayle: Faculty advisor to about 40 University College students.


O. Winter, Lothar: Member, University of New Mexico International Affairs Committee; AAUP University Committee; College Executive Committee and Task Force Committee.
P. Yeakel, John: Chairman, Supervisory Committee of Coronado Credit Union; Faculty advisor to students in University College and CBA. Member, CBA deanship committee.

9. Public service

A. Caplan, Edwin: Committee member of Boy Scout troop.

B. Edgel, Ralph: Small Business Administration Advisory Committee.

C. Finston, Howard: Vice Chairman, City Personnel Board; First Vice President, First Unitarian Church; Member, Board of Directors, Blue Cross-Blue Shield Assoc.

D. Mori, Perry: Governor's Tax Advisory Committee.

E. Park, James: Assisted with Community Chest Drive, UNM.

F. Reva, Virginia: Church work, Cancer Society, etc.

G. Sampley, Gayle: Hoffmantown Baptist Church.

10. Personal information

None
I. General College Information

A. Significant achievements during the academic year, 1967-68.

1. During the period of this report, the College of Education continued its rapid growth: 1) in the number of students enrolled in the College; 2) in enrollment in classes offered by the College; and 3) in degrees granted through the College. Another aspect of this growth is the ever-increasing enrollments in and graduation from graduate programs offered through the College of Education.

Table I below shows the number of students enrolled in the College of Education, by semesters, from Sem. I, 1962 through Sem. II, 1968.

<table>
<thead>
<tr>
<th></th>
<th>1962-63 I</th>
<th>63-64 II</th>
<th>64-65 I</th>
<th>65-66 II</th>
<th>66-67 I</th>
<th>67-68 II</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>613</td>
<td>691</td>
<td>678</td>
<td>665</td>
<td>674</td>
<td>748</td>
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</tbody>
</table>
Table II below gives the number of degrees awarded* through the College of Education during the last five years. The actual numbers and the percentage of increase are clear evidence of the tremendous growth of the College at both the undergraduate and graduate levels.

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>206</td>
<td>214</td>
<td>255</td>
<td>252</td>
<td>286</td>
<td>412</td>
<td>100.0%</td>
</tr>
<tr>
<td>Master's</td>
<td>97</td>
<td>101</td>
<td>118</td>
<td>127</td>
<td>160</td>
<td>140</td>
<td>44.3%</td>
</tr>
<tr>
<td>Ed. Spec.</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>266.6%</td>
</tr>
<tr>
<td>Doctor's</td>
<td>4</td>
<td>3</td>
<td>12</td>
<td>12</td>
<td>14</td>
<td>18</td>
<td>350.0%</td>
</tr>
<tr>
<td>Totals</td>
<td>310</td>
<td>324</td>
<td>393</td>
<td>396</td>
<td>466</td>
<td>581</td>
<td>87.4%</td>
</tr>
</tbody>
</table>

2. The Department of Elementary Education received national recognition (2nd place in nationwide competition with 132 other institutions) for its new "Junior-Block, Senior-Block program." (See departmental report for details.)

3. The Department of Secondary Education continued and expanded its special programs for student teaching to include additional junior and senior high schools in the Albuquerque Public Schools. This department also launched a new "honor cadet" program in student teaching for a group of carefully selected juniors and seniors in the program. This project is now known as the APS/COE (Albuquerque
Public Schools - College of Education) Project. (See departmental report for details.)

4. The Department of Home Economics and the Department of Health, Physical Education and Recreation were visited by committees composed of nationally recognized authorities in these fields and financed by the Danforth Foundation. Oral and written reports were made by the visiting committees to department chairmen, the dean of the College, the dean of the Graduate School, the academic vice-president, and the president. These reports were used by the departments concerned and by the administrative officers named above: 1) to assess the present status of these two departments; 2) to identify strengths and weaknesses (in personnel and programs); 3) to help give direction to the further development of the departments. It was generally agreed that these visits and the follow up discussions were very helpful.

5. Latin American projects carried on by the College continued to grow, reflecting the ever deepening commitment of the University of New Mexico to Latin American education.

a) The Ecuador Project in primary education continued into its third year. (See Elementary Education report for details)

b) The Department of Secondary Education continued its work in Colombia by 1) training 26 participants from that country on the UNM campus from August, 1967 through June, 1968. This department, with the help of Dr. Frank Angel, Assistant Dean for Special Programs and Projects, also developed a proposal to AID/Colombia for
a continuing program there in the development of comprehensive high schools in Colombia. The new contract (in the amount of $549,000) was signed by UNM officials and representatives of AID, and went into effect June 28, 1968. It is for 18 or 24 months, depending upon the funds to be made available.

c) The three and one-half year program of Internships in Latin American Education, directed by Dean Travelstead and funded by the Ford Foundation, was terminated, according to schedule on March 31, 1968.

d) Dean Travelstead, with the help of Dr. Frank Angel, Dr. Hershey Julien, Dr. Marshall Nason, and other UNM faculty members and administrative officers, directed the Ninth Annual Seminar on Higher Education in the Americas, in cooperation with the Universidad de Costa Rica and the University of Kansas. This seminar is sponsored and funded each spring by the U.S. Department of State for the benefit of selected rectors (presidents) of Latin American Universities.

6. Dr. George Keppers, Chairman of the Department of Guidance and Special Education, was appointed Assistant Dean for Student Affairs, effective July 1, 1968. Dr. Keppers will continue to serve as department chairman during 1968-69.
7. Dean Travelstead was appointed Academic Vice President for the University, effective July 1, 1968.

8. Dr. Richard Lawrence of Washington, D.C. was appointed dean of the College of Education to succeed Dean Travelstead. Dr. Lawrence will not be able to assume his new duties at UNM until about January 1, 1969.

9. Dr. Armond Seidler was appointed Acting Dean of the College, effective July 1, 1968 and continuing until Dr. Lawrence arrives in January 1969. Dr. Seidler will continue during this period to serve as Chairman of the Department of Health, Physical Education and Recreation.

10. Dr. Albert Vogel was appointed Chairman of the Department of Educational Foundations, effective September 1, 1968, succeeding Dr. John T. Zepper, who served as Acting Chairman of this department during 1967-68.

11. A new position in the College, Assistant to the Dean, was authorized by Vice President Heady, and some person will be appointed soon to assume this position no later than September 1, 1968. It is a staff position, designed to be of specific help to the dean of the College.

12. A number of special projects and programs were inaugurated in several departments of the College. (See departmental reports for details.)

13. A new and very significant program designed for handicapped and retarded children and adults was designed and begun during the
year through the Department of Health, Physical Education and Recreation, and the Department of Guidance and Special Education. Professor Frank Papcsy directed the program on Saturday mornings and involved a large number of UNM students on a voluntary basis and about 25 teachers in the Albuquerque Public Schools, all of whom worked closely with the retarded children and adults enrolled. This program will be continued and expanded during 1968-69.

14. A number of faculty members in the College of Education were offered positions at other institutions, some of the positions paying considerably higher salaries than those these faculty members are now being paid at UNM. But quite fortunately only one of them accepted another position and left this University at the end of the 1967-68 academic year. This number does not include some faculty members who resigned or took leaves of absence to continue graduate study at other institutions.

B. Significant plans and recommendations for the future

Since a new dean has been appointed and since he and the College of Education may very well wish to use this break in administrative continuity to plan and carry out new programs and services, it seems appropriate here for me (the dean until June 30, 1968) not to list specific plans and recommendations.

And yet several things appear to be obvious and quite likely.

1. If the College continues to be faced by restrictive budgets, as in the past two or three years, it will be forced to restrict considerably its undergraduate and graduate enrollments. It also
will be forced to cut back on its research and service functions.

2. Latin American programs will continue and expand. The College will more than likely extend its already deep involvement in educational programs in several of the Latin American countries.

3. It seems obvious also that the College will become more and more involved in domestic special programs and projects, funded by the federal government. A number of possibilities exist, the newest and most likely source of funding being the recently passed Education Professions Development Act--federal legislation which provides various ways of identifying and training new people at all levels for the profession of teaching and administering schools.

4. Other plans will be developed during 1968-69 under the guidance of Dean-Elect Lawrence.

C. Appointments to Staff
(See departmental reports)

II. Composite of information on individual biographical supplements
(See departmental reports)
THE REPORT OF THE DEPARTMENT OF ART EDUCATION
July 1, 1967 - June 30, 1968
Alexander Hasley, Chairman

I. General Department Information

A. Significant achievements during the academic year, 1967-68.

The Art Education Department continued to advance both as to quality and quantity of students and their art experiences and products; this development notwithstanding Dr. Hasley being on sabbatical leave for the spring semester and Mr. Srubek, a former graduate assistant in the department and now on a one year appointment, acting as Chairman during Dr. Hasley's absence. In itself this was a significant achievement inasmuch as no other regular staff member of the department had been on the staff for more than one year and would not, therefore, be able to anticipate or cope with the myriad problems that constantly beset any and all departments in the College of Education. This "achievement" takes on even greater importance when one considers that a department of four regular, full-time staff members and two graduate assistants does not have the services of even a part-time secretary.

Perhaps of even more significance for the future of the department, this year, almost more than any other previous year, there was considerable evidence of unified effort, in spite of the definite individuality of the staff members, in projecting an integrated but varied art education program meeting the needs
of the diverse groups of students that populate its classes

Contrary to what one might expect in a trying situation of this kind, the department not only met its regular obligations more effectively than usual but was also able to offer a special art program to the Ecuadorian teachers on campus and classroom teachers in an extension course in Socorro. In addition to these extracurricular undertakings, members of the faculty were active on committees in the College of Education and in the College of Fine Arts. An additional gain for the year was found in enlisting the services of Professor Emeritus Ralph Douglas to offer a two-week lettering course to art education majors in an attempt to strengthen the glaring weakness in the program of not being able to provide certain commercial art experiences to prospective art teachers because of lack of faculty personnel.

B. Significant plans and recommendations for the future.

Perhaps the most pressing problems requiring attention in the department relate to a major change that will take place within a year; a new department chairman will have to be appointed to succeed Dr. Masley upon retirement.

At this juncture, the entire program, undergraduate and graduate, should be reviewed and the several members of the departmental faculty should, together, study every aspect of the department including plant, space, equipment, supplies, objectives, methodologies and relationships with other departments on the campus and the community at large. It may very well be that such
a study might reveal certain advantages which may accrue to the College of Education and the College of Fine Arts and to their students if a more intimate relationship was developed between the Department of Art Education and the Fine Arts College, even to the extent that the Department be more closely related to the Fine Arts College than to the College of Education.

It is common knowledge that art education units, departments or divisions, are found in intimate relationships to colleges of fine arts on some campuses and to colleges of education on other campuses. In fact, in one important university in the United States the Department of Art Education is even found as a unit in the School of Architecture and Allied Arts. In any case, successful operation of art education programs depend more upon the acceptance or rejection of the department by faculty members of both colleges. Unsympathetic and prejudicial attitudes of colleagues in either or both of the colleges may effectively impede the successful function of even the best staffed and administered art education program on a campus.

Any other significant plans, and there may be many, depend upon decisions made regarding the ultimate form, stature and placement of the art education program. It would be premature to advance such plans at this time.

C. Appointment to staff.

Mr. James Srubek, former graduate assistant in the Department, was given a one year contract to fill the temporary vacancy
created by the one year leave of absence of Professor Walter Rutkowski who returned to Penn State University to further work on his doctoral studies in art education. It was the hope of the department faculty that Mr. Srubek could be given a regular contract at the end of the school year to permanently join the staff but he decided on a three year N.D.E.A. Fellowship in Art Education at Penn State University beginning Fall, 1968. An exceptionally outstanding faculty member was thereby lost to the department.

There were no other appointments to staff, although the department had the teaching services of two graduate assistants: Mrs. Susan Srubek, working on a Master's degree program in art education and Mr. Dennis Humes from the University of Washington who began his doctoral studies in art education and curriculum and instruction.

II. Composite of information requested on individual biographical supplements.

1. Advanced study: None

2. Sabbatical, etc.: Dr. Masley was on sabbatical leave during the spring semester of 1967-68. He visited schools in Oregon and Washington and addressed graduate students in art education at the University of Washington in addition to almost six weeks of study and visitations in schools and art centers in Hawaii and Japan.

3. New scholastic honors, fellowships, etc.: Mr. James Srubek
accepted an N.D.E.A. Fellowship in Art Education at Pennsylvania State University beginning Fall of 1968.

4. Publications: None

5. Other research projects or creative work in progress:
Dr. Hasley gave a visual documentation of art and education in Japan. He is continuing research in the formulation of tempura paint for use by children and also continuing research with sand drawing and painting and further progress with printmaking from steel foil.

Mr. Ronald Piotrowski has been painting in his studio for the past year.

6. Activities in learned and professional societies: Dr. Hasley addressed groups of art educators in Tokyo, Japan who are members of the International Society for Education Through Art.

7. Other professional activities: Dr. Hasley has displays of paper wall hangings throughout the Southwest and West Coast area; addressed graduate students in art education at the University of Washington; consultant for the Arts and Crafts Fair and for the Southwest Educational Study Center.

Mr. Ronald Piotrowski has been informed that his paintings will be exhibited in a national show scheduled for next year.

Mr. James Srubek had pottery exhibited in National Invitational Crafts Exhibition at the University of New Mexico Art Museum.
8. Non-teaching University service: Dr. Hasley served as faculty advisor in Art Education Administrative Committee, Ad Hoc Committee on certain requirements in graduate program, Fine Arts Gallery Committee. Certain off-campus project as community study in developing interest in cultural subjects.

Mr. Ronald Piotrowski is involved in the Learning Materials Committee and also active as an advisor in education.

Mr. James Srubek served as Acting Chairman, Department of Art Education during the spring semester of 1968, College of Education Administrative and Policy Committee, Curriculum Committee, National Invitational Crafts Exhibition Committee, and academic advisor.

9. Public service: Dr. Hasley directed the children's art classes in the department and is also Division Chairman of the Democratic Party.

10. Personal information: None
The Report of the Department of Educational Administration
July 1, 1967 - June 30, 1968
Richard L. Holeman, Chairman

I. General Departmental Information

A. Significant achievements during the academic year, 1967-68

1. The department ceased offering a Master's degree in Educational Administration. It has taken the position that educational administrators should first be knowledgeable about the teaching-learning process. This decision has meant a gradual shifting of emphasis to Post Master's programs in Educational Administration. With such a shift will come increased emphasis upon educational research activities. It can be expected that each professor in this department will, in the next year, be actively directing in excess of three doctoral dissertations.

2. The report of the pilot educational administrator training project was completed and submitted to the National Institute of Mental Health. This project affected the departmental program significantly. Already, course content has been modified to incorporate relevant social science concepts. Personnel replacements reflect an orientation consistent with the objectives stated in the original project proposal. Still lying ahead, is the task of reorganizing course offerings and developing new courses suggested by the experience of the pilot project.

3. The department took an active role in the reorganization of the College of Education's Bureau of Educational Service and Research. Efforts were made to identify the function more strongly with college-wide activities than with activities and personnel of this department. Special attention was given to planning an organization which would relate the College of Education to educational administrators in the State of New Mexico. So that both the research and field service
functions might be given attention, the former Bureau was divided into two organizations. The field service functions will now be performed by the Bureau of Educational Development and Planning. Within this Bureau are two functions that have been identified most closely with the Department of Educational Administration. They are: The School Plant Planning Service and the direction of the New Mexico Research and Study Council.

4. Preliminary discussions were held with the central administration of the Albuquerque Public Schools, in an effort to institute a joint internship program for elementary school principals. Considerable support for this plan was received from the public schools. The plan was proposed as a joint venture by the Departments of Elementary Education and Educational Administration. The financial crisis recently faced by the schools resulted in the last minute postponement of this program.

5. Several members of the department have worked with the Center for Occupational Education and the United States Office of Education, in an analysis of a county-wide program to improve the employment level. This project permitted the use of several administrator trainees in relevant field experiences.

B. Significant plans and recommendations for the near future

1. The department will continue to plan with Albuquerque Public Schools the elementary principals internship program. Recent overtures from the Albuquerque Public Schools concerning a similar program for secondary principals will be followed up. It is hoped that funds from the Education Professions Development Act can be utilized to
support and expand these plans.

2. Serious consideration is being given to the development of a program for the preparation of administrators for educational research. There appears to be a great demand for persons who possess administrative skills and knowledge of educational research.

3. The department will make a concerted effort to expand its activities in the field during the next year. This expansion will involve giving assistance to public schools in the solution of administrative problems.

4. The department will seek funds to underwrite research in the area of Educational Administration.

C. Appointments to staff

   Martin Burlingame, June 17, 1968
   Herbert Hughes, June 17, 1968

D. Separations from staff

   Patrick Lynch, April, 1968 resigned to continue with EDS.

II. Composite of information requested on individual biographical supplements

   A. Advanced study

      None

   B. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc.

      Dr. Frank Angel taught a course for Normal School personnel in Guayaquil, Ecuador in June, 1967; conducted budget negotiations on Ecuador contract in Quito; negotiated new Colombia contract.

      Dr. Horacio Ulibarri served as Lecturer-Consultant for the Office of Inter-American Programs at the Universidad Autonome de Guadalajara

      Dr. Paul Petty, leave of absence, for 1967-68 academic year to serve as Director of Southwest Cooperative Educational Laboratory.
C. New scholastic honors, fellowships, etc.

None

D. Publications

Angel, Frank. A series of publications on all teacher education subjects taught in the normal schools, in collaboration with Zintz, Mari-Luci Ulibarri

Holemon, Richard L. School Administration: Some Observations, a monograph, 1968, with Wiley


Holemon, Richard L. Educational Administrator Training for the Multicultural Community (Assisted by Hales and Wilsey), February, 1968

Tonigan, Richard F. "History of American Education in the First Two-thirds of This Century." 90 page chapter co-authored with T.C. Holy in Chief State School Officers.


Ulibarri, Horacio. Educational Needs of the Mexican American, National Conference on Educational Opportunities for Mexican Americans prepared by ERIC Clearinghouse, New Mexico State University, Las Cruces, New Mexico.

Wiley, Tom. Politics and Purse Strings of Education in New Mexico, The University of New Mexico Press (now in process of printing.)

E. Other research projects or creative work in progress or completed

Dr. Frank Angel ran a Seminar in Higher Education in the Americas for two weeks, finishing up in Washington, D.C.

Dr. Richard L. Holemon was Co-director of "Evaluation of Concerted Services in Technical Education, an organizational analysis of a Federal stimulation program for the rural unemployed. This was a contract project with the USOE and N.C. State University, $12,786.00, 1 year.
Dr. Richard F. Tonigan is currently writing two sections for The MacMillan Co. 15 Vol. Educational Encyclopedia to be published in 1970. The titles are "School Business Management," and "Planning and Managing Educational Facilities."

Dr. Horacio Ulibarri has project with USOE - Changes in Attitudinal Characteristics of Migrant and Ex-Migrant Workers Involved in Adult Education; is Consultant and Participant with Civil Rights Commission, Washington, D.C.; and is Consultant for the Department of Labor study on Work Opportunities for Minority Groups.

F. Activities in learned and professional societies

Dr. Frank Angel is Coordinator of Special Project Proposals for the College of Education.


Dr. Richard F. Tonigan attended annual meetings of AASA and CEEF. He is President of Council of Educational Facility Planners.

Dr. Horacio Ulibarri attended meetings of the National Conference of Adult Education Association, and National Conference on Educational Opportunities for Mexican Americans.

G. Other professional activities

Among many other activities, Dr. Frank Angel was Consultant on Mexican American conferences (National and Regional). Papers were prepared for National Conference on Mexican Americans, also a paper for Shiprock Conference on Indian Education.

Dr. Richard L. Holemon addressed the New Mexico School Boards Association and was Consultant to several New Mexico Public Schools.

Dr. Richard Tonigan gave two TV presentations at AASA in Atlantic City; was Management Consultant to Ferguson-Florissant School District (Mo.); was Educational Consultant to AID, Colombia, S.A.

Dr. Horacio Ulibarri was Lecturer for Teachers Corps Project, University of Southern California, and Lecturer for Denver Opportunity Program (OEO).

Dr. Tom Wiley was Consultant to Governor's Council on Teacher Salary Needs.
H. Non-teaching University service

Dr. Frank Angel: International Education Committee

Dr. Richard L. Holemon: College of Education Advisory Committee on the Deanship
Other College of Education ad hoc committees
Chairman 9 doctoral dissertation committees
Member 5 doctoral committees

Dr. Horacio Ulibarri: Chairman 4 Doctoral Committees on Studies
Chairman 4 Doctoral Dissertation Committees
Secretary, Education Doctorate Committee
Committee on Latin-American Education
Committee on Higher Education in the Americas

Dr. Tom Wiley: University Policy Committee
Chairman, Education Doctorate Committee
Chairman 5 Doctoral Dissertation Committees
Chairman 6 Doctoral Committees on Studies
Member 5 Doctoral Committees
I. General Departmental Information

A. Significant achievements during the academic year, 1967-68.

Beginning September 1, 1967 Educational Foundations began operating as a department within the College of Education, after ten years as an undergraduate teaching service, and a doctoral area in education within the Department of Educational and Administrative Services. During the 1967 summer session Dr. C.C. Travelstead, Dean of the College of Education, functioned as Acting Chairman of Educational and Administrative Services, with Dr. James Cooper coordinating the Educational Foundations program.

An Acting Chairman, John T. Zepper, was appointed for 1967-68 academic year because the split of Educational and Administrative Services into Educational Administration and Educational Foundations came too late in the year for the personnel in the Foundations area to choose a permanent chairman. During the year the department staff considered the question of a permanent chairman. Dr. Albert W. Vogel was appointed Chairman of the Department of Educational Foundations, effective September 1, 1968. Dr. Vogel will also serve as Acting Chairman of the department during the 1968 summer session.

Members of the department have been working on an educational researchers training program for two years. Two of the courses involved in the strengthening of the research emphasis in the College of Education have been passed in cooperation with an Ad Hoc Committee on Research Sequence chaired by Tom Wiley. The courses are:
Ed. Fdns. 500 - Research Applications to Education (3)  
Ed. Fdns. 602 - Multivariate Design and Analysis in Educational Research (3)  

These courses will be offered for the first time during the 1968-69 academic year. A further development in the stress upon the research dimension was the appointment of Dr. James Cooper, Professor of Educational Foundations, as research consultant for the College of Education. This service, involving the design and analysis of research studies, will be available to graduate students and faculty beginning in the fall.

B. Significant plans and recommendations for the near future.

As a new department, recent gains and already initiated programs must be consolidated. Further developments in the researchers program and the sociology of education will proceed slowly during the next two years. A must for future developments within the department is the addition of a comparative educator with a specialization in Latin America. Foreign specializations of Canada, Great Britain, Western Germany, Poland, and the USSR must be supplemented by a concentration upon the Spanish-speaking nations, to strengthen the College of Education's role in Latin American programs.

C. Appointments to staff

1. Lewis A. Dahmen, Ed. D., Arizona State University, Sept. 1, 1967  
2. Richard M. Gorman, Ph. D., Fordham University, Sept. 1, 1967  
3. David Bachelor, Ph. D., expected summer, 1968, Chicago University, Sept. 1, 1968  

D. Separations from staff

None

II. Composite of biographical supplements

1. Advanced study
J. Cooper -- Spanish, Guadalajara Summer School 1967, Mexico
Multivariate Analysis Workshop, Chicago, Feb., 1968

L. Dahmen -- Spanish, UNM, Sem. II, 1967-68

2. Summer teaching elsewhere and travel

J. Cooper -- summer, 1967 in northern and central Mexico
L. Dahmen -- Mexico City
J.T. Zepper -- taught Philosophy of Education at University

3. New scholastic honors, fellowships

None

4. Publications

J. Cooper. "Research and Study Possibilities in the State of

J. Moore. "An Item and Test Analysis Program Used in Con-
junction with the IBM 1230 Optical Scanner and IBM 534
Card Punch Attachment," Educational and Psychological
Measurement, pp. 171-175.

Book reviews for Contemporary Psychology, Vol. 13,
pp 15-117 and Educational and Psychological Measurement.

A. Vogel. Barelas-Arenal and Los Lunas. Division of Research
Department of Political Science, UNM No. 76, May, 1967
55 pp.

March, 1967.

"Probability--The Only Rationale for Teacher Education?"

5. Other research projects or creative work in progress or completed
during period.

J. Cooper. "Analysis of effects of anxiety upon success in
research course EF 501," unpublished.

L. Dahmen. Counselor's Guide to Selected Colleges in NM for
Educational Service Center.

W. Moellenberg. "Investigation of Methods to Assess the Effects
of Cultural Deprivation" (grant, UNM Faculty Research Allocations
Committee, $265., 1 year)
Refined educational game, "Agriculture."

J. Moore. "The Effect of Analogy Instruction on Analogy Test Test Performance" (Grant, UNM Faculty Research Allocations Committee, $600, 1 year)

An Application of Principles of Learning by the Classroom Teacher" (in progress, with L. Price, Psychology, when funds are available.)

A. Vogel. Photographs for Department of Elementary Education Block Program (NCATE award winning program), Dept. of PPS program, NMEA "A Partnership in Education," HIP program, Educ. Service Center.

6. Activities in learned and professional societies


L. Dahmen, APGA meeting in Detroit, April, 1968

W. Moellenberg, AERA meetings in Chicago, Feb., 1968

J. Moore presented a symposium to NDEA Counseling Institute, Arizona State U., Tempe.


7. Other professional activities

J. Cooper, consultant for UCLA: Chile SS, April 1968
NCA accreditation of Farmington High School

L. Dahmen, consultant to Indian Pueblos in Sandoval County for Arizona State UICAP program, and NDEA Elementary Counseling Institute, Oregon State U.

W. Moellenberg, lecturer for Ecuadorian Project.

J. Moore, review editor for Journal of Educational Measurement

A. Vogel, consultant on General Education at Ft. Lewis College, Colorado and lecturer in the Colombian and Ecuadorian Projects.
8. Non-teaching University service

Advisors for U. College - Dahmen, Gorman, Moellenberg, Vogel

Master's and doctoral committees in COE (Dr. 50)

10 Ph.D. majors - 2 dissertations completed (Croft and Desai)

Service on the following committees:

- UNM Computer Use
- Ed. Fdns. Core Courses
- U. Graduate
- COE Adm. & Policy
- Human Research Review
- Graduate Sub-committee on Interdisciplinary Programs
- Research Sequence Planning
- COE Faculty In-service Education
- COE Dean Selection,
- UNM Publications
- COE Curriculum B
- Ad Hoc on MAT in English
- NCATE
- Teacher Selection
- COE Screening
- UNM Teacher Ed. Council

9. Public Service

Cooper - Usher, St. Aidan's Episcopal Church

Moellenberg works for United Church of Christ, PTA, and Community Chest

Zepper is SS teacher at Messiah Lutheran Church
I. General departmental information

A. Significant achievements during the academic year, 1967-68

1. The Department of Elementary Education received a Distinguished Achievement Award for Teacher Education presented by the AACTE (American Association of Colleges of Teacher Education) for the newly inaugurated "modular" approach to undergraduate teacher education. The University of New Mexico's entry, one of 134 from colleges across the nation, was topped only by the University of Maryland. Essential features of the new award-winning program are:

   a) early contact with teaching by teacher education students;
   b) concentrated methods courses taught by teaching teams including university professors, instructors, graduate students, and carefully selected local classroom teachers;
   c) expanded experiences in elementary classrooms;
   d) close ties between methods instruction, classroom practice, and student teaching supervision;
   e) residential clinical supervisors in elementary schools designated as student teaching centers.

This year's graduating seniors are the first to go through the entire new program.
Working relationships with the Albuquerque Public Schools, already operating at a high level of cooperation, have continued to improve. Tangible evidence of this healthy situation is reflected in the following:

a) Student teaching centers (local schools where we concentrate large numbers of student teachers and a resident supervisor, and also provide in-service education for the teaching staff) have increased from the two mentioned in last year's report to five for the coming year;

b) Honors interns (senior students who have performed extremely well as juniors and who need a more intense and independent experience for their senior year) have increased from 10 in 1967-68 to 24 for 1968-69.

c) Full-time clinical supervisors (highly competent APS classroom teachers provided by APS in exchange for the honors interns) have increased from four in Semester I, 1967-68, to 5 for Semester II, 1967-68, and we will have seven for the 1968-69 academic year. This arrangement permits us to provide highly qualified supervision for our students and remain within the supervisor-student ratio recommended by the Association for Student Teaching of NEA.

The above relationships have significant benefits for both the APS
and the University.

Albuquerque Public Schools benefit by

a) having the services of our best performing students during their senior year;
b) having an intense practical training program in supervision and curriculum development for selected potential administrators and supervisors;
c) having an opportunity to "field test" potential administrators in real situations and over a period of time before making an appointment; and,
d) having centers available for curriculum experimentation and demonstration with added personnel needed for such activities.

The University gains by

a) having seven full-time highly competent teacher-supervisors at a cost of less than two of their salaries;
b) having a differentiated senior student teaching option available for those who need a more independent and autonomous setting;
c) having a means of rewarding our best performing students; and,
d) having student teaching laboratories for curriculum development and for research purposes.
2. The kindergarten program at Manzanita Center has continued to develop. This year a smaller number of tuition scholarships were provided, these coming only from department funds. These "Head Start" students were pooled with other children whose parents were both able and willing to pay for such a learning experience. Dr. Catherine Loughlin, director, and Mrs. Mary Ann Howell, teacher, both feel that this "integrated" approach was a better situation than the program last year which was essentially a "Head Start" group in the morning and a tuition-paying group in the afternoon. Tuition for the students whose parents cannot afford it is paid for by the Department from funds accrued as a result of previous Head Start training programs. The Department will be able to pay these tuitions for one more year only. A decision will have to be made next year either to discontinue providing tuition scholarships or the university will have to absorb the costs.

3. The department has a most productive year in the Ecuadorian Normal School Improvement Project. Fifteen carefully selected normal school professors completed a ten-month training program on the UNM campus. This group was a much stronger contingent than the ten who came during the 1966-67 year, primarily because our Chief of Party, Dr. John Aragon, played a major role in their selection. This year's group of "becarios" returned to Ecuador in May and will assume positions in the three designated model normal schools.

The Ecuador textbook writing program, under the direction of Dr.
Dolores Gonzales, is proceeding slightly ahead of schedule. Three manuscripts will be completed by October. This aspect of the project has extremely far-reaching consequences -- they cannot be overestimated. The content of these texts is up-to-date. The texts suggest sound pedagogical approaches. They contain vocabulary and experiential referrents which are Ecuadorian.

The curriculum improvement portion of the project has not gone as well as we had desired. With the arrival of the recently trained contingent of "becarios" and the addition of Mr. George A. Gonzales to our office staff this aspect of the project should improve significantly.

A brief trip to Ecuador to review the operations and make staffing decisions was taken by the chairman between semesters.

4. Four NDEA fellowships in elementary education were approved for 1967-68. Lois Pride, Richard Van Dongen, Susan Gordon, and Diane Brown were the recipients. Mr. Van Dongen completed his master's and is working on a doctorate. Miss Pride is completing her master's this spring. Mrs. Gordon completed her master's and is working on her doctorate. Mrs. Brown will finish her master's this summer.

5. In order to begin to prepare teachers for public school kindergarten and nursery schools in New Mexico, a psychology and development minor was developed for students wishing to move toward pre-school certification. The program uses courses from psychology, home economics, speech, and educational foundations.
6. Supervisory and consultative assistance to Head Start programs in Indian Pueblos in northern New Mexico was provided by Drs. Catherine Loughlin and Florence Schroeder (Home Economics). These persons served on a per diem and mileage basis for Arizona State University, Tempe, the prime contractor.

7. This Department and the Department of Home Economics collaborated on a training program for some 250 teachers and aides of Indian Head Start projects for three weeks during the summer of 1967. This project has been taken out of the hands of these two departments and placed in the hands of Mr. Ned Roberts. The Department feels this is a most unfortunate state of affairs and the manner in which this was done clearly circumvented faculty involvement in arriving at this decision. The two most knowledgeable and experienced professors on the university staff to deal with Head Start training programs, Dr. Catherine Loughlin and Florence Schroeder, were systematically avoided by those developing the proposal for Head Start Teacher Training and Aide Training. The department chairman regards this as an extremely grave omission and is committed to exposing this entire set of events to all appropriate persons and groups.

8. To improve offerings for teachers in service and to upgrade the training of many elementary teachers who have not had recent training in teaching the program of reading, the language arts, social studies, mathematics, and science, the department sought and obtained approval
to offer appropriate courses in those fields at the 400-level for graduate credit with appropriate prerequisites. This will provide a better range of offerings at the graduate level and will better meet the needs of teachers in service.

9. A project to develop 13 Navajo culture-based social studies units was undertaken through a grant from the Bureau of Indian Affairs. Dr. LeRoy Condie, director of the project, has been at work with a staff of one secretary and two research assistants in developing background information and prototype units. These units are to be self-contained, each lasting from 3 to 6 weeks in duration and designed to fit into the regular social studies curriculum without a great deal of curriculum revision. Two workshops have been held with BIA teachers during the year and an intensive two-week workshop will be held this summer. The workshops are designed primarily to train BIA teachers in the use of the units. Work on this project should continue through the 1970-71 academic year.

10. Three members of the Department of Elementary Education, Drs. Condie, Darling, and Zintz, were appointed to the Citizens Advisory Board for Bilingual Education for the Albuquerque Public Schools. The APS are applying for a grant from Title VII of the Elementary and Secondary Education Act to establish a model bilingual school for the state of New Mexico. The Advisory Board will aid in the development and implementation of the project if it is funded.
11. A proposal under the new Education Professions Development Act was submitted by Dr. Miles Zintz. The proposal was for a 12-month institute to train a task force of bilingual education specialists. Notification is expected in November and if approved, the project will begin in the summer of 1969.

12. The Department, jointly with the Department of Educational Administration and the State Department of Education, is sponsoring a workshop for elementary principals and supervisory personnel of Title I schools. Program management procedures, evaluation techniques, team-teaching and non-graded instruction, bilingual and bi-cultural education, and the like will be a part of the workshop.

B. Plans for the near future

1. Continued development and expansion of the student teaching centers until 90% of our students are placed in these centers. We will add two centers for the 1969-70 year, bringing our total to five.

2. Assist APS to implement the team teaching organization and the non-graded curriculum in selected center schools.

3. Develop an area of concentration in teacher education in our Ed. D. and Ph. D. programs with appropriate structural adjustments.

4. Expand our "honors" intern and clinical supervisors exchange program with APS. We will provide APS with 24 interns and will receive 7 full-time clinical supervisors from APS. The benefits of this were described earlier.
5. To take advantage of opportunities provided by the recent Education Professions Development Act, the department will devote several meetings in September and October to studying the act and evolving priorities and procedures. Further meetings with personnel of the State Department of Education concerning this act are anticipated.

6. The Department is developing a composite minor in bilingual education for elementary majors. Work from Spanish, English, Speech, Anthropology, and Education would be combined into a program for persons wishing to concentrate on teaching in bilingual settings. Two basic factors are at work in promoting a bilingual approach to education in our area:

a) the high incidence of educational retardation and drop-outs in our Spanish-speaking and Indian population, and

b) the growing interdependence among the nations of the Americas.

A composite minor, such as is being considered, would meet an immediate need in the state and would be an attractive feature for new programs under Title VII, ESEA; the Peace Corps training programs, and other new projects of this nature.

7. During the summer of 1968 a concerted effort will be made to develop research designs to study elements of our new modular teacher education program and our kindergarten program in Manzanita Center.
8. We will participate, along with all other departments in the college, in an experimental NCATE evaluation scheduled for Semester II, 1968-69.

C. Appointments to staff

1. Dr. David W. Darling was appointed Associate Professor of Elementary Education and chairman of the Department of Elementary Education beginning with the summer session 1967. He holds the Ed. D. degree from the University of Texas.

2. Dr. Margaret Lane Chisholm was appointed Associate Professor of Elementary Education and Director of the Learning Materials Center beginning September 1, 1967.

3. Mr. George A. Gonzalez was appointed Lecturer June 1, 1968. He is assigned at the present time to the Ecuador Project to work with the normal school professors and the teachers in Anexas.

4. Dr. Bernard Spolsky was appointed Associate Professor of Anthropology and Elementary Education effective September 1, 1968. His Ph.D. degree was earned at the University of Montreal.

D. Separations from Staff

1. Dr. Harry Carlson, associate professor who has been in Quito working on the Ecuador Project, was not reappointed upon his return to the United States in June, 1968.

2. Dr. F. James Guszak, an assistant professor appointed September 1, 1966, resigned August, 1967, to accept a position at the Uni-
versity of Texas with a higher salary and smaller teaching load.

II. Composite of information requested in individual biographical supplement

A. Advanced Study

Dr. Walters has continued her pursuit of the study of Spanish by attending classes at UNM and by employing a private tutor.

B. Sabbaticals, leaves of absence, etc.

Dr. Darling visited Ecuador in connection with the University's teacher education program and also stopped briefly in Colombia and Panama between semesters.

Dr. Harold Drummond taught at the University of Hawaii during the summer of 1967. He was on sabbatical for the 1967-68 academic year. While on sabbatical he visited Chile and other countries in South America. He has also worked on revision of his social studies textbooks.

Dr. Chisholm traveled in Greece, Turkey, Italy, France, and Spain during July and August. She will teach in an NDEA Institute at Washington State University and in a media workshop for school administrators in Los Angeles during the coming summer.

Mrs. Howell will work on her advanced degree in California during the coming summer. She will also teach part-time in their early childhood program.

Dr. Loughlin will direct a language arts instructional project in Nepal during the coming summer. This is sponsored by the NEA and the
Peace Corps.

C. New scholastic honors, etc.
No change.

D. Publications

Drs. Auger and Darling contributed an article for the "Promising Practices" section of the New Mexico School Review, May 1968. This article described the new program and the AACTE Distinguished Achievement Award.


Dr. Condie has an original story, "White Horse: A Story of the Grand Canyon," accepted for publication by Ginn and Company (in press).

Dr. Loughlin has a monograph, The Entrance Age Studies, accepted for publication by ACEI. Pending date of publication is August, 1968.

Dr. Darling completed revision of the textbooks, Discovering Mathematics, Books 5 and 6, 1968, Charles E. Merrill Co., Inc., Columbus, Ohio. Previous copyright date, 1966. With Dr. Dwain Estes, edited the Proceedings for the Texas Conference for the Mexican-American: Improving Educational Opportunities, published by the Southwestern Educational Development Corporation, Austin, Texas, 1968. Contributed
a chapter "Evaluating the Affective Dimension of Reading" in the Perspectives in Reading No. 8 entitled Evaluation in Reading, 1967.


E. Other research projects

Dr. Auger is director of elementary student teaching and wrote the entry to the Distinguished Achievement Award competition.

Dr. Chisholm wrote the proposal for Part A, Title VI, P. L. 89-329, for Equipment and Materials to Improve Undergraduate Instruction which was funded. She also served on a committee to write a proposal to the Bureau of Research to synthesize research on the bilingual learner. At this time the proposal is receiving favorable consideration by the USOE.
Dr. Condie is directing the Navajo Social Studies project funded by the BIA under 89-10 legislation.

Dr. Darling submitted a proposal to the Bureau of Research to develop educational specifications for an innovative teacher education program. The project was not funded.

Mrs. Howell wrote a position paper for the State Department of Education, "Learning Experiences in the Kindergarten, an Integral Part of the Total School Program."

Dr. Loughlin, with Dr. Schroeder of the Department of Home Economics, directed a training program for 250 Head Start teachers and teacher aides in BIA schools in the summer of 1967.

Dr. Zintz submitted a proposal for an institute to train a task force of 25-40 bilingual education specialists. This was submitted to the Bureau of Education Personnel Development. Notification date on this proposal is November, 1968.

F. Activities in learned and professional societies

Dr. Auger attended the national meetings of the Association for Student Teaching and the American Association of Colleges for Teacher Education. On the state level he attended the meeting of the New Mexico Department of Elementary Principals. Dr. Auger was to have appeared on the agenda of the Association for Supervision and Curriculum Development national meeting and the Department of Elementary School Principals national meeting but had to decline due to insufficient institutional travel funds.
Dr. Chisholm attended the A.L.A. in San Francisco, DAVI in Houston, and the New Mexico State Library conference, and served as treasurer of the Albuquerque Library Association. Dr. Chisholm served on committees and panels for the above groups.

Dr. Darling was a member of the National Planning Commission for the National Conference on Educational Opportunities for the Mexican-American held in Austin, Texas. Dr. Darling had to decline appearing on the agenda of the national ASCD meeting. He attended the state meeting for teachers of mathematics.

Mrs. Howell attended the National Association for the Education of Young Children in San Francisco and the state NAEYC meeting in Las Cruces.

Dr. Loughlin is on the Executive Board of the National Association for Education of Young Children and is vice-president of the New Mexico NAEYC. She attended the national NAEYC conference in San Francisco and the state meeting in Las Cruces.

Mrs. Mari Luci Ulibarri attended the National Conference on the Teaching of English to Speakers of Other Languages in San Antonio, Texas.

G. Other professional activities

Dr. Auger administered and was a major participant in two statewide conferences sponsored by the State Department of Education on non-grading and team teaching in the elementary school. As a part of Dr. Auger's regular responsibilities, he is engaged in on-going in-service
activities with Albuquerque Public School teachers and administrators.

Dr. Chisholm served as a consultant to the Los Alamos Schools, the Federal City College of Washington, D. C., and the U. S. Office of Education. She also presented a telelecture to the Mountain Plains Media Leadership Symposium held in Loveland, Colorado.

Dr. Condie was called upon to evaluate special projects related to Indian education and to speak on various occasions, such as a talk at the annual All-Pueblo Council Education Conference.

Dr. Darling serves as a consultant to the Bilingual Counselor project at Texas Technological College which is funded by the Southwest Educational Development Laboratory and was a major participant in a state-wide conference sponsored by the State Department of Education.

Dr. Loughlin served as a consultant to the New Mexico Pueblo Head Start programs and the Moapa Valley Migrant Worker Project. She was a speaker for local kindergarten PTA programs and for the Albuquerque Pre-School Association. Dr. Loughlin is on the Educational Program Committee of the Designing Education for the Future Project.

Mrs. Ulibarri is a consultant to a Mexican-American Education project in Las Vegas, Nevada.

Dr. Zintz has been very active as a speaker and consultant at the local, national, and international levels. These duties have taken him to many communities in New Mexico, to the states of Oregon and Oklahoma, and to British Columbia, Ecuador, and Guam on the international plain. The reader is referred to Dr. Zintz' personal biographical rec-
ord for a detailed description of these activities.

H. Non-teaching University service

Dr. Auger is Director of Elementary Student Teaching, a member of the NCATE preparation committee, was elected as a faculty representative to the Administrative and Policy Committee for the coming year and serves on several other college committees.

Dr. Chisholm is Director of the Learning Materials Center and served on the University committee for planning media services.

Dr. Condie served on the University committee to select a staff person for the TESL coordinator position and is currently a member of the Learning Materials Center committee.

Dr. Darling is chairman of the Department of Elementary Education, a member of the college Administrative and Policy committee and the Manzanita Center Kindergarten Selection committee.

Dr. Loughlin is Director of the Manzanita Kindergarten and the University of Massachusetts-UNM exchange program, junior advisor to the Student Education Association, faculty advisor to Pi Lambda Theta; she is also a member of the Manzanita Center committee and the Manzanita Kindergarten Selection committee.

I. Public Service

Dr. Darling is on the Cub Scout Pack 67 board of directors and den leader for a Webelo den.
Dr. Loughlin is on the Policy Board of the Bernalillo County Economic Board, Child Development Centers.

Dr. Zintz is a member of the board of Albuquerque Association for Retarded Children.
The Report of the Department of Guidance & Special Education

July 1, 1967 - June 30, 1968

George L. Keppers, Chairman

I. General Departmental Information:

A. Significant achievements during the academic year, 1967-68:

One new course in Guidance (Vocational Rehabilitation Counseling) and seven courses in Special Education (Introduction to Special Education, Social and Psychological Problems in Special Education, Survey of Physical Defects, Education of the Severely Retarded, Workshop in Special Education, Advanced Techniques of Teaching the Neurologically Impaired, Dissertation in Special Education) were added during the academic year along with four Workshops in Guidance (Pastoral Counseling, Plans for Progress, Guidance for the Disadvantaged, Vocational Rehabilitation Counseling). Traineeship (Junior and Senior) and Fellowship (Emotional Disturbance and Mental Retardation) awards were granted from the U. S. Office of Education and the State Department of Education. A Pilot class in teaching the Neurologically and Other Health Impaired Children was conducted in Manzanita Center.

B. Significant plans and recommendations for the near future:

1. Continuing the program for preparing teachers of the Crippled
and Health Impaired Children.

2. Developing a program in the area of Vocational Rehabilitation Counseling.

C. Appointments to the Staff: None.

D. Separations from the Staff: None.
II. Composite of Information requested on individual biographical supplements:

1. Advanced Study:
   
   Ted L. Christiansen
   
   Post-doctoral study in process, University of Utah. Non-degree status.

2. Sabbaticals, etc: None

3. New Scholastic Honors: None

4. Publications:

   Ted L. Christiansen
   
   "Identifying Maladjustment in the Classroom", Journal of Mental Hygiene, Vol.51, October '67, pp. 574-76.
   "Teaching the Maladjusted", New Mexico School Review, Vol. 46, April '67, pp.11.

   Edward J. Kelly
   
   "Toward a Comprehensive Paradigm of Special Education Functions", Journal of Special Education. Publication date pending.

5. Other Research Projects or Creative Work in Progress:

   L. C. Bernardoni
   
   Evaluated elementary guidance programs in Northern New Mexico under sponsorship of State Department of Education, December-February; Consultant for U. S. Office of Education project sponsored by Northern Arizona University to evaluate training programs for counselors of Indian children, and devise new programs of preparation, October-May.
Louis A. Bransford
"A Systematic Assessment of the EMR Curriculum"—developed as a result of a workshop on supervision of student teachers of the mentally retarded.

Ted L. Christiansen
None that is funded. Research in progress on an independent basis.

Edward J. Kelly
A 25 page report—Preliminary Report on the Coding of Cases at Manzanita Center; a contemplated book—Special Education: A Philosophical Synthesis—now in drafting process; completion of fellowship applications in the area of the Seriously Emotionally Disturbed, specific U.S.O.E. award, $26,500.00.

George L. Keppers
Director, Pilot Project "Guidance in the Elementary School", State Department of Education.

Don M. Rice
Prepared two Title VI Grants which were awarded: Neurologically Impaired and Pre-school Mentally Retarded.

6. Activities in Learned and Professional Societies:

L. C. Bernardoni
Participated in A.P.C.A. national convention in Detroit, read a paper concerning the preparation of counselors; promoted to Associate Professor.
Louis A. Bransford  
President, C.E.C.; Board of Governors, American Association on Mental Deficiency; Vice-president and Board member, Association for Retarded Children; presented paper to Phi Delta Kappa; member, Governor's Advisory Council on Mental Retardation.

Ted L. Christiansen  

Edward J. Kelly  
Participated in U.S.O.E. sponsored workshops in emotional disturbance and mental retardation, Salt Lake City, 7/67 and Minneapolis, 10/67.

George L. Keppers  
Member, Phi Kappa Phi, American Psychological Association, A.P.G.A., N.V.G.A., A.C.E.S., Employment Counseling, New Mexico Guidance Association (attended Spring meeting in Albuquerque); certified as a Psychologist in New Mexico; promoted to Assistant Dean, College of Education; attended National Convention of A.P.G.A., Detroit, 1968, and presented a paper - A Counselor, is a Counselor, is a Counselor. Paper has been submitted for publication.
Don M. Rice
Member, National Society for Crippled Children and Adults,
Association for Children with Learning Disabilities, Council
for Exceptional Children and American Association for Mental
Deficiency.

Gordon A. Zick
Attended Interest-group meeting, A.P.G.A., Athens, Georgia,
January '68; New Mexico Guidance Meeting, Ghost Ranch, May '68,
meeting of Albuquerque Public School Counselors, November '67;
presented paper at A.P.G.A. Convention in Detroit, April '68.

7. Other Professional Activities:

L. C. Bernardoni
Member, Governor's Task Force on Vocational Rehabilitation;
Consultant to Social Security Administration and for Indian
Headstart Program in New Mexico; talks to counselors of the
Division of Vocational Rehabilitation.

Louis A. Bransford
Several off-campus talks and radio and TV appearances; Consultant
to State Department of Guidance and Special Education, New Mexico
Public Schools, Vocational Rehabilitation, B.I.A., Columbian
Project, state and national associations for retarded children,
U. S. Office of Education and Title VI program.

Ted L. Christiansen
Speaker for PTA and Church groups, National League for Nursing
in New Mexico and Police and Sheriff's Association; Radio
appearance, Belen, re NMARC; Workshop director, Las Vegas; Special Education Consultant, East Las Vegas City Schools.

Edward J. Kelly
Parent-teacher oriented talks relevant to aspects of emotional disturbance in Albuquerque, Socorro and Los Alamos; PTA talks relevant to political action and Special Education in New Mexico.

George L. Keppers
Consultant for Vocational Technical Corp. - O.E.O. Headstart programs; evaluated Mora Headstart program; Evaluated Clovis' Special Service Center, Clovis, New Mexico, Title III project, and North Central project in Ruidoso; Consultant re Planning Grant - B.I.A. - Northern Arizona University; speaker - F.T.A., Highland High School; speaker, Osuna Elementary School faculty; attended conference in Minneapolis on Planning Programs for the Emotionally Disturbed, Fall '67; attended W.I.C.H.E. Conference on Problems Related to Vocational Rehabilitation and Mentally Retarded, Phoenix, March '68; participated in Elks' Cerebral Palsy Clinic, Carlsbad, April '68.

Don M. Rice
Director of UNM demonstration class for the Neurologically Impaired; radio appearance, Belen, re program on Mental Retardation; Workshop, Las Vegas, on Neurologically Impaired; appointed to Governor's Study Group for Statewide Planning for Vocational Rehabilitation Services.
Gordon A. Zick

Participated in organizational meetings for Albuquerque school counselors; Consultant to New Mexico Department of Guidance, and Elementary Guidance.

8. Non-teaching University Service:

L. C. Bernardoni

Member, C.O.E. Curriculum Committee A and Ad Hoc Committee on Research; Advisor to fifty active Master's candidates; Chairman, eight doctoral committees and member of six doctoral committees.

Louis A. Bransford

Student teacher supervisor; advisor for seventy students; writing proposals; member of Manzanita Center, Graduate Fellowship and Human Research committees.

Ted L. Christiansen

Faculty advisor.

Edward J. Kelly

Undergraduate and Graduate advisement; Chairman of, and member of, M. A. and Ed.D. committees; member of Education Doctorate Committee.

George L. Keppers

Department Chairman, Guidance and Special Education; Faculty Sponsor, UNM Student Soccer Club; Director, Manzanita Center; member of UNM Research Allocation and Adm. and Policy Committees; advisor for Masters, Education Specialist and Doctoral students.
Don M. Rice

Faculty advisor.

Gordon A. Zick

Advisor, Gamma Delta; member, Registration Committee; Host family for foreign student.

9. Public Service:

L. C. Bernardoni

Merit Counselor for Boy Scouts; active member of Episcopal Church.

Louis A. Bransford

Member of Board of Governors for A.A.R.C. and Y.M.C.A.

Ted L. Christiansen

Active in local Association for Mental Health and Retardation and participated in various community services.

Edward J. Kelly

Active member, Our Lady of Fatima Church.

George L. Keppers

Member, Community Council of Albuquerque; Usher and member of Official Board of Stewards, Central Methodist Church.

Gordon A. Zick

Board member and Sunday School teacher, Immanuel Lutheran Church.

10. Personal Information: No changes.
I. General Departmental Information

A. Significant achievements during the academic year, 1967-68:

1. The department awarded 51 Bachelor of Science Degrees in Health and Physical Education, 16 Bachelor of Arts Degrees in Recreation, 18 Master of Science Degrees in Health and Physical Education, 2 Master of Arts Degrees in Recreation, 1 Doctor of Education, and 4 Doctor of Philosophy Degrees.

2. The Department completed a Bachelor of Science Degree Program in Health Education which was approved by the College of Education faculty and the University of New Mexico faculty. It is hoped to begin this program in September 1968.

3. A therapeutic Physical Education Program for UNM students was begun with the cooperation of the University Health Service. Approximately 75 students were enrolled in this program. It is anticipated that a considerably larger number of students will be served during the coming years.

4. An institute on Physical Education for the Mentally
Retarded sponsored by the Joseph P. Kennedy Foundation, the Department of Health, Physical Education and Recreation and the Department of Guidance and Special Education at UNM was held on the University campus in the month of April. The institute was heavily attended and was considered quite successful.

5. A new course entitled Clinical Program in Physical Education for the Mentally Retarded was instituted by the Department with the support of the Department of Guidance and Special Education. This course was offered both semesters and was financed by a grant from the Albuquerque Public Schools.

6. The Summer Sports Fitness School continued its growth and enjoyed strong university and community support.

7. The Adult Fitness Program instituted by the department to serve members of the faculty and citizens of the community, continued its growth and continues to receive great support.

8. The Human Performance Laboratory of the Department was quite active and provided facilities and equipment for the conduct for one doctoral dissertation, two masters' theses and thirteen graduate research studies. Additionally, the laboratory provided services to the Summer Sports Fitness Program, the Adult Fitness Program, Research Classes taught
by the Department and by other Departments, and also was the location of a number of seminars conducted by the departmental faculty and the faculties of other agencies. The Human Performance Laboratory staff provided technical consultation in laboratory design and engineering for other laboratories around the country.

9. Intramural and Student Faculty Recreation Programs were considerably expanded and a great number more persons were served in these programs.

10. The Intramural Board became actively engaged in studying and advising the Department on the conduct of its programs in intramurals and student-faculty recreation.

11. The Board of Regents of the University of New Mexico approved the swimming pool project and plans for this project neared completion.

12. The Department conducted a study of physical education, athletic and recreational facilities on this campus as related to national norms.

13. Planning was continued in studying the possibilities of redesigning Johnson Gymnasium in order to serve our greatly expanding student population and to increase services in the area of physical recreation for our faculty and staff.

14. The need for additional tennis courts and handball and squash courts became more evident and the
Department engaged in discussions with the University Architect's Office in an attempt to clarify the situation regarding this type of facility.

15. The new athletic fields on the south campus were put into use beginning September 1967, which allowed for a considerable expansion of the Intramural Sports Program.

16. The Varsity Baseball Program was moved to the south campus and Varsity Football moved to the old football field, which allowed departmental programs free access to the six fields adjoining Johnson Gymnasium.

17. Final plans for an Athletic Department Administration Building reached near completion. The construction of this facility will make additional offices, locker room, storage rooms in Johnson Gymnasium available to the Department. These spaces are badly needed and will by put to immediate use as soon as they become available.

B. Significant plans and recommendations:

1. Construction should begin this fall on the new swimming pool complex which is badly needed. Research indicates that even with the construction of this facility the University will have fewer swimming pool facilities available than called for by national norms.
2. The construction of additional tennis courts is an urgent and pressing matter and should be undertaken in the immediate future.

3. A study of the possibilities of redesigning Johnson Gymnasium indicates that a new gymnasium floor could be constructed in the main arena of this building for an extremely low cost of $7.50 dollars to 8 dollars per square foot. This could provide 25,000 square feet of activity floor space for a cost of $175,000.00 to $200,000.00 and could allow a much needed expansion of offerings in physical education by the Department.

4. The need for further expansion of the Johnson Gymnasium facility becomes more apparent all the time. The building has no faculty lounges, one small seminar room, inadequate locker facilities, an insufficient number of activity teaching stations, an inadequate number of squash and handball courts; not enough class rooms, and no study areas.

5. The Department plans after the summer session of 1968 to convert the present Room 139, now called the Street Shoe Gymnasium, to a weight-lifting facility. The present weight-lifting room, Room 4 in Johnson Gymnasium, will become an exercise therapy clinic. This will serve several good purposes: (1) It will allow a therapeutic
physical education program to be expanded so that more persons with physical disabilities can be given exercise therapy. In addition, it will furnish opportunities for students training in the field of exercise therapy to have opportunities for clinical experience. Also it will provide an expansion of about 600 square feet of floor space for a weight-lifting program which has been crowded in the past.

6. The Department completed plans to establish a children's playground east of the Manzanita Center. This facility will be used for research and clinical work with handicapped children.

7. The Department hopes to begin active work on the development of a center for the study of Leisure and Recreation and proposes to begin active functioning of the Recreation and Park Field Service, which up to now has existed but has not been active.

8. The Department hopes to present to the University Administration a proposal for the development of a recreational and camping area located on the Young Ranch. In particular, an outdoor education center, a picnic area and camp ground, a beach and marina are all possibilities for exploration.

C. Appointments to staff:

Lawrence F. Locke, Associate Professor, September 1, 1968.
Helen Shearer, Assistant Professor, September 1, 1968.

Elmer A. Scholer, Professor, Department of Health, Physical Education and Recreation and Assistant Chairman for Recreation, September 1, 1968.

Sandra Suttie, Assistant Professor, September 1, 1968.

D. Separations from staff:

John E. Montgomery, Assistant Professor, June 30, 1968.

June M. Young, Instructor, June 30, 1968.

II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced study


Betty Bryant Benison - Doctor of Philosophy Degree; Conferred on June 7, 1968. Title of Dissertation: A Plan for Programming Sequential-Integrated Dance and Rhythmic Activities for the Elementary School Level Utilizing the Medium of Television.

Ronald E. Jacobsen - M.S. - June, 1968.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc., during the period


Mercedes Gugisberg - Semester II - sabbatical leave.

George T. Petrol - Traveled to California and Mexico.

3. New scholastic honors, fellowships, etc.

Edwin G. Belzer, Jr. - Elected a Fellow of the American School Health Association.

Betty Bryant Benison - Initiated into Pi Lambda Theta.
Ella May Small - Fellow, AAHPER (awarded annually)  
American Association for Health, Physical Education  
and Recreation.

4. Publications

Harold E. Kenney - "College Facilities for Health,  
Physical Education and Recreation"

Frances McGill - Physical Performance of Men and  
Women in Relation to Potassium Content Federation  
Abstracts.  
"Physical Performance in Relation to Fat Free Weight"  
in Physiological Effects of Exercise. Athletic  
Institute, 1967.

Charlotte L. Piper - "Principles and Techniques of  
Officiation"  DGWS Aquatics Guide, American  
Association for Health, Physical Education and  
Recreation, Pages 116-123; 1967-69.

Armond H. Seidler - "College and University  
Facilities Guide for Health, Physical Education,  
Recreation and Athletics" published by the Athletic  
Institute.

5. Other research projects or creative work in progress  
or completed during period

Edwin G. Belzer, Jr. - The Effect of Clothing  
upon Boys' Perceptions of Body Images Under Induced  
Aniseikonia, completed summer 1967, supported by  
UNM Faculty Research Grant.

Lloyd R. Burley - Seven curricula reports were  
prepared under my supervision and were circulated  
to the appropriate department, schools, Deans, and  
the Academic Vice President.

William A. Bynum, Jr. - Summer Sports Fitness  
School; Adult Fitness Program; The Effect of  
Altitude on Performance and The Effect of Stress  
on the Heart; Thirteen Graduate Research projects;  
One Dissertation and Two Theses.

Woodrow W. Clements - Have partially completed an  
Outline of Service Courses for use by Teaching  
Assistants in the Department; assisted in developing  
a new curriculum offering leading to a B.S. Degree  
in Health Education.

Mercedes Gugisberg - Research in Pueblo Indian  
games and their ecology (incomplete).
Frances McGill - Physical Performance Studies of World Class Swimmers, Lovelace Foundation $2,000.00
Title, Same Duration, 1 year; Telemetry Studies of World Class Swimmers, Lovelace Foundation $2,000.00
Title, Same Duration, 3 years; Energy Cost of Sports Activities, UNM grant, $300.00, 1 year.

Frank E. Papcsy - Institute on Physical Education for The Mentally Retarded, J. P. Kennedy Foundation, $750.00; Clinical Program in P.E. for the M.R., APS, $4,000.00; Workshop on Recreation Education for Mentally Retarded, Title VI, $3,000.00.

Ella May Small - On going research on health knowledge and attitudes of students of UNM.

6. Activities in learned and professional societies (meetings attended, offices held, professional papers read, etc.)


Betty Bryant Benison - State Dance Chairman, USGF-AAU Gymnastics Chairman for the state Southwest District Convention, Chaired a session.

Lloyd R. Burley - Convention Manager, Southwest District at the American Association for Health, Physical Education, and Recreation.

William A. Bynum, Jr. - Attended NMHPER; HHPER; Mountain District ACSM, National ACSM; Committee Member; Three Papers presented at Mountain District ACSM Meeting.

Woodrow W. Clements - Membership N.E.A.; N.M.E.A.; New Mexico Assoc. for HPER. Attended National Convention of AAHPER. Attended State and Local meetings of N.M.E.A. Attended and participated in the Southwest Conference of Health and Physical Education.

Mercedes Gugisberg - Convention of Southwest District of AAHPER; conference on Smoking sponsored by AAHPER.
Marvin Dean Heffington - Attended the National Intramural Association Conference; panel member on joint planning of facilities for recreation and schools at the Southwestern Regional Conference of the American Assn. of Health, Physical Education and Recreation.

Fred J. Hinger - Attended Southwest District (6 states) Elementary Conference for Physical Education; served as Chairman of Southwest District Committee on Improvement of Elementary Physical Education; made presentation at this meeting.

Ronald E. Jacobsen - Active member in A.A.H.P.E.R.

Harold E. Kenney - Attended National AAHPER convention in St. Louis.

Frances McGill - Attended: Intermountain Conference for Women in Physical Education, Division of Girls and Women's Sports Executive Council, Washington, D.C. Winter Conference, NM Physical Educators, Midwest District AAHPER; gave a speech, AAHPER Convention, St. Louis, DGWS Executive Council; past Vice President of Division of Girls and Women's Sports; National Commission on Intercollegiate Athletics, Commissioner for Regional Development; National Committee on Olympic Development; Committee for 1970 Meeting American College of Sports Medicine; National Committee Chairman for DGWS District Chairmen Workshop; Executive Board of U.S. Gymnastics Federation; Nominating Committee of National Intramural Sports Council; Chaired Session on Conference on Recreation in Colleges and Universities, Washington, D.C.

Russell D. Mitchell - Congress of American Gymnastic Coaches at Kansas; New Mexico Gymnastic Association, Committee Co-Chairman for Judging; First Gymnastic Workshop, California State College at Long Beach; 1968 Mid-west Coach of the Year; Gymnastic Consultant for American Athletic Equipment Co.; UNM TV to promote gymnastics; New Mexico Clinic (Alb.) Director, July, 1967.


Janice K. Olson - N.M. Board of Women's Officials,

Frank E. Papcsy - American Association for Health, Physical Education and Recreation Annual Meeting, St. Louis, Missouri; Director, Institute on P.E. & Recreation for The Mentally Retarded, State NMARC, Alamogordo.

George T. Petrol - Attended two sessions of First Aid Conferences held by authority of the National Chapter; attended Southwestern conference of AAHPER.

Charlotte L. Piper - President, Intermountain Conference, Park City, Utah; Western Society of NAPECW, Asilomar, California; National AAHPER Convention in St. Louis; Southwest District AAHPER Board of Directors (Chrm. Student Section); Chrm. College Section for NMAHPER; New member, National AAU Swimming Committee, N.M. Winter Conference for Women Physical Educators.

Ella May Small - New Mexico Association for Health, Physical Education & Recreation Evaluator, Health Education Division, Southwest District AHPER Constitution Committee, SW District AHPER, Chairman, Necrology Committee National Association Physical Education for College Women.


June M. Young - Winter Conference - Women Physical Educators - treasurer; attended Southwest District Convention.

7. Other professional activities

Edwin G. Belzer, Jr. - talk to class at A.P.S.'s Technical-Vocational Institute on "Theories of Sex Education" with special emphasis on parent-child communication, April 4, 1968; talk to a different T.V.I. class on "Birth Control" with special emphasis on "the pill" and abortion.

Betty Bryant Benison - Off-campus talks and clinics pertaining to gymnastics; conducted a workshop on
campus in the officiating of gymnastics; assistant chairman of Winter Conference for Physical Educators of New Mexico.

William A. Bynum, Jr. - Spoke to several PTA groups in Albuquerque.

Mercedes Gugisberg - Conference on Indian Education of American Indian Pueblo Council.

Fred J. Hinger - Have served as New Mexico consultant to State Dept. of Education on Elementary Physical Education. Made presentation to Southwest District AAHPER Convention General Assembly. Also participated in three panel discussions on professional education in physical education.

Ronald E. Jacobsen - Junior Wrestling Program.

Frances McGill - Speech - Midwest District Assn. for Health, Physical Education & Recreation; Speech - SW District AAHPER; Rocky Mountain Regional Sports Medicine - gave paper and chaired session; American College Sports Medicine - gave paper.

Russell D. Mitchell - Exhibitions - Jr. and Sr. Hi Schools (assembly programs) 10 schools in Albuquerque; Co-Director of Western Gymnastic Clinic at Tucson, Dec. 25-31, 1967; Member of Teaching Staff, New England Gymnastic Clinic - Nov. 26-27, 1967; Member of Teaching Staff, National Summer Gymnastic Clinic - Aug. 4-10, 1967; Tucson T.V. appearance for WAC Conference and NCAA Championships.

Janice K. Olson - New Mexico State Basketball Clinic - Clinician.

Frank E. Papcsy - Guest Speaker: 1. Sunland Training School, Fort Lauderdale, Florida 2. Las Vegas Mental Hospital, Las Vegas, New Mexico 3. Florida Atlantic University, Boca Raton, Florida 4. C.E.C. - Albuquerque, New Mexico.

Charlotte L. Piper - Career Speech at West Mesa High School "Women's Opportunities in Health, Physical Education and Recreation"; Speech for Christian Women's Luncheon "Physical Fitness for Women in Today's World"; First DGWS Sanctioned Swim Meet, UNM.

Armond H. Seidler - Numerous off-campus talks. Facilities design consultant. Lecturer Southwest Regional Management Conference.
8. Non-teaching University service

Robert Knight Barney - Varsity Swimming Coach; University College Advisor; Member, Physical Education; Chairman, Physical Education Curriculum Committee.

Edwin G. Belzer, Jr. - University College Advisor; Chairman, Health Ed. Curriculum Committee; Member, H.P.E.R. Curriculum Committee; University Library Committee; C.O.E. Committee to study course loads for graduate students who are employed full-time; Faculty In-Service Education Committee.

Betty Bryant Benison - Faculty Advisor for Freshmen Women Physical Education Majors.

Lloyd R. Burley - Budget Chairman, N.M.A.H.P.E.R.; Member, Executive Board, Member Executive Board S.W. District AAHPER, Member Advisory Committee, Constitution Committee AAHPER.

William A. Bynum, Jr. - Director of Human Performance Lab.; University Committee on Human Beings as Subjects in Research; College of Ed. Committee on Human Beings as Subjects in Research; Board of Supt. for Coronado Credit Union; Member, Curriculum Committee for P.E.; Undergraduate and graduate advisor.

Woodrow W. Clements - Assistant Chairman, Dept. Health, Physical Ed. & Rec.; Advisor, Major Students in HPER; Member, Campus Safety Committee; Member, College of Educ.; Director, Learning Materials Committee.

Mercedes Gugisberg - Health, Education Committee, Department of Health, Physical Education and Recreation, Women's Physical Education Committee, Chairman, Sem I; Developing Library in Carlisle Gymnasium.

Marvin Dean Heffington - Coordinator of Facilities for the Department of Health, Physical Education & Recreation; Director of Intramurals and Student-Faculty Recreation.

Fred J. Hinger - Member of College of Education - Committee A.

Ronald E. Jacobsen - Wrestling Coach.
Harold E. Kenney - Chairman, four Doctoral Committees; Membership on 3 additional doctoral committees; membership on numerous Doctoral Screening Panels, and M.S.; Comprehensive examinations committee; N.C.A.T.E. Committee.

Frances McGill - Faculty advisor for senior physical education majors; Graduate Committee (departamental) Health, Physical Education, and Recreation Curriculum Committee; Director of Women's Sports.

Russell D. Mitchell - Advisor for 21 students.

John A. Montgomery - Faculty secretary, Dept. HPER; Member, Department Curriculum Committee; Member, Curriculum Committee on Recreation.

Janice K. Olson - Chairman, Department of Health, Physical Educ. & Rec. Curriculum Committee; Winter Conference, Committee Chairman; Junior Major Advisor; Women's Extramural Director; Women's Extramural Council Advisor.

Frank E. Papcsy - Soccer Coach and Faculty Advisor 47 students.

George T. Petrol - Student Advisor; Department Curriculum Committee.

Charlotte L. Piper - University College Scholarship Committee; Recreation Curriculum Committee; Special Advisor; Women's Swim Team Coach.

Ella May Small - North Central Evaluating Team for West Mesa High School for health services and girls physical education; Coronado Credit Union, Supervisor; Co-sponsor, Physical Education Majors and Minors; Advisor, Graduate Students in Health, Physical Ed. and Rec. (10 doctoral and 8 masters); Departmental Graduate Committee; Chairman, Winter Conference for New Mexico Women in Physical Education.

Armond H. Seidler - Chairman of Department Health, Physical Education and Recreation; Advisor to a number of doctorate students; Chairman, Education Human Research Review Committee; Chairman, Department of Health, Physical Education, and Recreation Doctorate Committee; Member, College of Education Doctorate Committee; Member, College of Education Administrative and Policy Committee; Member, Advisory Committee on Teacher Education Programs; Member, College of Education Dean's Selection Committee.
June M. Young - Sponsor, Synchronized Swimming Club.

9. Public service

Edwin G. Belzer, Jr. - Draft Counselor.

Woodrow W. Clements - Member, Trinity Methodist Church; Assisted in collection for United Funds.

Mercedes Gugisberg - Aquinas Newman Center; Villa Maria, Youth Training Center for Boys.

Marvin Dean Heffington - Albuquerque Breakfast Lions Club.

Ronald E. Jacobsen - Member, Albuquerque Jaycee's.

Frances McGill - Sunday School Teacher; Director of Church Day Camp; Red Cross Safety Instructor- Trainer; AAU Executive Committee (state); AAU State Aquatics Committee.


Charlotte L. Piper - Heights YMCA Parents Club.

10. Personal information


Russell D. Mitchell - Baby girl born April 15, 1968 (Mary Nicole).
The Report of the Department of Home Economics
July 1, 1967 - June 30, 1967
Ednell M. Snell

I. General Department Information


The dietetic program was reactivated this year. Two of the four students who completed the special course requirements for this program received internships. Mrs. Frances Brookshier was employed to teach the dietetics courses, and the Presbyterian Hospital offered its facilities for teaching Quantity Food Preparation. An Allied Health Profession Basic Improvement Grant of $5,500 helped cover the operation of this program. The Grant also allowed purchase of scientific equipment to be used in experimental foods classes.

A Danforth visitation team evaluated the Department in November. Faculty spent the previous three months studying its program in preparation for the visit. A copy of the report submitted by the visitation team is attached. The faculty meet weekly during the rest of the school year to study the report and develop a program. Twelve students selected by student organizations met with the faculty to respond to the proposed curriculum. The faculty is hopeful that the new curriculum can be presented to Committee A in the fall.

All student teaching was done on a full day basis for seven to eight weeks. Most student teachers had 120 hours of teaching. Twenty-one students completed student teaching. All but one cooperating teacher had completed a course in Supervision of
Student Teachers. This year student teachers met on campus for one week prior and one week after student teaching under the direction of the Supervisor of Student Teachers. Prior to student teaching units were developed with the student receiving help in relating practice to theory. Time was spent in evaluation after student teaching. Each student teacher was visited three times by the University Supervisor. Individual conferences were held at this time. Each student had a final evaluation conference.

Although two additional sections of HE 150, Clothing Selection and Construction, and one additional section of HE 102, Infant Growth & Development were offered, many students continued to be turned away from classes. A section of HE 120, Food Science, and 150, Clothing Selection and Construction, were specified for majors only which enabled more freshmen to get into these required courses.

Second semester students enrolled in HE 408, Child Growth & Development, were scheduled to observe and participate in the Economic Opportunity Board Nursery Schools. This gave students a limited opportunity to become acquainted with some of the problems of the underprivileged child.

The physical facilities were improved by the installation of additional natural gas lines to the experimental foods lab which has made it possible to install or utilize both gas and electric ranges. The major expense was covered by Southern Union Gas Company.
Four students received the degree of Master of Arts in Teaching Home Economics. Each semester one graduate course was offered, however, Summer Session continues to be the best time to offer graduate level courses. A new course HE 554, Social and Psychological Aspects of Clothing, was approved for graduate credit and will be offered for the first time in Summer Session 1968.

Five part-time instructors were employed; Mrs. Frances Brookshier, Dietition, Presbyterian Hospital to teach two classes of dietetics; Mrs. Virginia Dorn, MA, Iowa State, to teach two sections of Clothing Selection & Construction; Mrs. Jeanne Perdreauville, MS, Purdue, to teach three sections of Meal Management; Mrs. Joyce Burgess, MS, University of Arkansas to teach four lab sections of Food Science and one section of Experimental Food, and Mr. Lawrence Brown, MS, Florida State University to teach one section of Family Relationships.

B. Significant plans and recommendations for the near future.

Field experiences are being planned to give students the opportunity to work with families unlike their own. Beginning arrangements are being made with the State Department of Health and Social Services. Arrangements for field experiences may possibly be made in child development, advanced nutrition, and home management.

Implementation of a revised curriculum that will provide students with more depth in behavioral sciences which will enable graduates to work with families of all cultures and income levels.
Provisions are being made for a planned program of in-service education for Albuquerque teachers. Cooperative plans are being made by the Home Economics Consultant, Albuquerque Public Schools and the Department.

Involvement of parents of nursery school students in a parent education program is under consideration.

Presbyterian Hospital is interested in developing a dietetic internship program and would like the University to consider an internship Master's degree program. This is under exploration at the present time.

C. Appointments to staff.

Two regular staff positions remain to be filled for 1968-69 school year. Mrs. Jean Rattner will be a graduate assistant for Summer, 1968, and Mrs. Sheila Sigmund has accepted the graduate assistantship for 1968-69 school year.

D. Separations from staff.

Mrs. Mary K. Huff who was persuaded to return on a 5/8 basis this past year resigned effective June, 1968. Her husband is pursuing a doctorate and they will leave town.

Mrs. Carolyn Topping resigned her position as nursery school teacher effective June, 1968. Mrs. Topping's husband is also pursuing a doctorate at another institution out of town.

II. Composite Information on Individual Biographical Supplements

1. Advanced study:

Ruth B. Harris attended a conference on Therapeutic Nutrition at the University of Wisconsin, June, 1967.
Imogeann McMurray attended summer session at Michigan State University and earned 6 graduate credits.


2. Sabbaticals, summer teaching, travel, etc.:

Mary K. Huff traveled in the Western States and Texas.

3. New scholastic honors, fellowships, etc.: none

4. Publications: none

5. Other research projects: none

6. Activities in learned and professional societies:

Ruth B. Harris attended two state meetings of the New Mexico Dietetic Association and served as President; one state meeting of the New Mexico Home Economics Association and is President-elect; Vice President UNM Chapter NMEA; New Mexico Committee on Nutrition Education; presided at Nutrition Symposium, UNM September, 1967; monthly meetings of Albuquerque District Dietetic Association and Home Economics Association.

Mary K. Huff attended Nutrition Symposium; New Mexico Dietetics Association meeting; College Teachers of Home Management meeting in San Francisco; American Home Economics Association meeting in Dallas; Chairman, Colleges and University Committee for New Mexico Home Economics Association.

Imogeann McMurray attended spring meeting of New Mexico Home Economics Association.

Florence Schroeder took part on panel New Mexico Association for Education of Young Children, December, 1968, UNM; National

Ednell M. Snell attended American Home Economics Association meeting in Dallas, June, 1967; American Vocational Association Teacher Education meeting in Cleveland, December, 1967; (participated as a recorder); American Home Economics Association hearing on Accreditation, Fort Worth, March, 1968; New Mexico Annual Home Economics meeting; monthly meetings Albuquerque Home Economics Association; Nutrition Symposium; American Vocational Association Public Relations Committee; Home Economics Section American Vocational Association, Policy Planning Committee.

Carolyn Topping attended the annual conference of the National Association for Education of Young Children, San Francisco.

7. Other professional activities:

Ruth B. Harris: Guest on radio program KOB.

Mary K. Huff: Off-campus talks - St. John's Methodist Church, one of the speakers in Financial Management Course.

Florence Schroeder: Consultant (University of Arizona) Head Start Programs of the Eight North Pueblos of New Mexico, 1967-68; participated Albuquerque Public School Navajo Indian Field Study, June, 1967; consultant, evaluator Albuquerque Public School
Head Start Study, Summer, 1967; talks on Child Development to Albuquerque AAUW Child Study Group, parents group of Gamma Beta Soro; member Albuquerque Public School TVI Child Development Committee.

**Ednell M. Snell:** Chairman, New Mexico Home Economics Association Annual Meeting.

8. Non-teaching University Service:

**Ruth B. Harris:** College of Education Committees - Administrative & Policy, Curriculum, Ad Hoc Committee on In-Service Training, Chairman of the Flower Fund; sponsor of Kappa Omicron Phi, Home Economics Honorary; local committee of AAUP; faculty advisor to forty students.

**Mary K. Huff:** Advisor to UNM Home Economics Chapter of American Home Economics Association; State Advisor, College Chapter of American Home Economics Association; faculty advisor to 15 students.

**Florence Schroeder:** Manzanita Center Committee member; Director Manzanita NS programs; advisor to 15 College of Education Home Economics majors; 31 University College students.

**Ednell M. Snell:** Chairman, Department, College of Education, Administrative & Policy Committee, Curriculum Committee B, Ad Hoc Committee Research, Petitions Committee 2nd semester; Committee for Selecting a Dean; Board of Director's Faculty Club; advisor 20 undergraduates and 20 graduate students.

**Carolyn Topping:** Learning Materials Center Committee.
9. Public service:

Ruth B. Harris provided transportation of trips for Senior Girl Scouts.

Imogene McMurray: Program Chairman of El Segundo Chapter, American Business Women's Association, immediate past Vice-President.

Florence Schroeder: Member Child Development Board of Economic Opportunity Board; Chairman of Committee on Nutrition; personnel selection committee 1967-68; consultant on CD programs of Economic Opportunity Board; consultant Special Education school.

Ednell M. Snell: Altrusa Service Club

10. Personal information:

I. General Departmental Information

A. Significant achievements during the academic year 1967-68

The framework for the new degree option in the M. A. T. in English was established by a joint committee of faculty members from the Departments of English and Secondary Education. Chairman of the committee, elected by the members, was an Associate Professor of Secondary Education, Dr. Peter Prouse. Drs. White and Hirshfield served from the Department of Secondary Education, as well as Dr. Vogel from Educational Foundations.

Departmental members moved into the realm of International Education in the Colombian Project. Not one but two groups of Colombians are involved (17 and 9) and two temporary staff members are currently attached to the department, Dr. Nicholas Abeyta and Mr. Anthony Sanchez. Drs. Ivins, Hanny, Dettre, and Doxtator were involved in teaching and administration.

The shift of two persons in the Business Education program from the College of Business Administration to the College of Education and the hiring of a third person brings together under one college for the first time historically multiple personnel most directly responsible for Business Education: Dr. Rider, Virginia Reva, Charlotte Sampley,
and Joyce Heemstra.

The addition of a fourth-full-time staff member in Industrial Arts, Thomas Baldwin, expands the program with the addition of electronics, as well as expanding personnel directly responsible for Industrial Arts.

The department generally tightened its requirements for entry into the undergraduate program of teacher preparation and the passing of the master's written comprehensive examinations. An approach with increased objective-type features was adopted and tried (i.e., numbers on the essay papers, not names; a pass, minimum pass, and fail scoring code; a formula for overall pass or fail). Twelve people took the master's comprehensive examination during the 1967-68 school year. Nine passed while three failed. Dr. Hanny was asked to head supervision of the master's examination, which he did, to be followed by Dr. Hirshfield in charge, 1968-69. The Education Specialist program increased by two, bringing the total to five students. The doctoral program tested three, passed two, and failed one. Three students are expected to receive their doctorates in June or August, 1968. Nine students were admitted to the doctoral program in Curriculum and Instruction, secondary level. Over 300 were admitted to a program of teacher preparation in secondary during the academic year 1967-68. This exceeds last year's peak for all time in secondary. Student teachers, over 400 in number, completed the internship phase of their programs which also exceeds last year's peak.
B. Selected important aspects of departmental work, 1967-68

The department assumed responsibility for contracting personnel and general administration of them during the 1968-69 year for those in library science and audio-visual work. These new personnel are Teddy Palmore, Donald Foster, and Marion Burke.

As a result of the Friday morning voluntary weekly departmental seminar meetings begun last year, the department approved an experiment in Sec. Ed. 301, simulation. Dr. Dettre is in charge of development of materials and procedure.

Special type projects, such as Valley High (last year) and Rio Grande and Albuquerque High Schools this year, are now Secondary Education 463, a permanent "course" offering (12-15 credits). Drs. Runge and Howard have continued movement, begun by Runge and others last year, to add options open to students in undergraduate preparation for teaching.

Cooperative endeavor is anticipated in 1968-69 with Peace Corps and the Quito Center in ever-broadening of options open to students in undergraduate and graduate teacher preparation.

C. Plans and recommendations for the near future

It is apparent that continued effort is needed to move Secondary's undergraduate teacher preparation program further along the lines of innovativeness, relevance, and effectiveness consistent with agreed-upon
departmental objectives. Increasing clarification of the latter is needed.

Questions are arising about procedures students are to follow in the Education Specialist program. Policies, procedures, and clarification of the objectives of that program are needed. Continued attention must be given to admission to master's programs, refinement of the programs, and assessment of the quality of the product. As in the case of the undergraduate program, continued attention is needed to innovativeness and relevance.

D. Separation from the staff

Dr. Elinor McCloskey, Library Science, attached to the Department of Secondary Education from 1966-68, resigned.

II. Composite of information requested on individual biographical supplements

A. Advanced study

Mr. Hirshfield received his Ed. D. degree from the University of New Mexico in June, 1967.

Mr. Nesbitt attended an NDEA institute for advanced study in Industrial Arts at San Jose State College, California; and also an NDEA Institute for in-service training of state association leaders in industrial arts in Tulsa, Oklahoma.

Mr. Warner enrolled in a numerical control course sponsored by TV-I
in Albuquerque; he attended a summer institute at Purdue University for the improvement of technical teacher education programs; and he enrolled for 8 semester hours of research study at Texas A&M.

Mr. Zweig received his Ed. D. degree from the University of New Mexico in June, 1967.

B. Sabbaticals, leaves of absence, etc.

Mr. Ivins was on sabbatical first semester 1967-68. He completed a 125 pp. book manuscript. He also visited Canada from British Columbia to Nova Scotia. In December he visited British Honduras, Canal Zone, and Costa Rica.

Mr. Nesbitt visited numerous industrial plans in the San Francisco Bay area.

Mr. Prouse was a visiting professor at the University of Colorado, summer session 1967.

Mr. Warner traveled extensively to governmental installations in Washington, D. C., and various historical sites, national parks, and recreational areas in California.

C. New scholastic honors, etc.

None

D. Publications

DETTRE, JOHN. "Video-Taping Simulated Teaching: A Tool in General Methods", Audiovisual Instruction, Vol. XII, No. 7, pp. 693-696
DOXTATOR, ROBERT. Background for the Navaho Social Studies Project. Mimeographed. Given to participants after speech was made. February 1968.

"A Junior High Award System! School Activities, in press
Teaching in Middle Schools, International Textbook Co., June 1968

IVINS, WILSON. "Yes, We Can Make Secondary Education Available to All", New Mexico School Review, 47:9-10, 25, May 1968

NESBITT, ROBERT. Prepared a brochure which was distributed to the Industrial Arts teachers in New Mexico which describes the Industrial Arts undergraduate program at UNM.


RUNGE, WILLIAM E. Handbook for Student Teaching, 8th edition, UNM Vocational Education Philosophy and Objectives, New Mexico State Department, multilith, 35 pp. Project proposals for USOE Sec. Ed. title funds through Albuquerque Public Schools (Rio Grande and Albuquerque High School projects)

WARNER, RICHARD. Book pending.


E. Other research projects or creative work in progress or completed during period

Mr. Brown researched materials for a textbook, Slide Rule for Industry. He also was on an evaluation of the curriculum and facilities of Stout
University. In April 1968 he was on a visitation committee for New Mexico State University.

Mr. Crawford has been developing "International Education Appraisal Instruments" for utilization purposes on his planned sabbatical Semester II, 1968-69. He was chairman and/or editor of Committee Evaluation Reports for fifteen secondary schools in New Mexico.

Mr. Dettre has a book under consideration by International Press: "Considering Change in Education: Profile and Process." He had an article accepted by Phi Delta Kappan, but still unpublished, entitled "Rewarding What?" This was co-authored with Dr. J. A. Conway, University of Buffalo. He had an article accepted but as yet unpublished by Journal of Teacher Education entitled "Teacher Education: In The Year of the Image."

Mr. Howard completed a book The Junior High School: Problems and Issues to be published by International Textbook Co. in the spring, 1969. He was also co-editor and contributor to Schools for the Middle Years, International Textbook Co., which is a book of readings.

Mr. Ivins completed a 125 pp. manuscript of critical essays on high school programs and practices.

Mr. Prouse devised, and is currently serving as director of, the APSCOE Project in Secondary English, a cooperative program of the Albuquerque Public Schools and the College of Education for the improvement of English curriculum and instruction in Albuquerque secondary schools. The project involves allocation by APS of funds from instructional budget to support project. Monies are used to retrain 12 teachers and train 42 outstanding English teacher apprentices.

Mr. Runge was in charge of a special block program at Rio Grande and Albuquerque High Schools which included methods, student teaching, and a course in supervision. He was also consultant to the State Department of Vocational Education on new proposals. He was consultant to Kirshner's, Inc., on evaluation of Indian Vocational Education. He is also in the process of implementing two new proposals for professional laboratory experience projects in the Albuquerque Public Schools: Spanish teacher preparation and teacher aids in selected classrooms.

Mr. White has a publication in progress: He is co-author, with Mr. Prouse, of New Dimensions in English, 7th and 8th grade texts.

F. Activities in learned and professional societies

Mr. Brown attended the American Industrial Arts Association convention
in Minneapolis and the Industrial Arts Fair of the Albuquerque Public Schools.

Mr. Crawford attended meetings of the North Central Association, the Virginia Historical Society, and the New York Regional Education Association.


Mr. Doxtator became president for the 1968-69 year of the New Mexico Council for Social Studies. He was also chairman of the Social Studies Objectives, NMEA Quality Education Project.

Mr. Hirshfield was sponsor to the Student Education Association and was also secretary to the American Association of University Professors, UNM chapter.

Mr. Howard spoke at the North Central Association conference in Chicago, and also to the New Mexico Secondary School Principals.

Miss McCloskey was guest speaker at the National Council for Social Studies pre-conference on disadvantaged students. She spoke on "Characteristics and Potentials of Disadvantaged Students". She also attended a curriculum conference at Teachers College Columbia University.

Mr. Nesbitt was president of the New Mexico Industrial Arts Association. He participated in the Mountain States Conference of Industrial Arts Teacher Educators and Supervisors.

Mr. Prouse was keynote speaker at Connecticut State Conference on English Curriculum; he also addressed Oklahoma City Secondary Language Arts Reading Institute and the Oklahoma State Reading Council and State English Council.

Mr. Rider was a delegate from the New Mexico Business Education Association to the Mountain-Plains Business Education Teacher Association. He also attended the National Association of Business Teacher Education convention.

Mr. Runge was a participant at numerous meetings and talks given in the public schools concerning UNM student teaching and professional laboratory experiences programs. He attended the Chicago meeting of teacher educators for vocational education.
Mr. Warner attended the Mountain States Industrial Educators and Supervisors Conference in Salt Lake City.

Mr. White presented papers to Albuquerque English Teachers Council, New Mexico Council of Social Studies, and New Mexico Council of Teachers of English. He was also elected first vice president of the Albuquerque English Teachers Council.

G. Other professional activities

Mr. Crawford was appointed consultant to Board of Education of Cobre Consolidated Schools.

Mr. Dettre was chairman and coordinator for NCA visitation of Grants High School.

Mr. Doxtater gave a speech to Albuquerque High School, Washington Junior High School, and Lincoln Junior High School selected teachers on "Trends in Secondary Education".

Mr. Hanny was consultant to Colombian Project and on NCA evaluation teams.

Mr. Howard gave several speeches in the state; he made five NCA visits, and was consultant for Las Vegas and Albuquerque schools.

Mr. Ivins attended orientation meeting of the Committee to Study Evaluative Standards and Criteria, AACTE. He also served as chairman of the visiting committee to Clayton High School for New Mexico NMASSC.

Mr. Nesbitt delivered a speech at the 5th annual governor's conference on industrial safety.

Mr. White served on NCA evaluation visits to West Mesa High School and Clayton, New Mexico.

Mr. Zweig gave talks to elementary teachers at Los Altos, Collet Park, and Navajo Elementary Schools.

H. Non-teaching University Service

Mr. Crawford was New Mexico State Chairman of the North Central Association again this year. His work in this regard has been outstanding and deserves special mention. He has also been asked to visit Germany this fall in connection with the evaluation of American dependent schools.
Mr. Dettre was chairman of Curriculum Committee A for the College of Education.

Mr. Doxtator was a member of the University Academic Freedom and Tenure Committee; Summer Session and Extension Committee; he became chairman of the Department of Secondary Education during the 1968-69 academic year.

Mr. Hanny was a member of the selection committee for a new dean for the College of Education.

Mr. Hirshfield was a member of the Administrative and Policy Committee and Petitions and Waivers committee, College of Education.

Mr. Howard was a member of the College of Education committee on doctoral studies.

Mr. Ivins was appointed chairman of the College of Education NCATE committee. He has done excellent work in this connection.

Mr. Nesbitt was a member of the University Safety Committee and a member of the College of Education In-Service Education committee.

Mr. Prouse was a member of the Board of Directors, UNM Concert Hall. He was also a member of the Master Planning Committee of the university.

Mr. Warner was a member of the Advisory Committee for New Mexico Industrial Arts Supervisors and membership chairman of American Vocational Association in New Mexico.

Mr. White was a member of the joint committee of Secondary Education and the English Department for preparation of the Master of Arts in Teaching English program. He was also a member of planning committee for APSCOE program.

Mr. Zweig was director of Northwest New Mexico Regional Science Fair; he was also on the Summer Session and Extension Division Committee of the university.

I. Public Service

Mr. Brown was again marshal for Ballut Abyad Shrine Temple and in charge of all unit functions.
Mr. Dettre was appointed member of Rector's Lay Advisory Board in matters of education.

Mr. Hirshfield was advisor to a group of citizens interested in Title VII program (bilingual education) for the elementary schools.

Mr. Prouse was a member of the Board of Trustees of the International Folk Art Foundation.

J. Personal Information

Mr. Nesbitt completed the Federal Aviation Agency requirements for a sailplane (glider) pilot's license.
I. Preface

Engineering education at the University of New Mexico entered into a new phase of its long-range development this past year. After many years of steady growth, both undergraduate and graduate enrollments stabilized to the point that the pressure to handle ever increasing numbers of students was no longer so pressing. Although continued growth is anticipated, it is beneficial to have a breathing period during which time attention can be focused on program consolidation and improvement and the College of Engineering has taken full advantage of it this past year.

A very important part of this year's activities has been a thorough and continuing introspective study of the several engineering curricula, both undergraduate and graduate. Departmental committees have spent much time and effort in studying several different phases of the engineering educational program. A committee under the chairmanship of Dr. V. J. Skoglund, Professor of Mechanical Engineering, spent the entire 1967-68 academic year studying the freshman engineering courses. At its meeting on May 3, 1968, the engineering faculty accepted in principle the committee's recommendation that a major modification of the freshman first semester graphics course be made and the matter was referred to the Department of Civil Engineering for implementation.
After much study, the Departments of Civil, Electrical, and Mechanical Engineering reduced the number of hours required for the baccalaureate degree to 130 plus 4 units of physical education. A similar action by the Department of Chemical Engineering is anticipated next year. At the graduate level, all five engineering departments reduced the required course work under Plan II for the M.S. degree from 32 semester hours to 30. This reduction was approved by the Graduate Committee and by the University Faculty at its meeting on April 9, 1968.

The Department of Electrical Engineering was selected as one of the U.N.M. departments to be studied and evaluated by a visiting committee of experts. The funds for this visit were provided by a grant to the University from the Danforth Foundation. Dr. Samuel Seely acted as chairman of the visiting committee. Other members were Dr. Edward David, Jr. of the Bell Telephone Laboratories, Dr. Otto H. Schmidt of the University of Minnesota, and Dr. T. L. Martin, Jr. of Southern Methodist University. This committee was on campus for three days, October 19-21, 1967, and made a thorough study of the department and associated areas. Their subsequent report provided the department with a balanced appraisal of strengths and weaknesses and gave invaluable guidance for continued departmental development and the attainment of long-range goals.

Experimentation is a necessary part of quality improvement and this past year saw several educational experiments in progress. The following are mentioned as examples only. The Department of Mechanical engineering initiated a real innovation into its course ME 201L, Introduction to Engineering Design.
This course set out to instill true-to-life engineering design concepts into sophomore M.E. students by means of guest lecturers from several areas of industry. Much of the credit for the success of this course format belongs to Mr. Arthur M. Hill of Sandia Corporation who acted as coordinator for the course. Dr. Martin Bradshaw used programmed materials that he developed as part of a national project in EE 361, Electromagnetic Waves and Fields. For the first time, a course was taught at Holloman Air Force base by a professor on the U.N.M. campus using teletypewriter and telelecture equipment. Dr. R. C. DeVries taught EE 535, Design of Digital Systems, using this equipment system. An interesting trial course, N.E. 230, Applications of Nuclear Energy, was set up and taught by Dr. R. L. Long of the Department of Nuclear Engineering. This course is designed for the non-technical student and has been approved as a natural science elective for the Colleges of Education and Fine Arts.

Although the process of self-examination and improvement of program quality is a never ending effort, this past year's more-than-usual efforts in this direction have furnished convincing evidence that the College of Engineering has that most crucial requirement for building academic excellence -- a high-quality faculty. U.N.M. has been especially fortunate to attract a group of such talented, energetic, and able educators. It is this fact that makes doubly serious the unusually high incidence of faculty resignations this past year. Seven faculty members, about 12 percent of the engineering staff, submitted their resignations during 1967-68. The primary reason given for leaving U.N.M. was salary, a situation severely aggravated by
the very low raises given for 1968-69. Not one of the professors lost can be replaced for the salary that he was being paid. Increased faculty salaries are a necessity if the College of Engineering is to maintain its present favorable faculty position.

II. Enrollments and Degrees

The past academic year again saw undergraduate engineering enrollments decline nationally, both comparatively and absolutely. Total national freshman engineering enrollments declined from 78,400 (1966) to 77,551 (1967). Engineering students as a percentage of all freshmen nationally continued to decline from a high of almost 24 percent in 1956 to a current figure of slightly more than 13 percent.

The matter of declining undergraduate engineering enrollments is of mounting national concern and has spurred on the U.N.M. College of Engineering to redouble its recruiting efforts in the local high schools. Approximately 60 percent of U.N.M.'s undergraduate engineering students come from Albuquerque high schools so the major effort has been local although follow-up actions are taken with all New Mexico students indicating an interest in studying engineering to the U.N.M. high school visiting team. Personal letters are sent to all such state students encouraging them to attend U.N.M. and inviting them and their parents to attend the annual Engineering Open House to get acquainted with the College. This year, for the first time, luncheon meetings were held between engineering faculty and local high school teachers, councilors, and administrators. This particular mode of contact has proven to be very successful.
In addition to the College of Engineering booklets and pamphlets made available to the high schools, the Department of Civil Engineering this year made up its own publication for student recruitment purposes.

Table 1 presents enrollment figures and Table 2 presents data on the total teaching load of the College of Engineering.

**TABLE I**

ENGINEERING ENROLLMENTS AT U.N.M.
Semester I

<table>
<thead>
<tr>
<th>Classification</th>
<th>1964-65</th>
<th>1965-66</th>
<th>1966-67</th>
<th>1967-68</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen*</td>
<td>351</td>
<td>435</td>
<td>408</td>
<td>343</td>
</tr>
<tr>
<td>Sophomores</td>
<td>250</td>
<td>290</td>
<td>319</td>
<td>359</td>
</tr>
<tr>
<td>Juniors</td>
<td>190</td>
<td>176</td>
<td>188</td>
<td>174</td>
</tr>
<tr>
<td>Seniors</td>
<td>156</td>
<td>148</td>
<td>145</td>
<td>161</td>
</tr>
<tr>
<td>Graduate**</td>
<td>385</td>
<td>348</td>
<td>325</td>
<td>340</td>
</tr>
<tr>
<td>Total</td>
<td>1,332</td>
<td>1,397</td>
<td>1,385</td>
<td>1,377</td>
</tr>
</tbody>
</table>

*In University College
**Includes Los Alamos and Holloman

**TABLE 2**

ANNUAL TEACHING LOAD, COLLEGE OF ENGINEERING

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Student Enrollments</th>
<th>% Change</th>
<th>Student Credit Hours</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-64</td>
<td>5,667</td>
<td>+7.0</td>
<td>14,687</td>
<td>+6.9</td>
</tr>
<tr>
<td>1964-65</td>
<td>6,228</td>
<td>+9.9</td>
<td>16,140</td>
<td>+9.9</td>
</tr>
<tr>
<td>1965-66</td>
<td>6,431</td>
<td>+3.3</td>
<td>16,424</td>
<td>+1.8</td>
</tr>
<tr>
<td>1966-67</td>
<td>6,460</td>
<td>+0.5</td>
<td>16,724</td>
<td>+1.8</td>
</tr>
<tr>
<td>1967-68</td>
<td>6,280</td>
<td>-2.8</td>
<td>16,517</td>
<td>-1.2</td>
</tr>
</tbody>
</table>
The tables show that freshmen engineering enrollments have entered a rather steep decline, a source of real concern. On the other hand, this past year saw a reversal of the recent decline in engineering graduate enrollments. This is especially encouraging because it occurred in spite of the phasing out of the Sandia Technical Development Program.

Table 3 presents information concerning engineering degrees conferred at the University of New Mexico during the past four years.

TABLE 3
ENGINEERING DEGREES

<table>
<thead>
<tr>
<th>Degree</th>
<th>1964-65</th>
<th>1965-66</th>
<th>1966-67</th>
<th>1967-68</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.</td>
<td>147</td>
<td>124</td>
<td>132</td>
<td>140</td>
</tr>
<tr>
<td>M.S.</td>
<td>99</td>
<td>88</td>
<td>78</td>
<td>64</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>7</td>
<td>16</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Totals</td>
<td>253</td>
<td>228</td>
<td>220</td>
<td>222</td>
</tr>
</tbody>
</table>

III. Undergraduate Program

The action of the University Faculty this past year in eliminating early examinations for graduating seniors resulted in changes in the commencement procedure that proved to be very unpopular among the engineering senior class. It is hoped that something better than the procedure followed in June 1968 can be worked out for subsequent years. Difficulties were also encountered by seniors in getting copies of their final transcripts in time for admission to graduate schools, military commissioning and employment certification.

The following tables present information concerning suspension, probation, and students on the Dean's List.
TABLE 4  
SUSPENSION AND PROBATION

<table>
<thead>
<tr>
<th>Status</th>
<th>End of Semester I</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1965-66</td>
<td>1966-67</td>
<td>1967-68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Probation*</td>
<td>60</td>
<td>11.5</td>
<td>61</td>
<td>11.0</td>
</tr>
<tr>
<td>Suspended</td>
<td>8</td>
<td>1.5</td>
<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Removed from Probation</td>
<td>13</td>
<td>2.5</td>
<td>17</td>
<td>3.1</td>
</tr>
</tbody>
</table>

*Includes placed on probation and continued on probation

TABLE 5  
ENGINEERING STUDENTS ON DEAN'S LIST

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester I</th>
<th></th>
<th>Semester II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>1964-65</td>
<td>122</td>
<td>23.4</td>
<td>146</td>
<td>28.8</td>
</tr>
<tr>
<td>1965-66</td>
<td>145</td>
<td>27.7</td>
<td>149</td>
<td>28.0</td>
</tr>
<tr>
<td>1966-67</td>
<td>139</td>
<td>25.2</td>
<td>149</td>
<td>26.6</td>
</tr>
<tr>
<td>1967-68</td>
<td>157</td>
<td>27.0</td>
<td>159</td>
<td>29.2</td>
</tr>
</tbody>
</table>

Table 5 shows that more than 1/4 of the undergraduate engineering students are on the Dean's Honor Roll. Considering the difficulty and rigor of the engineering curricula, it is
very encouraging to see such a large percentage of the engineering students maintaining a B-average or better in their studies.

IV. **Student Prizes and Awards**

The following awards were made by the College of Engineering Student Affairs and Awards Committee, C. T. Grace, Chairman. This list does not include those awards and prizes that are solely those of the individual engineering departments. There are many of these and they are listed in the departmental reports following.

1. **Hamilton Watch Award** - James A. Flagstead, EE
2. **Harry L. Dougherty Memorial Prize** - J. A. Flagstead, EE
3. **George E. Breece Prize**
   - Charles L. Braun, ME
   - James A. Flagstead, EE
4. **Rufus H. Carter, Jr. Scholarships**
   - Martin F. Barker, CE
   - Albert W. Smith, Ch.E.
5. **Harry and Mabel F. Leonard Scholarships**
   - Albert Brooks, CE
   - Robert Clayton, CE
   - Roberto Fantechi, EE
   - Kent R. Hoffman, Ch.E.
   - Ronald G. Rosenbaugh, Ch.E.
   - Bruce A. Schneider, CE
6. **Eric H. Wang Memorial Fund Awards**
   - Robert M. Carter, CE
   - Michael W. Edenburn, ME
   - Roger J. Koerner, ME
   - Bruce Trafton, CE
7. **N.M. Society of Professional Engineers' Wives Scholarship**
   - Kristine E. Anderson, Ch.E.
8. **American Society for Testing Materials Senior Awards**
   - John Carmichael, EE
   - James Donnelly, EE
   - Dennis Mitchell, ME
   - Robert McNeil, CE
   - Randall Trembly, Ch.E.
9. **George A. Rutherford Scholarship**
   - Ray G. Arnold, CE
10. **Western Electric Fund Scholarship in Engineering**
    - Michael W. Edenburn, ME
11. **Western Electric Fund Supplemental Scholarships**
    - Ross Perkal, EE
    - Greg Utton, ME
12. **Women in Construction Scholarship**
    - Sung-Ling Liu, EE
In addition to the above, there were several engineering students who were selected for awards by non-University groups and organizations. It is almost impossible to obtain complete listings of these but those that can be identified are listed below:

1. The American Society of Civil Engineers Senior Award
   Jose E. Martinez, Jr.
2. Institute of Electrical & Electronic Engineers Sr. Award
   Charles G. Rowan
3. American Institute of Chemical Engineers Junior Award
   Gerald A. Chiramonte
4. Associated Contractors of New Mexico Scholarship
   Mario Sanchez
5. Outstanding Foreign Engineering Student
   Ernesto Perez - Mr. Perez is a senior CE student from Cuba and was recognized at the Annual Engineers' Luncheon during National Engineers' Week.

John C. Gustafson and Roger Paroz, senior ME students, won third prize in a national paper contest sponsored by the James F. Lincoln Arc Welding Foundation. Each man won $250 and $300 was awarded to the U.N.M. Department of Mechanical Engineering.

Jose E. Martinez, Jr., senior CE student, won first prize in the regional student paper contest at a meeting of the American Society of Civil Engineers in Albuquerque on February 16-17, 1968.

At the initiation and dinner on May 20, 1968, the following engineering students were initiated into Phi Kappa Phi, national honorary society:

**Seniors**

John England, ME  
Eugene L. Neau, EE  
Dennis E. Mitchell, ME  
Ted Raad, Ch.E.

**Juniors**

Michael W. Edenburn, ME
V. Graduate Program

During Semester I, 1967-68, there were 340 engineering graduate students registered at U.N.M., 41 of whom were at Los Alamos Scientific Laboratory and 19 at Holloman Air Force Base. During that semester, the College of Engineering had 15.5 percent of all the graduate students registered at the University. After several years of being the largest graduate department on campus, the Department of Electrical Engineering was nosed out this year by the Department of English. The three largest graduate departments on campus were English (142), Electrical Engineering (139), and History (138).

Although Sandia Corporation has been talking about phasing out its Technical Development Program for some time, it was not until this year that a definite termination date was established. It is now definite that the Sandia T.D.P. will end in June 1969. First established in 1959, this program has been a real challenge and source of strength for the College of Engineering. It has provided top-notch graduate students in sufficient quantities to enable the Departments of Electrical and Mechanical Engineering to build first-class graduate programs. During its nine years of operation, the Technical Development Program has produced 321 M.S. degrees in E.E. and M.E.

The College of Engineering regards the termination of T.D.P. with real regret, but is pleased and reassured that Sandia Corporation finds this step to be necessary for reasons other than dissatisfaction with the program. Fortunately, the engineering
graduate program has developed to the point where the termination of TDP should not result in any serious perturbations. In addition, the new computer science program being started in 1968-69 with a fairly substantial input of Sandia students will hopefully make up much of the difference. This new computer science program, devised by a committee under the chairmanship of Dr. Stoughton Bell, consists of computer options in three existing M.S. programs: engineering, mathematics, and business administration. Whether or not a curriculum and/or department of computer science will be established at U.N.M. remains to be seen. For the 1968-69 year at least, the computer science program will be covered by a T.D.P. type of contract with Sandia Corporation and will be placed under the general administrative direction of Prof. C. T. Grace, Director of Sandia Programs.

Sandia Corporation has also established a new doctoral study program under which selected Sandia employees will engage in full-time doctoral studies at an approved university. Sandia designated 14 men to begin the program with the 1968-69 academic year. Of these, five opted to attend the University of New Mexico.

The Los Alamos Scientific Laboratory has an advanced study program under which selected employees can pursue full-time graduate study at approved universities. Next year Ludwig A. Gritzo and W. M. Sanders will begin work on their doctorate in nuclear engineering on the U.N.M. campus under this program.

The effect of current Selective Service regulations on next year's graduate enrollments remains a big question. In particular, the supply of available research, teaching, and
graduate assistants is subject to considerable doubt. As the law now stands, student deferment ended June 30, 1968 for young men between the ages of 18 and 26 who (1) had completed requirements for the bachelor's degree, (2) had completed their first year of advanced study, or (3) who had completed work for a master's degree. Only graduate students in health-related fields are eligible for further deferments. The Scientific Manpower Commission has predicted that the disciplines of physics and engineering will be the hardest hit in the sciences, with first-year graduate classes down over 60 percent.

Another dark side to the graduate enrollment picture are appropriations cuts by Congress resulting in drastic decreases in number of federally supported fellowships and traineeships available for 1968-69. The total of N.D.E.A. Title IV fellowships has been almost halved from last year's level. NASA's traineeships have been reduced by nearly 90 percent.

VI. Placement

The national demand for engineers has declined somewhat from last year's all-time high. Nevertheless, recruiting on the U.N.M. campus for engineering graduates continued at a hectic pace this past year. As has been the case for several years, more companies and agencies sent recruiters to the campus looking for engineers than there were engineering graduates. Consequently, every job-seeking engineering graduate received several job offers with the best students receiving as many as ten bona fide offers of employment.

Starting salaries continued to climb to startling levels. Table 6 presents data on average salary offers for the engineering class of 1968.
### Table 6
AVERAGE MONTHLY SALARY OFFERS, B.S."

<table>
<thead>
<tr>
<th>Department</th>
<th>Class of 1967</th>
<th>Class of 1968</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.N.M.</td>
<td>Nat'l. Average</td>
</tr>
<tr>
<td>Chemical</td>
<td>$765</td>
<td>$733</td>
</tr>
<tr>
<td>Civil</td>
<td>722</td>
<td>706</td>
</tr>
<tr>
<td>Electrical</td>
<td>746</td>
<td>728</td>
</tr>
<tr>
<td>Mechanical</td>
<td>733</td>
<td>720</td>
</tr>
</tbody>
</table>

*Data supplied by U.N.M. Placement Bureau

Table 6 shows that U.N.M. graduates, as they have been doing for many years, again received starting salaries substantially in excess of the national averages.

### VII. Research

The most recent complete data available on U.N.M. research is for the 1966-67 academic year. Table 7 presents data on the engineering research program for the past few years.

#### Table 7
REIMBURSEMENT FOR SPONSORED RESEARCH

<table>
<thead>
<tr>
<th>Division</th>
<th>Total Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>$398,642</td>
</tr>
<tr>
<td>All-University</td>
<td>$2,168,704</td>
</tr>
</tbody>
</table>

Although not administered by the Bureau of Engineering Research, the Civil Engineering Research Facility (CERF) does research of an engineering nature, the reimbursed amount of which was $869,513.23 during 1966-67. This makes a total volume of $1,455,705.48 of engineering research for that year.

As Table 7 illustrates, engineering research increased
strongly this past year. All indications are that another large increase was experienced during the 1967-68 academic year. The contract volume of research on hand with the Bureau of Engineering Research as of June 1, 1968 totalled something over $850,000. A later section of this Report contains detailed information concerning engineering research performed on campus under the Bureau of Engineering Research.

The College of Engineering was one of a select group chosen for "Project Themis", a new Defense Department program started in 1967. U.N.M. was one of 50 institutions selected from 480 applicants. The proposal was prepared by the Departments of Electrical Engineering and Mathematics with Dr. Wayne Grannemann, Professor of Electrical Engineering, as head of the research team. The U.N.M. program will involve both experimental and theoretical work designed to obtain knowledge about what happens to materials in electronic devices when they are exposed to radiation. A long term project, the first year's budget was set at $185,000 with the project monitor being the U. S. Office of Naval Research.

Whether or not the College of Engineering can maintain its high research level is a matter of some concern. The large bulk of engineering research is funded by federal agencies and much of this by defense agencies. Early in 1968, defense and space agency spending for research at universities was cut by 20 percent. Because of the Vietnam war, other governmental bodies are reducing their research support, including the National Science Foundation which is an important source of engineering research funds. The effect of these continuing cutbacks on the College of Engineering is, as yet, largely unknown.
The annual Engineering Open House was held February 23-24, 1968. This is a student-sponsored activity and attracts large numbers of junior-high and senior-high students as well as townspeople from all over New Mexico. This year, however, the attendance was reduced somewhat by a public schools teachers' strike in Albuquerque at the time of the Open House. The U.N.M. Associated Students again made funds available to the Engineers' Joint Council to help defray Open House expenses. (The Associated Students budget has been allocating approximately $1,000 each year to the Engineers' Joint Council). This year, as in the past, the Albuquerque Technical Council provided funds to pay transportation costs of out-of-town students attending Open House.

John King, CE, won the prize for the best individual exhibit for his illustration of the operation of a water treatment plant. The trophy for the best over-all departmental exhibits was won by the Department of Mechanical Engineering.

One of the cleverest exhibits was prepared by senior electrical engineering students of Dr. Ruben Kelly. They designed and constructed a special digital computer that plays the game of tic tac toe. This machine was built as part of a course project but proved to be very popular at Open House. The computer was designed so as never to lose a game although the machine can be switched to forget some of its logic and then will lose a game occasionally.

Mr. Robert Carter, a civil engineering senior, served very capably as president of the Engineers' Joint Council for the 1967-68 year. Mr. Michael Edenburn, a mechanical engineering senior, was elected president of EJC for the coming year.
Professor C. T. Grace, Assistant Dean of Engineering, did his usual fine job of working with the engineering students in his capacity as Chairman of the Student Affairs and Awards Committee of the Engineering College.

The Albuquerque Chapter of the New Mexico Society of Professional Engineers honored the graduating engineering seniors at a special dinner at the Western Skies Motor Hotel on the evening of November 27, 1967. This annual affair enables many students to meet their future employers and associates and also helps to indoctrinate them into the activities of their chosen profession.

IX. Faculty

Effective 1967-68, the following men joined the full-time professorial staff of the College of Engineering:

- H. T. Cates, Ph.D., Asst. Professor of Electrical Engineering
- R. C. DeVries, Ph.D., Asst. Professor of Electrical Engineering
- Y. C. Hsu, Ph.D., Asst. Professor of Mechanical Engineering
- G. W. May, Ph.D., Asst. Professor of Civil Engineering
- R. G. Vaughan, Ph.D., Asst. Professor of Civil Engineering
- F. C. Wessling, Ph.D., Asst. Professor of Mechanical Engineering

The following engineering faculty received promotions in rank effective July 1, 1968:

- J. B. Carney to Assoc. Professor of Civil Engineering
- K. T. Feldman to Assoc. Professor of Mechanical Engineering
- R. L. Long to Assoc. Professor of Nuclear Engineering
- G. E. Triandafilidis to Professor of Civil Engineering

After eight years of service in that office, Dr. Richard H. Clough resigned as Dean of the College of Engineering as of the end of the 1967-68 academic year. He will return to full-time teaching and research as Professor of Civil Engineering. Under the able chairmanship of Professor M. C. May, an advisory committee of engineering faculty functioned to screen applicants for the position and to recommend final candidates for administrative
consideration. After examining the credentials of approximately 150 nominees, the committee submitted a list of names to Vice-President Heady for consideration. After interviewing several of these candidates, three of whom were from outside U.N.M., Dr. Richard C. Dove, Chairman of the U.N.M. Department of Mechanical Engineering, was appointed as the new Dean. His duties commenced July 1, 1968. Dr. Maurice W. Wildin was named as Acting-Chairman of the Department of Mechanical Engineering to replace Dr. Dove.

This year, the University finally found it possible to establish a limited number of joint faculty appointments with Sandia Corporation. Patterned after the Oak Ridge-University of Tennessee arrangement, three employees of Sandia Corporation were selected to receive regular University faculty appointments. The University pays 20 percent of the man's salary for 9 months and receives the equivalent of one full day's service per week. The three appointees were: Dr. D. R. Morrison, Professor of Mathematics; Dr. B. T. Kenna, Associate Professor of Chemistry; and Dr. J. D. Williams, Associate Professor of Electrical Engineering. It is hoped that the University can continue this very valuable arrangement.

The year saw the formal establishment of a U.N.M. Chapter of the American Society for Engineering Education. Dr. K. T. Feldman was elected as Chairman, Dr. E. J. Nowak as Secretary, and Dr. R. D. Kelly as Institutional Representative (1971) and Activity Coordinator.

The College of Engineering was very proud to have Dr. Ruben D. Kelly, Associate Professor of Electrical Engineering, receive the annual Western Electric Fund Award for Excellence in Engineering Instruction. The award was presented to Dr. Kelly at
the meeting of the Southwest Section, American Society for Engineering Education, at Texas A & M University on March 22, 1968. The award, consisting of a citation and $500, is based upon teaching ability, research, professional stature, and publications.

Dr. R. C. Dove, Chairman of the Department of mechanical Engineering, shared a top award from the Instrument Society of America for a technical paper. The award of a plaque and $500 prize was for the best paper to be published by the Society during the year.

During the 1967 summer months, two University professors participated in research at Sandia Corporation under a program financed by an A.E.C. grant to the Associated Western Universities. Dr. Roy Johnson, Asst. Prof. of Civil Engineering, and Dr. E. J. Nowak, Asst. Prof. of Chemical Engineering, participated.

It is worthy of note that Dr. W. L. Everett, Associate Professor of Nuclear Engineering, presented a paper at the Eighth International Conference on Phenomena in Ionized Gases in Vienna, Austria, August 27 – September 2, 1968. The paper was co-authored with Dermot Kelleher who recently received his Ph.D. in nuclear engineering at U.N.M.

It simply must be pointed out one more time the impossible situation that the 9 months contracts of department chairmen impose on the College of Engineering. It is just not possible to lock up the engineering departments during the summer months without major disruption and missed opportunities. Generally speaking, it is only through the gratuitous donation of their time by the chairmen during their summers that more
previous harm to the many continuing programs is not suffered. It is a fact of life that engineering programs are year-around activities and the summer months are as busy as any other period of the year. Some system for providing summer employment for the department chairman simply must be devised.

X. Laboratory Equipment

The College of Engineering continues to pursue every program that provides any form or kind of support to buy laboratory equipment. Things would indeed be catastrophic if our equipment budgets were the only source of new equipment.

Two grants for 1968-69 were obtained from the N.S.F. Undergraduate Scientific Instructional Equipment program. The Department of Chemical Engineering received an equipment grant for $29,800 ($8,000 from U.N.M. matching funds) to equip a new laboratory for process dynamics and control. The Department of Civil Engineering received an equipment grant for $5,800 to purchase seismic equipment for soil dynamics experiments. It is also anticipated that the Departments of Civil and Mechanical Engineering will receive about $5,000 of equipment money from Title VII of the Higher Education Act of 1965. Proposals were submitted to the New Mexico Bureau of Educational Finance in February 1968 for these funds.

On May 15, 1968, bidding documents were released for approximately $200,000 worth of scientific equipment and furnishings for the new Engineering Center. Bids were opened on June 26, and delivery will begin early in the fall of 1968.

After literally years of trying every known source of funds and writing several proposals, it is believed that the College of Engineering is finally going to get a 2 mev flash
x-ray unit. This is a very important and basic equipment item in work associated with the effects of radiation on materials. With the help of some matching funds from U.N.M., it is anticipated that the Project Themis research program will buy the unit and transfer it to U.N.M.

XI. Physical Plant

Construction of the new Engineering Center was underway all this past year and much progress has been made. The contract with K. L. House Construction Co. requires project completion by mid-November 1968, but there is some question as to whether this date will be met or not. Spaces presently occupied by the College of Engineering in the Research Center, Engineering Annex, Geology Building, Science Lecture Hall, the Kappa Kappa Gamma House, and Zimmerman Library will be vacated when the Center is completed and ready for occupancy.

The remodeling of the Civil Engineering Research Building and the Electrical Engineering building was completed during the summer and early fall of 1967. The excellent and very usable spaces resulting made the trials and tribulations of remodeling well worth while. To clear the E.E. building for the work, the Bureau of Engineering Research moved to the Kappa Kappa Gamma house in July 1967 where it will remain until the Engineering Center is finished.

A Riehle self-contained pulsator for fatigue tests of structural materials and test frame have been installed in the newly remodeled Civil Engineering Research Building. The pulsator was secured through two NSF grants and U.N.M. funds. The load frame was donated by the Steel Fabricators Advisory Committee of New Mexico.
XII. College Activities

The College of Engineering acted as co-sponsor for the following major conferences held on campus:

"International Symposium on Wave Propagation and Dynamic Properties of Earth Materials", August 23-25, 1967, co-sponsored with the National Science Foundation and the New Mexico Section of the American Society of Civil Engineers.

Eighth Annual Symposium, "The Concept of Design", November 17-18, 1967, co-sponsored with the New Mexico Section, American Society of Mechanical Engineers.


Relations between the College of Engineering and its many alumni has never been really organized to any extent. Part of this is undoubtedly due to lack of action on the part of the Dean's office. However, lack of facilities, funds, and manpower has also hindered the development of any real liaison between the two. At 1967 Homecoming, a printed "Engineering College Newsletter" was sent out to all engineering alumni which received much favorable comment. It is anticipated that such newsletters will be issued at regular intervals in future years. In addition, it is hoped that Dean Emeritus M. E. Farris will find it possible to help develop favorable alumni relations from his office in the new Engineering Center.
Annual Report of the Sandia Technical Development and Educational Aids Programs,
The Accountability Office for Sandia Equipment and
The Kirtland A.F.B.-U.N.M. Cooperative Educational Program

July 1, 1967 - June 30, 1968

Charles T. Grace, Director

I-A. General Information

Sandia T.D.P. & E.A.P.

The University contracts with the Sandia Corporation to operate the Technical Development and Educational Aids Programs were renewed for the school year 1967-'68. The proposed contract for 1968-'69 has been submitted by this office and is under consideration by the University and the Sandia Corporation.

THE TECHNICAL DEVELOPMENT PROGRAM

The entering class 1967-'68 will be the last of the regular T.D.P. classes. The program is being phased out and replaced by the Year on Campus Program involving 15 universities. The University of New Mexico is one of the 15 schools, but the student input to our graduate programs will be greatly reduced, since 15 rather than 1 school will be involved.

The new class of 1969 entering the program in September 1967 was made up of 19 bachelor of science electrical engineering
students and 11 bachelor of science mechanical engineering students. In addition to the bachelor of science students, 6 master of science electrical engineering students and 11 master of science mechanical engineering students enrolled to complete the core course of TDP.

The class of 1968 entered its second year of the program with 11 electrical engineering students and 6 mechanical engineering students. Two electrical engineers and one mechanical engineer terminated employment and withdrew from school during the first year of the program. One mechanical engineer withdrew from TDP and entered into the EAP program. Of the 17 men on roll Semester I 1967-'68, all but one received his master of science degree at the June Commencement. The other man failed his comprehensive examinations in mechanical engineering. He will be eligible to take the examination again next year.

The table below is a summary of the above information.

<table>
<thead>
<tr>
<th></th>
<th>First Enrolled</th>
<th>Completed TDP June 1968</th>
<th>MS Degrees Class of 1968</th>
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<td>11</td>
<td>11</td>
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<tr>
<td>M. E.</td>
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<td>5</td>
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## EDUCAATIONAL AIDS PROGRAM

### Semester I. 1967-'68

<table>
<thead>
<tr>
<th>Program</th>
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<tr>
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<td>Civil Engineering</td>
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### Arts and Sciences

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</tr>
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<td>English</td>
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<tr>
<td>Geology</td>
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### Education

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### Fine Arts

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### University College

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### Total Enrolled for Degrees

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<th>Ph.D.</th>
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<tr>
<td>Total Students</td>
<td>51</td>
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<td>90</td>
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<td>Total Students</td>
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<td>in Degree Programs</td>
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<td>Graduate Specials-Not for Degree</td>
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<td>Non-Degree Students</td>
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**TOTAL E.A.P. ENROLLMENT SEM. I** 232 (Up 7% from '66-7)
EDUCATIONAL AIDS PROGRAM (continued)

Semester II, 1967-'68

<table>
<thead>
<tr>
<th>Field</th>
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<tr>
<td>Electrical Engineering</td>
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<td>Mechanical Engineering</td>
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<td>Civil Engineering</td>
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<td>Nuclear Engineering</td>
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<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>17</strong></td>
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<td>English</td>
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<td>1</td>
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<td>Geology</td>
<td>2</td>
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<td>0</td>
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<tr>
<td>Journalism</td>
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<td>0</td>
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<td></td>
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<tr>
<td>Mathematics</td>
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<td>10</td>
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<tr>
<td>Physics</td>
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<td>1</td>
<td>5</td>
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<td>Psychology</td>
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<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>10</strong></td>
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<table>
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<tr>
<td>Fine Arts</td>
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<td>2</td>
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<tr>
<td>University College</td>
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<td><strong>Total Enrolled for Degrees</strong></td>
<td><strong>61</strong></td>
<td><strong>40</strong></td>
<td><strong>95</strong></td>
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Total Students in Degree Programs: 196
Graduate Specials-Not for Degree: 7
Non-Degree Students: 27

TOTAL E.A.P. ENROLLMENT SEM. II: 230 (Up 6% from '66-7)
DEGREES GRANTED TO EDUCATIONAL AIDS STUDENTS JUNE 1968

Engineering
Bachelor of Science (4 E.E., 1 M.E.) 5
Master of Science (3 E.E.) 3
Doctor of Philosophy (3 E.E., 1 M.E., 1 Ph.D.) 5

Arts and Sciences
Bachelor of Arts (Math.) 1
Bachelor of Science (1 Chem., 1 Phys.) 2
Master of Arts (1 English, 1 Math.) 2
Master of Science (Physics) 1
Doctor of Philosophy (Math.) 1

Business Administration
Bachelor of Business Administration 1
Master of Business Administration 4

TOTAL DEGREES EARNED UNDER E.A.P. 25

Accountability Office for Sandia Equipment Loans to U.N.M.

This is the third year that this office has had the duty of accounting for the items of equipment on loan to the University from the Sandia Corporation. These loans are in two categories: Excess equipment that is used in the various departments for educational purposes. Equipment that is on loan to individual faculty members for use on contract research for the Corporation.

The new accounting system introduced last year has resulted in a much better control and greater ease in the annual physical inventory of equipment at the University.

The annual inventory was made the week of April 1, 1968.
by Mr. Edsel Gunn of Sandia and C. T. Grace of the University.

This year, through the excellent cooperation of Mr. Gunn, the audit was made in 3½ days as compared with 5 days last year. The volume of equipment on the campus amounts to $505,500.00.

For the past two years it has been mentioned that, to the Director's knowledge, no money has been budgeted by the University to cover the operation of the Office of Sandia Equipment Accountability. It is again suggested that this be considered. It is estimated that the Director spends approximately ten percent of his time, and that his secretary spends about twenty percent of her time, handling the various tasks that this office entails.

**THE KIRTLAND A.F.B. - U.E.M. COOPERATIVE EDUCATIONAL PROGRAM**

This is the third year that this office has served as liaison between the University and Kirtland Air Force Base for their undergraduate cooperative educational program.

This year 15 students were enrolled Semester I, and 12 students were enrolled Semester II.

Three men received their bachelor of science degrees:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Engineering (M.E.)</td>
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<tr>
<td>Arts and Sciences</td>
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<td>Physics</td>
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<tr>
<td><strong>TOTAL DEGREES</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

June, 1958.
I-D. ----

I-C. Appointments to Staff

Mrs. Mary Evelyn Coleman, Secretary, August 28, 1967.

I-D. Separations from Staff

Gaynelle Thomas, Secretary, August 31, 1967.

II. Biographical Supplement for the Director, C. T. Grace

1. through 5. - no new items

6. Activities in learned and professional societies:
   b. As chairman of the Nominations Committee and a member of the Policy Committee, I attended the annual meeting of the Gulf Southwest Section of the American Society for Engineering Education. As a member of the Policy Committee, I rewrote and simplified the by-laws of the Section. It appears that the revision will be accepted by a mail ballot of the members of the Section.
   c. I have been active in the Albuquerque Chapter of the New Mexico Society for Professional Engineers.
   d. I have been active in the New Mexico Section of

7. Other professional activities:
   I served as a design consultant to the Los Alamos Scientific Laboratories for the 16th year.

8. Non-teaching University Services:
   a. I continued to serve with Dean A. H. Clough on the advisor group to the architects of the new Dean Farris Engineering Center.
   b. I served as the Engineering College collector for the United Fund Drive.
   c. I edited and circularized the fifth edition of the Engineering College Newsletter. 1800 copies were sent out, of which 120 were returned because of insufficient or incorrect addresses. This is a great improvement over last year.
   d. I have continued to work for newspaper and technical magazine coverage of the activities of the faculty and students of the College. The results have been decidedly better than last year.
e. I have continued to serve as the faculty advisor to Engineers' Joint Council. I again contacted the principals and superintendents of the large schools of the State to encourage student attendance of the annual Engineers' Open House. The teachers' strike in the Albuquerque schools cut into the attendance, but over 1,000 visitors were recorded at the registration desk, and many others did not go past the registration desk.

f. I served on the College Administrative Committee, the Scheduling Committee, as chairman of the College Scholarships and Awards Committee, and as a member of the Dean of Engineering Selection Committee, charged with the screening of applicants for the replacement for Dean R. H. Clough.

g. Public Service:
Member of the Albuquerque Optimist Club (Boys Work). I administered the National Junior Engineering Aptitude Test for the Albuquerque area.
The Bureau of Engineering Research has had a total funding of $1,126,014.44 from Government contracts. This was distributed as follows: Mechanical Engineering, $337,461.23; Electrical Engineering, $631,139.23; Nuclear Engineering, $39,963.98; Chemical Engineering, $27,000.00; and Civil Engineering, $90,450.00.

We have employed 86 salaried personnel and 53 hourly personnel. The salaried personnel are mainly faculty and graduate students, while the hourly personnel are mainly undergraduate students. The number of research contracts in force during the past year was 40. The number of research proposals submitted to potential Government sponsors in the past year was 41, of which to date 22 have been successful, with the balance of 19 still pending. Eighteen research contracts were awarded as a result of proposals submitted during the preceding fiscal year.

The most pressing need in the Bureau of Engineering Research is for additional administrative help. The present authorized administrative load is one 1/2 time director for a total of $1,126,014.44 per year of research. This is the same as was allowed when the total research volume was approximately 1/3 this volume.
The Bureau of Engineering Research needs a means of paying staff faculty members to write research proposals in order to obtain a higher quality of research proposals. The technical writer position needs to be expanded to half time and to be filled by someone with proposal writing experience. This will improve our success ratio on fundings. This program could be paid out of research overhead and should pay off handsomely in terms of research funding for the Bureau of Engineering Research. In fact new research overhead would quite probably more than pay for the expense. There is also a need for more research equipment, particularly of the type that cannot be obtained by grant or contract funding.
## Research Contracts in Force
### July 1967–June 1968

<table>
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<tr>
<th>Research Contract</th>
<th>Project Supervisor</th>
<th>Contracting Agency</th>
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Mohler, R.R.       Moon, S.
Morris, D.E.       Nielsen, K.W.
O'Dell, R.D.       Omid'Varan, C.
Park, B.K.         Petersen, D.P.
Phelan, J.R.       Phillip, L.
Pierson, J.H.      Potts, J.S.
Pritchard, R.     Richards, C.G.
Schenk, K.A. *    Schnurr, R.
Schreyer, H.L.     Schulz, G.L.
Sewards, T.V.      Shannon, M.
Skoglund, V.J.     Smith, W.D.
Southward, H.D.    Steelman, J.E.
Thacker, L.W.      Thorn, D.C.
Treat, C.H.        Walters, W.F.
Wambold, J.        Wheeler, C.
Williamson, T.A.   Wilson, L
Yao, J.T.P.        Yeh, H.Y. * 

* Also Hourly Personnel
REPORTS PUBLISHED
July 1967 - June 1968


REPORTS PUBLISHED (cont.)


REPORTS PUBLISHED (cont.)


I. A - ACHIEVEMENTS

1. Faculty

The academic year 1967-68 has been rewarding and successful in many ways.

All faculty members are returning for the academic year 1968-69 with the exception of Dr. D. B. Phillips who has decided to return to industry. It is worthy to note that all have contributed to the life of the University community by serving on the University committees as well as the Engineering College Committees. Their services to the state and the community in general are commendable.

A proposal prepared under the direction of Dr. A. A. Armstrong, Jr. to the National Science Foundation (Instructional Scientific Equipment Program) for $20,000 was approved last spring to modernize the Unit Operations Laboratory. Dr. Armstrong also wrote a proposal for the Institutional NSF Grant for additional equipment and was granted $5150. All of this equipment has been ordered and installation was started.

Dr. R. E. Traeger presented a paper at the 12th Annual Technical Conference of the Cellular Plastics Division, Society of Plastics Industry held in Washington, D. C., October 16-17, 1967, written by Dr. Armstrong and Dr. Traeger: "Short-Time High Temperature Effects on Plastic Foams."

Dr. E. E. Cox spent the summer of 1967 working in the Materials Science Department at Stanford University under the direction of Dr. W. A. Tiller, the present Executive Head. His project was entitled, "Selenium Crystallization of Ultra-High Pressures," and involved studying
the growth kinetics of selenium single crystals. Dr. Cox's project was sponsored by NSF under the Research Participation for College Teachers Program. He continued a project entitled "Crystallization Kinetics of Long Chain Molecules," which was approved for support under an academic year extension program, and is presently under progress with the aid of student help.

In conjunction with his interest in Materials, Dr. Cox organized a seminar series entitled "Materials Science Seminars" in which noted outside speakers from Sandia Corporation and LASL spoke in their respective fields of research. The first of these speakers was: Dr. R. Schwoebel on "Atomic Crystal Growth," followed by Dr. R. Traeger (formerly of this department) on "Polymers," and Mr. R. Baughman on "Techniques of Crystal Growth." All of these talks were held on campus in the Chemical Engineering Building, attracting audiences of approximately 20 persons. Dr. R. D. Fowler of LASL spoke on "Superconductivity" at the only seminar held at that location.

A proposal to the UNM Alumni Development Fund was successfully funded and will provide $1200 for the undergraduate Unit Operations Laboratory for use in a project entitled "Copper Recovery From Leach Liquors" by liquid ion exchange. It is hoped that this experiment will both aid in the recovery methods for copper, one of this state's major mineral products, as well as teach the students.

Success has also been obtained in enrolling Sandia Corporation graduate student in a course entitled "Transport Phenomena." Their reception of the material has been good, and they have expressed interest in taking more courses of this nature and in basic chemical engineering.
Two introductory Materials Science courses were taught at Los Alamos Graduate Center by Dr. Cox.

Dr. E. J. Nowak has continued his research activities in the field of catalysis. A grant of $50,000 from NSF and $4,086 from the University will support research on sulfided nickel catalysts for two years with two graduate students under Dr. Nowak's direction. Also, Dr. Nowak has submitted a proposal to Sandia Corporation for support of fundamental studies related to the NSF-supported research. These proposed studies are a continuation of research in which he participated at Sandia Corporation last summer, and which will be continued by him this summer under an ANU Faculty Appointment Grant at Sandia.

A request written by Dr. Nowak to the Greater URM Fund for funds to build a catalytic chemical reactor to be used in undergraduate teaching has been approved in the amount of $1,025. The reactor, to be constructed in the fall, will be used for laboratory instruction in CHE 415L and CHE 481-2L.

A graduate course offering CHE 561 (Kinetics of Chemical Processes), has been completely revised and updated by Dr. Nowak. He has also incorporated analog and digital computation in CHE 470 (Applied Chemical Kinetics). The use of an analog computer for applied kinetics calculations was demonstrated with the cooperation of the Mechanical Engineering Department, and the University computer was used by groups of students to solve complex design-related problems in applied kinetics.

Under a grant of $19,526.00 from Sandia Corporation, work has been completed by Dr. Castonguay on the Rover Post-Operational Destruct System Instrumentation tests. Several of the undergraduate chemical engineering students have worked on this project, enabling them to obtain
important experience in research and development that should be helpful in their engineering careers.

Dr. D. D. Phillips has been very actively engaged in the development of the department's Process Dynamics and Control Course (ChE 354). The most rewarding achievement in this area was the complete funding of his $29,800 proposal to establish a new laboratory to verify and reinforce the principles and concepts taught in the lecture portion of the Process Dynamics and Control Course. The National Science Foundation will provide $14,900, and the University will provide a matching amount. The new laboratory will be composed of several fully-instrumented small scale processes. The control systems will be all-electronic, and hence, the students will have an opportunity to become familiar with modern instrumentation of the type most suitable for connection to process control computers. This new laboratory will give ChE 354 the potential of being one of the best process dynamics and control courses in the country. Dr. Phillips started ChE 354 from scratch second semester, 1966.

A graduate level course in the application of matrices to chemical engineering problems was given by Dr. Phillips the first semester of this year. Further development of this area is likely through cooperative efforts with the Computer Center.

Dr. Phillips has been active this past year in two fields of applied research. He directed two projects -- "Heat Transfer Characteristics of Carbon Black Laden Reactor Gases" and "Computer Calculation of Theoretical Flame Temperatures for Arbitrarily Complex Feed Stocks." The Cabot Corporation of Pampa, Texas, provided the necessary equipment for the experimental study.
Active participation by the members of the faculty in career days, Science Fairs and the American Chemical Society have brought the faculty in closer contact with the young men and women of the Junior and Senior High School age who will be the University students of tomorrow.

The Department has maintained its close contact with the school counselors and the chemistry instructors in the Albuquerque schools through the program of sending them monthly appropriate literature on vocations. Through the New Mexico Section of the American Chemical Society, other schools in New Mexico will be added to the list to receive this information. A copy of "Chemical and Engineering News" devoted to career opportunities in Chemical Engineering, Chemistry and Chemical Technology was sent to High School Counselors throughout the state. Letters congratulating students and pointing out the opportunities available at UNM have been sent to members of graduating senior classes in New Mexico. The names of the prospective students were obtained from the list supplied by the UNM Student Aids Division.

The Department has representation on the North Central Association Accrediting Committee for secondary schools affording the opportunity of observing the teaching and subject matter in the sciences as well as meeting the science and mathematics instructors in the various schools. Membership on such a committee has been very helpful in enhancing the image of the University and Engineering College throughout the state.

2. Students

A smaller number of Bachelor of Science degrees than last
year were awarded during the June, 1968 Commencement. This is slightly
less than the Bachelor of Science degrees in Chemical Engineering awarded
last year which placed the Department in the upper third nationally
with respect to the number of undergraduate degrees conferred. Starting
salaries were again excellent for our graduates ranging from $750 to
$870 per month with an average accepted offer of $824. Approximately
half of the graduates accepted production, development and process
design engineering jobs with private industrial firms at locations in
the Southwest.

Two Master of Science degrees in Engineering Science of
Materials were awarded at Los Alamos Graduate Center.

1. Donald James Sandstrom, Plan I - Thesis Title,
   "Joining Graphites to Graphites with Transition Metal
   Foils."

2. Charles Clellan McPheters, Plan I - Thesis Title,
   "Mass Transfer of Oxygen in Sodium Gold Traps."

Gim Ten and Suresh Chandra are continuing their work toward
the Ph.D. in Chemical Engineering at the University of New Mexico on
a University fellowship.

Fifteen of the eighteen juniors will be working out in
industry this summer in Chemical Engineering positions which will rein-
force their theoretical studies at the University, and we have placed
four sophomores and one freshman in well paying positions in the
chemical engineering industry.

To give the young Chemical Engineer an overall viewpoint of
the industries in which he will apply his theoretical knowledge, plant
trips are an important part of our curriculum. Several students were
guests of Anaconda Mining Company at Grants, New Mexico, and had the
opportunity of observing the processes involved in the production of
uranium. They also visited the Shell Refinery at Gineza, New Mexico.

Several of the undergraduate students have been honored by
election to Blue Key and Sigma Tau (Arthur LeMaster, Douglas Hamilton,
Ronald Rosenbaugh, and Gerald Chiaramonte). Other important awards
have been:

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<tr>
<th>Name</th>
<th>Scholarship/Merit Award</th>
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<tr>
<td>David K. Baumgardner</td>
<td>Staufer Chemical Company Scholarship $500.00</td>
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<tr>
<td>Clifford B. DeRosa</td>
<td>Universal Oil Products Company Scholarship</td>
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<td>Arthur LeMaster</td>
<td>Universal Oil Products Company Scholarship</td>
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<td>James Houzer</td>
<td>Mobil Oil Company Scholarship</td>
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<tr>
<td>Thomas H. Rodgers</td>
<td>Staufer Chemical Company Scholarship $500.00</td>
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<td>Albert W. Smith</td>
<td>Rufus H. Carter, Jr., Scholarship $100.00</td>
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<td>Kent R. Hafeman</td>
<td>Harry and Mabel F. Leonard Scholarship</td>
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<td>Ronald C. Rosenbaugh</td>
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<td>Kristine E. Anderson</td>
<td>New Mexico Society of Professional Wives Scholarship</td>
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<td>Randall Trebley</td>
<td>American Society for Testing Materials Senior Award</td>
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<td>Gerald A. Chiaramonte</td>
<td>American Institute of Chemical Engineers Junior Award</td>
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Many of the student functions in the Chemical Engineering Depart-
ment are organized and coordinated by the University of New Mexico Student
Chapter of the American Institute of Chemical Engineers. The officers
for next year are:

- President: John Stevenson
- Vice President: Terry Williams
- Secretary: Bob Fullen
- Treasurer: Joe Rightmyer
- Engineering Joint Council Representative: Clark Dickson, Albert Smith
- Alternate to EIC: Hugh Parry
- Faculty Advisor: Dr. Kenneth E. Cor

Former graduates continue to contribute money to the Department
of Chemical Engineering trust fund which is now over $10,000. The interest
from this investment is being used for scholarships for second-semester freshman entering the Chemical Engineering field.

Department interest in its graduates, as well as its undergraduates, has been maintained throughout the years by the issuance of a Christmas newsletter. This year's letter, Vol XXIII, mailed to the departmental alumni on December 19, 1967, listed the addresses, activities and achievements of the more than 245 members who have received their training in the Department since the first graduating class of 1948.

A project carried on by the students, which the Department has supported heartily, is Engineering Open House held during Engineers Week in February. Hundreds of people have been attracted to this student affair, and many outstanding student exhibits have been shown. This year our department received the following awards: "Flow Control" 1st Place to Robert Stellaccio, Bob Pullen, Clark Dickson. "Nylon Extraction," 2nd Place, Victor Payne, William McClellan. "Liquid Extraction." 3rd Place, Douglas Hamilton, Gerald Chiaramonte, Larry Groves.

The undergraduate activities of a more social nature which have been a tradition throughout the years are:

1. The Annual Spaghetti Dinner given at Christmas time and prepared in the department with attendance last December of more than 75 people.

2. The Annual Spring Steak Fry and Picnic with more than 75 attending held at Doc Long's Picnic Grounds in the Sandias in May.

3. The Senior Dinner, given annually by the Department Chairman to the graduating senior class, held this year at La Bacienda.

3. Curriculum

The present curriculum of the Chemical Engineering Department
is meeting the needs of the students well. Employers of the Department's graduates indicate that it is one of the better schools in the country.

A few changes were made this year, however, to increase graduate quality and to provide the student with greater flexibility.

A second course in Chemical Engineering Materials Science was added. (Both courses were taught at the Los Alamos Graduate Center this year). This should increase the employment opportunities for the department's graduates in this important area of Chemical Engineering. There is a great shortage of competent people in this area of technology at the present time.

A course in process modeling and optimization was given this year at the graduate level. This will help meet the increasing need which Chemical Engineers have for tools to describe their systems in a quantitative manner.

Beginning this year, most freshmen expressing an interest in Chemical Engineering took the new, more comprehensive freshmen chemistry sequence, Chem. 121-122. This is the same sequence which is taken by the chemistry majors.

Computer methods and computations have been used successfully at the Sophomore-Junior level in the Process Calculations Courses. Both the IBM System 360 as well as the 1620 Computer were used to perform and solve intricate heat and material balances around a complete chemical plant. The reception from the students was excellent due to the fact that they were allowed to use their own initiative in the problem solution and the programming of the computer.

The Engineering Materials Science program on campus and at the
Los Alamos Graduate Center has been considerably strengthened through the efforts of Drs. Castonguay and Cox. Several visits have been made to Los Alamos to talk to the individual department heads and prospective students concerning the needs in regard to the program leading to the M.S. and Ph.D. degrees. Dr. Richard Williams, coordinator of the University's program at Los Alamos has been most helpful.

Visits with interested personnel at Sandia Corporation have been rewarding in regards to the Materials Science program.

The course offering in process dynamics and control (CHE 354) will be considerably strengthened next year because of the $29,800 National Science Foundation Grant (Instructional Scientific Equipment Program) given to the Department to establish and equip a process dynamics and control laboratory. This new laboratory will serve to verify, illustrate and reinforce the concepts and principles learned in the lecture portion of the course.

4. Facilities

The main Chemical Engineering laboratories have undergone needed repair and remodeling.

The $29,800 NSF Grant for a new process dynamics and control laboratory will probably require that additional floor space be allocated to the Department of Chemical Engineering. This grant, plus other successful proposals, will force the Department to expand more rapidly than was anticipated only one short year ago.

The space requirements for the grants received last year have just about exhausted all available space in the Chemical Engineering Building. Graduate student office space has been turned into a
instrumental analysis center housing a general purpose gas chromatograph and an infrared spectrophotometer. Unused space in the unit operations laboratory is now occupied by new fluid flow and heat transfer equipment.

The courtyard adjoining the Chemical Engineering Building was finished in concrete courtesy of the Cabot Corporation of Pampa, Texas. Cabot also has provided the Department with a carbon black pilot plant complete with all accessories.

5. Graduate School

Dr. D. D. Phillips again handled all of the administrative and research advisement duties for the Department's on-campus graduate students. There are presently three candidates for the Ph.D. degree in Chemical Engineering - the greatest number in the Department's history. Dr. E. J. Nowak is expected to take over the Graduate Advisor duties for the next year.

Two M.S. degrees in Chemical Engineering from Los Alamos Graduate School will be conferred at the June Commencement.

The Department continues to recruit graduate students in earnest. Several hundred letters and brochures were sent out to prospective graduate students. Next year additional measures will be taken to insure a steady flow of qualified graduate students into the Department.

Graduate courses have been revised for the current school year to reflect the modern trend in Chemical Engineering graduate work.

The Department has four graduate assistantships to facilitate the grading and laboratory operations in the Department.

6. Research

Supported Research projects have been conducted during the academic year by members of the faculty along their fields of interest.
Dr. E. B. Cox has been continuing his selenium crystal growth studies. Dr. E. J. Nowak’s catalysis investigations also continue to bear fruit. Two new applied research ventures were initiated this year in cooperation with the Cabot Corporation. The first involves a fundamental investigation of the heat transfer characteristics of carbon black laden reactor gases from typical furnace process equipment. The other is a digital computer study of the temperatures and compositions of flames generated from arbitrarily complex feed stocks. These projects have been under the technical direction of Dr. D. D. Phillips and the administrative direction of Dr. T. T. Casoquay.

Our undergraduate program involves supervised research. Undergraduate students have been actively engaged throughout the year in the following departmental projects:

1. Crystallization Kinetics of Selenium
2. Copper Enrichment by Liquid-Liquid Ion Exchange
3. Bentonite and Asphalitic Stabilization
4. Vaporization of Metals and Metallic Coating
5. Iron Ore Flotation and Recovery of Iron
6. Liquid Phase Hydrogenation
7. Thermodynamic Models for the Rocket Propellant Combustion Process
8. Production of Carbon Black
9. Theoretical Computation of High-Temperature

It is hoped that some of these projects will eventually yield to larger projects financed by outside funds and that the "spin-off" from them will result in an increased economic benefit to the State of New Mexico.

E. PLANS AND RECOMMENDATIONS

In many respects some of the Department’s plans and recommendations have been stated in the body of the report; but to bring them more clearly into focus for our own perusal we may state them as follows:
1. To continue efforts by the faculty to obtain outside contract research funds in fields commensurate with the individual and department interest, in both the graduate and undergraduate areas.

2. To exploit to a greater degree than in the past, New Mexico's resources in such a way as to help in the industrial development of the state. In some ways we may retard the "brain drain" to other states.

3. To exert a greater effort to increase the graduate enrollment in the department with our present staff.

4. To obtain suitable floor space for the Department's new process dynamics and control laboratory.

5. To continue to explore and obtain from alumni and industrial concerns funds for scholarships.

6. To continue to update and review graduate and undergraduate offerings in the Chemical Engineering curriculum.

7. To maintain excellence in teaching, which is the primary purpose of our existence, so that our graduates will receive in the future, as they have in the past, acceptance in any graduate school or industrial concern in the country.

8. To continue and develop the image of the Department, the College and the University to the public and New Mexico's schools.

9. To work closely with the Fission Products Inhalation Laboratories of the Lovelace Foundation in an effort to develop one or more cooperative research ventures.

10. To work closely with the Los Alamos Scientific Laboratory, and the American Chemical Society for a symposium on cryogenics.

11. To establish with interested personnel at the Sandia Corporation and the Los Alamos Scientific Laboratory an NSF Summer Institute for 1969 involving vacuum technology.
12. To evaluate the possibilities of cooperative education and summer school in Chemical Engineering.

13. To continue cooperative research studies with the Cabot Corporation.

C. APPOINTMENTS TO STAFF
D. SEPARATION FROM STAFF

Dr. D. D. Phillips, Assistant Professor, is terminating his position with the University effective June 7, 1960, and returning to industry.

His salary plus fringe benefits with the Geigy Chemical Corporation will be approximately double those received from the University of New Mexico.

II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL GEOGRAPHICAL SUPPLEMENTS

1. Advanced Study

2. Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere, Travel

   A. A. Armstrong, Jr. - Guest Lecturer, University of Nevada, for one week short course on "Radiation Chemical Processing" June 12-16, 1967.


   D. D. Phillips Summer School for Chemical Engineering Teachers, Michigan State University, June 1967. (Held in conjunction with the American Society for Engineering Education meeting).

3. New Scholaristic Honors, Fellowships

   K. E. Gun National Science Foundation Research Participant, Stanford University, June 12-September 11, 1967.

   D. D. Phillips Established new process dynamics and control laboratory with $29,000 NSF Undergraduate Equipment Grant.

4. Publications
A. A. Armstrong, Jr.

E. E. Cox
   b. Elected Advisor to Executive Board of Central New Mexico Section of American Chemical Society.
   c. Chairman, Nominations Committee, Central New Mexico Section, ACS
   d. Membership Committee, Central New Mexico Section, ACS
   e. Nominating and Election Committee, American Society for Engineering Education.

E. J. Nowak
   a. Attended "The Epsieff Centenary," a symposium devoted to current world-wide catalysis research, September 6-9, Evanston, Illinois
   c. Attended the 60th Annual Meeting of the American Institute of Chemical Engineers, November 26-30, 1967, New York City
   d. Co-chaired a symposium at the joint meeting of the A.I.Ch.E. and the Instituto de Ingenieros Quimicos de Puerto Rico, May 19-22, 1968, Tampa, Florida
   e. Presented a paper entitled "The Reduction of Nickel Oxide by Hydrogen" at the New Mexico Section of the American Vacuum Society Meeting in Albuquerque, March 13-15, 1968

7. Other Professional Activities

T. T. Castonguay
   b. Career Day and Guidance Seminars held at various Junior and Senior High Schools.

A. A. Armstrong
   a. Consultant to Sanita Corporation
K. E. Cox
a. Engineering Consultant to United States Fidelity and
Guaranty Company, and to Toulouse, Beul, Gallagher and
Walters, Attorneys.
b. KMEF spot announcement, "Chemical Engineering as a
Career."
c. Talk at St. Pius High School. "Chemical Engineering as a
Career."

K. J. Nowak
a. Seminar at Sandia Corporation "Molecular Beam Studies
of Gas-Solid Reactions" (July, 1967).
b. Seminar at New Mexico State, CH department, "Structures,
Properties, and Uses of Molecular Sieves" (May 18, 1968).
c. Consultant in Division 5123, Sandia Corporation and also
to Celanese Chemical Company, Corpus Christi, Texas.

3. Non-Teaching University Service

T. T. Castanquay
a. College Committees: Engineering Administrative and
Freshman Advisory.
b. University Committees: Extension, Summer Session, and
Community Services.
c. Departmental Advisor to all Seniors.

A. A. Armstrong, Jr.
a. Departmental Advisor to all Juniors.
b. Chair Advisor for High School Visitation Day.
c. College Committees: Engineering Deanship, Freshman Advisory
and Library.
d. University Committees: Research Allocations and Campus
Safety.

K. E. Cox
a. Freshman Advisor for International Students
b. Graduate Student Advisor for Materials Science students
at Los Alamos Graduate Center.
c. Faculty Advisor to Student Chapter of A.I.Ch.E.
d. College Committees: Freshman Advisory, Scheduling and
Enrollment and Scholarship.
e. University Committees: Scholarship

E. J. Nowak
a. Vice-President and Secretary of local ASCE branch
b. College Committees: Freshman Curriculum, Advisory to Bureau
of Engineering Research, Goals Subcommittee of Deanship
and Freshmen Advisory.
c. University Committee: New Student Orientation.
D. D. Phillips
a. Recruit and Advise all Chemical Engineering Graduate Students with respect to both administrative matters and research direction.
b. Departmental Advisor for all Chemical Engineering Sophomores.
c. Wrote successful NSF Undergraduate Equipment Proposal ($29,800) which will result in the establishment of a new process dynamics and control laboratory.
d. College Committees: Freshman Advisory, Scheduling and Enrollment and Mathematics - Engineering Liaison.

9. Public Service

T. T. Castonguay
a. Aquinas Newman Center
b. Newman Forum
c. Friends of the University of New Mexico Library
d. Serra Club

A. A. Armstrong
E. E. Cox
E. J. Nowak

) All three served as judges at the New Mexico State High School Science Fair held at M.I.T. in Socorro on April 20, 1968.

10. Personal Information

I. GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements During the Academic Year 1967-68.

1. Student Enrollment and Degrees Granted

Enrollments

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<th>Semester II</th>
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<td></td>
<td>148</td>
<td>163</td>
</tr>
</tbody>
</table>

Degrees Granted

B.S.
- August 1967          : 2
- February 1968        : 12
- June 1968            : 14     

M.S.
- February 1968        : 8
- June 1968            : 7       

Ph.D.
- February 1968        : 1
- June 1968            : 1       

The total enrollment in the Department of Civil Engineering has decreased slightly. However, the enrollment in our graduate program has continued to
increase; in addition to an increase in the total, an increase in the number of full time students was experienced again this year.

During this year, the faculty of the Department published a brochure "Civil Engineering at the University of New Mexico". The brochure includes sections on items such as: CIVIL ENGINEERING: What is it?; CIVIL ENGINEERING: Challenges of the future; HOW TO BECOME A CIVIL ENGINEER; CAMPUS LIFE at the University of New Mexico; CIVIL ENGINEERING at UMM; Our faculty and facilities; CIVIL ENGINEERING at UMM: our students. Copies of the brochure have been distributed to every High School in New Mexico. The brochure will inform High School students about Civil Engineering and the educational opportunities in this field at the University of New Mexico.

2. Curriculum Changes.

The hours required for the B.S. Degree in Civil Engineering was reduced from 139 + 4 PE to 130 + 4 PE beginning with the 1968-69 catalog. This is a more realistic requirement for a four year program. This reduction in requirements is also included as one of the recommendations in the "Goals of Engineering Education"
a final report of an extensive study of the American Society for Engineering Education. No major changes were necessary in the curriculum coverage to make the reduction. The requirement in physics was reduced from 11 to 10 credits. Four of the required Civil Engineering courses were reduced from 3 to 2 credits and the technical elective requirements were reduced from 15 to 11. The required course in sanitary engineering was moved from the senior year to the spring of the junior year; this permits a better selection of electives during the senior year for those students interested in water resources.

In order to provide suitable technical electives in the sanitary engineering area for the undergraduates, CE436, an existing course, was changed from 3 to 2 credits, and CE437, Sanitary Engineering III, was added. New courses for the increasing number of graduate students in the water area are CE530, Radiological Health, and CE534L, Advanced Sanitary Laboratory.

The use of computers in Civil Engineering practice is continuing to increase rapidly. Consequently, in addition to introducing computer work in existing courses, a new elective course CE452L, Computer
Applications in Civil Engineering, will be taught for the first time during the Spring 1969 semester.

With Dr. R. H. Clough rejoining the Department as a full time teacher, we are broadening the scope of our educational opportunities in the field of construction. Two new courses were introduced to supplement available courses in this area: CE461, Soil Engineering for Highways and Airfields, and CE572, Construction Planning and Scheduling.

A course CE568, Physico-Chemical Properties of Soils, had been taught as a special topic course and now is approved for inclusion in the catalog.

The Department of Civil Engineering is continuing to teach the courses in structural engineering for the students majoring in Architecture. In order to provide the work in advanced topics for these students, the following new courses will be offered: CE417L Structures Workshop I and CE418L Structures Workshop II.

3. Conferences

The Department of Civil Engineering and the Eric H. Wang Civil Engineering Research Facility personnel organized an International Symposium on Wave Propagation and Dynamic Properties of Earth Materials
held in Albuquerque on August 23-25, 1967. In addition to the University, the Symposium was sponsored by the American Society of Civil Engineers and the National Science Foundation.

The Department of Civil Engineering in cooperation with the Steel Advisory Committee of New Mexico presented a continuing education program on October 18, 1967 on the Design of Steel Structures.

The Fifth Paving Conference held at the University of New Mexico on December 7-8, 1967 was presented by the Department of Civil Engineering in Association with the New Mexico Highway Department, Portland Cement Association, and the Asphalt Institute.

The Department of Civil Engineering in cooperation with the Portland Cement Association presented a continuing education program on March 22, 1968 on the Ultimate Strength Design of Concrete Structures.

On May 16, 1968, the Rust Tractor Co. in Cooperation with the Caterpillar Tractor Co., presented a full day seminar on Earthmoving to our Civil Engineering students.
4. Student Activity

The Student Chapter of the American Society of Civil Engineers held monthly meetings with guest speakers. The officers for the year were: Bruce Trafton, President; Richard Amerman (Sem II) and Bruce Schneider (Sem II), Vice President; Robert McNeil, Secretary; Ernest Coriz, Treasurer; and Bruce Eisner, Editor. The Chapter members built and entered a float in the Homecoming Parade and were awarded second place in the competition. Engineering Open House was held in February with displays constructed by students; John King, a Civil Engineering senior, won first place in the Engineering College for his project.

The Chapter members made arrangements for and participated in the Annual Meeting of the Rio Grande Conference of Student Chapters of the American Society of Civil Engineers which was held in Albuquerque in February 1968. Mr. Jose H. Martinez Jr. from our Chapter, presented a paper in the annual student paper contest at this meeting and was awarded first place.

5. Student Achievements

Sigma Tau, national engineering honorary, elected the following Civil Engineering students to membership: Henry Burke, Douglas Catchell, Kendall Kennedy, Bruce Schneider, and Billie Taylor.
Chi Epsilon, national Civil Engineering honorary, elected the following to membership: in the Fall 1967 -- Henry Burke, Elliott Chalif, Charles Jennett, Iyadurai Kasiraj, Badru Riggundu, Salvador Reyes, Bruce Schneider, Alan Sinclair and Larry Walker; in the Spring 1968 -- Kendall Kennedy, Leslie Lam Carmona, and Billie Taylor. The following Civil Engineering faculty were also elected: John B. Carney, Jr., Richard G. Mazarski, Cyrus Omid'varan, and George E. Triandafilidis.

The following scholarships were awarded to Civil Engineering students during the 1967-68 year: The John E. Beck Memorial Scholarship to Bruce A. Schneider; The Craig Elton Bresenham Memorial Scholarship to Ernesto A. Perez; the Harry and Mabel F. Leonard Scholarship to Charles J. Mead; The George A. Rutherford Scholarship to Ray G. Arnold; The Rust Tractor Scholarship to Robert O. McNeil; and the Western Electric Supplementary Scholarship to Elliott H. Chalif.

The following Fellowships were awarded to graduate students in Civil Engineering: NSF Trainees -- William C. Hughes, Charles Jennett and James D. McClure; MDEA Title IV -- Charles E. Weld and Larry A. Walker;
NAS -- Roy C. Waters and Golden E. Lane Jr., for one semester each; OCD -- Howard B. Jones; UNM -- Hsiang-Yueh Yeh.

Mr. Jose E. Martinez, Jr. was awarded the "Outstanding Civil Engineering Senior Award" presented by the New Mexico Section of the American Society of Civil Engineers.

Mr. Ron Nelson, Civil Engineering Junior, was given an award by the New Mexico Section of the American Society of Civil Engineers for "Outstanding Achievement in Extra-Curricular Activities". Mr. Nelson had an outstanding year as Captain of the 1967-68 UNM Basketball Team while maintaining a scholastic average in the upper third of his class.

6. Rental Funds

The Department collected $1,027 from the rental of surveying equipment which was deposited in a special agency account 290-6. The expenditures from the account for the year amounted to $1,583.18 leaving a deficit of $1,160.12 on May 1, 1968. The amount of fees collected during each of the last two years has been about one-third of that collected during 1965-66. This reduction is due to the significant decrease in the amount of construction underway in the Albuquerque area.
The Department collected $110 from the rental of drawing equipment. The disbursement from the account, 290-21, amounted to $18 leaving a deficit on May 23, 1968 of $290.12.
<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Title</th>
<th>Time</th>
<th>Amount</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>AISI</td>
<td>Fatigue Properties of Light Gage Steel Structural Members</td>
<td>9/67-9/68</td>
<td>11,000</td>
<td>C.L.Hulsbos</td>
</tr>
<tr>
<td>NSF &amp; UNM</td>
<td>Engineering Research Equipment for an Analog Computation Laboratory</td>
<td>1 year</td>
<td>30,000</td>
<td>J.T.P.Yao</td>
</tr>
<tr>
<td>NSF</td>
<td>Institutional Grant - Equipment</td>
<td>1 year</td>
<td>9,995</td>
<td>J.T.P.Yao</td>
</tr>
<tr>
<td>NSF</td>
<td>Institutional Grant - Equipment</td>
<td>1 year</td>
<td>6,350</td>
<td>C.C.Patterson</td>
</tr>
<tr>
<td>NSF &amp; UNM</td>
<td>Instructional Scientific Equipment Program</td>
<td>1 year</td>
<td>5,800</td>
<td>W.W.Hakala</td>
</tr>
<tr>
<td>Sandia</td>
<td>Behavior of a Bi-Material Cylinder Including the Effects of Fracture</td>
<td>9/68-6/69</td>
<td>12,300</td>
<td>R.L.Johnson, Jr.</td>
</tr>
<tr>
<td>AFRL</td>
<td>Constitutive Relations of Rock</td>
<td>Conducted at CERF</td>
<td>W.W. Hakala</td>
<td></td>
</tr>
<tr>
<td>AFRL</td>
<td>Shear Strength of Deep Reinforced Concrete Slabs</td>
<td>Conducted at CERF</td>
<td>E.J.Rhomberg</td>
<td></td>
</tr>
</tbody>
</table>
7. **Research and Academic Grants 1967-68 (continued)**

**AFWL**
- Areas of Wave Propagation, Dynamic Properties of Earth Materials, Soil Structure Interaction, Soil Stabilization, and Simulation of Air Induced Ground Shock

- Director of Eric H. Wand Civil Engineering Research Facility

Conducted at CERF

G. Triandafilidis

E. Zwoyer
8. Proposals submitted by the Department 1967-68 (no reply as of June 1, 1968)

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Title</th>
<th>Time</th>
<th>Amount</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>OWRR</td>
<td>Treatability of the Raffinates of the Reverse Osmosis Process Applied to Wastewater Reclamation</td>
<td>1 year</td>
<td>$22,000</td>
<td>C. C. Patterson</td>
</tr>
<tr>
<td>FBS</td>
<td>Investigation of Indian Community Sewage Characteristics</td>
<td>1 year</td>
<td>14,300</td>
<td>C. C. Patterson</td>
</tr>
</tbody>
</table>
9. **Proposals submitted by the Department 1967-68 (Request not granted)**

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Title</th>
<th>Time</th>
<th>Amount</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSF</td>
<td>Discrete Analysis of Guyed Latticed Towers</td>
<td>2 years</td>
<td>$27,200</td>
<td>C. Omid'varan</td>
</tr>
<tr>
<td>NSF</td>
<td>Rotation Capacity of Reinforced Concrete Beam-Column Connections with Column Loads</td>
<td>2 years</td>
<td>$58,300</td>
<td>E.J. Rhomberg</td>
</tr>
<tr>
<td>NSF</td>
<td>An Investigation of the Effect of Strain Hardening on the Plastic Bending of Rectangular Plates</td>
<td>1 year</td>
<td>$12,600</td>
<td>G.W. May</td>
</tr>
<tr>
<td>NSF</td>
<td>A Systems Approach to Structural Design Including Safety Considerations</td>
<td>2 years</td>
<td>$52,400</td>
<td>J.T.P. Yao</td>
</tr>
<tr>
<td>BPR &amp; FWPCA</td>
<td>Compaction and Shear Strength Characteristics of Asphalt Concrete</td>
<td>1 year</td>
<td>$26,000</td>
<td>J.E. Martinez</td>
</tr>
<tr>
<td>NSF &amp; UNM</td>
<td>Water Resources Curriculum Development and Training Grant</td>
<td>5 years</td>
<td>$283,000</td>
<td>C.C. Patterson</td>
</tr>
<tr>
<td>NSF &amp; UNM</td>
<td>Instructional Scientific Equipment Program</td>
<td>1 year</td>
<td>$3,000</td>
<td>J.B. Carney, Jr.</td>
</tr>
<tr>
<td>NSF &amp; UNM</td>
<td>Instructional Scientific Equipment Program</td>
<td>1 year</td>
<td>$16,000</td>
<td>M.M. Cottrell</td>
</tr>
<tr>
<td>Greater</td>
<td>Free Vibration of Ribbed Plates and Ribbed Curved Panels</td>
<td>3 mon.</td>
<td>$1,500</td>
<td>C. Omid'varan</td>
</tr>
<tr>
<td>UNM Fund</td>
<td>Greater Purchase of Electronic Desk Model Calculators</td>
<td></td>
<td>$6,300</td>
<td>M.M. Cottrell</td>
</tr>
</tbody>
</table>
B. Plans and Recommendations

1. Faculty

We have made some progress towards reducing the excessive teaching loads in the Department. However, much of the gain has been due to a reduction of research by the faculty. When the research increases, and this is already occurring, we will lose some of the progress made on reducing teaching loads. Our faculty needs to develop an active research program in the Department to support a growing graduate enrollment. However, it is unreasonable to expect a faculty member who wishes to do an effective job of teaching an excessive number of courses to, at the same time, develop a good research program.

The establishment of a Transportation Institute was recommended in last year's report and a proposal was submitted to the administration. The proposal was not approved. However, it still may be a desirable move and additional study will be made to determine its feasibility.

We have made some progress towards providing continuing educational opportunities in Civil Engineering to the residents of New Mexico. Much more needs to be done in this area. However, funds
must be allocated for this work before any extensive program can be provided.

With the increasing number of full time graduate students, the engineering College summer program must be developed so that students can make effective use of the summer months. The Department Chairman should be employed on a full year basis and the summer school budget should be handled through the Department Chairman and the Dean of the College. The salary rates for summer school professors should correspond to their regular academic rates. Some means must be found in order to have an adequate number of courses available in the summer for our students.

Additional travel funds should be available for faculty members to attend selected national meetings. This is one means for our faculty to become acquainted with leaders in their field and at the same time their own capabilities would become better known. This participation in technical meetings is a definite asset in the development of an excellent graduate and research program.

One item is a must for next year -- we must be able to adjust our salaries to become more competitive with other institutions. If a significant adjustment
is not made, we will very likely lose a number of our best faculty next year. This lack of competitive salaries was at least a major item in the loss of two valuable faculty members this year.

2. Facilities

During the summer 1967, our old hydraulics laboratory was remodeled to provide space for a research laboratory. Some equipment is now in place and research activity is underway. The new Engineering Center will provide additional space next year. A number of grants have been obtained in the last few years for the purchase of badly needed equipment. Considerable faculty time is needed to properly develop the laboratories for effective use. Some means must be provided to allow faculty the time to handle this extra work so necessary to develop excellent laboratory support for both undergraduate and graduate students. Considerable additional funds for equipment will be required to provide adequate facilities for our future needs.
C. Appointments to staff

1. Full-time

Dr. Gerald W. May, Assistant Professor, effective September 1967

Dr. Richard G. Vaughan, Assistant Professor, one-quarter time Civil Engineering and three-quarter time CERF, effective September 1967

2. Part-time and temporary

Mr. Victor Adegunleye, Graduate Assistant, Semesters I and II

Mr. Charles Bacchus, Teaching Assistant, Semesters I and II

Mr. Tai yo Chen, Graduate Assistant, Semesters I and II

Mr. Jeng Wen Hwang, Graduate Assistant, Semesters I and II

Mr. Iyadurai Kasiraj, Graduate Assistant, Semester II

Mr. Joseph E. Keithley, Jr., Graduate Assistant, Semester I

Mr. Leslie A. Lam Carmona, Graduate Assistant, Semesters I and II

Mr. Phillip H. O'Dell, Graduate Assistant, Semester I

Mr. Satwant Rihal, Teaching Assistant, Semesters I and II
Mr. Christopher H. Timm, Graduate Assistant,

Semesters I and II

D. Separations from Full-time Staff

Dr. William W. Hakala, Assistant Professor,
effective June 1968

Dr. Edward J. Rhomberg, Associate Professor,
effective June 1968

Dr. Richard G. Vaughan, Assistant Professor,
effective February 1968
II. COMPOSITE OF INFORMATION ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

CARNEY, J. B., Jr.
Ph.D., University of Arizona, June 1968
HAKALA, W. W.
Registered Professional engineer - New Mexico
HUZARSKI, R.G.
Study at the Library of Congress, Washington, D.C.
Study trip to Tempe (Arizona State U.)

OMID'VARAN, C.

YAO, J. T. P.
Analog Simulation & Computation Course, EAI, Palo Alto Calif., Aug. 22-26/66
In Service Seminar on Computer Simulation as a Teaching Aid, Simulation Councils, San Diego, Calif. March 12-22/68
Registered professional engineer - New Mexico

2. Sabbaticals, leaves or absence, summer teaching, travel, etc.

HULSBOS, C. L.
Regional Conference of Civil Engineering Department Chairmen, Dallas, Tex., Apr. 5-6/68

PATTERSON, C. C.
Summer employment, Group K-7, Los Alamos Scientific Lab, Los Alamos, N.M.

YAO, J. T. P.
Las Cruces, N.M. Installation of New Mexico State Chapter of Chi Epsilon
3. New scholastic honors, fellowships, etc.

JOHNSON, R. L., Jr.

Associated Western Universities Summer Faculty Research Fellowship in conjunction with Sandia Corp. during summer 1957

CUSHVARAN, C.

Listed: "American Men of Science" supplement 4 to the 11th edition

4. Publications

COTTRELL, M. M.

"Dynamic Analysis of Complex Supersonic Sleds" USARMOC - Tech Report G8-3, Jan. 1968 (co-authors C. E. Bacchus, A. Ghose)

HULSBOS, C. L.

"Horizontal Shear Connection in Composite Concrete Beams Under Repeated Loads", Journal of the American Concrete Institute, Vol. 64, No. 12, Dec. 1957

HUZARSKY, R. G.

Numerous abstracts of East European Sci/Tech publications at ATD Journal, 1967-68

JOHNSON, R. L., Jr.


MARTINEZ, J. E.

Editor, Fifth Paving Conference Proceedings, May, 1968

MAY, G. W.


RHOENBERG, E. J.


TRIANDAFILIDIS, G.


YAO, J. T. P.


"On the Two-sided Time-Dependent Barrier Prob." Jour of Sound & Vibration, v. 6, no. 1, July 1967, pp. 98-104 (with M. Shinozuka)

9. Other research projects or creative work in progress or completed

ABBOTT, W. T.

Developing new course - CE452 - Computer Applications in C.E.

CARNEY, J. B., Jr.

Research Contract 14-06-D, Dept. of Interior

COTTRELL, M. M.

"Vibration of Beams with Spacewise Random Forcing Functions", Investigation is continuation of work at Sandia Corp, Summer 1967

GAFFORD, W. R.

Coordinator for selection of Computer Equipment to be incorporated within the new Engineering Center. Assignment by the Dean of the College of Engineering.

HAKALA, W. W.

Working on report for Sandia Corp.

Principal investigator on "Constitutive Relations of Rock", at CERF

HULSBO, C. L.

Research Project "Fatigue Properties of Light Gage Steel Structural Members", sponsored by American Iron and Steel Institute, $11,000 Sept. 1967-Sept. 1968

HUSZARSKI, R. G.

Layout of a new course on Engineering Design at freshman level.

CSEDVARAN, C.

"Elastic stability of Lattice Beam-Columms" supported by NSF completed Nov. 1967 (initiated Nov. 1965) total grant $14400.
Unsponsored research led to preparation of a proposal on Structural Analysis of Guyed Latticed Towers.

The following papers being reviewed for publication:

a). Bending & Buckling Frames
b). Discrete Energy Theorem
c). Buckling of Restrained Multi-Level Frames

PATTERSON, C. C.

NSF - Instructional Scientific, CE436, $2,000 + $2,000 matching, 1 year.

NSF - Evaluation of a model for radionuclide transport, $8,500, 1 year.

Proposals prepared:

a). Treatability of Reverse Osmosis Raffinates, OWR
b). Training Grant in Water Pollution, FNPCA
c). Investigation of Indian Community Sewage Characteristics

REICHBERG, E. J.

Principal investigator on study of the shear strength of deep reinforced concrete slabs at the Civil Engineering Research Facility

TRIANDAFILIDIS, G.

Research in the areas of Wave Propagation, Dynamic Properties of Earth Materials, Soil-Structure Interaction, Soil Stabilization & Simulation of Air Induced Ground Shock at the Eric H. Wang CRF, URI sponsored by AFRL.

NSF Grant for the Symposium on Wave Propagation and Dynamic Properties of Earth Materials, $17,600.

YAO, J. T. P.


"Safety Analysis of Statically Indeterminate Struct." A final report prepared for NSF under Grant No. GK-597, March 1968
YAO (cont'd)

"Photoelasticity in C.E. Under-graduate Education"
A final report prepared for NSF under grant GV-3196
(equip. grant of $2100. with UNM matching funds) April
1968

ZWOYER, E.

Continued operation of the Eric H. Wang Civil Engineering
Research Facility, negotiated a new contract (F29601-68-C-
0009) in the amount of $1,613,449. for the period of Sept.
16, 1967 to Sept. 15, 1969

6. Activities in learned and professional societies

COTTRELL, H. M.

Panelist on NSF Undergraduate Research Participation
Program,

Invited participant on MAA Conference on Mathematical
Engineering

Reviewed paper "Instability of Shear Flexible Sandwich
Columns" B. J. Harris and G. M. Noræby for publication
in Engineering Mechanics Journ. ASCE

HAIRRA, W. W.

Member Committee D-18 of ASTM

Attended meeting 10th Symp. on Rock Mechanics, Austin
Texas, May 20-22, 1968

HULSBOS, C. E.

Annual Meeting of the American Society for Engineering
Education June 20-23, 1967 at Michigan State University

International Symposium on Wave Propagation and Dynamic
Properties of Earth Materials, Albuquerque, Aug. 23-25,
1967. Treasurer of the Symposium

15-19, 1968. Member of Committees D-C3 and D-C5, UNM
Liaison Representative to the Highway Research Board
BULSBOS, (cont'd)

Annual Meeting of the American Concrete Institute, Los Angeles, Calif., March 4-8, 1968. Member of ACI Committees 115, 215 and 437.


A number of meetings of the New Mexico Section of the American Society of Civil Engineers
   Director - New Mexico Section
   Director - New Mexico Branch

JOHNSON, R. L., Jr.


MARTINEZ, J. R.


Attended Highway Conference EESU, April 1968

Attended Arizona Roads Conference, Tucson, April 1968

MAY, G.W.

Attended ASCE Specialty Conference, Chicago, Ill.

MAY, K. C.

Attended seminar on Urban Planning at Univ. of Calif., Dec. 1967

OMIDVARAN, C.

Papers reviewed for publication in ASCE Journals:
   a) Goldbert, J. E. "Lateral Buckling of Braced Multi-story Frames"
   b) Lee S. L. and Monse "Approximate Analysis of Continuous Prismatic Shells"
   c) Gustafson & Wright "Analysis of Skewed Composite Girder Bridges"
   d) Bryan & El Dakha "Shear Flexibility & Strength of Corrugated Decks"
OHID'VARAN (cont'd)

Attended EMD Specialty Conference Raleigh, N.C., Nov. 1967

PATTERSON, C. C.

Water Pollution Control Federation, Annual Convention

RECHBERG, R. J.

Attended Annual Convention of the American Concrete Institute in March 1968

Presented research-in-progress report at Fall Meeting of the American Concrete Institute in October 1967

TRIANDAFILIDIS, G.

Annual meeting of ASCE, Boston, Mass., June 1967, Member Subcommittees 9 and 10, Soil Dynamics and Bearing Tests of Soil and Rock in Place, respectively.

YAO, J. T. F.

Offices held:
a). ASCE Structural Division - Task Committee on Structural Fatigue
b). ASCE Structural Division - Task Committee on Structural Safety
c). ASCE Committee E-9 on Fatigue
d). ASCE Rocky Mountain District Council - Secretary-Treasurer
e). Sigma Xi - Treasurer of N.M. Chapter

Meetings attended:
j). Joint Meeting of ASCE Committee on Metals, Washington D. C., April 30-May 1, 1968
ENGLISH, E.

1. Attended several local, regional and national meetings in American Society of Civil Engineers, National Society of Professional Engineers, and Building Research Institute.
2. Elected as National Director of District 15 of American Society of Civil Engineers.
3. Continued as member of two national committees of American Society of Civil Engineers.
4. New committee assignments include:
   1. Chairman of Awards committee of New Mexico Society of Professional Engineers.
   2. Member of Engineering Practices Act of the Albuquerque Chapter of New Mexico Society of Professional Engineers.
5. Presented paper entitled "Design and Response of a Large Tracking and Receiving Antenna" at the Second Space Age Facilities Conference of the American Society of Civil Engineers, Los Angeles, Calif., April 24-26/68.
6. Co-authored paper entitled "Behavior of Deep Reinforced Concrete Slabs Loaded to Ultimate Capacity" presented to the American Concrete Institute convention in Des Moines, Iowa, October 1967.
7. Continued as Secretary of the Steering Committee and Coordinator of Technical Activities for the International Symposium on Wave Propagation and Dynamic Properties of Earth Materials. The symposium was held August 23-25, 1967 in Albuquerque, and was sponsored by the University of New Mexico, the American Society of Civil Engineers and the National Science Foundation.

7. Other professional activities

COTTRELL, M. M.

gave talk for N.M. Sect. ASCE on "Elements of Design of Earthquake Resistant Structures".


Member, Albuquerque City Building Comm.

HAHALA, W. W.
Consultant to Sandia Corp.

HUBBS, C. L.
High School Career Day, St. Pius X

HURZAWSKI, R. C.
Several consultancies

MARTINEZ, J. E.
Consultant to Albuquerque Metropolitan Arroyo Flood Control Authority on Embudo Arroyo Transition Structure

OMID'VARAH, C.
Served as consultant assisting a local firm with the design of a grid system

PATTERSON, C. C.
Visiting Staff Member, Group E-7 Los Alamos Scientific Lab
Staff Member - Symposium on Systems Analysis in Water Resources Management

RICHARDS, H. J.
Consultant to Edgar D. Otto & Son, Inc., and Hydro-Conduit Corp.

THANAFELIDES, C.
Consultant in various Soil Mechanics and Foundation Engineering projects

YAO, J. T. P.
"The Factor of Safety in Structural Design" presented at a graduate seminar in the Dept. of Civil & Environmental Engrg., Washington U., St. Louis, Missouri Jan. 6, 1960
ZWOLYER, E.

Performed structural design of several projects, the most notable ones were:
1. design of an instrumentation tower located at ground zero over a nuclear underground test at the Nevada Test Site; the tower had to survive severe ground shock during the test and subsequent formation of a crater.
2. provide design criteria for two large AEC manufacturing facilities (Burlington, Iowa and Pantex, Texas) subjected to blast loading.
3. structural design of two blast facilities for AEC (Pantex, Texas and Sandia Base, N.M.)

ABBOTT, W. T.

Chairman, Dept. Computer Use Committee

CARNEY, J. B., Jr.

Freshman Advisor, Faculty Advisor Student Chap. ASCE, Curriculum Committee

COTTRELL, M. M.

Presidential Selection Advisory Committee, Faculty Policy Committee, Dept. Graduate Advisor

GAFFORD, W. R.

Special Counselor, University College, Entrance & Credits Committee, Faculty Computer Use Committee, Junior College Committee, Various College Committees

HAKALA, W. W.

Freshman Advisory Committee, Intramural Board

HULSBOS, C. E.

Chairman, Dept. of Civil Engineering; Dept. Committees (Ph.D., M.S., etc.) Grad. Comm.; Admin. Comm.; College of Engineering; Advisory Comm., Bureau of Engineering Research; Committee on International Programs
HUBERT, R. C.

Freshman Advisory Committee, Freshman Curriculum Committee (ad hoc), Advisor of Sigma Tau Engrg. Honorary Fraternity

JOHNSON, R. L., Jr.

Freshman Advisor; Member, ad hoc Engr. College Committee re UET Technology Application Center; Member, C.E. Dept. Committee on Computer Use

MARTINEZ, J. E.

Class Schedule Committee, Engineering College; Athletic Council; Chairman, Program Committee, Paving Conference, Dec. 1967; CE Dept. Curriculum Committee; Student Advisor

MAY, M. C.

Mentor Plan Committee; Academic Freedom & Tenure Committee; Managed Survey Rental Fund; Technical Assistant to administration on planning zoning matters; Chairman, Engineering College Deanship Committee

CHIDVARAH, C.

Served the department with Doctoral Intern, exam, Ph.D. work schedule; Master's thesis and Master's exams; Faculty advisor to Baha'i Student Assoc.; Faculty advisor to 13 students

PATTERSON, C. C.

Committee on Radiation Control; Adjunct Goals Committee to the Advisory Committee on the Deanship, Departmental Committee; Computer Use; High School Brochure, Curriculum

PRESTERG, B. J.

Chairman-University Registration Committee and member of Civil Engrg. Dept. Curriculum Committee

TIRAPAKIDIS, G.

Chairman, International Symposium on Wave Propagation and Dynamic Properties of Earth Material, held at Sheraton-Western Skies, August 23-25, 1967
9. Public service

CARNEY, J. B., Jr.

Cub Scouts, Sunday School Supt.

COTTRELL, M. M.

Chairman of Official Board, Christ Methodist Church;
Chairman of Board, Wesley Foundation, UMB;
Boy Scout Committee

HAKALA, W. W.

Lutheran Campus Council;
Chairman of Property Committee, St. Luke's Lutheran Church

HULCHOS, C. L.

Member - Bernalillo County Metropolitan Industrial
Expansion Committee

KUZARSKI, R. G.

Committee Chest contribution, and church contribution

MAY, M. C.

President and Chairman of the Board of Directors of the
Albuquerque Metropolitan Flood Control Authority;
Vice-Pres. of the Citizens' Transportation Committee

NAID'UPAN, C.

Chairman, Local spiritual Assembly of Baha'i of Albuquerque;
Member National Goals Committee of Baha'i of U.S.

PATTERSON, C. C.

Ecoing Officer for air pollution standards - Metropolitan Environmental Health Advisory Board
TRIANTAFILIDIS, G.

Greek Orthodox Church

YAO, J. T. F.

Reviewed papers for ASCE, ASTM, and reviewed proposals for NSF
**THE REPORT OF THE DEPARTMENT OF ELECTRICAL ENGINEERING**

*July 1, 1967 - June 1, 1968*

A. E. Koschmann, Chairman

I. **GENERAL DEPARTMENTAL INFORMATION**

A. Significant Achievements During Academic Year 1967 - 68

a. Enrollment Summaries

<table>
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<th>Undergraduate</th>
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<th>Graduate</th>
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<tr>
<td></td>
<td>Semester I</td>
<td>Semester II</td>
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<td></td>
<td>66-67 67-68</td>
<td>66-67 67-68</td>
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<tr>
<td>Sophomores</td>
<td>98 115</td>
<td>96 115</td>
<td></td>
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<tr>
<td>Juniors</td>
<td>82 76</td>
<td>76 69</td>
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<tr>
<td>Seniors</td>
<td>58 69</td>
<td>76 75</td>
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<td></td>
<td>238 260</td>
<td>248 258</td>
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<tr>
<td>Masters</td>
<td>89 96</td>
<td>84 82</td>
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<tr>
<td>Ph. D.</td>
<td>35 32</td>
<td>32 35</td>
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<tr>
<td>Off Campus</td>
<td>20 20</td>
<td>21 21</td>
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<td></td>
<td>144 148</td>
<td>138 138</td>
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**DEGREES AWARDED**

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<tr>
<th></th>
<th>64-65 65-66</th>
<th>66-67 67-68</th>
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<tr>
<td>B.S.</td>
<td>73</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>M.S.</td>
<td>58</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>3</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>
The overall undergraduate statistics again show an increase. However, this change is almost within ordinary random fluctuations and it will take several years to discern a definite trend. Graduate enrollment statistics also show some variation, but this is more likely to reflect variations in classification procedures than a significant change in the number of graduate students.

The number of degrees awarded held fairly constant this past year. Probably the most significant figure is that of 10 doctorates awarded, which confirms our prediction that we are operating at the level of 8 to 10 doctorates per year.

It might be pointed out that one of the M. S. degrees was awarded to a student who completed all of his graduate work at our off-campus residence center at Holloman, the first student to do so. Indications are that both of our off-campus programs, at Holloman and Los Alamos, are becoming more stable, and the next few years should see an increase in the number of students who successfully complete degrees under these programs.

b. *Progress in the Undergraduate Curriculum*

After several years of considering changes in the electrical engineering curriculum, the faculty has made major revisions in the undergraduate program, to go into effect the Fall of 1968. Some changes in the sophomore courses were already started in the Spring semester of 1968.

The major changes involve a reduction in the number of hours required, from 138 to 130, and a significant increase in the number of electives in the senior year. This will permit the student to plan his program to suit his own particular interests, to specialize in areas such as solid state, electronics, computers, and microwaves; in some cases the student may choose
to develop a strong background in other areas such as business administration, biological sciences, nuclear engineering or mathematics. It is also hoped that this increased flexibility will encourage many students to coordinate their senior electives with a fifth year, of graduate study.

One of the major considerations in the revision of the sophomore EE courses was to develop courses which would better serve the non-EE engineering students. Accordingly, a new course, EE 204, has been added to cover electronics and instrumentation for the non-EE major.

Our efforts in the use of television have continued. Both EE 361 and EE 362, a junior course in electromagnetic waves taught by Professor Bradshaw were broadcast over Channel 5. In the Spring Semester, EE 361 was presented by closed circuit TV.

c. Progress in the Graduate Program

During this past year the department has tried to concentrate its efforts in the development of several strong areas. The areas which appear appropriate are solid state, systems, computers, and bio-engineering. In the first two areas the department now has a good nucleus of faculty members, active research programs, and many interested graduate students. This year the department, instead of sending out a general announcement concerning graduate study in electrical engineering, sent out two separate announcements on our graduate programs in solid state and systems.

The department's capability in the general area of computers was strengthened this year with the addition of Dr. Ronald DeVries, a specialist in switching theory. The departmental computer committee was very active this year in the development of courses and an overall program.
While several of the faculty have expressed an interest in working in problems related to bio-engineering, no significant progress has been made in the actual development of a program in this area.

The decision to concentrate the efforts of the faculty into several areas of Electrical Engineering rather than attempting to cover all fields, has also resulted in significant changes in graduate procedures and regulations. The graduate examinations have been changed to emphasize "depth" rather than "breadth". Students are encouraged to choose their area of specialty as early as possible, and a committee of faculty members from this specialty has the major responsibility for guiding and examining the student.

The course requirement for the nonthesis student has been reduced from 36 to 30 hours. It is hoped that by properly coordinating his senior electives with his graduate program, a good student will be able to complete the M.S. degree in one year.

The department continues to augment its capabilities by the addition of selected adjunct professors to the staff, both in Albuquerque and at our off-campus residence centers. These professors usually teach one course, and are available for a small amount of committee work. In order to promote even closer cooperation with the local engineering and scientific community, the university has authorized several appointments for personnel from Sandia Corporation to serve on the regular faculty. It is expected that these appointees will have the time to participate more fully in the activities of the department, and will aid in formulating policies and goals. It is on this basis that Dr. J. D. Williams, of Sandia Corporation, joined our staff. He has taught courses in the department, and has given very valuable assistance in the development of
our solid state program. It is hoped that this type of activity can continue and can be expanded.

In the Fall of 1967 the last class of the Sandia Technical Development Program was enrolled. While terminating this type of educational support, Sandia Corporation has initiated new programs, in which both beginning graduate students and doctoral candidates will be given support to attend a university on a full time basis. While the number of students involved will be smaller, this department would still expect that a number of these students will select this university and this department for their continued study.

In the Fall of 1968 Sandia Corporation will initiate a new Computer Science Program which will be patterned closely after the previous Technical Development Program, though the students will be distributed over more departments. This department will be effected in that some of the students will be majoring in electrical engineering. The department is also involved in a wider sense, as two courses, EE 435 and EE 437, will be required of all students in the program. A number of other EE courses will be available as electives.

d. Physical Plant

The remodeling of the first floor of the electrical engineering building has resulted in a significant improvement. The changes resulted in three faculty offices, three teaching laboratory spaces, increased shop area, and some storage area.

A considerable amount of faculty time and departmental funds were expended in trying to get some of these laboratories into operation. In particular, Dr. Cates is to be commended for his work in developing facilities in the solid state laboratory. A considerable effort must still be expended next year to bring these laboratories up to full utility. Some of this development will have to be delayed until the completion of the
new engineering building, as it is still necessary to use some of the present space for research purposes.

e. Student Achievements and Awards

The student branch of the IEEE again served as a focal point for the professional activities of the students. This group again sponsored a meeting for faculty and students to discuss the mathematics courses and curriculum with representatives of the department of mathematics.

The following individual awards and scholarships were received by students in Electrical Engineering.

1. Hamilton Watch Award, to an outstanding senior in the College of Engineering for not only excellence in his chosen major, but for studies in the humanities and social sciences, and for campus activities—James Arnold Flagstead.

2. The Harry L. Dougherty Memorial Prize in Engineering, to the senior in engineering who made the highest scholastic average in residence during his freshman and sophomore years—James Arnold Flagstead.

3. The George E. Breece Prize in Engineering, to the senior who has been enrolled for a full time course of instruction, upon the basis of character, general ability and excellence of scholastic record shown during the last two consecutive years of residence in the University—James Arnold Flagstead.

4. The Hewlett Packard/Nealy Sales Division Scholarship, $500.00 for a Junior in E. E.—Paul Kent Williams.

5. The Western Electronics Educational Fund Grant ($400.00), Mr. John Peter Beaudy—Sophomore in Electrical Engineering.

6. The American Society for Testing Materials Senior Awards, Mr. James Donnelly and Mr. John Carmichael.

7. The Institute of Electrical and Electronic Engineers Senior Award—Mr. Charles G. Rowen.
The following students completed the departmental honors program:

Martin J. Cheney  Cum Laude
George R. Frederick-Magna Cum Laude
Don R. England  Magna Cum Laude
Don E. Winge  Magna Cum Laude

Mr. James Arnold Flagstead completed the University Honors Program graduating summa cum laude. (General Honors)

B. Significant Plans and Recommendations for the Near Future

One of the most significant events for the department this past year was the visit by a committee of distinguished engineering educators, supported by a grant from the Danforth Foundation to the Graduate School of UNM. The visiting team consisted of Dr. Samuel Seely, Chairman; Dr. Edward David, Bell Telephone Laboratories; Dr. Thomas Martin, Southern Methodist University; and Dr. Otto Schmidt, University of Minnesota.

While the committee concentrated much of its effort on the graduate program, it also considered several problems in the undergraduate area. Many of the problems considered were suggested by the department and faculty, but the committee members showed considerable initiative in probing into other areas they considered important.

At the risk of presenting a somewhat biased point of view, the following are some of the committee's views and recommendations:

1. Both the undergraduate and graduate programs were too rigid and were in danger of becoming oldfashioned.

2. It was extremely important that the use of computers be integrated into all aspects of both the graduate and undergraduate programs.

3. It was strongly recommended that the department develop a graduate specialty in computer engineering.
4. It was recommended that the department and the university develop an interdepartmental program in bio-engineering. It was recognized that this would take special support from the university.

5. In order to develop excellence the department must be much more active on the national scene, e.g. more publication of research results in national journals, more participation of faculty in national meetings and professional societies, a wider base of research support, and the attracting of more graduate students from other parts of the country.

In general these recommendations were not particularly startling to the department, as they involved problems which the department was already aware of, and in some cases had been discussing for years. The committee report, however, did produce some very positive results, in convincing the department to quit talking and start doing. In particular, the recent revisions in our undergraduate curriculum and the changes in our graduate exams were carried out much more rapidly and more drastically because of this report. The department will be putting more effort into the integration of computers into undergraduate and graduate courses, and to the development of a graduate specialty in this area.

The department would like to express its appreciation to the Danforth Foundation and to the Graduate School for making this visit possible, and would encourage other departments to take advantage of this opportunity to obtain the guidance and encouragement of prominent educators.

a. Faculty and Personnel

During this past year the faculty has been actively involved in improving the undergraduate program and laboratories,
and in strengthening the graduate program. Here the directions seem clear, and the faculty is making good progress.

A major problem remains in the development of a national reputation commensurate with a department that ranks among the top 30 electrical engineering departments in the United States, in terms of the number of doctorates awarded. It is expected that the department will put additional emphasis on the following items in the next years:

1. **Attendance at national meetings and service on technical committees.**

   Probably the major difficulty here is travel funds. While a certain amount of travel is sponsored by research contracts, it is clear that travel which contributes to the reputation of the university should be controlled and sponsored by the university; it should not be determined by a contracting agency. In the past, faculty members have resigned from national technical committees because they could not obtain funds to attend meetings. It might be pointed out that travel, particularly by the chairman, can be an important factor in improving our ability to recruit good faculty.

2. **Publications**

   Only a small percentage of the research done in the department has been published in the national journals, although most of this work has been published as Bureau of Engineering Reports. But, as the visiting committee pointed out, local...reports just do not carry the same prestige as publication in the national journals.
3. **Colloquium Series**

Under the direction of Prof. Karni, the Electrical Engineering Colloquium Series has become more active in the past few years, and has brought speakers of national reputation to this campus. Not only has this been an inspiration to the faculty and students, but the speakers have left with considerable respect for this university and department. It seems clear that this program should be expanded.

4. **Special Summer and Short Courses**

Almost alone among the leading graduate departments, this department has not been involved in the sponsorship of special courses, short courses for engineers in industry, summer workshops, and the like. In the past the faculty devoted most of its summer activities to research contracts and the supervision of graduate students. With the growth of the department it appears appropriate that some of the energy of the faculty be devoted to these types of courses, which serve the needs of engineers in industry, and also help publicize the university.

5. **Sabbaticals**

In the past the members of this faculty have been so involved in local activities that they found it difficult to leave the campus for sabbatical leave. It is healthy for the department that next year Prof. Karni will spend a semester at the University of Hawaii and Prof. Mohler will spend the year at UCLA, in an international program in systems. It is expected that this activity will not only improve the competency of our faculty members, but will also aid in publicizing UMN.
Teaching  While much effort will be devoted to establishing the excellence of this department at the graduate level, the department is equally committed to establishing excellence at the undergraduate level whether or not this is recognized nationally. Particularly at the undergraduate level, excellence is determined by good teaching.

The department also felt honored when one of its excellent teachers, Prof. Ruben Kelly received the Gulf-Southwest American Society of Engineering Outstanding Engineering Teacher Award (Texas, Louisiana and New Mexico). The student branch of IEEE also encourages good teaching, and recognized Professor Shlomo Karni as Electrical Engineering Professor of the Year.

b. Facilities

With the completion of the new Engineering Center next year, the research facilities of the department, particularly in the area of solid state, will be significantly improved. While the laboratory space will be sufficient for some time, additional support will have to be obtained to complete the equipping of these laboratories.

c. Research

The research program of the department received a considerable boost with a grant of about $185,000 from the Themis program, to study radiation effects in semiconductors. This project involves professors and students from several departments, and is under the direction of Prof. W. W. Grannemann. One of the significant features of this type of grant is that it gives assurance of being at least partially funded for three years.
While the research program of the department is progressing well, several problems continue. The year-by-year funding, the excessive reporting requirements and restrictive policies of some contracting agencies, dissipate energies of the faculty and students that should more properly be spent on actual research. While the research facilities of the department are improving, experimental research is still highly dependent on outside support for equipment and supplies.

As one of the major reasons for having research at a university is to aid in the training of graduate students, it is necessary that our research program be coordinated with all aspects of our graduate program. It is hoped that more of our research activities will result in advanced and special courses, seminars and workshops. It might be noted that one of the purposes of the Themis grant is to provide funds for a core of faculty and students around which a much larger group and activity should develop.

Following is a listing of supported research activities in the department during the past year. While most of our faculty have support for these research activities, it might be pointed out that research continues to be done by faculty and students which is not funded by outside agencies.
C. **Appointments to Staff**

Harold T. Cates  
Ronald C. DeVries  
Phadej Savasdibutr  
J. D. Williams

D. **Separations from Staff**

Donald C. Thorn  
Frank Janza  
S. Moorthy

**Part-time Employees**

**Semester I, 1967-68**

Byong K. Park  
Thuan Van Nguyen  
Charles Gwyn  
Frank Ezell

**Semester II, 1967-68**

John Phelan  
Krishan Mehta  
Thuan Van Nguyen  
Sang Fi Moon
II. COMPOSITE OF INFORMATION ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

DeVRIES, RONALD C.

Ph. D. University of Arizona, Tucson, Arizona, Fall Semester, 68-69. Dissertation Title--Minimization of Switching Circuits Subject to Constraints.

MOHLER, RONALD R.

Summer short course in "Optimal Control and Functional Analysis."

SOUTHWARD, HAROLD

Short course-- "Radiation Effects in Semiconductors" University of Michigan, Summer 1967.

2. Sabbaticals, leaves of absence, summer teaching, etc.

KARNI, SHLOMO


KELLY, RUBEN D.

Taught the Engineer-in-Training class in Electrical Engineering and Electricity. Attended WESCON in San Francisco and attended the Micro Electronics Symposium while there. Invited by the National Science Foundation to serve as a panel member for judging NSF proposals. This is the third time I have served on the panels and I was panel chairman this time at the Los Angeles meeting.

MOHLER, RONALD R.

University business trips to University of Hawaii, University of Pennsylvania, UCLA, Denver and Los Angeles.
SCOUTWARD, HAROLD

Four trips to various conferences and meetings with regard to research. Tremix at Dallas, Wescon at San Francisco, Screen printing in microelectronics workshop, Philadelphia, DuPont electrochemicals Dept at Wilmington, Delaware.

3. New Scholastic honors, fellowships, etc.

DEVRIES, RONALD C.

Received NASA-ASEE summer faculty fellowship for the summer of 1968 and have accepted.

KARNI, SHLOMO

Listed in: "Who's Who in American Education" 1968

KELLY, RUBEN D.

Awarded the Gulf-Southwest American Society of Engineering (ASEE, Texas, Louisiana, New Mexico) Outstanding Teacher in Engineering Award which included a cash award of $500.00 and a certificate. The award was presented at the annual GSW-ASEE meeting held in Texas at Texas A & M University.

MOHLER, RONALD R.

Nominated to American Men of Science and Who's Who in American Education (Leaders in Science edition)

4. Publications

BRASSIAW, MARTIN D.


BYATT, W. J.

Co-Author Textbook, INTRODUCTORY ENGINEERING FIELD THEORY (with Martin Bradshaw), Prentice Hall, Inc., July 1967.

Submitted to IEEE "A Diffusion Theory Based Stability Criterion for Semiconducting Devices Under High Electric Fields" (as a letter)

ERTEZA, AHMED


GRANNEMANN, WAYNE W.


KARNTI, SHLOMO


KELLY, RUBEN D.

NAE5 paper (SECRET) missile fuse electronics (150 pp)
co-author: Dave Holmes. "The Use of Driving Point Impedance Methods on Active Networks" (46 pp.) presented at the Gulf Southwest ASEE meeting at Texas A and M. "Use of Closed Circuit TV in Live Classroom Demonstrations of Electronic Circuit Design." (14 pp.) presented at the ASEE meeting at Texas A and M.

KNUDSEN, HAROLD K.


MOHLER, RONALD R.


4. Two Engineering Research Bureau Reports.
SOUTHWARD, HAROLD D.

Final Report AFWL-TR 68-31 "Radiation Effects on Gallium Arsenide Devices and Schottky Diodes." This report is also published as Bureau of Engineering Research Report, EE 152, Vol 1 and 2. The material of these reports will be printed as an IEEE Nuclear Science paper and is being considered for publication in IEEE Transactions on Nuclear Science.


5. Other Research Projects or Creative Work in Progress or Completed During Period

BOATWRIGHT, LEWELLYN

Participant in Research Project Themis

BRADSHAW, MARTIN D.

Full time research on Contract # AF29(601)-7097 US Air Force, Summer 1967. 1/3 time through academic year; became Principal Investigator on Feb. 1, 1966.

BYATT, WM. J.

Themis Advocate for Sandia Contract (Gwyn) Contract with Kirtland, "Radiation Transport"

CATES, HAROLD T.

Completed research (with others) on KAFB Contract F29601-67-C-0017 and submitted reports in June 1967. "Nuclear Damage on Avalanche Transistors and Diodes" and "Compensation Techniques for Tree Hardening" and completed research on KAFB Contract AF29 (601) -7-59 and submitted report in October, 1967. Neutron damage effects in noise Diodes. Worked on KAFB research contracts AF29 (601) -7059 and F29601-67-C-0017 and Department of Defense research contract entitled THEMIS. All of the above contracts involved radiation effects on materials. Developed EE 475L Lab and started writing a manual just for that Lab. Supervised honors students and master student in area of solid state to help further develop the solid state lab in the area of alloying, diffusion, oxidation, thin film evaporation and manufac-turing of semiconductor devices. Presently writing a book with Dr. Southward entitled ELEMENTARY THEORY AND EXPERIMENTS ON SEMICONDUCTOR DEVICES.
DeVRIES, RONALD C.

Submitted two proposals, one to Sandia and one to NSF

GRANNEMANN, WAYNE W.

A Radiation Effects Research Program under the Project, Theme: Surface Recombination Effects with Magnetoresistance as Applied to High Current Low Voltage Switching; Laboratory Testing and Theoretical Studies in Support of the AFML. TREE Program on Avalanche Junction Compensation, Hardening and Modeling

KARNI, SHIGO


KELLY, RUBEN D.

Worked on Air Force contract with KAFB (Dr. Koschnmann---Principal Investigator) until February 1968. Obtained my own Air Force Contract with KAFB Feb. 1968 through September 1968 ($15,000.00). A $60,000, two-year extension to this contract is being negotiated presently. Have begun work on a text book on Electronics.

KNUDSEN, HAROLD K.

Research on the design of near optimal feedback controllers partially supported by NSF (275-115) and Sandia Corporation (290-873)

KOSCHEMANN, ARNOLD H.

Research on U.S. Air Force Contract #AF29(601)-7097 to February 1968

MOHLER, RONALD

1. Optimal Control of Bilinear Systems, NSF, $46,200, about 2 years.
2. Optimal Nuclear Reactor Control, Sandia, $15,900, 1 year.
3. Control of the Nuclear Voltage Standard, Sandia, $16,200, about 18 months.
4. Systems study of Communist China
PETERSEN, DANIEL


SOUTHWARD, HAROLD

Completed Research Project on Radiation Effects on III-V Compounds $22,000, Air Force Weapons Lab.; Active on Microelectronics Techniques project, AF Special Weapons Center $16,000: Radiation Effects on Semiconductors—Project Themis Department of Defense.

WILLIAMS, RICHARD H.

I have been working with the Art Department (Robert Ellis) to develop a computer program to use in esthetic computer graphics.
6. Activities in learned and professional societies

BRADSHAW, MARTIN


CATES, HAROLD T.

IEEE
Electronic Device Group

EKTEZ, AHMED

A paper was read at the IEEE International Electron Device meeting on October 20, 1967 at Washington D. C.

KARNY, SHICOMO

Invited to Chair session on "Topology". First Asilomar Conference on Circuits and Systems, November 1967.

KELLY, RUBEN D.

Attended the 2nd Annual IEEE Technical Conference held at Sandia Base on Tuesday, May 7, 1968. See 8 for below for ASEE representative.

ROSCAMANN, ARNOLD H.

Attended meeting of Rocky Mountain Electrical Engineering Chairman, Grand Lake, Colorado, August 1967.

KOHLER, RONALD R.


PROPPEN, DANIEL P.

Twelfth APOSRI Science Seminar, Albuquerque, June 1967. Local meetings of IEEE and NMSPE.

WILLIAMS, RICHARD H.

7. Other Professional Activities

MARTIN D. BRADSEW


BYATT, WILLIAM J.

Consultant EVCO. Revision of 6 volume set for Philco Corporation (Technical-vocational series on electronics)

CATES, HAROLD T.

Charity--Ran for the Ugly Man on Campus

DEVRIES, RONALD C.

Taught a course at Holloman via tele-lecture

ERTEZA, AHMED

Consultant for Dikewood Corporation, Albuquerque

KARNI, SHLOMO


KELLY, RUBEN D.

a. Gave talk to each of six ninth grade science classes at Grant Junior High School on the subject of "Electricity and Magnetism". During the full day of talks, a set of demonstrations relating to static electricity, dynamic electricity and electromagnetism was presented to each ninth grade science class.
b. My entire class was the subject of a KOB news program filmed in the EE Lab of the course EE 498 Senior Design Seminar in which the class designed and constructed a small digital computer that automatically plays Tic Tac Toe. The color-sound film was shown on KOB-TV.

c. Had a consultancy agreement with Sparton Southwest for the design of electronic instrumentation systems. I designed a new wide-range poly-phase oscillator which is not available on the present market and which apparently is patentable.

d. Had a consultancy-type agreement with Kirtland AFB Civil Service Personnel in which I provided teaching "services" consisting of twenty-five lectures describing the design of electronic circuits. A photograph and an article describing the course appeared in the April 26, 1968 issue of the NEUCLEUS, the KAFB weekly news paper.

e. Am scheduled to deliver a talk to the Manzano High School Radio Physics course on the Tic Tac Toe machine design.

KNUDSEN, HAROLD K.

Employed by Sandia Corporation Summer 1967 for the evaluation of a Loran-Inertial Guidance System

KOSCELMANN, ARNOLD H.

Talked to students at St. Pius High School on career day.

MÖHLER, RONALD R.

a. Two lectures related to my research were given at UCLA
b. Consultant to Aerojet-General Corporation, Sacramento and Sandia Corporation.


PETERSEN, DANIEL P.

SOUTHWARD, HAROLD D.


8. Non Teaching

BOATWRIGHT, LEEWILYN

Department Scheduling committee, Faculty advisor to NESEP program, Several Graduate Exam Committees, Department Laboratory Committee

BRADSHAW, MARTIN


CATES, HAROLD T.

Electrical Engineering Equipment Committee, Building Committee for the New Engineering Building, Electrical Engineering Bulletin Committee and a preponderance of other small jobs.

DEVRIES, RONALD C.

University College Advising, Electrical Engineering Computer Committee, College of Engineering Freshman Advisory Committee.

Erttza, Ahmed

Chairman, Graduate Programs Committee of the Electrical Engineering Department, Chairman, Computer Engineering Committee, Electrical Engineering Department, Graduate Advisor, EE Dept., Member of Special Committee for screening nominees for Dean of Engineering of UNM.

Karnit, Shlomo

Faculty Advisor, IEEE Branch; Scholarship-awards Committee, College of Engineering; various Dept. Committees; UNM Colloquium Committee
KELLY, RUBEN D.

Elected as University Representative of the ASEE and attended the Gulf Southwest committee meeting at Texas A and M. Elected for a one-year term as an alternate to the 1968-69 Academic Freedom and Tenure Committee, University College Faculty Advisor, EE Laboratory Equipment Administrator for EE Dept. under the Educational Aids Program. Supervision of EE Technicians and Student Shop Aids.

KNUDSEN, HAROLD

Faculty advisor--Chess Club.

KOSCHMANN, ARNOLD H.

Engineering College, Administrative Committee, Greater UMM Fund Allocations Committee

MOHLER, RONALD R.

Chairman, EE Systems Committee; Engineering Research Committee; Athletic Council; Freshman Committee; Committee Chairman for 3 doctoral students and supervised two dissertations completed this academic year; advisor.

PETERSEN, DANIEL P.

Committee on Summer Session, Extension and Community Service, UMM Symphony Orchestra (cello)

SOUTHWARD, HAROLD D.

Served on Library committee, Freshman and EE student advisor, worked on grant proposals and labs in new Engineering Building. Chairman, EE Solid State Committee.

WILLIAMS, RICHARD H.

Director-Graduate Center at Los Alamos, Faculty advisor, IEEE Student Chapter.
9. Public Service

BOATWRIGHT, LEWELYN

Precinct Committeeman, 1967-68.

BRADSHAW, MARTIN

Deacon, Del Norte Baptist Church

BYATT, WILLIAM J.

Democratic Co. Chairman, Faculty advisor, Newman Center.

CATES, HAROLD

Actively engaged in politics.

COOPER, JAMES ARLIN

Pack 393 Cub Master, 1969

DEVRIES, RONALD C.

Affiliate members of St. Andrew's Presbyterian Church. Instrumental in forming a couples club there.

KARNY, SELMO

B'nai Brith-Chairman, Israel Committee (Albuquerque Lodge)

KELLY, ROBERT D.

Installed and operated the audio equipment at the Anniversary Mass held at the Dominican Retreat House on Coors Rd. Modified and installed the electrical wiring at the "coffee house" opened recently by the Albuquerque Council of Churches. Installed the microphone system used for the "Guitar Mass" at the Newman Center. Served as advisor, representing the Faculty, to the committee that arranged the Anniversary Banquet held this spring at the Knights of Columbus Hall. Served as narrator in mass.

KOSCHEMANN, ARNOLD H.

Vice-chairman, Albuquerque Chapter National Multiple Sclerosis Society, Member Albuquerque Electronics Advisory Board, Board of Directors--Colorado District of the Lutheran Church--Missouri Synod.
MOHLER, RONALD R.

Junior High Sunday School Teacher, Committee on Christian Education, Committee for Selection of Minister of Christian Education—First Congregational Church.

SOUTHWARD, HAROLD D.

Active in church and boy scouts.

WILLIAMS, RICHARD H.

Board for Parish Education, Redeemer Lutheran Church

10. Personal Information

KARNI, SHLOMO

2nd child (daughter) born: May 9, 1967
  Name: Sarah M. Karni

My Israeli Citizenship Renunciation Accepted by Government of Israel.

WILLIAMS, RICHARD H.

Draft Status changed to 5A.
<table>
<thead>
<tr>
<th>Research Contract</th>
<th>Project Supervisor</th>
<th>Contracting Agency</th>
<th>Title of Project</th>
<th>Amount</th>
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<tr>
<td>281-005</td>
<td>Grannemann</td>
<td>Office of Naval Research</td>
<td>A Radiation Effects Research Program Under the Project Themis</td>
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<td>281-027</td>
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<td>281-028</td>
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<td>Surface Recombination Effects with Magnetoresistance as Applied to High Current Low Voltage Switching</td>
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<td>281-037</td>
<td>Kelly</td>
<td>AF Weapons Lab, Kirtland AFB</td>
<td>Investigation into Fuzing Problems</td>
<td>$15,054.96</td>
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<tr>
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<td>National Science Foundation</td>
<td>Optimal Bilinear Control Processes</td>
<td>$23,100.00</td>
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<td>Re-Entry Vehicle Antenna Studies</td>
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<td>290-647</td>
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<td>AF Weapons Lab, Kirtland AFB</td>
<td>Investigation into Fuzing Problems</td>
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<td>290-743</td>
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<td>Sandia</td>
<td>Time-Dependent Magnetohydrodynamic Shocks with Radiation Transport</td>
<td>$17,147.56</td>
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<tr>
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<td>Sandia</td>
<td>Transient Pulse Transmission Using Impedance Loaded Dipole Antennas</td>
<td>$18,941.32</td>
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<td>Sandia</td>
<td>Optimal Feedback Control of the Nuclear Voltage Standard</td>
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<td>Research Contract</td>
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<td>Amount</td>
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<td>--------------------</td>
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<td>290-774</td>
<td>Grannemann</td>
<td>AF Weapons Lab, Kirtland AFB</td>
<td>Laboratory Testing and Theoretical Studies in Support of the AFWL TRBE Program on Avalanche Junction Compensation, Hardening and Modeling</td>
<td>$32,427.00</td>
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<tr>
<td>290-775</td>
<td>Petersen</td>
<td>US Weather Bureau</td>
<td>A Study of Interpolation and Smoothing Operators in Objective Analysis</td>
<td>$13,952.00</td>
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<td>290-798</td>
<td>Southward</td>
<td>AF Weapons Lab, Kirtland AFB</td>
<td>Study ofTransient Radiation Effects in III-V Compound Solid State Devices</td>
<td>$22,780.00</td>
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<td>290-810</td>
<td>Southward</td>
<td>AF Weapons Lab, Kirtland AFB</td>
<td>Investigation of Microelectronics Techniques</td>
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<tr>
<td>290-861</td>
<td>Byatt</td>
<td>Sandia</td>
<td>A Theoretical Investigation of Radiation Effects on MOS Devices</td>
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<td>Sandia</td>
<td>Optimal Reactor Control</td>
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<td>275-126</td>
<td>Karni</td>
<td>National Science Foundation</td>
<td>Topological Synthesis of Dynamical Systems</td>
<td>$11,900.00</td>
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</table>
I. General departmental information

A. Achievements

(a) Student enrollments and degrees granted

<table>
<thead>
<tr>
<th></th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem. I</td>
<td>70</td>
<td>47</td>
<td>46</td>
<td>78</td>
</tr>
<tr>
<td>Sem. II</td>
<td>53</td>
<td>43</td>
<td>49</td>
<td>85</td>
</tr>
<tr>
<td>B.S. (M.E.)</td>
<td>June 1968</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.S.</td>
<td>June 1968</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>June 1968</td>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

These figures show a considerable increase in the number of B.S. degrees awarded (27 B.S. degrees in 1967), a decrease in the number of M.S. degrees (26 in 1967), and an increase in the number of Ph.D. degrees (2 in 1967). We are encouraged by this apparent growth in our undergraduate program, although we suspect that this large number of B.S. degrees is atypical and does not represent a growth rate that can be extrapolated. The decrease in the number of M.S. degrees was anticipated, because of the phasing out of the Sandia Corporation Technical Development Program. The increase in the number of Ph.D. degrees was also anticipated and we definitely expect growth in this area to continue.

Again this year, all of our graduates had accepted employment or made other plans (graduate school or military service) well before graduation. Six of our
B.S. degree candidates will go on to graduate school on a full-time basis, and several more will pursue graduate work in connection with their employment or military service on a part-time basis. Comparing 1963 to 1967, it is interesting to note that a much smaller percentage of our B.S. candidates are going on to graduate school. Last year 10 out of 27, or 37%, went on to graduate school, whereas this year only 6 out of 46, or 13%, went on to graduate school.

Two of our M.S. candidates will continue their studies for the Ph.D. on a full-time basis. Two of our Ph.D. candidates have accepted college faculty positions.

(b) Curriculum changes

The hours required for the B.S. degree have been reduced from 134 (plus 4 P.E.) to 130 (plus 4 P.E.). This change is consistent with a national trend toward reduction in the number of hours required for an engineering degree.

During this past year our entire undergraduate program has been under intensive study by a faculty committee. As a result of this study, we expect that in the near future recommendations will be made concerning the humanities and social science electives
required of our students and concerning the range and scope of courses that our students can select as technical electives.

Only one new course was added to our program. This course, Intermediate Dynamics (M.E. 414), was added to consolidate material previously taught in several courses. As a result of this consolidation, Mechanical Vibrations (M.E. 494) was deleted.

(c) Building modifications

With special funds, made available by the administration, our laboratory areas were tiled and repainted during the past year. The improvement in the appearance of our laboratories is truly remarkable. As funds can be made available, we believe that additional modifications can be made which will further improve the utility of the building.

(d) Student accomplishments

The following prizes, awards, and scholarships were presented to Mechanical Engineering students:

1. The George E. Breece Prize in Engineering - Mr. Charles L. Braun (shared with Mr. J. A. Flagstead, an Electrical Engineering student).

2. The Southern Union Gas Company Scholarships - Mr. Frank C. Cheston, III
   Mr. David R. Martinez

3. The Western Electric Fund Scholarships - Mr. Michael W. Edenburn
   Mr. C. Gregg Utton

4. The Harry and Mabel F. Leonard Scholarship - Mr. Robert L. Clayton
5. The A.S.T.M. Award -
Mr. Dennis E. Mitchell

Two of our undergraduate students, Mr. Roger Paroz and Mr. John Gustafson, were honored with a cash award presented by the Lincoln Arc Welding Company in recognition of an outstanding engineering design submitted as a senior project.

(c) Research

Sponsored research continues to be a major activity within the Mechanical Engineering department. During the past year the department was involved in 13 projects with a total funding value of $337,460; of this we estimate $220,000 was expended during the past year. Nine of our eleven full-time faculty members devoted a fraction of their time (typically 1/3 time) to sponsored research. The remaining two members were new as of last fall. One of these two men has secured sponsorship for research for the coming academic year. As was pointed out in last year's report, suitable space for contract research is very limited. The new Engineering Center will provide valuable additional space, but we must continue to renovate all existing outmoded facilities if our research effort is to be expanded.
B. Plans and recommendations

In the chairman's opinion, the department's greatest need is for the provision of facilities, equipment, and incidental support for dissertation and unsponsored faculty research. It seems fair to say that the faculty members of this department have done a truly outstanding job of obtaining support from outside agencies for research. This sponsored research has purchased faculty time, provided research assistantships and large amounts of research equipment on a loan basis. All of this has certainly strengthened the department and has contributed to the growth which our Ph.D. program has experienced. We will continue to aggressively seek this support.

However, this success in obtaining sponsored research has in some ways tended to disguise a problem area in our Ph.D. program which is now becoming very apparent. This is the matter of the department's need for certain major equipment and facility items around which new areas of research can be developed. And, as our Ph.D. program grows, we will see more and more need to develop new areas of research to fully exploit faculty talents and student interest. The problem with the present system is twofold: First, sponsorship is very difficult or impossible to obtain until after certain
pilot research is completed. Second, since equipment furnished for sponsored research is furnished only for a very specific designated purpose and time (loaned) we can not build up general research facilities from this source.

I recommend that this department and the administration work out a plan to provide funds over a period of years to increase the research capabilities of the department. I believe that this is absolutely essential if our Ph.D. program is to continue to grow and I believe that such expenditures would be an excellent investment in terms of the return that would result from additional sponsored research.

C. Appointments to staff
(a) Full-time faculty -
Glen Frank Cochrane, Jr. - Assistant Professor -
September 1968

D. Separations from staff
(a) Full-time faculty -
Floyd O. Calvert - Associate Professor -
On leave during 1967-68, resigned December 1, 1967
Two former full-time instructors, who have more recently served as teaching assistants, have completed their Ph.D. degrees in this department and have assumed teaching duties elsewhere.
Charles H. Treat joined the faculty of Trinity University, San Antonio, Texas as an Assistant Professor on February 1, 1968.

J. Darrell Gibson joined the faculty of the University of Wyoming, Laramie, Wyoming as an Associate Professor on July 1, 1968.

E. Change in chairmanship

Professor Richard C. Dove will relinquish the department chairmanship on June 30, 1968, to assume the position of Dean of Engineering. Professor Dove has found his 17 years of service with the M. E. department to be stimulating and rewarding. He enjoyed the utmost support from the faculty, the dean and other members of the administration. He leaves the department with considerable regret.

Dr. Maurice W. Wildin, a member of the faculty since 1961, will assume acting chairmanship on July 1, 1968.
II. Composite of information in biographical supplements

1. Advanced study

Richards, C.G.

Summer Engineering Conferences, The University of Michigan, Numerical Analysis,

Wessling, Francis C., Jr.

The Effect of Gases on the Freezing of Blood
Ph.D. Thesis March 1968 (Granted)

2. Sabbaticals, etc.

Houghton, Arthur Vincent III

Visited General Atomics, Los Angeles, California

Wildin, M. W.

Sabbatical Leave, Semester II, 1967-68.

3. New Scholastic Honors

Dove, R. C.

$500 award for best technical paper published by the Instrument Society of America.

Houghton, Arthur Vincent III

Recipient of Ford Foundation support for work on Heat Transfer, UCLA, May 16-17.
4. Publications

FELDMAN, K. T.


HOUGHTON, A. V. III


HSU, Y. C.


JU, F. D.

SKOGLUND, V. J.


WILDIN, M. W.
"Transient Strain and Temperature Distributions in Long Circular Cylinders Cooled by Emission of Thermal Radiation" (paper previously reported) accepted for publication in Experimental Mechanics, Vol. 8, No. 6, June 1968, p 272-277.

5. Other research or creative work

Albrecht, B. - Work on Air Force Weapons Laboratory Contract No. 290-660 Nose Cone, with Dove.

Baker, W.E. - Air Force Missile Development Center, Holloman Air Force Base, New Mexico. $24,977,


Dove, R.C. - Principal Investigator on AFSWL Project, $52,284, February 1967 - June 1968.


Houghton, A.V. III - Sandia sponsored $12,800, Dynamic Adiabatic Calorimetry (completed); Sandia sponsored $8,700, Thermal Conductivity (in progress).
Hsu, Y. C. - Gave seminar on "Couple-Stresses Elasticity" for one-third semester time in fall semester in the Mechanical Engineering Department.


Richards, C. G. - Numerical Study of The Vortex Rate Sensor, $33,000 NASA, Langley; Numerical Study of The Fluid Flow in Monostable and Bistable Fluidic Devices, $11,500, Air Force Special Weapons Center, KAGB.

Skoglund, V. J. - Experimental investigation of non-equilibrium air at high temperature in a shock tube, with Leroy Wilson. Analytical investigation of non-equilibrium air at high temperatures with Charles Watkins. Development of gas dynamics research facility. Contract research on numerical analysis of gas dynamics, $17,000, Sandia Corp.

Wildin, M. W. - Currently working on additions to notes for ME 511 (Radiant Heat Transfer) and on two papers for publication with the tentative titles: "An Investigation of a Model for Bidirectional Reflectance of Rough Surfaces," and "A Comprehensive Analysis of Errors Associated with an Integrating Sphere Reflectometer."
6. Activities in learned and professional societies

Dove, R. C.


Feldman, K. T.


Houghton, A. V. III

Attended Rocky Mountain Science council meeting, Member Executive Committee RMSC; Delivered paper, "Modern Methods in Numerical Analysis," Third Annual Symposium Mathematics, NMIMT. Attended RMSC Executive Committee meeting; attended meeting of American Association of Universities and Land Grant Colleges.
Hsu, Y. C.


Ju, F. D.

Reviewer for NSF Research Proposal (2). Reviewer for Prentice Hall on Manuscripts in Elasticity (1)

Schreyer, H. L.


Appointed to Committee on Stability of the Engineering Mechanics Division of ASCE. Reviewer for Applied Mechanics Reviews.

7. Other professional activities

Baker, W. E.


Dove, R. C.

Consultant to Sandia Corporation, Albuquerque, New Mexico; Consultant to Environ, Inc., Albuquerque, New Mexico.
Feldman, K. T.

"Career Opportunities in Mechanical Engineering," West Mesa High School, March 1968; St. Pius X High School, April 24, 1968. Consultancies: Sandia Laboratories (heat pipes), half-day per week from 1/67 to 6/67; Northrup Corporate Laboratories, Hawthorne, Calif. (heat pipes), 6½ days between 11/67 and 3/68. Litton Industries, San Carlos, Calif. (heat pipes), 2 days, Nov. 8, 7, 9, 1968; Menig and Sager, Attorneys-at-Law, Sept. 14, 1967, expert witness on gas fire; Energy Conversion Systems, half day per week from 3/67 to present (heat pipes); Jet Propulsion Laboratory, Pasadena, Calif. (heat pipes), two days during May 1968; Envirco, Inc. (heat pipes), one day during April 1968.

Houghton, A. V. III

Consultant: Sandia Corporation; various legal and insurance firms; Quantum Systems, Inc. Applied several large computer codes to solve problems in Aero-Space Industries. Informal consultant TRW Industries.

Ju, F. D.

Consultant, LASL.

Wessling, F. C., Jr.

Consultant, Envirco Corporation.

Wildin, M. W.

Consultant, Jet Propulsion Laboratory
8. Non-teaching University service

Albrecht, B.
Freshman Advisory Committee; M.E. Department Curriculum Study Committee.

Baker, W. E.
M.E. Department Graduate Advisor

Dove, R. C.
University Administrative Committee

Feldman, K. T.
UNM Campus Planning Committee; M.E. Scholarships and Awards Committee; Advisor: ASME Student Section; M.E. Open House; Engineering Freshman Advisory Committee; Christian Science Organization.

Houghton, A. V. III
Graduate Dean's Fellowship Committee; Freshman Advisor; Assistant to Graduate Dean; Coordinator for Danforth Foundation Visiting Committees.

Ju, F. D.
Graduate Committee

Richards, C. G.
Freshman Advisor (University College); Insurance and Retirement Committee; M.E. Curriculum Committee; Comprehensive Exam Committee (Fall 1967); Technology Application Center Committee.
Skoglund, J. J.
Chairman Engineering College Freshman Curriculum Committee; member Advisory Committee on Selection of Dean of Engineering; member Engineering College Library Committee; member M.E. Curriculum Committee.

Wessling, F. C., Jr.
Freshman Curriculum Committee; student advisor; in charge of M.E. part of new fluids laboratory; lecture to freshmen students on engineering.

9. Public Service

Dove, R. C.
Governor's Scientific Advisory Committee; Advisory Committee for Selection of Dean of Business Administration.

Feldman, K. T.
Church: Usher and Board Member, Christian Science Church.

Ju, F. D.
Cub Scout Leader

Wessling, F. C., Jr.
Newman Forum
I. GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements During the Academic Year 1967-68

1. Enrollment Summary

Enrollment trends for the past four years are shown in the table below. On-campus full-time enrollment shows a significant increase to 18 students compared to 11 for 1966. Total on-campus enrollment also demonstrated an increase from 27 to 39 students. This trend is expected to continue this Fall. Students enrolled at the Los Alamos Graduate Center continue to decrease each year. Since 1965, campus enrollments have outnumbered those at Los Alamos.

<table>
<thead>
<tr>
<th></th>
<th>Fall 1964</th>
<th>Fall 1965</th>
<th>Fall 1966</th>
<th>Fall 1967</th>
<th>Spring 1968</th>
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<tr>
<td>Full-Time</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Part-Time</td>
<td>15</td>
<td>26</td>
<td>27</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td><strong>Los Alamos</strong></td>
<td>25</td>
<td>21</td>
<td>18</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td><strong>Holloman</strong></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40</td>
<td>47</td>
<td>47</td>
<td>53</td>
<td>48</td>
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</table>
2. **Degrees Granted**

The table below reviews the degrees granted for the last four years. The number of advanced degrees awarded this year appears to be unusually low. As a result, 10 M.S. degrees and 4 Ph.D. degrees are anticipated next year.

<table>
<thead>
<tr>
<th>M.S. Degrees</th>
<th>1965</th>
<th>1966</th>
<th>1967</th>
<th>1968</th>
</tr>
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<td>On Campus</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Los Alamos</td>
<td>2/3</td>
<td>5/8</td>
<td>2/6</td>
<td>1/3</td>
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<tr>
<td>Ph. D. Degrees</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

3. **Curriculum**

Modification and reorganization of the present graduate courses were again carried out this year to update and improve the overall graduate program. Two new courses were also added to the bulletin to strengthen certain areas of graduate specialization: NE 514L Nuclear Engineering Laboratory II and NE 581 Controlled Fusion II.

An undergraduate course designed to acquaint the non-technical student with nuclear energy
and its peaceful applications in many areas affecting human affairs, NE 230 Applications of Nuclear Energy, was added to the curriculum. This course has been approved as an elective in the physical science requirement for a bachelor's degree in the Fine Arts College and the College of Education. The enthusiastic response of these Colleges to this new service course has been very gratifying.

4. Graduate Program

As a result of the reorganization of course work mentioned above, the basic core of courses in the M.S. program is now recommended as follows:

Math 312 and 3xx Adv Applied Mathematics
Physics 491 Contemporary Physics I
NE 460 and 461 Fundamentals of Nuclear Engr I & II
NE 463L Radiation Measurements and Analysis
NE 510 Reactor Theory I
NE 513L Nuclear Engineering Laboratory I
NE 590L Nuclear Systems Design

Three broad areas of specialization within the graduate program have been defined as
1. Reactor Theory and Technology
2. Radiation Technology
3. Controlled Fusion and Plasma Technology

After completing the basic core courses listed above, each graduate student is encouraged to concentrate his program of studies in one of the three listed areas.

5. Facilities

The new nuclear engineering laboratory should be ready for occupancy early in 1969. Additional equipment for this new laboratory, obtained from Sandia Corporation, includes 340 stringers (4"x4"x48") of reactor grade graphite and two master-slave manipulators to be used with the hot cell and gamma irradiation facility. These items, representing a dollar value of about $20,000, are useful additions to the laboratory facilities.

Victoreen, Incorporated, presented the department with an educational gift, a solid state automatic scalar module valued at $765.

Through the efforts of Dr. R. D. O'Dell, the department received a UNM grant of $3,300 to provide a modified drift tube extension for the Texas Nuclear neutron generator, enabling the direct use of the generator with the AGN-201 reactor.
## 6. Research in Progress, 1967-68

<table>
<thead>
<tr>
<th>Project Supervisor</th>
<th>Sponsor</th>
<th>Title</th>
<th>Time Period</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>O'Dell</td>
<td>NSF</td>
<td>The Determination of Nuclear Properties in Small Samples by the Pulsed Neutron Technique</td>
<td>6/67-4/68</td>
<td>$9,600.</td>
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</tbody>
</table>
7. **Student Activities and Achievements**

The UNM student branch of the American Nuclear Society received its national charter in December 1967. Officers elected in March are E. P. Royer, President; T. J. Raper, Vice President; E. Yao, Treasurer; and H. Bridges, Secretary.

Four students presented papers at the Annual Student Conference of the American Nuclear Society held at the University of Arizona in April.

- **Charles C. Price** - "A Snap-Type Reactor Design Permits a Simple Thermal Analysis"
- **E. Paul Royer** - "Nuclear Applications of Thermionic Converters"
- **Nelson S. Demuth** - "Reactor Kinetics of a Reflected Cylinder"
- **Wallace F. Walters** - "The Range of Validity of the Lenard-Balescu-Guernsey Kinetic Equation".

W. F. Walters received a second prize for his paper.
Dennis Mangan was awarded a Special Nuclear Science and Engineering Fellowship from the AEC, in National competition, to support his doctoral study.

The following Fellowships and Traineeships were held by graduate students in Nuclear Engineering (1967-68):

1. H. L. Bridges - NDEA Title IV Fellowship
2. C. Carossino - Office of American States Fellowship
3. N. S. Demuth - AEC Special Fellowship
4. A. Guthrie - Office of Civil Defense Fellowship
5. D. Mangan - NSF Traineeship
6. C. C. Price - NASA Traineeship
7. M. C. Rohwer - NSF Traineeship
8. E. P. Royer - NDEA Title IV Fellowship
9. C. C. Shau - UNM Fellowship

Ludwig A. Gritzo and William M. Sanders, staff members of the Los Alamos Scientific Laboratory, were selected to conduct full-time graduate study toward their Ph. D. degree under the sponsorship of the Laboratory's Advanced Study Program.
B. Significant Plans and Recommendations for the Near Future

1. Facilities

Many items of equipment are still needed to build and maintain a first rate teaching and research laboratory in nuclear engineering. A priority list of items to be requested in equipment grants is shown below:

1. Radiation Measurements and Analysis $35,000
   Equipment
2. AGN-201 Reactor Upgrading $30,000
3. 2-3 Mev Van de Graaff Accelerator $60,000
4. Cobalt-60 (20,000 curies) Irradiator $40,000
5. Plasma Laboratory Equipment $50,000

Additional equipment proposals will be written and submitted this fall in an attempt to secure funds for this necessary laboratory equipment.

2. Faculty and Staff

It has been three years since the number of faculty members in the department has been increased. This year it was not possible to offer a sufficient number of courses to give a good broad graduate program in nuclear engineering, even in view of the fact that the areas of specialization have been very carefully defined. Since the enrollment trends
indicate a continuing increase, particularly at the doctoral level, a very critical situation will exist next year unless the number of full-time faculty members is increased.

A very valuable part of the graduate program has been the cooperative efforts with the Sandia Laboratory. A number of staff members from Sandia have offered courses for the department in their areas of specialization. This provides a much broader program than would otherwise be available and should be continued and expanded. It is strongly recommended that a salary budget be provided each year to make this exceptional engineering talent available to the students.

With the acquisition of additional laboratory facilities each year, it becomes increasingly difficult to maintain the equipment in good working order and thus obtain the maximum usage. At this time the department has only a one-half time electronic technician. This staff appointment should be increased to full-time. In addition, another Graduate Assistant is needed to assist in the preparation of experiments and the maintenance of laboratory equipment.
3. **Undergraduate Program**

In line with the ASEE Goals Report, the M.S. degree should be the first professional degree in nuclear engineering. It is important, however, that the potential graduate student receive training in the fundamental areas of nuclear engineering while he is an undergraduate. For this reason, it is important that the department become more involved in undergraduate teaching. Nuclear engineering options in the bachelors programs of the other engineering departments would strengthen this department's contribution to undergraduate education and are to be encouraged.

4. **Graduate Program**

A planning and advisory committee has been set up to assist the development of the graduate program in controlled fusion and plasma technology. Of particular interest is the development of a teaching and research laboratory to augment the theoretical work that is underway in the department.

5. **Conferences**

The University of New Mexico has been selected to host the Annual Student Conference of the American Nuclear Society for 1969. This conference,
to be held next April, will bring together nuclear engineering graduate students and faculty members from the western half of the United States. A one day technical session will feature research papers presented by the students.

A national topical meeting on "Fast Burst Reactors", jointly sponsored by the Nuclear Engineering Department and the American Nuclear Society, will be held at UNM on January 28-30, 1969. Dr. Robert L. Long, Technical Program Chairman, has been responsible for bringing this prestigious national conference to the University.

C. Appointments to Staff

1. Full-Time Faculty & Staff
   Miss Bernice Buhrmester, Department Secretary

2. Part-Time Faculty & Staff
   Dr. George W. Arnold, Adjunct Professor, Semester I
   Mrs. Doris Dunning, Secretary, Semesters I & II
   Mr. Robert M. Jefferson, Instructor, Semester I
   Mr. Dennis L. Mangan, Graduate Assistant, Semester I
   Mr. Thomas J. Raper, Graduate Assistant, Semester II
Mr. Joseph E. Spitzer, Graduate Assistant, Semesters I & II

Mr. Wallace F. Walters, Graduate Assistant, Semester I

Mr. Ely Yao, Graduate Assistant, Semester II

D. Separations from Staff

None
II. COMPOSITE OF INFORMATION ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

None

2. Sabbaticals, Leaves of Absence, Summer Teaching, etc.

LONG, Robert L.

Returned on 1 Sept. 1967 from leave of absence to AWRE, Aldermaston, Berkshire, England.

WHAN, Glenn A.

Returned on 1 August, 1967 from leave of absence to Junta de Energia Nuclear, Lisbon, Portugal.

3. New Scholastic Honors, Fellowships, etc.

None

4. Publications

EVERETT, Willis L.


LONG, Robert L.


4. \textbf{Publications (continued)}

\textbf{LONG, Robert L.}


\textbf{WHAN, Glenn A.}


5. \textbf{Other Research Projects or Creative Work in Progress}

\textbf{EVERETT, Willis L.}


\textbf{LONG, Robert L.}

5. Other Research Projects...(continued)

O'DELL, R. Douglas


6. Activities in Learned and Professional Societies

EVERETT, Willis L.


Treasurer of the Trinity Section of the American Nuclear Society.

Chairman of the Finance Committee, Fast Burst Reactor National Topical Meeting.

Served as Consultant to Adolf R. Hockstim, Institute of Defence Analysis.

Attended and served as a member of the Conference Evaluation Committee of the Ninth Annual AMU Nuclear Engineering Education Conference, Argonne National Laboratory, March, 1967.

LONG, Robert L.

6. **Activities in Learned and Professional Societies**

(continued)

**LONG, Robert L.**

Presented paper titled "Applications of Nuclear Energy for Students in the Humanities" at Gulf-Southwest Section Meeting of American Society for Engineering Education, Texas A&M Univ., March 21-23, 1968;
Organizer and Technical Program Co-Chairman for American Nuclear Society National Topical Meeting on Fast Burst Reactors to be held at University of New Mexico, Jan.28-30, 1969;
Membership Chairman, Trinity Section of American Nuclear Society;
Represented Trinity Section at meeting of American Nuclear Society Program Committee, Toronto, Canada, Feb. 25-27, 1968;

**O'DE LL, R. Douglas**

Chairman, Education Committee, Trinity Section, American Nuclear Society;
6. Activities in Learned and Professional Societies
   (continued)
O’DELL, R. Douglas
   Judge at Western Regional Student Conference,
   ANS, March 29-31, 1968, Tucson, Arizona;
   Judge at 1968 New Mexico State Science Fair,
   Socorro, New Mexico.

WHAN, Glenn A.
   American Nuclear Society, Attended Annual Student Conference, University of Arizona, March 29-31, 1968;
   Associated Western Universities, Member, Nuclear Education and Training Committee; Attended Nuclear Education Committee Meeting, Salt Lake City, October 13, 1967; Attended Technical Orientation Conference, Berkeley, California, February 14-16, 1968.

7. Other Professional Activities
LONG, Robert L.
   Received AEC Senior Operator License for UNM AGN-201 Reactor, Nov. 6, 1967;
7. **Other Professional Activities** (continued)

**LONG, Robert L.**

Received Associated Midwest Universities grant for travel to Argonne National Laboratory, University of Illinois, and Purdue University, January 29 - Feb. 2, 1968.

**WHAN, Glenn A.**

Received AEC Senior Operator License for the University AGN-201 Reactor, November, 1967.

8. **Non-teaching University Service**

**LONG, Robert L.**

Member Nuclear Engineering Dept. Committees on Reactor Operations, Curriculum, Policy and Planning, Facilities Improvement.

**O'DELL, R. Douglas**

Sigma Xi Admissions Committee

Engineering College Library Committee and Schedule Committee

Chairman, University Committee on Radiological Control

Chief Reactor Supervisor

UNM Student Branch, ANS, Faculty Advisor

Goals Sub-Committee for Advisory Committee on Engr. College Deanship
8. Non-teaching University Service (continued)

EVERETT, Willis L.

Member, Graduate Fellowship Committee
Chairman, Engineering Doctoral Committee
Member, Advisory Committee to the Bureau of Engineering Research
Nuclear Engineering Doctoral Advisor
Member, Ad-hoc Planning Committee for a UNM Controlled Fusion and Plasma Program
Served as Member Deanship Advisory Committee
Member, Nuclear Engineering Curriculum Committee
Member, Nuclear Engineering Student Support and Recruitment Committee
Member, Nuclear Engineering Policy and Planning Committee
Chairman, Three Doctoral Dissertation Committees

WHAN, Glenn A.

Chairman, Nuclear Engineering Dept.
Member, Engineering Administrative Committee
Reactor Administrator
Chairman, Departmental Policy & Planning Committee and Curriculum Committee
Member, Departmental Student Support & Recruitment Committee and Facilities Improvement Committee
9. Public Service

LONG, Robert L.
Trinity United Methodist Church Senior High Youth group counselor, University class church school teacher, Choir Member, Elected Chairman of Commission on Education 1968-69.

O’DELL, R. Douglas
Clerk of Session and Choir Member at St. Andrew Church
This report is in six sections: I. Enrollment and Statistics, II. Faculty, III. The Visiting Committees, IV. Space, V. Other Events, and VI. Recommendations.

I. ENROLLMENT AND STATISTICS

Enrollment in the College of Fine Arts continued to increase during 1967-68, although at a less rapid rate than in recent years. The change in rate of growth is doubtless due to several factors, among them the sharp increase in tuition fees for non-resident students.

Among the college's departments, architecture experienced proportionally the largest increase in enrollment in 1967-68. Cumulative percentage increases in enrollment over the six year period between 1961-62 and 1967-68 have been as follows:

- Architecture: 150.6%
- Art: 108.4%
- Drama: 95.7%
- Music: 48.4%
- CFA: 88.6%
- UNM: 89.4%

During this six year period the rate of growth in the College of Fine Arts has thus approximately equalled that of the University as a whole. Three of the college's four departments have grown at a rate more rapid than the University average, two of them markedly so.
### STUDENT CREDIT HOURS (ANNUAL TOTALS)

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### PERCENTAGE INCREASE IN SCH OVER PREVIOUS YEAR

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### STUDENTS ENROLLED IN THE COLLEGE OF FINE ARTS

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### DEGREES GRANTED BY THE COLLEGE OF FINE ARTS

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<td>63</td>
<td>87</td>
<td>85</td>
<td>69</td>
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*Corrected figure.

**The BFA in Music was granted prior to 1966.
As a result of the less rapid increases in student enrollment, student-faculty ratios have tended to stabilize during the past three years. The high student-faculty ratio in the department of art has been maintained, however, only by shifting an increasing proportion of lower division studio instruction from the full-time faculty to graduate assistants. The Danforth Committee which visited the department of art in January, 1968, commented adversely upon extent to which graduate assistants are now being employed to instruct fundamental courses (see pages 8 through 17 of this report for a discussion of the Danforth Committee's observations and recommendations).

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<td>15.6</td>
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During the year Assistant Dean DONALD McRAE undertook a number of studies designed to provide information about patterns of enrollment in the college. Questionnaires were circulated to students who interrupted their studies in an effort to learn more about their reasons for leaving the University. The performance of students in upper division courses was studied in relation to work earlier done in required lower division courses. A comparative study was made of the

*totals may not add due to rounding.
work done by resident and non-resident students. A study was made of grades given in fine arts courses.

These and other studies will be continued as a means to gather data which may serve to provide a meaningful basis for faculty and administrative decisions with respect to courses and curricula.

II. FACULTY

Administrative Changes

WALTER KELLER, acting chairman of the department of music during 1967-68, was appointed chairman effective July 1, 1968.

THOMAS R. VREELAND, JR. chairman of the department of architecture, resigned effective June 30, 1968, to accept a position at the University of California, Los Angeles. During his three years as chairman Mr. Vreeland through his outstanding and vigorous leadership greatly advanced the academic program of the department. It is with the deepest regret that we see him leave the University. DON P. SCHLEGEL has agreed to assume the acting chairmanship of the department during 1968-69.

ROBERT O. PARKS resigned as director of the university art museum and ROBERT M. ELLIS was appointed director effective July 1, 1968. As assistant director of the Museum since 1964 Mr. Ellis has repeatedly demonstrated his exceptional abilities in installation of museum exhibitions and design of publications.
Promotions in rank

Three members of the faculty received promotions in rank in 1967-68, all in the department of art.

From Associate Professor to Professor.

GARO Z. ANTREASIAN. One of the United States' most distinguished lithographers, Mr. Antreasian came to the university in 1964. Earlier he taught for fourteen years at the Herron School of Art in Indianapolis and served as Technical Director of the Tamarind Lithography Workshop during its founding year in 1960-61. Since joining the faculty of the department of art, Mr. Antreasian has established a lithography workshop which has rapidly gained a national reputation as a center for advanced instruction and research in the medium. He has served ably as acting chairman of the department during the absence of Mr. Coke and with great effectiveness as a member of important committees, including the University Policy Committee, the University Library Committee and the College Policy Committee.

From Assistant Professor to Associate Professor

ROBERT M. ELLIS. As noted above, Mr. Ellis came to the university in 1964 as assistant director of the university art museum and assistant professor of art. Previously he was for eight years curator at the Pasadena Art Museum. Since coming to the university Mr. Ellis has made an immense contribution to the art museum. He is a superior teacher, an able and conscientious student adviser, and a valuable member of college and university committees.

RALPH E. LEWIS. A member of the university faculty since 1957, Mr. Lewis is a versatile and effective teacher not only in jewelry and metalwork, his primary fields, but also in drawing and painting. He is well-regarded by students and faculty alike. His creative work has been widely exhibited in New Mexico and in national exhibitions held elsewhere. He has been active in formulating department policies and has made an important contribution both as a student adviser and as a member of faculty committees.

Additionally, RONALD R. EICHHORN, who has served as Lecturer in Architecture during the past two years was appointed Assistant Professor of Architecture effective July 1, 1968.
Additions to the Faculty

The faculty of the college was greatly strengthened through a number of new appointments effective in September, 1967:

STEPHEN DUBOV, Instructor in Art (sculpture)
B.F.A., Kansas City Art Institute; M.A., Stanford Univ.

RICHARD RUDISILL, Assistant Professor of Art (history of art)
B.A., M.A., Sacramento State College; Ph.D., Univ. of Minnesota.

GABRIEL P. WIESBERG, Assistant Professor of Art (history of art)

FRANCIS H. BOWEN, Assistant Professor of Music (flute)
B.M., Univ. of Illinois; M.M., Texas Technological College,
Study at the Amsterdam Conservatory.

JOANNA deKEYSER, Assistant Professor of Music (cello)
B.M., Univ. of Southern California
Private study in Paris; master classes under Pablo Casals.

HECTOR GARCIA, Artist-in-Residence, Music (classical guitar)
B.M., Peryriad de Conservatorio, Havana.
A noted guitarist, Mr. Garcia taught there and elsewhere before coming to Albuquerque.

Additionally, there were four temporary appointments to the faculty during 1967-68:

GEOFFREY HOLROYD, Visiting Lecturer in Architecture
B.A., Univ. of Sheffield, England; Graduate Study, Harvard Univ.

CHARLES MATTOX, Visiting Associate Professor of Art (sculpture)
Mr. Mattox, a distinguished American sculptor, lives and works in Los Angeles.

VIVIAN N. MILFORD, Part-Time Lecturer in Art (art appreciation)
B.F.A., Syracuse Univ.; M.A., Univ. of New Mexico

MARIA L. NORDMAN, Instructor in Art (sculpture, photography)
B.A., M.A., Univ. of California, Los Angeles.
Separations from the Faculty

The following members of the faculty resigned effective June 30, 1968; JANE S. BUCKLES, Assistant Professor of Dramatic Art; THOMAS V. CALKINS, Assistant Professor of Dramatic Art; J. TEHRANCE CONWAY, Instructor in Art; STEPHEN DUBOV, Instructor in Art; WILLIAM A. GOODMAN, Instructor in Art; ROBERT O. PARKS, Professor of Art and Director, University Art Museum; JOHN PEARSON, Instructor in Art; DAVID STARKEY, Assistant Professor of Music; THOMAS R. VREELAND, JR., Professor of Architecture and Chairman of the department; and ALFRED YOUNG, Assistant Professor of Art.
III. THE VISITING COMMITTEES

An impartial view of an academic department by a committee of visitors is of value if it serves (1) to point out weaknesses which might be corrected, (2) to illuminate problems and suggest solutions, (3) to reinforce convictions already held by the faculty and administration, or (4) to provide evidence of a need for augmented support of the department's program. Necessarily the reports of visiting committees are limited by the brevity of their visits; within the span of two or three days it is hardly possible for the members of a visiting committee fully to become aware of either the weaknesses or the strengths of a complex and varied department. Visiting committees may also tend to suggest ideal rather than pragmatic solutions to the problems they perceive, and to answer the question, "What would be the best possible way to conduct this program?" rather than the more practical question, "What would be the best way to conduct this program given the financial resources available to support it?"

Three of the college's four departments have been visited by outside committees in the past two years. An accrediting committee of the National Architectural Accrediting Board visited the department of architecture in February, 1967; a committee invited by the university under the program supported by the Danforth Foundation visited the department of music in April, 1967; and a second Danforth Committee visited the department of art in January, 1968.

The reports submitted by these committees have stimulated highly profitable discussions among the faculties of the departments,
and we will long remain indebted to the distinguished architects, musicians, artists and scholars who served as committee members.*

The departments have already benefited in many ways from the counsel they have given us.

Unfortunately, many (perhaps most) of the committees' suggestions entail money, and in a lean budgetary year it has not been possible to do many of the things which the committees, the faculty and the administration agree should be done. In some cases it is questionable that the University of New Mexico will ever be in a position to take the course of action recommended to us.

As an example, the committee that visited the department of art noted in its report that the university "has met the problem of greatly increased undergraduate enrollments by greater and greater reliance on teaching assistants. The quality of instruction is bound to deteriorate by this policy....Steps should be taken at once to either increase the number of full-time staff members, or to limit enrollment in courses which are not now adequately staffed." In verbal discussions with members of the university administration, the committee urged that all sections of freshman courses be taught by

* The members of the committees were as follows:

Architecture: Albert A. Dreyfuss, FAIA, Sacramento; Samuel E. Homsey, FAIA, Wilmington (Del.); Thomas Howarth, ACSA, University of Toronto; Reginald Roberts, FAIA, San Antonio; W. J. Burke, Arizona State University; and Sam T. Hurst, FAIA, ACSA, University of Southern California, Chairman.

Music: Walter Ducloux, University of Southern California; Paul H. Lang, Columbia University; Walter Robert, Indiana University; and Wilfred C. Bain, Indiana University, Chairman.

Art: Warren MacKenzie, University of Minnesota; Robert Mallary University of Massachusetts; Wayne Thiebaud, University of California (Davis); and Allen S. Weller, University of Illinois, Chairman.
senior members of the faculty, not by graduate assistants.

No one would contest this recommendation, were it feasible.

In the fall semester of 1967-68 graduate and teaching assistants were responsible for instruction in twenty-four sections of beginning art courses. If as an alternative these sections had been taught by "senior members of the faculty" it would have been necessary to increase the faculty by eight full-time positions. The net difference in cost (assuming an average faculty salary of $11,000) would have been $61,400 on an annual basis. This expenditure would have made necessary a 25% increase in the department's budget, and the student-faculty ratio would simultaneously have dropped from 21:1 to approximately 14.5:1.

Within the financial resources presently available to the university this alternative is not a possible solution to the problems of lower-division instruction. To support our upper-division and graduate programs while maintaining an overall student-faculty ratio of 21:1, there is no choice but to accept the teaching of freshmen and sophomores either in large lecture classes taught by the faculty or in discussion and studio sections taught by graduate assistants.

The real question, the practical question is whether it is indeed true that through use of graduate assistants the quality of instruction "is bound to deteriorate." Are there ways in which graduate assistants may be used while still providing good, even excellent, instruction to beginning students? What can be done, accepting the realities of the situation, to make such instruction more effective?

The Danforth Committee was rightly critical of the art department's
use of graduate assistants on two counts, although the circumstances were not entirely within the department's control. During 1967-68 the freshman courses in Visual Fundamentals suffered from inadequate faculty supervision due to the resignation of NEWTON HARRISON, who left the faculty in the summer of 1967 to accept a position at the University of California (San Diego). While at UNM Mr. Harrison developed a tight and well-integrated course, closely supervising the assistants who taught the studio sections. At the time of his resignation, a replacement appointment proved impossible, and 1967-68 was hence an interim year.

Two appointments have been made for 1968-69 specifically to provide experienced staff strength in the supervision of the freshman courses. MILTON HOWARD (M.F.A., Pratt Institute), who will supervise the courses in Visual Fundamentals, has had a similar responsibility at the University of Minnesota during the past four years; KENNETH RAY (M.F.A., Yale University), who will supervise courses in the Fundamentals of Drawing, has been teaching since 1962 at the University of Illinois.

Supervision of assistants is not, however, the entire answer to the problem. The Danforth report notes that assistants are characteristically appointed "on the basis of the creative promise of their own work, and without any knowledge of their teaching abilities. Some of the graduate students told members of the committee that they did not know until the day before classes met for the first time the nature of the course they were assigned to teach, and the teacher in charge was not aware of who the newly assigned teaching assistants
would be."

This is true. Increases in enrollment have been such that newly appointed graduate assistants must usually be assigned to teach two sections of freshman courses in the first semester of their appointments. Often it is not known until registration has been completed which extra sections are required, hence an assistant originally scheduled to work in the visual fundamentals courses may instead be assigned to a section of freshman drawing. This, clearly, is a dis-service both to the assistants and to the students in the courses.

To correct this problem it will be necessary to increase the number of assistantships available to the department so that newly appointed assistants need not be assigned to teaching duties in the first semester of their appointment. Additionally it will be necessary to add a new course specifically designed to teach the graduate assistants how to teach drawing and design to freshman students. All newly appointed assistants will then be required to enroll in this course during their first semester at the university.

This approach to freshman instruction will also cost money, more than is budgeted now, and it will place a heavy load of responsibility upon the faculty members in charge of these courses. Although a lack of funds will prevent substantial progress in 1968-69, the question of adequate support of freshman instruction will be given the highest priority in budget requests for 1969-70.

This question has been discussed at length because its solution will ultimately be of importance to all departments of the college. The department of music has already begun to use graduate assistants...
in freshman instruction; the department of architecture must soon begin to do so. The problem, as stated above, is to develop the strongest possible lower division instruction through the joint efforts of the faculty and assistants.

Problems related to understaffing are not confined to the lower division. The reports of both the art and music committees emphasize the need for additional faculty appointments to provide specialized professional instruction at the advanced level. The art committee observes that "the greatest problem which faces the department...is the altogether too large number of major students as related to the staff. The existing staff is to be commended for the generally good calibre of the work which is being produced, but there is great need for more staff strength."

While noting that "the first priority should be the obtaining of additional support for the existing programs," the Danforth Committee also recommends new and expanded programs in areas of existing strength. Here the need for staff is closely related to space (discussed in section IV).

The committee that visited the department of music noted similar problems in its report. At one point the report describes the department as "inadequately staffed in the number of major teachers." Elsewhere it emphasizes the need for special additions in several special fields.

Substantial progress has been made since the Danforth Committee's visit. Instruction in cello and in flute was immeasurably strengthened through the appointment of JOANNA deKEYSER and FRANCIS BOWEN, both
distinguished musicians who have made an important contribution to the department not only through their teaching but also through a series of brilliant concerts and recitals. Instruction in classical guitar was offered for the first time in many years after appointment of HECTOR GARCIA as Artist-in-Residence. Mr. Garcia's appointment was made possible through a gift to the university by an anonymous donor.

Two other appointments have been made for 1968-69. MAURICIO FUKS, during the past year assistant concertmaster of the Dallas Symphony Orchestra, will join the faculty as assistant professor of music (violin), further adding to the growing strength of the instrumental faculty. The second appointment which has been made is in direct response to a recommendation given particular emphasis in the Danforth Committee's report. Commenting on the university's "magnificent theatre facilities" the report recommends that "opera should be organized as an instructional area and its fruits presented as a major attraction, especially during the tourist season. Many institutions look with somewhat jealous eyes at the operatic activities in Santa Fe. It is the committee's judgement that there is a similar opportunity for the production of opera on the Albuquerque campus."

THOMAS H. PHILIPS, JR., who will join the faculty in September, 1968, as professor of music has a distinguished record of achievement in the staging of opera, plays and musical comedies. He comes to UNM from the New England Conservatory of Music where he has served as director of the opera department.

Despite the progress which these appointments represent, many gaps in the department's staff remain to be filled. One of the most
serious of these gaps is in the field of composition. Others exist in instrumental fields: horn, trombone and oboe, to name but three. And as Mr. Philips develops an active program in opera there will be an imperative need for an experienced theatrical designer of national reputation. This appointment, of course, is needed by the department of drama as well as by the opera program.

Rapid advances have been made by the department of architecture during the past three years. The committee that visited the department on behalf of the NAAB notes in its report, however, that "the department has in effect come from a position of grossly inadequate support for a minimum program to a position of marginal support for what is essentially a graduate program." This advance, which has been substantial in percentage terms, has been made at the expense of other departments of the college. Past circumstances made it necessary, indeed imperative, to give architecture favored treatment in budgetary allocations: to provide additional staff positions in order to develop the program to its present level.

The accreditation committee comments that "gaps exist in the specialist faculty talents required for a comprehensive program, notably in the Technology area of teaching, including Structures, Acoustics, Illumination, Lighting and Mechanical and Electrical Systems. To staff the new curriculum additional teaching service is required in both Design and Technology courses."

Under its normal schedule, a second committee of the NAAB will visit the department during the coming year (two years after the initial visit). It may be anticipated that the committee will raise
further questions as to staffing. Due to limitations of budget, no
addition to the architecture faculty is to be made in 1968-69.

The combined staff needs of the three departments, underlined in
reports of the three visiting committees are both real and substantial.
And because all of the departments (including drama) are in need of
additional staff, it will not be possible to assist one department at
the expense of the others. The college can make progress in meeting
these needs only if it receives substantially increased support.

Far from making progress in recent years, the college as a whole
has actually lost ground. Over the five year period between 1962-63
and 1966-67 the college received only one new faculty position for
every 25.4 added full-time equivalent students. If during this period
the college had received new positions on the basis of a 21:1 student-
faculty ratio, four additional positions would have been created,
additions which would in part have met the staff needs described by
the visiting committees.

Actually, of course, a 21:1 student-faculty ratio is an unreason-
able goal for a college of fine arts. Architecture is a professional
school involving much highly specialized instruction; the art depart-
ment has a substantial graduate program both at the master's and
doctoral levels, one which requires many smaller classes and seminars;
and music inevitably requires much instruction on a one-to-one basis.
In applied music it is impossible to attain a student-faculty ratio
of more than 4:1.

The actual student-faculty ratio in the college has averaged
15.3:1 in the past three years (see table, page 3). This is as high

.16.
a student-faculty ratio as can be achieved while maintaining quality instruction; according to the visiting committees it may be too high a ratio. Had the college received new positions during the past five years on the basis of one position for every 15.3 full-time equivalent students, ten additional appointments would have been made. But these appointments were not made, and hence it is that the departments are now "inadequately staffed," that we have an "altogether too large number of major students as related to the staff," and that we place an ever greater reliance upon graduate assistants in teaching freshman classes.

V. SPACE

The need for a new building to house the department of drama has been discussed repeatedly and at length in previous annual reports of the college. This need becomes more acute with every passing year. The many inadequacies of Rodey Theatre and of adjacent teaching spaces are such as most severely to constrain the department's curriculum, limit its ability to provide the exciting experience of living theatre to campus and community audiences, inhibit its growth, and impair its morale. Despite the continuing efforts of the department's staff and students to maintain its program at present levels, it is impossible to hold a sanguine view of the department's short term future, and equally impossible to see what might be done to ameliorate its circumstances.
Nor is drama the only department in which the need for new space has become severe. The Danforth report on the department of art emphasizes that department’s need for additional space. It cites three specific problems: (1) the unfortunate separation of the department’s classes, now taught in seven campus buildings, (2) the fact that many of the graduate students in painting have to work in their own homes rather than in university assigned space, and (3) the adverse effect of limitations of space upon the curriculum. As an example of the latter the committee cites the need to develop a workshop for intaglio printmaking and serigraphy. "The outstanding work which is being done in lithography should be complemented by such an addition. If this could be accomplished at the same level of excellence, the department would undoubtedly have one of the outstanding print workshops in the country."

A second logical extension of the art department's program should come in the field of film making. "The outstanding work in photography plus some imaginative beginnings in the foundation course...suggest that with some additional facilities activities in such combined fields might reach a level of considerable importance." This recommendation of the Danforth committee has been anticipated in the thinking of the faculty and administration; an initial course in film making has been added to the curriculum, and Raynolds Hall is being remodelled to provide greatly improved photographic laboratories and teaching studios for use both by classes in still and cinematic photography.

The committee's recommendation that intaglio printmaking be added
to the curriculum had also been anticipated; such a step would have been taken some time ago had space been available. The department will during the coming year explore the possibility of revising the use of the basement of the Art Building so as to accommodate a studio for this purpose. Even if space is found, establishment of courses in intaglio printmaking will depend upon an additional faculty appointment and availability of funds for purchase of etching presses and related equipment.

Ultimately the needs of the department of art for more and better related space will be met only through construction of a new art building on the site adjacent to the Fine Arts Center. It is not known when funds for construction of such a building may become available.

Most likely the first building project to be undertaken will be a small addition to the Fine Arts Center which will provide additional space for the Fine Arts Library, additional storage space for the University Museum, and offices for faculty and staff. It is possible that this "west addition" to the Fine Arts Center may receive funding in 1969.

Minor revisions in the basement of the Architecture Building will make it possible to use more effectively the total space assigned to the department. Specifically it will be possible to provide space for an exhibition and jury room, one of the major recommendations of the NAAB committee.
V. OTHER EVENTS

Many other events and achievements of importance to the growth and development of the college are recorded in the annual reports of the several departments. Also listed in these reports are the many accomplishments of individual members of the faculty: books and articles published, performances, exhibitions, and participation in the work of learned societies and community organizations.

Space permits mention of only a few such items in this report:

Architecture

(1) As a result of its accreditation, the department was eligible for the first time to award the AIA Student Medal. The new medal was created to honor Mr. JOHN GAW MEEM, the distinguished Santa Fe architect, designer of the university's administration building and Zimmermann Library, among other campus structures. The John Gaw Meem medal will be given each year to a student in the graduating class for "excellence in design."

(2) The undergraduate curriculum in architecture was revised to include a requirement that all students complete a minor in a field other than architecture.

(3) The work of the building technology courses was expanded to include work on experimental structures. One such structure, an experimental multiple dome of wood and metal skeletal construction, thirty feet high by sixty feet wide, attracted particular campus (and community) attention when erected in the parking lot adjacent to 20.
A number of distinguished architects participated in the department's continuing lecture series. Among them were J. B. JACKSON, CHARLES W. MOORE, MICHEL POLAK, MARVIN HATAMI, DOUGLAS MICHELS, BOB FIELDS, WALTER BOR, DAVID T. HICKS, EDUARDO LOZANO and LOUIS SAUER. The department must also express its appreciation to the many members of the profession in New Mexico who again, as in years past, generously gave their services as visiting lecturers and jurors. This support, as well as that given through membership in the Alumni and Friends of the Department of Architecture, is of utmost importance to the department.

Art

A new graduate program leading to the Ph.D. degree in the history of art was approved by the college faculty, the university faculty and by the Board of Regents. It will be presented to the Board of Educational Finance for final approval in the fall of 1968.

As noted above, funds were made available to remodel Sara Reynolds Hall as a building for instruction in photography and film. This work will be completed prior to the beginning of the fall semester of 1968. Some additional space in the Engineering Annex and in Hodgin Hall was assigned to the department for use by graduate students in painting.

The department again took satisfaction in the notable achievements of its students. Many received awards in professional exhibitions. Others received appointments to fellowships and graduate
assistantships at leading universities. Those completing requirements for the M.A. and M.F.A. degrees received faculty appointments at major institutions. Both the Danforth Committee and the juror of the annual student exhibition, Mr. RUDY TURK, Curator of Collections at Arizona State University, commented favorably upon the strength and diversity of the department's work. The Danforth report first took note that "the faculty exhibition gave evidence of a staff which is professionally competent and decidedly varied. It was a pleasure to observe that no one person and no one style dominated the exhibition. It is obvious that the students have the opportunity of working with accomplished artists who are themselves creative and productive, and who represent a wide variety of styles."

The report continued, observing that "the student shows, both undergraduate and graduate reflected a similar variety of approach. There was a gratifying sense that the work had not been formed under the dictation of one or two dominant personalities."

Mr. Turk likewise observed that "the exceptionally high quality and diversity of the 1968 New Mexico Student Annual Exhibition are readily apparent, and apparent to a degree very seldom encountered in any competitive art exhibition. The entire show testifies to highly developed understanding of drawing and design combined with a commitment to individualized expression. Thus, the show evidences amazing maturity in skills and sensible independence in imagery."

(4) Among the department's visiting lectureres in 1967-68 were PIERRE COURTHION, SUE THURMAN, JUNE WAYNE, and LAWRENCE ALLOWAY.
Drama

The department maintained its normal production schedule during 1967-68. Included were productions of The Little Foxes, Under Milkwood, Asia and the Far East, and The Amorous Flea, as well as the Children's Theatre production, Hansel and Gretel.

Music

(1) Perhaps the most significant undertaking of the department during 1967-68, yet one of the less tangible, was a careful self-appraisal. Under Dr. WALTER KELLER's sound and excellent leadership, this self-appraisal has already resulted in a notable improvement in faculty and student morale and a renewed dedication to the highest standards of performance and musicianship. The curricula of the department were thoroughly restudied, a number of changes and revisions were made, and several courses added.

(2) An important and, indeed, spectacular addition to the performance capabilities of the department was made in January, 1968, when the magnificent new pipe organ, built by the Holtkamp Organ Company, of Cleveland, Ohio, was dedicated in a series of inaugural concerts.

(3) A third auxiliary organization in support of the college's programs, The Friends of Music, joined those already formed in support of the art museum and the department of architecture. As its first objective it has pledged $1,000 to assist incoming music students during the coming year. The department and the college are deeply indebted to the interested citizens who have lent their support to this new and important organization.
(4) As is customary, the department again presented a rich and exciting series of concerts and recitals. Particularly notable in a year of many notable events, including a superb performance of Beethoven's Missa Solemnis by the university chorus and orchestra, were the many distinguished recitals presented by members of the faculty as scholarship benefit concerts.

University Art Museum

(1) The museum presented seventeen exhibitions during 1967-68. Attendance rose sharply, from 32,641 in 1966-67 to 47,025 in 1967-68. A large portion of the increase may be attributed to the children's exhibition, The Animal Kingdom, organized by the museum in cooperation with the Junior League of Albuquerque. Visited by every sixth grade class in Albuquerque, as well as by adults and other children of all ages, the exhibition included sixty-five works of art, lent principally by other American museum, and ranged from ancient Egypt to the present day.

(2) Among other notable exhibitions presented during the year were:

Cady Wells: A Retrospective Exhibition. Published in connection with the exhibition was a 24 page illustrated catalog with text by Kate C. Duncan (M.A., 1967).

Young Photographers. Organized by Van Deren Coke, the exhibition included work by 55 young photographers from universities across the country. Mr. Coke also wrote the introduction to the 36 page catalog.

National Invitational Crafts Exhibition. Supported by a federal grant administered by the New Mexico Arts Commission, this exhibition was organized by a special committee, Robert M. Ellis serving as its chairman. Mr. Ellis designed both the distinguished installation and the 24 page catalog.
Lithographs by June Wayne.
Sculpture by Charles Mattox.

Presented concurrently, these colorful exhibitions surveyed the work of two noted contemporary artists, both of whom have made important contributions to UNM: Mrs. Wayne as Director of the Tamarind Workshop, with which the university has many associations; and Mr. Mattox as visiting professor of sculpture. The exhibition checklists were written by Mrs. Louise Lewis, museum curator.

(3) A total of 203 paintings, sculptures, drawings and prints were added to the museum's permanent collection during 1967-68, principally through gifts. So numerous were these gifts that it becomes impossible to name the donors in this report. The university's deep appreciation is extended to all of them, as well as to the members of the Friends of Art who have so generously and devotedly supported the museum's program. Without their aid and that of the museum docents, our program would be impossible. Particular mention must be made of the dedicated work of Mrs. F. M. Waller, chairman of the Junior League committee for The Animal Kingdom exhibition.

A selection from recent gifts to the museum will be presented in a special exhibition in the fall of 1968.

VI. RECOMMENDATIONS

Many of the recommendations which appropriately might be made at this time are implicit in earlier sections of this report. Briefly summarized, the more important actions which must be taken to ensure continuing qualitative growth of the college's programs are as follows:

.25.
(1) Most important of all, provision must be made for additional faculty appointments, both to correct existing deficiencies and to provide for future growth.

(2) Additional graduate assistantships must be provided so that newly appointed assistants may complete a program of instruction before their assignment to teaching duties.

(3) Added funds must be provided for departmental expenses and equipment, for travel by the faculty and administrative staff, and for museum exhibitions, publications and acquisitions. These funds have fallen badly behind needs in recent years, due both to continuing inflation and to rising enrollments.

(4) The building needs of the college must be met at the earliest possible date. The situation of the department of drama is particularly critical.

(5) The faculty of the college must continue to examine means through which instruction may be improved. Imagination is needed as well as money if the university is to keep pace -- or better, to provide leadership -- in meeting the needs of our students in the last third of the twentieth century.

Student participation in discussions which might lead to improvement in instruction is both welcome and desirable. It is hoped that recent student requests for increased participation in these decisions will be equalled by student responsibility in effecting them.
This annual report cannot conclude without a deep and affectionate expression of appreciation to TOM L. POPEJOY, who as President of the University did so much to aid and encourage the arts. It is entirely fitting that the Concert Hall should be named in his honor, for without him it would not be there. Nor would any of the university's programs in architecture, art, drama or music have achieved their present strength. Our accomplishments are his accomplishments.
The Report of the Department of Architecture
July 1, 1967 - June 30, 1968
Thomas R. Vreeland, Jr., Chairman

I. General departmental information

A. Significant achievements during the academic year, 1967-68.

1) In November 1967 the Architecture Department proposed and had accepted by the College a provision that students majoring in Architecture minor in some other field as a requirement for their first degree, the Bachelor of Arts in Fine Arts. This is the beginning of the fulfillment of a long-standing ambition of the Department that its students have broad knowledge in other disciplines (such as the social sciences and the natural sciences) as a support to their work in architecture. In line with this Professor Jones worked out with the assistance of members of the Civil Engineering Department a minor in Engineering for architecture students.

2) Professor Jones and Professor Weismantel proposed to the Department several modifications to the current curriculum which would introduce greater flexibility in accepting students with credits from other colleges and universities, with or without degrees, into the architecture program. In addition they proposed measures which would broaden the number of possible options in graduate studies in the last two years. These were approved by the Department. Professor Schlegel got approval for and actually conducted teaching in a minor in architecture for students following the Ph.D in Education.
3) Pursuing the drive started last year to build up the teaching strength in technical areas of architecture in response to the accrediting board's criticism of the Department's weakness in this area, much was accomplished this year and much remains to be done:

a) Using money from the Reynolds Metals Company, Professors Gathman and Schlegel edited the tapes from last year's Building Technology Workshop and, with the graphics assistance of Professor Eichorn, published a 75-page report of the workshop proceedings. Copies of this book were distributed to every architecture school in the country and additional copies went to all delegates attending the second Building Technology Workshop in Harvard this April.

b) Professor Gathman served on the program committee for this second Building Technology Workshop, chaired by Neal Mitchell and sponsored by Harvard. This workshop, inspired by the success of last year's workshop held in Albuquerque, was much larger, attended by many more schools, and heavily subsidized by contributions from the building industry. Professor Schlegel attended as the University of New Mexico delegate and reported that the workshop was intensive and highly successful.

c) The Department was fortunate in being able to use $2000 of Law School money, received in exchange for the
teaching services of Professor Weisman in a law seminar this spring, to bolster the teaching in technical areas. Steve Baer assisted Professor Gathman in the spring semester of the Building Technology course and conducted an experimental building program which resulted in the erection of a thirty-foot high solar heat collecting tower in the west court of the Architecture Building and a thirty-foot high and sixty-foot wide multiple dome of wood and metal skeletal construction. These experiments were considered very successful and valuable teaching additions to the Building Technology courses by the faculty and many of the participating students; and there is a strong desire to continue them next year if the money is available.

d) Professor Gafford used some of the money referred to in paragraph (c) to have his students build demonstration models for teaching structures. This was in line with last year's recommendations for the Structures and Building Technology program and money should be found to continue this next year.

e) Professor Gathman instituted an ambitious program of guest lecturers in the Building Technology course this year. These included many of the best practicing consulting engineers in Albuquerque. Professor Gathman paid these lecturers out of his own salary. Since the Department
wishes to continue this practice next year, it is hoped that other funds can be found to pay for it.

4) At the annual Student Awards Banquet this year, two medals were awarded for the first time. As a result of its accreditation last year, the Department was eligible for the first time to award the AIA Student Medal. And the Department created a new medal to honor John Gaw Meem, the retired Santa Fe architect. This medal will be given every year to a student in the graduating class for "excellence in design." In addition the Alumni and Friends of the Department of Architecture initiated a new policy to make grants-in-aid to needy and deserving students in architecture each year in lieu of the previous practice of making cash awards toward tuition to students purely on the basis of scholarship without considering need. A number of grants-in-aid were made to applying students this year at the Awards Banquet. In the future medals and certificates only will be awarded for scholarship.

5) The recommendation was made to the Dean, and approved by him, to add a third-line classification to the architecture slides. It was also resolved that in the future all architecture slides will be filed and classified in drawers similar to the painting and sculpture slides. This work of reclassifying will start over the summer.
6) Because a serious problem exists in Albuquerque with regard to the professional growth and development of the Architecture faculty, namely the lack of opportunity for involvement in actual work in planning and architecture, the Department recommended to the University the creation of a Center for Design and Research in Architecture and Planning within the larger structure of the contemplated Institute for Research and Development in the Social Sciences. This has been approved in principal by Vice Presidents Heady and Springer. It is hoped that two members of the Department, Professors Weismantel and Jones, will be working on the first contract undertaken by the new Center this summer, namely a planning contract with the city for the Albuquerque Model Cities Program.

7) The following lectures were sponsored by the Department this year: November 3, J. B. Jackson, "Road Architecture and Strip Development;" December 7, Charles W. Moore, "Form and Metaform;" February 12, Michiel Polak, "An Illustration of Reciprocity in the Evolution of European Architecture;" February 27, Marvin Hatami, "Recent Work;" March 6, Doug Michels and Bob Feild, "Spring Road Trip;" March 29, Walter Bor, "A New City in Tuy Valley, Venezuela;" April 17, David T. Hicks, "Architecture of the High Atlas Mountains;" May 6, Eduardo Lozano, "New Thoughts on Urban Design." In addition, on May 17, Louis Sauer lectured on his own work at the Student Awards Banquet, under the sponsorship of A.F.D.A.

8) Professor Weismantel organized a series of seven informal lectures featuring Albuquerque architects discussing their own works.
and thought for the benefit of the students. Speakers were Jason Moore, Robert Riley, John Varsa, George Wright, Hildreth Barker, Joe Boehning, and John Reed. In addition, these architects exhibited their work in the entrance hall to the Architecture Building. One other exhibit, photographic panels of Peace Corps work of architecture students in Venezuela, was shown to good effect in this hallway during spring semester. A display of this year's architecture theses in the foyer of the Fine Arts Center for one week in the spring rounded out the exhibits sponsored by the Department this year.

B. Significant plans and recommendations for the near future.

1) Reviewing last year's recommendations, some of these have been carried out and some remain to be done.

a) Using its own shop facilities and expense account money, the Department has constructed a total of twenty-four free-standing seven-foot high and eight-foot wide panels which have been used to great advantage in the second-floor drafting room to create visual separation between the design studios and sections. This has proved far more satisfactory than last year. In addition the Department has found that juries can be very successfully held in this room by arranging a quadrangle of panels within the drafting room. Since this is done at the expense of the space otherwise assigned
to fifth-year student desk space, it might prove highly desirable to construct lockable carrells for fifth-year students in the basement since their desks in the open drafting room upstairs go largely unused. In addition students in the second-floor drafting room are at present suffering from inadequate storage space. Money should be found to provide either the additional drawers on their desks that were omitted in the initial purchase to save money, or to construct lockers similar to those in the first floor drafting rooms.

b) Professor Schlegel attended a conference at Yale on the use of computers in architecture. He reported that their use and versatility are growing so rapidly among the schools that those who have not incorporated computer methodology into their teaching are in grave danger of falling hopelessly far behind. Last year’s request for the installation of an IBM 1050 Control Unit in the Architecture Building has still not been honored. Its installation in 1968-69 is urgently requested.

c) The Department still needs badly a photographic darkroom to be built in the basement of the Architecture Building. Although this can be done quite reasonably, last year’s request produced an astronomical estimate due to an attempt to combine Architecture’s modest needs with the full darkroom teaching facility requested by the Art Department.
The Architecture Department renews its request for a small darkroom facility in the basement for the constantly mounting needs of its students and teachers.

C. Appointments to Staff.

1) Professor Don P. Schlegel has been appointed Acting Chairman of the Department of Architecture for next year.

D. Separations from staff.

1) Geoffrey Holroyd, a former teacher at the Architectural Association in London, was appointed as a Visiting Lecturer in Architecture during the past year to replace James R. Jarrett, who left the faculty a year ago. Mr. Holroyd has done a splendid job as Fifth-Year Design Teacher and Thesis Critic. He goes next year to fill a visiting teaching appointment at California Polytechnic College at San Luis Obispo. No successor has been appointed yet.

2) Professor Thomas R. Vreeland, Jr., has served the Department as Chairman since 1965. He goes next year to head the new architecture program in the School of Architecture and Urban Planning at the University of California in Los Angeles. Although Professor Schlegel will act as Chairman next year, no faculty appointment has been made to replace Professor Vreeland yet. Professor Weismantel heads a search committee composed of Architecture Faculty members that will assist and advise the Dean next year in selecting a new chairman of the Department for the following year.
II. Composite of information requested on individual biographical supplements.

1) Advanced study.

Eichorn, Ronald R.
Bachelor of Architecture, Summa Cum Laude

Heimerich, John J.
Earned rating as Qualified Analyst and instructor for Fallout Shelter Analysis at Pennsylvania State University

Jones, Arthur W.
NCARB Council Certificate
Architectural registration in New Mexico

2) Sabbaticals, etc.

Heimerich, John J.
Traveled through Eastern U.S. before and after attending summer session at Penn State

Schlegel, Don P.
Travel in Europe for three weeks

Vreeland, Thomas R., Jr.
Visiting lecturer and juror, School of Architecture, Tulane University, January 8-11
Lecturer, School of Architecture, University of Oklahoma, October 12, 13

Weismantel, William
Served as seminar chairman, Mayor's Conference on Urban Beauty in St. Louis, March 14-15 at invitation of Mayor of St. Louis

3) New scholastic honors, etc.

Eichorn, Ronald R.
Graduated Summa Cum Laude, Member Phi Kappa Phi
Received A.I.A. Medal for general excellence in architecture

4) Publications.

Vreeland, Thomas R., Jr.
NATION'S SCHOOLS, Vol 80, No. 3, Sept 67, pp 66-69:
"Architects Design New Schools for New Towns"
PROGRESSIVE ARCHITECTURE, Apr 68, pp 198-214:
"New Schools in New Towns -- the Future"
ZODIAC 17, pp 118-161: "Young American Architects"
Weismantel, William
Review of HOUSES OF BOSTON’S BACK BAY by Bainbridge Bunting, in LANDSCAPE, (Vol. 17, No. 3 ) Spring 1968 p. 34.

5) Other research projects, etc.

Heimerich, John J.
Awarded a grant of $550 by Research Allocations Committee for "Current Construction of Significant Buildings" project

Jones, Arthur W.
Faculty Grant-in-Aid to develop new types of low-cost housing at the Indian Pueblos. Submitted design proposal to Model Cities Agency

Schlegel, Don P.
Architect for Dental Clinic ($175,000)

Vreeland, Thomas R., Jr.
Participated in Rice Design Fete #4, June 1967, "New Schools for New Towns" for two weeks. Project: A linear educational system for parkways, Houston Faculty Grant-in-Aid ($400) to continue research started in 1966 on perception and visual communication.

Weismantel, William
With student participation, report on ideal design of a typical square mile of Albuquerque. This will be completed this summer and published if funds can be found for printing. Began research on 13 New Mexico cities of 10,000-50,000 population (1960). Some findings already mimeographed.

6) Activities in learned and professional societies, etc.

Heimerich, John J.
Member, American Institute of Architects, Albuquerque Chapter Treasurer for year ending Oct 31, 1967; reelected for another year Chairman, Finance Committee

Jones, Arthur W.
Attended AIA Teachers' Seminar, Chicago, June 1967

Schlegel, Don P.
Vreeland, Thomas R., Jr.
Chairman, 1968 AIA/ACSA Teachers' Seminar Committee
Seminar on Industrialized Building to be held in Montreal
June 9-14
Member, Visiting Team, National Architectural Accrediting
Board to California Polytechnic College, Feb 11-14, 1968

Weismantel, William
Spoke to New Mexico Planners Association at Sunport, Oct
1967 on Urban Renewal
Helped prepare a discussion on a Rio Grande Park for
Albuquerque Urban Progress organization

7) Other professional activities, etc.

Heimerich, John J.
Five lectures on France to students at Manzano High School
Six lectures on Europe to various Albuquerque groups
Architect for apartment complex ($1,000,000)

Jones, Arthur W.
Entered National Architectural Competition for Football
Hall of Fame
Completed design and construction, Senescu residence,
Albuquerque

Schlegel, Don P.
Several off-campus talks
Consulting, Fort Lewis College

Vreeland, Thomas R., Jr.
June 1967, consultant to School of Architecture & Urban
Planning, U.C.L.A. on architecture curriculum
Chairman, Commission on Education, N.M. State Society AIA
Member, Architectural Panel, advisory to N.M. Art Commission
Member, curricular panel, ACSA Regional Meeting, Tucson, Ariz.
Apr 19-21
Lecture on urban design to New Mexico Association of Planners;
Dec 1
Lecture on history of landscape architecture in Landscape
Design School III, Nov 7

Weismantel, William
Made spot radio talk for use on various New Mexico stations
8) **Non-teaching University service.**

Eichorn, Ronald R.
Faculty adviser for 33 students
Department slide committee chairman

Heimerich, John J.
Faculty adviser for 90 to 95 architecture students

Jones, Arthur W.
Faculty Adviser for 49 students
Faculty Adviser for Zimmerman Library Motorcycle and Timing Association
Department of Architecture Lecture Series Chairman
Fine Arts College Policy Committee

Schlegel, Don P.
Member, Student Union Board
Member, Lawrence Ranch Board
Chairman, Library Committee for the Department
Faculty adviser for 32 students

Vreeland, Thomas R., Jr.
Member, Campus Planning Committee
Member, Committee for the Enhancement of Education
(a subcommittee of the Policy Committee)
Member, Art Museum Advisory Committee
Member, Fine Arts Policy Committee

Weismantel, William
Guest editor for Fall 1968 issue of NEW MEXICO QUARTERLY
Adviser to 11 students
Arranged a series of eight public lectures by Albuquerque prize-winning architects
Helped design curriculum for Master's Program in Architecture

9) **Public Service.**

Heimerich, John J.
Member, official board of Monte Vista Christian Church and
member of building committee
Vreeland, Thomas R., Jr.
Presented position paper on design of the city to Albuquerque Goals Commission under Title I of Higher Education Act

Weismantel, William
Advised Albuquerque Model Cities Staff
Appeared at two City Commission hearings as independent unpaid expert

10) Personal information.

Vreeland, Thomas R., Jr.
Has resigned as of July 1, 1968, accepting position on architecture faculty at UCLA

Weismantel, William
Son born here March 8, 1968, Karl Louis Weismantel
A. Significant achievements during the academic year, 1967-68.

The enrollment in the Department of Art has leveled off in comparison to the rapid rate of growth that has been experienced in the past five years. However students are still turned away from many courses taught by the Department of Art due to a shortage of staff and a lack of space. For example during Semester II, 1967-68 all studio courses at the freshman and sophomore level, despite the addition, during the period of enrollment of three new sections in the visual fundamentals courses, were full before registration was closed. At the graduate level the Department continues to attract students from all parts of the country, however, enrollment in the graduate program must be curbed in order to properly house and teach the number of graduate students presently enrolled. Graduate students from the following fifty colleges and universities in addition to the University of New Mexico are enrolled in the graduate program this year. Adelphi University, New York State College at Alfred, University of the Americas, University of Arkansas, Arizona State University, Atlanta School of Art, Baylor University, Brandeis University, Boston University, Brown University, University of California at Berkeley, University of California at Los Angeles, Connecticut College, Cooper Union, Florida State University, University of Hartford, University of
Hawaii, John Herron Art Institute, Chinese University of Hong Kong, Hornsby College of Art, London, University of Houston, University of Illinois, Indiana University, Kansas City Art Institute, University of Kansas, Maryland Institute, Massachusetts College of Art, University of Michigan, Minneapolis School of Art, University of Minnesota, Muhlenberg College, New York University, Notre Dame University, Oklahoma Baptist College, Oregon State University, Philadelphia College of Art, Pratt Institute, Queens College of New York, Randolph Macon Woman's College, Richmond Professional Institute, Rockford College, Rhode Island School of Design, Stanford University, Syracuse University, Texas State College for Women, University of Texas, Washington University, Western State College of Colorado, Wichita State University, University of Wisconsin, University of Wyoming.

A recent survey shows that the proportion of graduate students in the Department of Art who receive financial aid, in the form of fellowships or assistantships, is very unusual. In many departments of art only ten to fifteen percent more students are attracted than are awarded graduate assistantships or fellowships. Only thirty of the eighty graduate students in the Department of Art at UNM are being given financial aid.

Again it should be emphasized that the future development of the studio program, and now for the first time the
art history program, must be linked to the availability of space and additional staff. The Department's current needs in photography, the fastest growing part of the studio program, will be met by space that is being made available in Sara Reynolds Hall. This space was previously assigned to graduate painters. Space for the graduate painters will be made available in recently vacated buildings near the Art Department Building. These adjustments do not provide space for all graduate students in painting. Nor is space available for an etching studio, a field of study that is badly needed to complement our outstanding program in lithography. This is probably the only major art department in the country that can only offer students an opportunity to work in a single medium in the traditional graphic arts. This is a distinct limitation for majors as well as graduate students.

Although one additional art historian was added to the staff in 1967-68, it would be most desirable to add another faculty member, hopefully in the field of Renaissance art, in order to carry out plans for implementing the newly approved Ph.D. in art history. In this regard space for storage and study of slides and photographs, used by our art history and studio students, is very badly needed in the Fine Arts Library. Classroom space for teaching the expanded undergraduate art history program is also a need that must be met in the very near future.
A Visiting Committee, made possible through a grant from the Danforth Foundation, spent three days in January studying the programs and facilities of the Department of Art. Dean Allen Weller of the College of Fine and Applied Arts, University of Illinois, served as chairman of the committee. Professors Robert Mallary, University of Massachusetts, Warren McKenzie, University of Minnesota and Wayne Thiebaud, University of California, Davis were the other members of the committee.

Although the Visiting Committee made an effort to learn as much as possible about the activities of the Department, it was not feasible, in the brief period of three days, to see and understand all aspects of the various programs carried on by the Department. As a consequence a few false assumptions and errors in interpretation were noted in the Committee's report. In order to fully air these matters and discuss the report in general a meeting, of the professorial members of the faculty and Dean George Springer, was held in May after the report of the Visiting Committee was received. This group felt that the recommendations regarding improvements, that were within the present resources of the Department, had already been under study and steps had been taken in a number of instances to improve situations that needed attention. In many cases actions were recommended that are not feasible under our present limitations of staff and space.
It is appropriate that portions of the report submitted by the Visiting Committee be quoted since they make us all aware of our achievements as well as throw light on certain trouble spots.

"The Department of Art at the University of New Mexico has an excellent reputation and is carrying on an extraordinarily extensive and ambitious program. There must be very few universities with a comparable total enrollment which have such a large proportion of students who are majoring in art. It is quite extraordinary to find that there are apparently well over 600 students whose major is in this department.... In a university with a total enrollment of approximately 13,000 the resulting figure of approximately 630 students majoring in art is most remarkable. It is quite obvious that the department is filling a very important need, and that it is dealing with an exceptionally large student body....

There seems to be an unusual awareness on the part of the departmental staff of the teaching role which many university art majors will assume, and it is somewhat unusual to find that this aspect of the program is distinctly emphasized. There has been a real attempt to produce students who are capable of teaching in a considerable variety of artistic fields, rather than in concentrating in more limited areas. One result of this has been a rather unusual emphasis on requirements in art history for studio majors. This has been done in order that such students can occupy dual positions on university or college faculties, but has also lead to certain internal difficulties....

The internal difficulties referred to in this passage have been discussed at some length by representative members of the faculty. There is a tendency for the studio faculty to misjudge the aims of the art history faculty and visa versa. In order to raise the standards of the art history
courses it has been felt necessary, by the art historians, to
demand more hours of research and study from the students. This
has sometimes meant that studio majors have given emphasis to
their art history course work at the expense of their studio
course work. It is expected that this matter will clear up
as the students adjust to the demands of the art history
faculty and the art history faculty makes special arrangements
to integrate the special interests of their studio students
into the art history program. The greater emphasis placed
this year by the art history faculty, on preparing research
and criticism papers has already improved the level of this
aspect of the program.

The Danforth report continues:

"The committee did not make an exhaustive
technical survey of the physical facilities
available, but it is obvious that the department
needs additional new space. Separation of various
departmental activities is not ideal.... Most mem-
ers of the committee seemed to feel that it is
unfortunate that many of the graduate students in
painting have to work at their own homes rather
than in university assigned space; this did not
seem to be considered a hardship by the students
concerned, but it must create a considerable
difficulty for the staff members who visit them
and it is generally considered that graduate stu-
dents learn a great deal by associating with each
other in a graduate studio situation....

"There was a general impression that the
student work in lithography and photography
was the strongest shown, and that the work in
watercolor and crafts was in need of strengthen-
ing. It was particularly interesting to see
examples of the graduate students work arranged
in chronological order, and to note the change
and development in style over the last few
years. There is very little sense of regionalism
or localism in the work at this level, but it
is very much in tune with dominant artistic aims elsewhere in the contemporary world. Members of the visiting committee had the opportunity of talking with a number of the current graduate students; these gave the impression that they were interested and satisfied with the work they are accomplishing here.

"The greatest problem which faces the department, in the opinion of the visiting committee, is the altogether too large number of major students as related to the staff. The existing staff is to be commended for the generally good calibre of the work which is being produced, but there is great need for more staff strength. While this is true at all levels of instruction, the unfortunate effects of insufficient full-time permanent staff is particularly evident in the foundation course. . . . Steps should be taken at once to either increase the number of full-time staff members, or to limit enrollment in courses which are not now adequately staffed. . . ."

The "foundation course" is now staffed to a very large extent, by graduate assistants supervised by a member of the faculty.

It is difficult to measure the achievements of the Department of Art unless one is located in a metropolitan center where there are a number of departments organized along similar lines. It was therefore gratifying to read the following statement by Professor Rudy H. Turk, Curator of Collections at Arizona State University, and formerly Director of the Richmond California Art Center and Assistant Director of the San Diego Gallery of Fine Arts, who was the juror for the 1968 exhibition of work by students in the Department of Art.
"The exceptionally high quality and diversity of the 1968 New Mexico Annual Student Exhibition are readily apparent, and apparent to a degree very seldom encountered in any competitive art exhibition. The entire show testifies to highly developed understanding of drawing and design combined with a commitment to individualized expression. Thus, the show evidences amazing maturity in skills and sensible independence in imagery.

At first encounter, a visitor to the exhibition can not help but be surprised at the monumentality of the works, especially as it is apparent even in the smallest pieces in the show. Again, this testifies to understood fundamentals of drawing and design which seem to be exploited in a characteristic way very natural to students accustomed to the monumental environs of this state.

Inclusion in this show should be considered at once an honor and recognition of outstanding creative ability...."

B. Significant plans and recommendations for the near future.

The most significant plans for the near future is to develop the Ph.D. program in art history which was approved in May by the Board of Regents. As pointed out elsewhere, all other plans for the future are contingent upon the availability of additional staff and space.

C. Appointments to staff.

To meet the needs of our increased enrollment, to further the development of the art history program and to replace members of the staff who have resigned, seven new
faculty members have been appointed and four visiting artists will be on the faculty either for a semester or a year.

Richard Rudisill, who during Semester II, 1967-68, replaced Professor Elizabeth Smith while she was on leave, has been appointed an Assistant Professor of art history. Professor Rudisill's primary interest is the history of photography. He took a Ph.D. at the University of Minnesota in American Studies and has a secondary interest in the art of the United States and its relationship to literature.

Milton Howard, who took his M.F.A. at Pratt Institute, has been appointed an Assistant Professor to supervise the Visual Fundamentals program and teach painting. He has held a similar position for the past four years at the University of Minnesota.

Kenneth Ray, who took his M.F.A. at Yale University, has been appointed an Assistant Professor. He will be supervising the Fundamentals of Drawing program and teaching sculpture. He has been teaching since 1962 at the University of Illinois.

David Rodgers, who recently completed his M.F.A. at Indiana University, has been appointed an Instructor. He will be teaching a lecture course in contemporary art and courses in sculpture and drawing.

Thomas Perkinson, who completed his M.A. at UNM in
June, has been appointed an Instructor. He will be teaching drawing. Perhaps the most outstanding draftsman to graduate from the University in recent years, Mr. Perkinson has won a number of awards in drawing in major competition throughout the country.

Frank Boyden, who completed his M.F.A. at Yale University in 1968, has been appointed an Instructor. He will be teaching a lecture course and beginning painting.

E. Boyd, Curator of Collections, Spanish-Colonial art, at the Museum of New Mexico in Santa Fe, has been appointed an Adjunct Professor. Mrs. Boyd will teach a graduate seminar in Spanish-Colonial art during Semester II, 1968-69.

Four senior faculty members will teach on a visiting basis next year.

Charles Mattox, who was a Visiting Associate Professor during Semester II, 1967-68, has again accepted an appointment during Semester I, 1968-69.

John Anderson, of New York, a well-known sculptor who recently received a Guggenheim Fellowship, has been appointed a Visiting Lecturer for Semester II, 1968-69.

Ilya Bolotowsky, a distinguished painter, who is Chairman of the Art Department at Southampton College in New York will be a Visiting Professor during Semester II, 1968-69.

Frederick Hammersley, who has been teaching at Pomona College and Chouinard Art Institute since 1953, will be a Visiting Lecturer during the year. He will teach intermediate and advanced level painting.
D. Separations from staff.

Alfred Young, who came to UNM from a teaching position in England and has been active in our Visual Fundamentals program and in teaching painting, has accepted a position at San Francisco State College. John Pearson, a British subject whose visa has terminated, has accepted a position at the Nova Scotia College of Art. William Goodman and Stephen Dubov, both Instructors in sculpture, have resigned. Robert Parks, Professor of Art and Director of the Art Museum has resigned. John Conway (M.A. 1965, UNM), an Instructor in drawing and painting, will join the faculty of the Department of Art, University of Wisconsin, Madison.

Composite of information requested on individual biographical supplements.

1. Advanced Study

George, Douglas R. - Ph.D. Dissertation is in the hands of committee and work for degree is expected to be finished in June 1968.


2. Sabbaticals, leaves of absence, summer teacher elsewhere, travel, etc., during the period.

Coke, Van Deren - Traveled and did research in The Netherlands, Belgium, France and England during the summer of 1967. Lectured and did research in England during March.

George, Douglas R. - Visited Amon Carter Museum, Fort Worth to arrange show, "Visions of the West," which is expected to open at UNM Art Museum in the fall, 1969.
Kacere, John - Traveled in Great Britain, France, Spain and The Netherlands during the summer.

Smith, Mary Elizabeth - Leave of absence, spring semester, 1968.


Weisberg, Gabriel P. - Visiting Assistant Professor, Queens College, New York City, summer session 1967 (taught course in Nineteenth Century art history). Visiting Assistant Professor, Washington Square College, New York University, summer session 1968 (to teach survey course in art history).

3. New scholastic honors, fellowships etc.

4. Publications


5. Other research projects or creative work in progress or completed during period.

Antreasian, Garo Z. - UNM Research Grant - Development of lithography equipment. For Tamarind Lithography Workshop, continued work on textbook on lithography.


Coke, Van Deren - Continued research on the history of photography in the Southwest, the relationship between photography and painting, and work on the final stages of writing a book on B.J.O. Nordfeldt. UNM Research Grant, "The Penitente Rituals as a Subject for New Mexico Artists."

Dubov, Stephen - UNM Research Grant - sculpture project.

Ellis, Robert N. - Designed: California Design, 10 catalog for Pasadena Art Museum; catalog for Cady Wells, checklists for June Wayne and Charles Mattox exhibitions for UNM Art Museum; Chairman, Selection Committee for National Invitational Crafts Exhibition.

George, Douglas R. - Began preparation for major exhibit, "Visions of the West" for University Art Museum.

Mattox, Charles - Grant $25,000, to design and build for children a musical playground for Brooks Foundation - Santa Barbara, California.

Kacere, John - Intensive work under way on drawings and paintings.


Pearson, John - UNM Research Grant, "Exploration of the application of industrial materials to the idea of visual energy changes and non-mass in sculpture."

Smith, Sam - Research in progress on new techniques of framing and painting. Working in the lost wax technique of sculpture.

Tatschl, John - Four cement reliefs (4x10') for the University of Albuquerque. Six stained glass windows for private homes and business buildings. Designs for several stained glass windows for a church in
Tatschl, John (Cont.) Arizona. Designs made for a crucifix, baptismal and tabernacle; the execution of these designs is now in progress for the Arizona church. Designed a mural for the Telephone Building at Los Alamos, New Mexico.


6. Activities in learned and professional societies.


Coke, Van Deren - Served on the Board of Directors, Society of Photographic Education. Attended Mid-West College Art conference, Chicago, Oct. 1967; College Art Association of America conference in St. Louis, Jan. 1968; Society of Photographic Education conference, Washington, D.C., April, 1968, where read paper on "Paul Strand and 'Cubism.'"

George; Douglas R. - Attended American Studies Association, meetings in Taos and Albuquerque.

Paak, Carl E. - Member, American Craftsmen Council - New Mexico and Designer Craftsmen of New Mexico.

Parks, Robert O. - Attendance, annual meeting, Western Association of Art Museums, Vancouver, B.C.; annual meeting, American Association of Art Museums, New Orleans, where read paper on organization of academic art museums titled "Museum by Ear."

Smith, Mary Elizabeth - Attended College Art Association conference, St. Louis, Jan. 1968.

Weisberg, Gabriel P. - Attended College Art Association conference, St. Louis, Jan. 1968.

7. Other professional activities.


Antreasian, Garo Z. - Lectures on lithography, Olivet College, University of Wisconsin, Platteville; University of Wisconsin, Madison; Exhibits: Eastern Michigan University, New Mexico Fiesta Biennial Exhibition, Santa Fe; Smithsonian Institute; Museum of Albuquerque, Albuquerque I; A.A.A. Gallery, New York; Suihart Gallery, Tucson; University of Nebraska; U.S.I.A. to Saigon; Awards: Wichita Art Association; Albion College; Northern Illinois University; Pottsdam College; New York State University, Albany; Seattle Museum; Annual Department of Art Faculty Exhibition, UNM Art Museum.

Bunting, Bainbridge - Delivered the annual Bailey Lecture, Boston University, April, 1968, "Back Bay and South End: Two Examples of 19th Century Urban Design."
Coke, Van Deren - One-man show of photographs (35 prints) Scudder Gallery, University of New Hampshire; group show (10 prints) Friends of Photography Gallery, Carmel, California; Photography '68 (10 prints) Art Gallery, Transylvania College, Lexington, Kentucky; Photography-USA (7 prints), DeCordova Museum, Lincoln, Massachusetts; Seven Photographers (5 prints), Jonson Gallery; Quivera Gallery (20 prints), Corrales; Annual Department of Art Faculty Exhibition, UNM Art Museum. Juror for the 1967 All-Army Photography Contest, Fort Sam Houston, Texas. Represented the College Art Association at the annual meeting of the National Council of the Arts in Education at Pennsylvania State University, August, 1967. Served on a panel to select painters and sculptors from the Mid-South and South-West regions to receive grants-in-aid from the National Endowment for the Arts; served as a juror for the Third Albuquerque International Color Slide Exhibition; member Board of Directors, International Folk Art Foundation.

Conway, John T. - Painting exhibited - Albuquerque I, Museum of Albuquerque and in New Mexico Painting Invitational, Museum of New Mexico, Annual Department of Art Faculty Exhibition, UNM Art Museum.

Ellis, Robert M. - Exhibited in New Mexico Painting Invitational, Museum of New Mexico; lectured on contemporary art to the docents of the Museum of Albuquerque, served as a Consultant to Friends of Art, Annual Department of Art Faculty Exhibition, UNM Art Museum.

George, Douglas R. - Lecture "J. S. Copley" for Friends of Art series, "Great Masters."

Kacere, John - Lecture - "Picasso" for Friends of Art series, "Great Masters;" Annual Department of Art Faculty Exhibition, UNM Art Museum.

Lazorik, Wayne R. - New Mexico Photographers '68, Museum of New Mexico, awarded purchase prize; Seven Photographers (5 prints), Jonson Gallery, UNM; Annual Department of Art Faculty Exhibition, UNM Art Museum.

Levis, Ralph W. - One-man show, Relief Paintings, Jonson Gallery, 1968; National Invitational Drawing Show, Ithaca Museum, New York, Museum Purchase Award made for drawing; Southwestern Craftsmen Exhibition, Museum of New Mexico, awarded Honorable mention, 1967; Southern Utah Invitational painting exhibition, May 1968; Exhibited as member of selection committee in National Invitational Crafts Exhibition, UNM Art Museum; New Mexico Painting Invitational, Museum of New Mexico, 1968; Designed and executed cross, candlestick, and chalice for Monte Vista Christian Church, March, 1968; participated in radio interview regarding
Lewis, Ralph W. (Cont.) National Invitational Crafts Exhibition, KUNN, March, 1968; painting donated to Jonson Gallery collection, UNM.

Mattox, Charles - Preparing exhibit for 1969, Wilder Gallery, Los Angeles, California.

Paak, Carl E. Annual Department of Art Faculty Exhibition, UNM Art Museum; Invitational Exhibit, Wichita, Kansas; Exhibited as member of selection committee National Craft Invitational Exhibition, UNM Art Museum; New Mexico Designer Craftsmen Exhibit, Museum of Albuquerque; Southwestern Craftsmen Exhibit, International Folk Art Museum, Santa Fe; Contemporary Crafts Exhibit, State Fair, Albuquerque.


Pearson, John - One-man show of sculpture, Richard Gray Gallery, Chicago; Annual Department of Art Faculty Exhibition, UNM Art Museum.

Smith, Mary Elizabeth - Appointed member, Editorial Advisory Board, Institute for Latin American and International Studies, University of Nebraska.


8. Non-teaching University service.

Adams, Clinton - Dean, College of Fine Arts. Member: Administrative Committee; Committee on Entrance and Credits; Concert Hall Board; chairman or ex officio member, various committees of the College of Fine Arts.

Antreasian, Garo Z. - University Policy Committee; College Advisory Committee; Department of Art Curriculum Study Committee; Department of Art Advisory Committee; Art Museum Advisory Committee.

Bunting, Bainbridge - Department of Art Advisory Committee, University College advisor.

Coke, Van Deren - University Library Committee; Art Museum Advisory Committee; Chairman, Department of Art; Graduate students advisor.
Ellis, Robert M. - Faculty Publications Committee; Committee for Concentrated Fine Arts Project (formulation of project proposal); faculty advisor to eighteen Fine Arts majors.

Kacere, John - Department of Art Advisory Committee, Fine Arts students advisor.

Lewis, Ralph W. - Fine Arts students advisor; member selection committee; National Invitational Crafts Exhibition; University Student Standards Committee; Department of Art Advisory Committee; Department of Art Curriculum Study Committee.

Paak, Carl E. - Board of Harwood Foundation, Taos; Graduate Fellowship Committee, Fine Arts students advisor.

Smith, Mary Elizabeth - Committee on International Programs, Fine Arts students advisor.

Smith, Sam - Research Allocations Committee; AAUP member; College of Fine Arts Committee on Promotion and Tenure; University College students advisor.

Weisberg, Gabriel P. - Art Museum Advisory Committee; Fine Arts advisor for art history undergraduate students.

9. Public Service

Adams, Clinton - Member, Board of Directors, Opera Assn. of New Mexico; member, National Committee, Art in the Embassies Program, Department of State; Chairman, Committee on the Arts and Humanities, Associated Western Universities.

Antreasian, Garo Z. - Juror, Taos Art Association Annual Exhibition.

Bunting, Bainbridge - Board of Directors, Museum of Albuquerque, Chairman of Acquisition Committee for Museum of Albuquerque.

Coke, Van Deren - Chairman, Fine Arts Advisory Committee for the City of Albuquerque.

Paak, Carl E. - Vice President - Rocky Mountain Desert Art - Unitarian Church; Supervisor for Boy Scout Merit Badge in Ceramics.

Parks, Robert O. - Choir, St. John's Episcopal Cathedral.

Smith, Sam - Donation of painting for raffle for Friends of Art.
10. Personal information

Conway, John T. - one child

I. GENERAL DEPARTMENTAL INFORMATION


There were no new departmental organizations, offerings, or emphases during the academic year.

B. SIGNIFICANT PLANS AND RECOMMENDATIONS FOR THE NEAR FUTURE.

It has been requested that the University Architect, the University Safety Inspector, and the Department Manager of the University Physical Plant conduct a thorough inspection of the University Theatre building to determine its current stability and safety for occupancy as a classroom and theatre. Further, it has been requested that any defects of structure or mechanical equipment that could be considered a hazard to occupancy and use be corrected prior to the next academic session.

If feasible arrangements can be made, the Department of Drama will plan to stage two of its season's productions in the Fine Arts Center: one production to be staged in mid-December in the Recital Hall; the second production to be staged in mid-May in the Concert Hall.

Inasmuch as the major portion of the Department of Drama program, including Children's Theatre and Student Workshop Theatre, will be housed in the University Theatre (Rodey Hall), it is urgently requested that some provisions be made to keep this building as attractive and presentable as possible for our student and community audiences.
C. APPOINTMENTS TO STAFF.
Emil F. Shulte.
Carolyn Sirkle.

D. SEPARATIONS FROM STAFF.
Thomas V. Calkins.
Jane S. Buckles.

II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS.
1. Advanced Study.
BUCKLES, Jane S.
Eleven quarter hours toward Ph.D. - University of Denver.

2. Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere, Travel, etc., During the Period.
YELL, Joseph E., Jr.
Producer-Owner of Garrett County Playhouse (Oakland, Maryland, July, August). Produced eight plays in an eight week season. Employed eight UNM Drama Majors.

3. New Scholastic Honors, Fellowships, etc.
BUCKLES, Jane S.
Fellowship in Costuming, University of Denver, beginning June, 1968.

4. Publications.
None.

5. Other Research Projects or Creative Work in Progress or Completed During the Period.
None.
6. Activities in Learned and Professional Societies.

SNAPP, Robert E.


Attended Southwest Theatre Conference, Las Cruces, New Mexico, October 26-28, 1967 - "Role of Director in the University Theatre." President - New Mexico Theatre Guild. Corporate Member of American National Theatre and Academy. Member of the American Educational Theatre Association and National Theatre Conference.

YELL, Joseph E., Jr.

Member of American Association of University Professors, Member of American Educational Theatre Association, Member of Children's Theatre Conference. Member of Southwest Theatre Conference (attended convention in October, 1967, in Las Cruces, New Mexico). Member of New Mexico Theatre Guild.

7. Other Professional Activities.

The Department of Drama again offered theatre-goers of both the student body and community a varied and stimulating theatre program:

THE LITTLE FOXES by Lillian Hellman, directed by Edwin Snapp; UNDER MILKWOOD by Dylan Thomas, directed by Thomas Calkins; ASIA AND THE FAR EAST by Isaac Chocron, directed by Edwin Snapp; and THE AMOROUS FLEA by Jerry Devine and Bruce Montgomery, directed by Gene Yell.

Settings and costumes for the plays were designed by Jane Buckles; lighting and make-up were provided by Nadene
Blackburn; all technical aspects of the physical production were in charge of Thomas Calkins. Each of the productions ran for seven performances.

An important part of the Department of Drama's service to the community at large is its Children's Theatre production. This past year its presentation was HANSEL AND GRETEL. The play was directed by Gene Yell; scene construction, mounting and shifting were handled by Thomas Calkins; Nadene Blackburn was in charge of the lighting and make-up; costumes were designed by Jane Buckles; the set was designed by Justine Kahn.

The Student Workshop Theatre, under the supervision of Edwin Snapp, presented two senior thesis productions: Bertolt Brecht's THE EXCEPTION AND THE RULE, directed by Gerry Puhara with special music composed by Carl Hammond; and Oscar Wilde's SALOME, directed by D. Masters.

The lighting for the plays was supervised by Nadene Blackburn. Each of the productions ran for four performances in the Commedia Theatre.


BLACKBURN, Nadene S.
Advice for Drama Department students. Chairman of Department Hospitality. State Thespian Festival Planning Committee.

BUCKLES, Jane S.
University College Advisor.

CALKINS, Thomas V.
Advisor to twenty-four upper division Drama Majors.

SNAPP, Robert E.
UNM Radio Committee. College of Fine Arts Policy Committee. Executive Director of University Theatre.

YELL, Joseph E., Jr.

University College Advisor. Concert Hall Board Committee. Fine Arts Advisory Committee. Fine Arts Promotion Committee. Fine Arts Course #100 Committee. Faculty Club (AAUP).


SNAPP, Robert E.

Served as advisor and adjudicator for the High School One-Act Play Festival, held at Valley High School in Albuquerque.

YELL, Joseph E., Jr.

March of Dimes.

10. Personal Information.

BLACKBURN, Nadene S.

Divorced.
The Report of the University Art Museum

July 1, 1967 -- June 30, 1968

Robert O. Parks, Director

NOTE: Mr. Robert O. Parks resigned as Director of the University Art Museum effective June 30, 1968. This report has been prepared by Clinton Adams, Dean, College of Fine Arts.

I. General departmental information

A. Significant achievements during the academic year 1967-68:

Seventeen exhibitions were shown in the Museum during 1967-68. Annual attendance was 47,025, an increase of 44% over the attendance for 1966-67 (32,641). A portion of the increase is due to the special children's exhibition, The Animal Kingdom, attended by all sixth grade classes in the Albuquerque Public Schools and by many other children and adults.

The exhibition schedule was as follows. Exhibitions marked with an asterisk (*) were organized by the museum staff.

* 1. Gady Wells: A Retrospective Exhibition

2. L.A. to N.Y.: Drawings of the 1960's

   Organized by the University of Colorado Art Museum.

* 3. Fourth Annual Purchase Exhibition

4. Photographs by Clarence Kennedy

   Organized by the University of Colorado Art Museum.
5. **Italian Renaissance Drawings**

Selections from the Collection of Janos Scholz, shown in Albuquerque as a benefit for the Committee to Rescue Italian Art (CRIA).

* 6. **Nineteenth Century Prints from the Permanent Collection**

* 7. **Annual UNM Faculty Exhibition**

* 8. **Pieter Breughel the Elder, Prints and Drawings**

* 9. **Young Photographers**

* 10. **The Animal Kingdom**

Organized by the UNM Art Museum in cooperation with the Junior League of Albuquerque.

* 11. **Selections from the Permanent Collection**

* 12. **Lithographs by June Wayne**

* 13. **Sculpture by Charles Mattox**


Organized by the Museum of Modern Art for the UNM Art Museum.

* 15. **National Invitational Crafts Exhibition**

Organized by the UNM Art Museum under a federal grant administered by the New Mexico Arts Commission.

* 16. **Master Theses Exhibition**

* 17. **Selected Work by Students of the Department of Art, 1968.**

A most significant continuing activity of the museum is its program of publications. These publications have done much throughout the country to advance the university's reputation as a major art center. The publication program has, in the past, been entirely self-sustaining, supported by sales, fees from
participating institutions, and subventions from community organizations, principally The Junior League of Albuquerque. During 1967-68, the museum published three catalogs and three illustrated checklists.

**Cady Wells: A Retrospective Exhibition**

Text by Kate C. Duncan. Designed by Robert M. Ellis. 24 pages, 15 illustrations.

**Young Photographers**

Introduction by Van Deren Coke. Designed by James Kraft. 36 pages, 55 illustrations.

**National Invitational Crafts Exhibition**


**Charles Mattox**

Text and biographical notes by Louise M. Lewis. 6 pages, 4 illustrations.

**June Wayne**

Text and biographical notes by Louise M. Lewis. 6 pages, 4 illustrations.

**The Animal Kingdom**

Prepared by The Junior League of Albuquerque assisted by the Museum staff. Exhibition chairman: Mr. F. M. Waller. 8 pages, 10 illustrations.

In addition to the checklist for The Animal Kingdom, a supplemental pamphlet was prepared for use by teachers. These notes (mimeographed, 28 pages) contained extensive historical background information regarding objects in the exhibition.

A total of 203 paintings, sculptures, drawings and prints were added to the Museum's permanent collection during 1967-68.
It is impossible within the scope of this report to list the many gifts made to the collection. Without the continuing generosity and support of their donors, the Museum's acquisition program would be most sharply limited. The funds available for purchase of works of art remain severely inadequate.

The third issue of the Museum's Bulletin, to be published in the fall of 1968, will list all recent donors to the collection.

The FRIENDS OF ART continued to play an important role in support of the museum's program. Dr. William J. Hanratty served as its president during 1967-68. The FRIENDS during the year sponsored opening receptions at four major exhibitions, a series of films on art, a series of lectures on individual masters by members of the faculty, and a panel discussion on "Art and Taxes."

The Annual Purchase Exhibition was the occasion of an important gift from the FRIENDS to the Museum: two major prints, one by Albrecht Dürer, the other by G. B. Piranesi. To the membership, the officers and committee members of the FRIENDS the Museum expresses its deep and continuing appreciation.

B. Significant plans and recommendations for the near future

Despite the support that comes to the Museum through the FRIENDS OF ART, from The Junior League of Albuquerque and other members of the community, as well as from donors to its collections, it is evident that sharply increased support from University funds is imperative if the Museum is to build a collection.
and schedule exhibitions adequate to meet the needs of a growing campus, a growing city and a growing state.

Because the Museum produces directly no "student credit hours," serving instead to enrich the programs of other academic departments as well as the general cultural life of the campus, no direct provision for its financing is made under BEF budgetary procedures. It is recommended that the administration explore ways and means through which the Museum (and other similar campus activities) might be better financed, perhaps on a fixed ratio in relation to total campus head-count, adjusted annually to compensate for inflation.

The Museum's needs for added storage space and better loading and crating facilities will apparently be met at a relatively early date through construction of the "west addition" to the Fine Arts Center.

C. Appointments to staff

Mr. Robert M. Ellis, Assistant Director of the Museum since 1964 was appointed Director effective July 1, 1968.

D. Separations from staff

Mr. Robert O. Parks, Director of the Museum during 1967-68 resigned effective June 30, 1968.
I. General departmental information

A. Significant achievements during the academic year, 1967-68

1. One of the more significant undertakings of the department during the year, and yet one of the less tangible accomplishments, has been the careful re-examination of department philosophy and objectives. The stimulus for this self-appraisal was the final report of the visiting committee, sponsored by the Danforth Foundation, which had visited the department in April, 1967.

Beginning in the summer of 1967 the Administrative Committee of the department met frequently to discuss policies and objectives; these discussions have continued throughout the year among the entire music faculty. The general results of these forums have been improved morale among faculty and students, a more positive outlook toward the responsibilities of the department, a renewed emphasis on high quality teaching and performance standards, and the building of a sense of pride on the part of both students and teachers in the activities of the department and the potential of its faculty. A significant increase in the number of department committees and individual faculty responsibilities has resulted in a freer communication of ideas among the faculty and a flow of positive suggestions for improvements in the functioning of the department.

Most important of all, these deliberations have focused the emphasis on teaching all music students sound musicianship,
performance proficiency at a professional level, and a thorough background in subject matter related to the area of concentration.

2. Among more specific achievements, which stemmed in part from the recommendations of the Danforth Committee, several curricular changes have been instituted. All the music curricula have been re-examined with the aim of consolidating courses which tended to overlap in content and eliminating courses which were no longer germane to one or more of the existing programs. The courses in conducting, in particular, have been combined and restructured so as to offer basic material for undergraduates in all curricula and yet allow in-depth specialization at the graduate level.

An innovation has been introduced in the form of a course in student teaching at the college level in which music education majors may be given supervised practice teaching of beginning music classes at the university.

The curriculum in Music Literature, formerly considered a professional curriculum, has been broadened to a liberal arts program with emphasis on music as a humanities subject area.

In the teaching of applied music, especially piano, significant experiments have been made in the teaching of groups of two to four students at a time in order to handle more students within the available teaching time. In the same vein the assignment of graduate assistants to the teaching of some of the beginning applied music students has allowed increased enrollment in this area.

Changes in the requirements in ensemble music have been recommended so that students may gain more experience in playing
chamber music without being overburdened by participation in too many groups at the same time.

For the first time in many years instruction in classical guitar has been offered, thanks to the gift, made by a donor who prefers to remain anonymous, of a sum of money designated to employ a guitarist on a part time basis.

Finally, several courses at the 400 and 500 levels have been approved which will add both richness and flexibility to the Master's programs, particularly in music education. Specifically these are:

Music Ed. 443 - Music for the Pre-School Child
Music Ed. 444 - Supervision of Elementary Music
Music Ed. 451 - Foundation of Musical Behavior
Music Ed. 532 - Research Methods in Music Ed.
Music Ed. 534 - Seminar in Music Ed.
Music 564-5 - Advanced Conducting

3. The student performing groups, which constitute the major laboratory experience for music students, have completed another highly successful season of concerts on the campus, presented for the most part in Popejoy Concert Hall.

The University Orchestra, under the leadership of Dr. Kurt Frederick, presented four concerts during the year. A sizeable portion of the audience consisted of students from the public and parochial schools of the city and surrounding communities, who were guests of the music department. An important facet of these concerts has been the presentation of soloists of international repute, giving the orchestra members the privilege of meeting mature artists and watching them work, and the opportunity to benefit from their professional approach.
to musical problems. This year's soloists included Arturo Delmoni, violinist, and Toby Saks, cellist; Morton Schoenfeld, pianist, and member of the U.N.M. music faculty; and Karine Georgian, young Soviet cellist whose first American tour this year has proved a sensational success. In the final concert of the season the orchestra and the University Chorus, Douglas McEwen, director, with four graduate students from the department as soloists, combined forces to present Beethoven's Missa Solemnis in a performance which, both by reason of the magnificence of the work with the challenges attendant thereto and because of the excellence of the presentation, must be considered an achievement of the first magnitude.

In addition to the performance of the Missa Solemnis given in Semester II, the choruses also presented a delightful Christmas concert in December. The A Cappella Choir, also under Dr. McEwen's direction, besides reinforcing the University Chorus in its two major programs gave two programs of its own on the campus.

In cooperation with the Athletic Department, the University Band, William Rhoads, director, presented half-time shows for five home football games; the Pep Band played for all home basketball games during the season. The Concert Band, purely a music department organization, gave three concerts in Popejoy Hall, one directed by Professor Rhoads and two under the baton of James Thornton. The band also provided a short musical program on May 5 as part of the festivities in the naming of the Concert Hall for President Tom Popejoy.

In January the U.N.M. Opera Workshop, Jane Snow, director,
gave four very successful performances of a double bill, Gian Carlo Menotti's *The Bishop of Brindisi* and *The Medium*, in the Recital Hall. Also in the Recital Hall the U.N.M. Dance Workshop gave three performances of modern dance, featuring student choreography as well as a new choreographic interpretation of Stravinsky's *Rite of Spring* by Miss Waters.

A newly formed student group, the U.N.M. Chamber Orchestra, directed by Kurt Frederick, made its campus debut in the late spring with two concerts featuring as soloists faculty members Joanna de Keyser, Frank Bowen, and Walter Keller.

Thanks to the incentive provided by the new faculty members in the department, a series of seven faculty chamber music and solo recitals were presented in the Recital Hall as scholarship benefit concerts. These demonstrated an abundance of performing talent among the faculty, and the response was most gratifying.

Easily the most spectacular addition to the performance resources of the department has been the pipe organ, built by the Holtkamp Organ Company, of Cleveland, Ohio, which was installed in the Recital Hall in October and November, 1967. A series of three recitals served to dedicate this magnificent instrument. The first program was presented by Wesley Selby, instructor of organ at the university. The second concert presented Catherine Crozier, internationally famous organ virtuoso, in solo recital. The final program included music for voices and other instruments with organ and utilized the A Cappella Choir, the U.N.M. Brass Ensemble, directed by
James Whitlow, and The University Orchestra, with Mr. Selby at the organ. All the concerts were played to overflow audiences and the response testified to the tonal beauty and great versatility of the instrument.

4. In addition to the performances on campus, described above, several of the groups have performed off campus for high schools in the city and around the state, or for public audiences in nearby cities. The U.N.M. Chamber Orchestra played concerts in Socorro and in Santa Fe. The a cappella choir and brass ensemble performed in most of the Albuquerque high schools as well as for schools in Alamogordo, Carlsbad, Hobbs, Roswell, and Las Cruces. These concerts were always well received and have served to call attention to the excellence of the music groups trained in the U.N.M. Department of Music.

Individual faculty members have also performed or lectured throughout the state, and while details of these appearances are listed in the second portion of this report it should be noted here that the contribution of all this activity to the enhancement of the public image of the department is of inestimable value.

5. The department of music has served the public schools of the city and state in several other ways. The joint sponsorship, along with the public schools, of the Youth Symphony, has already proven its worth; several Albuquerque students who have benefited from Youth Symphony training have come to the university as music students. The annual string clinic, held in October, 1967, provides an incentive to the Public School string teachers and string students from all parts of the state. In the break between semesters
the music department acted as hosts for the All-State Music Festival, supplying space and equipment needs as well as the supervising personnel for the four-day clinic. In August, 1967, a week-long Senior High School festival, sponsored by the department, was held at the Lawrence Ranch north of Taos.

6. Related to the department's service to the high schools of Albuquerque has been a project in comprehensive musicianship, funded by the Ford Foundation and administered by the department of music, which contributed the services of music department personnel and other resources in working with theory classes in three city high schools: Highland, Sandia, and Del Norte. Professors Jack Stephenson and Donald McRae served as coordinators of the project.

7. At the suggestion of the music faculty a group of interested citizens from the community has been incorporated as The Friends of Music. The group has expressed as its primary purpose the raising of funds for scholarships for worthy music students. As its first objective it has pledged $1,000 to be used to assist incoming music students for next year. The department held auditions in April and has already made commitments of the money to several deserving incoming freshmen.

8. The growth of the department in terms of enrollment has been steady. In the first semester the increase was modest, but in the second semester the percentage increased rather dramatically. It is the hope that this represents the beginning of an upward trend in enrollment. The department feels that with new support from the community and with the increased amount of
favorable publicity gained by the performing groups, it may soon gain the widespread recognition it has long deserved.

B. Significant plans and recommendations for the near future

1. The review of the effectiveness of the teaching in the department will continue. It is recommended that the methods of training basic music theory, for example, be carefully scrutinized with the objective of discovering more efficient techniques in this area. The policy of freely discussing in open forums problems pertaining to academic and professional activities will continue to be encouraged.

2. An expansion of the program in the field of opera will certainly be stressed in the coming year, with the appointment of a specialist in this field having already been made for the fall of 1968.

3. The department plans to expand the performance activities of its faculty with regularly established chamber music groups, representing the department, giving programs for the schools and the public throughout the state.

4. It is hoped that a lecture series can be instituted which will bring to the campus distinguished composers, conductors, and lecturers on different facets of music. With the availability of the Recital Hall organ, concerts by guest organists will certainly be added to the performance calendar.

5. It is felt that the music students ought to have a greater opportunity to contribute ideas to the formulation of department policies; plans to establish some machinery for
communication between students, faculty, and administration will be considered during the coming year.

6. The need for teaching personnel in certain highly specialized areas is growing more acute. In order to maintain the program of instrumental instruction which is so well begun, provision must be made soon for high quality instruction in horn, trombone, and oboe, to name but three areas. One of the most serious gaps in the faculty is a qualified teacher of composition. The need for a gifted person to stimulate and direct the creative aspects of music at all levels is clearly recognized. It is hoped that some means of meeting these needs can be discovered in the near future.

C. Appointments to staff

1. The following persons were appointed to the teaching staff beginning their teaching duties in September, 1967.
   a. Francis Bowen, assistant professor of flute and theory.
   b. Joanna de Keyser, assistant professor of cello and chamber music.
   c. Hector Garcia, artist-in-residence (part time)

2. Phyllis Kaye was employed as bookkeeper (half time), March 1, 1968.

D. Separations from the staff

1. David Starkey will terminate his employment in the department as of June 30, 1968, after serving two years on the faculty.

2. Ava Nichols terminated her employment as bookkeeper
for the department on March 1.

3. Robert Stehwein will terminate his employment as piano technician (part time) on June 30.

II. Composite of information requested on individual biographical supplements

1. Advanced study

William Seymour received Ed.D. degree September, 1967 (Washington University, St. Louis).

2. Sabbaticals, leaves of absence, summer teaching elsewhere, etc.

John Batcheller: travel in Spain, Portugal, Madeira.
Joseph Blankenship: Sabbatical leave, Semester II
Kurt Frederick: travel to Hawaii, Japan, Hong Kong, Cambodia, Thailand, Laos, India, Nepal, Iran, Israel, Central Europe.
William Rhoads: Sabbatical leave, Semester II; taught one-week workshops in Kansas State Teachers College and University of Pacific.
James Whitlow: taught at Hobbs Music Camp, Taos Music Camp.

3. New scholastic honors - None

4. Publications

William Rhoads: Ten Solos with piano for Bass Clarinet, for Contest and Concert, San Antonio: Southern Music Co.
Jack Stephenson: "National Teacher Examination - Music Education Section," for Educational Testing Service (Joint authorship); miscellaneous reviews for Journal of Research in Music Education; miscellaneous Reviews for Allyn and Bacon Co., on Music Appreciation texts.

5. Other research projects

Kurt Frederick has prepared a manual of 16th century counterpoint.
Donald McRae has served as director of Contemporary Music Project for Creativity in Music Education (Ford Foundation Grant, $5,000).

Hugh Miller has two articles in progress, "Musical Textures: Concepts and Terminology," and "Interdependence in Music."

William Rhoads is completing three pieces for band and is writing a syllabus for "Modern Arranging."

Jack Stephenson served as teacher and assistant in Contemporary Music Project for Creativity in Music Education (Ford Foundation Grant, $5000). Assisted in the following projects: HEW Title IV, "Guidebook to Live Music," ($10,00 pending); Title III, "Albuquerque Youth Symphony," ($25,000); John D. Rockefeller III Foundation, "Fine Arts Program in N.M. Rural Schools," ($100,000 pending).

6. Activities in learned and professional societies

Donald McRae attended a two week seminar at New York University sponsored by Department of Health, Education, and Welfare. William Seymour served as chairman of research for the New Mexico Music Educators Association.

Jane Snow assisted on the program of the Regional Convention of the National Association of Teachers of Singing, Austin, Texas.

Jack Stephenson assisted on the program of the State Convention of New Mexico Federation of Music Clubs; attended the New Mexico Music Teachers Association district meeting, and the national convention of MENC in Seattle. Secretary of local chapter of Pi Kappa Lambda.

James Thornton represented U.N.M. at the National convention of the MENC in Seattle.

7. Other professional activities (subdivided by a. musical performances, b. lectures, c. adjudication)

a. Musical performances

John Batcheller conducted a concert at Immanuel Presbyterian Church

Frank Bowen: solo and ensemble concerts in California and Washington, D.C. Two faculty programs at U.N.M. Member of the Albuquerque Symphony Orchestra.

Joanna de Keyser: concerts in New Mexico, Texas, Oklahoma, Mississippi, Georgia, Tennessee, Louisiana, Kansas, Illinois, Wisconsin, Michigan, California. Member of the Albuquerque Symphony Orchestra.

Kurt Frederick: conducted four concerts of U.N.M. Orchestra, four concerts by U.N.M. Chamber Orchestra (Socorro, Santa Fe, and Albuquerque) plus several television programs with the Chamber Orchestra for Station KNME. Conducted three opera workshop
performances. Guest Conductor of Los Alamos orchestra. Conducted U.N.M. String Clinic orchestra, Conducted Honors Orchestra at Tri-State Music festival (Oklahoma).

Walter Keller: directed Albuquerque Early Music Ensemble in five performances of early music from Spain (Albuquerque, Socorro, Alamogordo, Arroyo seco); directed a program of early Italian music in connection with the opening of an exhibition of Italian drawings in the University Art Museum. Harpsichord soloist in three performances with U.N.M. Chamber Orchestra. Assisted in three faculty recitals, accompanying Frank Bowen and David Starkey.

Douglas McEwen: guest conductor for regional convention, American Guild of Organists; Bemidji State College Music Clinic; SW District Choral Festival (Las Cruces); All-Oklahoma Choral Festival (Stillwater); All-City Music Festival (Tulsa); Albion Choral Festival (Nebraska); Arizona All-State Mixed Chorus (Tempe); Hudson High School Music Festival (Hudson, Wis.); Wyoming All-State Mixed Chorus (Rawlins); Central District Music Festival (Grants); Junior High Choral Festival (Albuquerque); Regular conductor U.N.M. a cappella choir in concerts for high schools in Albuquerque, Alamogordo, Las Cruces, Carlsbad, Hobbs, Roswell.

Donald McRae: directed and served as soloist in three special concerts and five special services, Temple Albert; soloist in two special concerts, First Congregational church.


Morton Schoenfeld: soloist with U.N.M. Orchestra. Three chamber music programs, with George Robert, Frank Bowen, Hector Garcia.

Jane Snow: accompanist for concerts under Title I throughout New Mexico, two concerts in Boston, one at Syracuse University, one in Washington, D.C. Director of U.N.M. opera workshop production of two Menotti operas.

David Starkey: performed in six concerts of the Albuquerque Early Music Ensemble. Soloist with the Albuquerque Chamber Orchestra; soloist with Albuquerque Symphony Orchestra in youth concert. Faculty recital at U.N.M. Solo recital at N.M. Tech, Socorro.
Jack Stephenson: performed in five concerts of Albuquerque Early Music Ensemble.
James Thornton: one faculty chamber music recital.
Conducted U.N.M. Band during Semester II, while Mr. Rhoads was on leave.
Elizabeth Waters: directed and danced in annual campus presentation of Dance Workshop. Created choreography for Stravinsky's Rite of Spring.
James Whitlow: guest trumpet soloist with Deming High School Band (on tour in Mexico; Rehobeth High School Band; Espanola Junior High School Band; Mayfield High School Band (Las Cruces); Harrison High School Band (Colorado Springs); Sheridan High School Band (Sheridan, Wyoming). Concerts in Northern New Mexico for Youth Concerts, Inc.

b. Lectures

Hugh Miller: lectures on "Experimentalism in Musical Media," "Music of Hawaii and the South Pacific."
George Robert: lecture on "Theory Texts by A. J. McHose."
Elizabeth Waters: lecture-demonstrations on dance, sponsored by HEW Title I, on a tour in Northern New Mexico.

c. Adjudication

Kurt Frederick: auditioned string students for All-State; adjudicator at music festival in Los Alamos; judge for solo competition, Albuquerque Youth Symphony.
Walter Keller: adjudicator SWNMMEA Senior High Festival, Alamogordo.
Douglas McEwen: adjudicator: El Paso Choral Festival; District 7 Choral Festival, Albuquerque; Buccaneer Music Festival, Corpus Christi, Texas.
Donald McRae: adjudicator, NMMEA
Jack Stephenson: adjudicator NMMEA, Grants, Alamogordo; New Mexico Federation of Music Clubs.
James Whitlow: adjudicator, Highlands University Festival.
d. Miscellaneous professional activities

William Seymour served as moderator of NMMTA Program of Professional Enrichment. Local chairman for All-State music Festival
Jack Stephenson served as chairman of the U.N.M. String Clinic, and as chairman of the orchestra at All-State Festival. Served on North Central Evaluation Team for Clovis High School and Farmington High School.

8. Non-teaching University service

John Batcheller served as secretary of the music faculty, and as a member of the College of Education committee on School Planning and Services.
Joanna de Keyser served on the department of music committee on Music Performance Awards.
Douglas McEwen served on the College of Fine Arts Advisory Committee and the music department Administrative Committee.
Donald McRae served on the Fine Arts College Scholarship Committee, the Fine Arts College Advisory Committee, and the Department of Music Administrative Committee.
Hugh Miller was a member of the University Graduate Committee and chairman of the music department committee on Graduate Studies and Curricula.
William Rhoads served on the University Summer Session Committee and on the music department Scholarship Committee.
George Robert served as a member of the University Registration Committee, and on the music department Administrative Committee, and also the Committee on Scholarship and Recruitment. He also acted as Theory-coordinator in the department.
Morton Schoenfeld served on the Clayton Barber Scholarship Committee; directed and reorganized the Music Performance Awards; served as advisor for the General Honors Program; was the principal force in starting the "Friends of Music" corporation.
William Seymour was a member of the University Curriculum Committee and in the music department as a member of the Committee on Graduate Studies and Curricula and the Committee on Applied Music.
Jane Snow served on the University Cultural Committee, and in the music department as faculty advisor of Sigma Alpha Iota and as chairman of the Scholarship Committee.
David Starkey served as faculty advisor for Phi Mu Alpha Sinfonia, and as chairman of the music department committee on Student Recitals and Assemblies. Served as co-director of "Showtime U.N.M." tour in Southeast New Mexico.
Jack Stephenson was a member of the Committee on the University; the College of Fine Arts Advance Committee; and the music department Administrative Committee, the Committee on Graduate Studies and Curricula, Music Performance Awards Committee, Committee on Scholarship and Recruitment, and as coordinator with the College of Education.
James Thornton served on the music department Administrative Committee, and also helped organize and direct the "Showtime U.N.M." tour of Southeast New Mexico.

9. Public service

John Batcheller served on the boards of the Albuquerque Children's Theater, Albuquerque Community Concert Association, Albuquerque Chapter of the Santa Fe Opera Guild.

Joanna de Keyser performed volunteer service in music therapy at B.C.I. psychiatric ward.

Kurt Frederick was a member of the board of the Albuquerque Community Concert Association.

Donald McRae acted as coordinator for the Community Chest and the College of Fine Arts.

Jane Snow served as local co-chairman of the National Young Artists' Audition Planning Committee for the Federation of Music Clubs.

David Starkey was a member of the Education Committee of Central Methodist church.

Jack Stephenson was a patron of Mu Phi Epsilon; a member of the boards of the Albuquerque Youth Symphony, Albuquerque Light Opera Company, Albuquerque Children's Theater, the Casa Linda School; served as committeeeman Troop 86, St. Charles Boy Scouts, and as chairman of St. Charles Seminar on Religious Education for Teenagers.
REPORT OF THE SCHOOL OF LAW  
July 1, 1967 - June 30, 1968  
Thomas W. Christopher, Dean

1. General Information

Enrollment in the fall of 1967 was 185, as compared to 163 for the previous fall, 144 in 1965, and 97 in 1964. The freshman class had 80 students; 13 of the 80 were suspended for academic reasons in February or June. 45 graduated in June 1968, (36 in 1967, 23 in 1966, 17 in 1965).

For the third year in a row, faculty research has broken records. In 1965-66, eight of nine professors had publications, and the ninth man actually did substantial research and writing but with later publication dates. In 1966-67, eleven of eleven professors had publications with a total of 37 items, including one casebook, four text or form books, chapters in four books, and 21 articles in scholarly journals. For 1967-68, every faculty member save one (11 out of 12) had publications, and that one was a new teacher in his first year out of law school. There were 14 articles in scholarly journals, five book reviews, one book, and eight other items (editing book supplements, editing loose-leaf legal books, and the like), for a total of 28 items. Also, personnel in the law library assisted in the revision of a book containing state laws affecting education.

The program for Continuing Education for the Bar included two seminars in Albuquerque--one on law and psychiatry (with Professor Weihofen and Dr. Senescu in charge), and the other on estate planning (Visiting Professor John Scott in charge).
The Institute of Public Law and Services made a modest beginning in service to the state and region. It did some work on the proposed new state constitution, worked with the governor's office in regard to solutions for land title problems in Northern New Mexico, drew up an administrative procedure guide for the state, and consulted on the state's food and drug laws. The director, Mr. Raymond Sawyer, spent considerable time in work with the State Bar, and in supervising special institutes for the Bar. He also has assisted in our judicial project with The Navajo Tribe, a project that proposes to re-structure the judicial system of the Tribe. Mr. Sawyer is the sole employee of the Institute but, given additional people, this organization will render valuable service to the state and to the University.

The law students continued to participate in legal aid work with the Albuquerque Legal Aid Society, and in the release-on-recognizance program for indigent prisoners, with almost all senior and junior students taking part in one or the other of these programs. Mr. Frank Dewey directs the programs. The law school has been a pioneer among law schools in this work. Aside from the important community service aspects of these programs, the law student obtains valuable professional training.

Efforts by the school to work more closely with the State Bar and with law alumni have continued. The dean spends a fair amount of time on these efforts and he needs to spend more.

The special program to encourage American Indians to study law has progressed in satisfactory fashion. The enrollment for the summer workshop, 1967, was 18. Of these, six were enrolled in law school.
here in the fall and one was enrolled at Arizona State. During the summer of 1968, 18 Indians are enrolled in the workshop, and some eight or nine of these will enter law school here or elsewhere this fall (one has been accepted at Harvard, and another at UCLA).

The school did pretty well this year in rendering services to the campus and to the lay community. On December 1, 1967, and December 12, 1967, it had evening meetings open to all University personnel on problems of retirement. Among the subjects discussed were the problems of taxes, pensions, wills, trusts, and investments. Attendance was excellent, and with a cross-section of the campus.---Associate Professor Carl Selinger designed and ran an experimental freshman course in University College, Introduction to Contemporary American Thought, with an enrollment of 380. Two law professors participated as guest lecturers (Malcolm P. Sharp, Thomas W. Christopher). Professor Selinger presided over each class meeting, and Professor Sharp attended each session.---On April 20, 1968, the school had a three hour session for women on women and the law; discussed were community property, joint ownership, and other legal matters of interest to lay women.---In addition to the law school going outside to work with non-lawyers and with other schools on the campus, other schools on the campus were represented in law school activities. Thus, Professors James E. Brown and Perry T. Mori of the School of Business Administration participated in the seminar on problems of retirement. Professor Nathaniel Wollman participated with Professor Malcolm Sharp in the law school seminar, Logic and Evaluation in the Law. Dr. Robert Senescu and several other members of the Medical
School faculty assisted Professor Weihofen in conducting the law school seminar, Law and Psychiatry. Associate Professor William Weismantel of the Department of Architecture taught the law school seminar, Law and Control of the Urban Environment, in the second semester.

The amount of contact between the law faculty and members of other departments is increasing, and the law school is encouraging this development. This interdisciplinary exchange is carried on not only because the law school recognizes its obligation to be a good neighbor but also because substantial benefits accrue to the law school, law faculty, and law students.

There was considerable activity in the field of Indian affairs. The school is engaged in a two-year project with The Navajo Tribe for the purpose of studying the Tribe's judicial system. The end product will be recommendations for re-structuring the court system and procedure. Along the way, the project will prepare special codes, such as a juvenile code, traffic code, etc.—The school received two grants to be used in connection with problems arising from the civil rights provisions for tribes passed by the present Congress.—A Center of Indian Law is being created, probably to be placed under the Institute of Public Law and Services for administration purposes, and all of the Indian matters will be centralized in this Center.—The school began publication of an Indian Law Newsletter in May of this year. This mimeographed newsletter gives information on recent legislation and court decisions of interest to Indians. Current circulation is about 1000 and the letter is being well received.
The school continued work started three years ago to overhaul the curriculum, to bring it into line with present trends and needs. International Law is now required in the freshman year, and needed courses are being added (examples: courses or seminars on urban problems, real estate transactions, law of the poor, women and the law, legal accounting, food and drug law, trial practice workshop, jurisprudence).

II. Faculty

Three new people joined the regular faculty in September, 1967: Walter Barnett, Associate Professor; Robert Desiderio, Assistant Professor; Robert Walker, Assistant Professor. Mr. Raymond Sawyer joined the law school faculty as director of the Institute of Public Law and Services on July 1, 1967.

Frank Dewey, Director of Legal Services, received the additional title of Lecturer in February, 1968.

The school had two visiting professors during the spring semester: George Neff Stevens and John W. Scott. Both are distinguished law professors.

Four associate professors were promoted to full professor, effective July 1, 1968: Willis Ellis, Leo Kanowitz, Carl Selinger, and Albert Utton.

Professor Fred Hart, who had been a visiting professor, joined the faculty on a regular, full-time basis as of July 1, 1968.

Associate Professor Denny O. Ingram, Jr. who was on leave for 1967-68, resigned effective June 30, 1968, to accept a position at the University of Utah.
During the Summer Indian Workshop, 1968, the school had two visiting faculty: Dean David Vernon of the University of Iowa College of Law, and Professor James W. Smith of the Boston College Law School.

Two people joined the law faculty as of July 1, 1968: Professor Hugh B. Muir, B.S., J.D., formerly on the legal staff of Texas Instruments; and Assistant Professor Jerome A. Hoffman, A.B., J.D., formerly in private practice in Los Angeles. It may be noted here that Professor Carl Selinger will be leaving the law faculty as of September 1, 1968, to become Dean of the College of Bard College in New York.

The following faculty attended one or more professional meetings: Selinger, Ellis, Weihofer, Hart, Walker, Desiderio, Dewey, Utton, Christopher, and Fink.

III. Significant needs

(A) Substantial increases in the Budget for faculty, library, library personnel, and the Institute of Public Law and Services.

(B) Professional assistance in dean's office.

(C) Outside funds for scholarships and other needs.

(D) More B+, A- students.

(E) A more attractive fringe benefit program for faculty.

(F) Facilities for the continuing legal education program and for other non-teaching activities such as service to government and the community.

IV. Finally

A fair amount of progress has been made in recent years and the school has had warm support from the administration, the campus, the Bar
and the community. The problems and risks, however, are still very substantial as the school is not yet on firm ground. Further, the school, relatively speaking, is falling behind neighboring schools. Thus, this report ends on a note of pessimism. The University has the opportunity at hand to create a really outstanding law school—one that would shine on the national level. And the need in New Mexico for such a law school is very, very strong.

RESPECTFULLY SUBMITTED THIS 13th DAY OF AUGUST, 1968.

[Signature]
Dean
SCHOOL OF MEDICINE

Following are the Annual Reports, 1967-68, for the various departments in the School of Medicine. The Dean's covering report will be incorporated in his Annual Report for 1968-69.
ANNUAL REPORT OF THE DEPARTMENT OF ANATOMY
July 1, 1967-June 30, 1968
A.J. LADMAN, Chairman

I. General departmental information

A. Significant achievements during the academic year:

During the present academic year the activities of the Department of Anatomy have proceeded at approximately the same pace as last year. We moved into the new Basic Medical Sciences Building in October and November of 1967, and the space of necessity has had to undergo some renovation and adjustment to conform to the individuals who were occupying it. On the other hand, the direction of effort has been altered to some extent to conform to the physical restrictions which this building imposes. Further adjustments will have to take place before the space designated for this department can become maximally utilizable. In addition, there is a definite need to have additional space identified so that funds may be requested for renovation to suit the particular need of the individuals to occupy that designated space. Specific details of operation of this department are outlined below.

1. Administration

The communications gap on campus as well as within the departments of the medical school was mentioned last year. With the resignation of Dean Fitz on February 22nd, to become effective July 1, 1968, an atmosphere of uncertainty has engulfed the departmental personnel, and it is my hope that the new leadership will be able to offer the program and guidance to reassure faculty, staff and supporting personnel alike of the maintenance of effort in the medical school and the continued opportunity here for satisfaction in one's career and service.
It is also my feeling from the experience of almost four years that the procedures and mechanics of the business office of the University could be streamlined to satisfy the legal requirements of the State as well as to serve the academic community on a much faster and more efficient basis.

We added a second part-time secretary during the year, Mrs. Joy Leach, who was employed from July 1, 1967 to March 25, 1968. During the interval of Mrs. Leach's employment, additional need for secretarial assistance became evident and she was replaced upon her termination by Mrs. Vivyan Jordan, who is working on a full-time basis. Half the salary of one secretary is being paid by funds derived from the Wistar Institute Press in conjunction with the service of the office of Managing Editor of The Anatomical Record, which Dr. Ladman assumed in April 1968.

2. Teaching

No new academic appointments were made this year. At Holloman Air Force Base a graduate course titled "Advanced Neuroanatomy" was given during the first semester of this academic year by Dr. Donald Buxton, who had the title of Resident Instructor of Anatomy at the Air Force Base. Although originally intended to have a rather large enrolment, only two students took the course for credit and four were auditors. Material covered was of assistance to those who attended the course, and presumably provided an extra added opportunity for individuals serving their military duty to keep abreast of current and background research in selected areas.

The curriculum for medical students was reorganized to some extent to reflect new teaching quarters provided by the opening of the Basic Medical Sciences Building. Adequate instruction has been given in Microscopic Anatomy,
- 3 -

Gross Anatomy and Neuroanatomy. The areas of Developmental Anatomy as well as Subcellular and Cellular Biology are not well represented in our curriculum. Whether or not they should be better represented than they are is a decision for the Curricula Committee to analyze and to make appropriate recommendations.

Plans to offer several graduate courses during this academic year were made but a lack of students to take these courses as well as a problem in funding some of them is still with us.

Research and teaching equipment in the grant for this Basic Medical Sciences building included an electron microscope with the specific intent as a teaching and training instrument; however, funds must be budgeted to underwrite the cost of a service contract and the consumable supplies that such an instrument requires.

Further improvement of our light microscope slide collection must be forthcoming to raise it to a more serviceable level. Cadaver procurement by the willing process is more than adequate at this time. We are still encountering problems related to proper preservation of cadaver material. The embalming of donors, because of the distances in the State and the practices of funeral directors, is going to involve more study and consideration before a procedure can be worked out which would suit the vested interests of the University, the donor and the program alike.

3. Research

The research productivity of the Department again has established a high level of quality and quantity this year. The bibliographic references give adequate testimony to this fact. Continuation grants for all the individuals who currently hold support in the Department have been acted upon favorably.
Dr. Adamo has an application pending at N.I.H. for studies of the avian auditory system. A collaborative grant was awarded to Drs. T.N. Finley and A.J. Ladman from the Tobacco Research Council to run for three years, which in part will underwrite some of the work being done on lung lavages.

Our personnel involved in research at the technical level has maintained its stability. Mrs. Barbara Treu terminated her employment and her place was filled by Mrs. Edna Ferrel. The other individuals identified last year continue to work effectively and have added to their research capabilities in this Department.

During the year Dr. Gene Colborn joined the Department as a Postdoctoral Fellow in Cytology in September 1967, to work under Dr. Ladman's grant in areas of secretion and transport behavior. His particular area has been in investigations of cardiac muscle and autonomic ganglia.

4. Recruitment:

Beginning July 1, 1968, Dr. Jerry S. Trier will hold a joint appointment in the Department of Anatomy and the Department of Medicine. Since his research area is functional cytology of the gastrointestinal tract, this blends well into the research competencies of those in this department, and between Dr. Trier and Dr. Ladman a postdoctoral fellow, Dr. Peter R. Sterzing, will join the department in a research capacity. In addition, Dr. Morris Smith will also have a joint appointment in the Departments of Anatomy and Medicine, working as a postdoctoral fellow under Dr. Ladman's grant in the area of lung morphology and cytochemistry. Dr. Frederico Mora, a neurosurgeon in Albuquerque, will join the Department of Surgery in January 1968 and will participate in Gross Anatomy and Neurobiology in the second half of the 1968-69 instructional year.
In addition we are negotiating with Dr. Donald Duncan, presently Chairman of the Department of Anatomy of the University of Texas, Galveston, to become a Professor in our department, beginning February 1969. This will be a year to year continuing appointment subject to mutual agreement. If Dr. Duncan elects to join our group, his experience will be employed in the teaching of medical students as well as in our graduate student program which is getting under way. With the increase in medical students from 24 to 36 we are eagerly seeking more assistance in the teaching of these students so that the student/faculty ratio is not increased inordinately. Several individuals are being contacted in the hopes that funds will be available to offer a firm faculty position in this department.

5. Planning

Continued planning in the areas of teaching, research and graduate education has gone on during this year. Some innovations have occurred in the first year medical curriculum. Several joint collaborative research efforts by members of this department with other departments have also developed this year, and we are hopeful that our new quarters in the Basic Medical Sciences Building will contribute substantially to our ability to attract and train graduate students.

B. Significant plans and recommendations for the near future:

A training grant application, originally intended to be submitted last year, was postponed until this fall. We propose to make a deadline of October 1, 1968. Because of the extreme cutbacks in funds for training programs I am not optimistic of our chances to compete with others in the nation for the limited amounts of monies available. However, an application
will be prepared and submitted in time for the fall meeting of the Council of
the National Institutes of General Medical Sciences of NIH.

C. Appointments to staff: None

D. Separations from staff: None

II. Composite of information requested on individual bibliographic supplements

1. Advanced Study: None

2. Sabbaticals, leaves of absence etc. None

3. New scholastic honors etc.

Dr. A. J. Ladman was appointed Managing Editor of The Anatomical Record
in April 1968. He continues to be a member of the Research Career Award
Committee of the National Institute of General Medical Sciences. In addition,
he is an Associate Editor of the Journal of Morphology. He is a member of the
sub-committee on nomenclature for the Nomina Histologica of the American Association
of Anatomists. Dr. Ladman was a speaker at the University of Mississippi Medical
School in May 1968.

Dr. Napolitano was appointed Associate Editor of The Anatomical Record
in April 1968. He was a guest speaker at the University of Wisconsin
Medical School, Duke University Medical School, Harvard Medical School, the
University of Oklahoma Medical School and the University of Texas Medical Branch
at Galveston during the academic year. In addition, he is an invited speaker
to one of the Gordon Conferences on Membrane Structure, June 1968.

Dr. T. John Leppi received the Lederle Medical Faculty Award in January 1968,
and is the first individual at this University to have been so honored. He was
a panelist in the Membrane Transport section of the Symposium on Cystic Fibrosis
and Related Human and Animal Diseases in New York, February 29 to March 1.
Dr. Adamo was admitted to membership in the American Association of Anatomists.

4. **Publications**

Publications of members of the Department of Anatomy are:


- 8 -


5. Other research projects

Members of the department continue actively in research pursuits. The areas in which specific advances have been made are represented by the above list of publications. In addition the whole department is utilizing the techniques of cytochemistry and electronmicroscopy combined with suitable physiologic or pharmacologic experiments to gain insight into the manner in which cells and tissues function under given conditions. In this particular context Dr. Susan Pratt, who has been a Research Associate during this year, has contributed significantly to the research programs of Drs. Ladman and Napolitano of this department and of Dr. Finley of the Department of Medicine.

6. Activities in learned and professional societies

Dr. Ladman attended the Electron Microscopy Society of America meeting in Chicago and presented a paper. He also attended the meetings of the American Society for Cell Biology in Denver and the American Association of Anatomists in New Orleans. Dr. Napolitano attended the annual meeting of the American Association of Anatomists. Dr. Leppi attended the 134th annual meeting of the American Association for the Advancement of Science in New York, the annual meeting of the American Society for Cell Biology in Denver, the meetings of the Histochemical Society and the American Association of Anatomists in New Orleans, and the Council on Medical TV meeting in Houston. Dr. Dietert attended meetings of the American Society for Cell Biology and presented a paper at the annual meeting of the American Association of Anatomists. Dr. Adamo attended
meetings of the American Society for Cell Biology and the American Association of Anatomists and presented a paper jointly with Dr. Gene Colborn to a meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science in El Paso.

7. Other professional activities. None

8. Non-teaching service.

Dr. Napolitano remains Chairman of the Promotions and Academic Standing Committee and a member of the Committee on Graduate Studies. He is also a member of the Athletic Council for the University of New Mexico. Dr. Ladman served as a member of the First Year Curriculum Committee and as Chairman of the Four Year Curriculum Review Committee. He also served as a member of the University Curricula Committee, the Executive Committee of the School of Medicine, and on various ad hoc committees. Dr. Leppi served as Chairman of the Television Committee of the School of Medicine. Dr. Dietert remains a member of the Human Research Review Committee and also served on the First Year Medical School Promotions Committee. Dr. Adamo served as a member of the Animal Care Committee of the School of Medicine.
I. GENERAL DEPARTMENTAL INFORMATION

A. Minor changes were made in our participation in Medical Biology I and II based on the experience of the last two years. More emphasis is being placed on small conference or seminar groups as a method for teaching and appraising the success of the teaching.

Medical Science 623 (Fall Term - Dr. Scallen) "Biochemistry of Steroids" and Medical Sciences 621 (Spring Term, Dr. Loftfield) were offered. Lectures and discussions in each case were in Mitchell Hall and the majority of the registered students were graduate students in Chemistry, Biology and Geology. It is anticipated that for at least the next year, the Graduate Biochemistry Courses will be offered on the main campus in an effort to facilitate communication.

The department took a modest but hopefully significant part in the third-year teaching program.

B. We still recommend reorganization of the curriculum to integrate more of the preclinical material into the third and fourth year. We also recommend a more formal participation of this department's faculty in the teaching of those undergraduate chemistry or biology courses that are primarily biochemical in content.

C. Appointments:

Dr. Beulah M. Woodfin, Instructor, July 1, 1967.
Dr. Gaynor Wild, Assistant Professor, August 1, 1967.

D. Separations:

None.
The major event during the past year in or about the Department of Epidemiology and Community Medicine was its initiation and development. During the interval between Spring and Winter 1967, Drs. Eberle, Miller, Pressman, Quenk (part-time) and I arrived and designed teaching efforts in Biometry, Epidemiology and Community Medicine.

Consideration should be given to the place and role of extra-mural experiences for our students. A single final year elective does not provide what we believe to be important undergraduate medical curricular ingredients: the skills, knowledge and attributes needed to deal with groups of persons in contrast to the necessary clinical experiences involving approaches to the single patient and his problems.

One additional person would be added during the next two year interval if appropriate resources were available. We believe our program is important. However, a large staff is not intended.

Our rate of growth has been rapid — perhaps too rapid in view of the slender nature and amount of the resources at hand. The University and School of Medicine might review needs and resources in our area of work. Surely, on our present base, we cannot continue to deal effectively with teaching, investigation and service, addressing ourselves to the health needs of our state.
1. **General Departmental Information.**

A. **Achievements during the academic year 1967-68.**

1. **Student Teaching.** During this year we had our first group of fourth year medical students. Their work was designed to be that of a "pre-internship" rather than another year of clerkship. While there were some difficulties involved, they seemed minor and I would judge that the program carried out its design.

2. **Internship in Medicine.** There were four straight medical interns requested and filled for the year beginning July 1, 1967. For the year beginning July 1, 1968, there were more than sixty applicants, most of whom ranked in the upper portion of their class. On the matching plan we went down to Number Eight, which is a fine record, and we have four men from Columbia, Stanford, Southwestern, and Western Reserve.

3. **Residency in Medicine.** There were 21 residents in the year 1967-68. Twenty-six residents have been assigned for the year beginning July 1, 1968. A neurology residency program was applied for and approved and will begin July 1, 1968. The caliber of the residents has continued to improve, and applications are already coming in for July 1969.

4. **Hospital Relationships.** Dr. Byron G. Brogdon was appointed Medical Director of the hospital, which changed its name to Bernalillo County Medical Center. This hospital will be discussed further under Section B.
Dr. A. North Longfield, formerly Chief of Medicine, was appointed Chief of Staff at the Veterans Administration Hospital, and Dr. Robert T. Cauthorne, Jr. was appointed Chief of the Medical Service. The V. A. continues its outstandingly good development and has added a chronic dialysis program under the leadership of Dr. Eugene L. Klingler, Jr.

5. Research. The Department of Medicine continues to be active in the area of investigation, and during the academic year 1967-68 published 26 papers, 5 abstracts, 2 editorials and one book review in scientific journals.

6. Research and Training Grants. The following grants were awarded during the year:


b) Luis Garcia-Bunuel, M.D. - Connective Tissue Enzymes in Skeletal Muscle. NIH. $28,533 for first year beginning April 1, 1968.


d) George S. Nakai, M.D. - Ribonucleic Acid Metabolism of Leukemic Leukocytes. NIH. $102,201 for the period January 1, 1968 to December 31, 1969.


The total annual Research and Training Grant budget from extramural sources in the Department of Medicine was $730,752.
7. **Visiting Professor Program.** Dr. Sol Sherry, Professor and Chairman of the Department of Medicine at Temple University and the winner of the Phillips Award of the American College of Physicians, served as our Visiting Professor for five days during the month of February. He added enormously to our program and made many good suggestions concerning future progress and development.

We also had a distinguished Visiting Lecturer, Dr. Alan Thompson, F.R.C.P., F.A.C.P., President of the Royal College of Physicians of Dublin, who spoke on "The Problems of Medical Education."

Other Visiting Professors included:


b) Joseph Foley, M.D., Western Reserve University School of Medicine, Professor and Chairman, Division of Neurology, Cleveland, Ohio.

c) Raymond Alexanian, M.D. and Philip J. Migliore, M.D. M.D. Anderson Hospital and Tumor Institute, Houston, Texas.

B. **Plans and Recommendations for the Future.**

1. **Plans.** In view of the resignation of the Chairman of the Department of Medicine and, also, the resignation of the Assistant Chairman of the Department of Medicine, planning has changed hands and it would not be appropriate for discussion in this annual report.

2. **Recommendations.** Our recommendations are many and only the highlights will be listed and presented in outline form.

   a) The Bernalillo County Medical Center, in our judgment, has shown no significant improvement in the past year and continues to have problems that influence patient care. When problems influence patient care they inevitably affect the teaching program as well. These problems include personnel, equipment, cleanliness, organization, and the total operation of the institution.
b) The salary structure for all personnel, including the faculty, is far too low. We are no higher than the lowest 20% in the country and this has to be modified if one is to maintain a quality faculty and recruit people of high caliber.

c) The Central Administration of the University must take an active role in understanding the nature and problems of a medical school, its needs, as well as its contributions to the University and the people of the state. This should include, in my judgment, the presence of the Academic Vice President at faculty meetings of the School of Medicine and private discussions between him and the departmental chairmen, as well as efforts to get to know some of the junior people in the school. This is recommended in addition to his close contact with the Dean.

d) It is strongly recommended that the strength and caliber of the Department of Medicine be maintained in order for the medical school to progress. Other departments will not be strengthened by weakening the Department of Medicine.

C. Appointments to the Staff.

New appointments to the Full-time Faculty during the year 1967-68:

1. James K. Conrad, M.D., Assistant Professor of Medicine
2. Joseph B. Fazekas, M.D., Visiting Professor of Medicine (Neurology)
3. Luis Garcia-Bunuel, M.D., Assistant Professor of Medicine (Neurology)
4. Roy M. Kropinak, M.D., Instructor in Medicine (Joint Appointment with Department of Epidemiology and Community Medicine)
5. Shirley Libo, Ph.D., Instructor in Medicine
6. Edward A. Liske, M.D., Associate Professor of Medicine (Neurology)
7. George S. Nakai, M.D., Assistant Professor of Medicine
8. Roger N. Pesch, M.D., Assistant Professor of Rehabilitation Medicine (Joint Appointment with Department of Surgery)
9. Russell D. Snyder, M.D., Assistant Professor of Pediatrics and Medicine (Neurology)
10. Jerry S. Trier, M.D., Associate Professor of Medicine
New appointments to the Clinical Associate Faculty during the year:

1. Donald Seelinger, M.D.
2. Christian B. J. vonHoyningen-Huene, M.D.

D. **Separations.**

**Resignations from Full-time Faculty:**

1. Solomon Papper, M.D., Professor and Chairman of the Department of Medicine.
2. William S. Lovekin, M.D., Assistant Professor and Assistant Chairman of the Department of Medicine.
3. Theodore N. Finley, M.D., Associate Professor of Medicine.
4. Carlos A. Vaamonde, M.D., Assistant Professor of Medicine.
5. Robert L. Barenberg, M.D., Instructor in Medicine.

**Resignations from Clinical Faculty:**

1. Andrew D. Edes, M.D.
2. Michael J. Perley, M.D.

E. **Promotions:**

1. Darwin Palmer, M.D., to Assistant Professor of Medicine, effective July 1, 1967.
2. Robert L. Barenberg, M.D., to Instructor in Medicine, effective July 1, 1967.

F. **Future Appointments.** The following appointments have been approved for the academic year 1968-69:

1. R. Philip Eaton, M.D., Assistant Professor of Medicine.
2. Jerry E. Goss, M.D., Assistant Professor of Medicine.

G. **New Scholastic Honors, Fellowships, Etc.:**

3. Alexander L. Kisch, M.D. - Elected to Phi Kappa Phi
4. William H. R. Nye, M.D. - Elected to: (1) Membership in Western Society for Clinical Research; (2) Fellowship, American College of Physicians.

5. Solomon Papper, M.D. - Elected to Board of Governors, American College of Physicians.

6. Jerry S. Trier, M.D. - Elected to membership in: (1) American Society for Clinical Investigation; (2) Western Society for Clinical Research. Appointed to Editorial Board: (1) Gastroenterology; (2) Anatomical Record.


H. Personal Note: While we are proud of what has been accomplished in this medical school and in the Department of Medicine in the past six years, it is important to recognize and deal with the serious fiscal and morale problems that exist within the school and within the Department of Medicine. In our judgment, these are the responsibilities not only of the faculty and administration of the School of Medicine but, also, of the Central Administration of the University.
I. A. Significant Achievements during the Academic Year 1967-68

One of the important goals for this year was the development of an improved program for both medical and graduate students in the area of genetics. This was accomplished after Dr. Thomas I. Baker joined our department on July 1, 1967. Fundamentals of genetics, molecular genetics and medical genetics are extremely important in the present-day education of medical students and also for graduate students in the biological sciences. Dr. Baker collaborated with other faculty members of the School of Medicine to develop an integrated presentation of these topics.

One of the significant achievements during the past year was the occupancy of the new Basic Sciences Building. For the first time since the basic science departments were created at The University of New Mexico, both teaching and research activities were able to be carried out under ideal conditions. This welcome addition will undoubtedly help greatly in our recruiting of both first-rate faculty members, graduate and medical students.

One of the highlights of the past year for the Department of Microbiology was the Medical School Basic Science Dedicatory Program. The Department of Microbiology presented a seminar on "Transformation of Cells by SV_{40} and Polyoma Viruses" which was given February 16, 1968 by Dr. Renato Dulbecco, Resident Fellow, Salk Institute for Biological Studies, La Jolla, California. Dr. Dulbecco is a virologist.
of international reknown and his presentation was extremely inspiring.

Also of tremendous significance not only to the present stature but also to the future development of the department was notification that Dr. Sei Tokuda had been awarded an N.I.H. Career Development Award. This award will pay his entire salary for the next five years, and his present university salary can therefore be utilized to hire a new faculty member.

Dr. Joseph V. Scaletti, Associate Professor of Microbiology, received notification of the continuation of a research grant from the National Cancer Institute. This will make available $26,265.00 for support of Dr. Scaletti's research program from June 1, 1968 - June 1, 1969 and also supports the thesis research of one graduate student.

Dr. Carl E. Cords, Assistant Professor, received notification from N.I.H. that his application for research support had been approved for three years for the full amount requested, $52,575.00.

Dr. Sei Tokuda, Assistant Professor, received notification from the National Cancer Institute that his application for research support was approved for three years for the full amount requested, $64,378.00. This money supports Dr. Tokuda's experimental work on immunologic enhancement of cancer cells and also the thesis research of two graduate students.

The Ph.D. program in Medical Sciences with specialization in Microbiology has progressed satisfactorily. Mr. Frank Casey competed nationally for an N.I.H. predoctoral fellowship. He was notified that his application had been approved and would be funded beginning September 1, 1967. Mr. John Safford already holds an N.I.H. predoctoral fellowship and Mr. John Mayo has an application for a similar fellowship pending.
Two new graduate courses in microbiology were offered for the first time. Dr. Scaletti introduced a course in Advanced Microbiology (Med. Sci. 632) and Drs. Cords and McLaren presented a course in Advanced Virology (Med. Sci 636). In addition to taking both of the above courses, the graduate students participated actively as laboratory instructors during the time that microbiology was presented to first and second year medical students. For additional teaching experience, arrangements have been made so that the graduate students will each present a number of lectures to laboratory technology students during the summer, 1968.

Members of the department attended a number of scientific meetings during the year. Drs. Cords, Scaletti and McLaren attended the national meeting of the American Society for Microbiology in Detroit, Michigan. Dr. Baker was invited to and did attend two highly selective meetings in California, the Neurospora Conference and the Tryptophane Conference. Dr. Tokuda again attended as a Council member the Annual Meeting of the Midwinter Conference of Immunologists held in Houston, Texas and the American Association of Immunologists meeting in Atlantic City, New Jersey. On invitation, Dr. McLaren presented seminars at UCLA School of Medicine, the University of California at Davis and Northwestern University Medical School.

Dr. Scaletti was invited as a visiting professor to work collaboratively with Professor Davidson and his graduate students in the Department of Chemistry at the California Institute of Technology in Pasadena. This research was carried out during part of the summer, 1967, and will result in a publication.

Dr. Tokuda received an invitation and partial support from the NATO Advanced Study Institute to attend a symposium on "Cellular and Genetic Aspects of Antibody Formation" to be held the latter part of June, 1968 in Montreal, Canada. He plans to attend.
List of Publications of the Departmental Staff
for the Academic Year 1967-68.

1. McLaren, L. C., Scaletti, J. V. and James, C. G. 1968
   Isolation and properties of enterovirus receptors,

   Phenylalanine-tyrosine biosynthesis in Neurospora crassa,
   Genetics, 58: 351-359

   the early immune response in mice by slow and fast migrating 7S
   mouse antibody fractions, Life Sciences, 6: 2185-2189.

   by mouse gamma globulin fractions, Transplantation, 5: 606-614

   induced in mice with rabbit 5S antibody fragments,

   Preservation of myelin lamellar structure in the absence of
   lipids, a correlated chemical and morphological study,
   J. Cell. Biol. 34: 817-826

   associated lysin II Purification and characterization,
   J. Dairy Sci. 50: 1019-1024.
I. B. Plans and Recommendations for the Near Future

Now that the School of Medicine has occupied its permanent quarters in the newly constructed Basic Sciences Building, space and facilities are available for development of a more active graduate program. Financial aid will be sought from federal sources for support of new courses, additional equipment and trainee stipends.

The Department of Microbiology would like to cooperate with the Department of Pathology by taking a more active role in future improvement in the diagnostic microbiology service at the B.C.M.C. hospital. Our excellent facilities within the department could be utilized for preparation of culture media used in diagnostic bacteriology, and money is available to help pay the salary of a professional microbiologist who might hold a faculty rank in the Department of Microbiology. Such a faculty member would be valuable in the presentation of lectures on diagnostic bacteriology to second year medical students and in providing expertise to interns and residents.

I. C. Appointments to the Staff

The following appointments were made within the department:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Effective date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas I. Baker, Ph.D.</td>
<td>Assistant Professor</td>
<td>July 1, 1967</td>
</tr>
<tr>
<td>Robert Murgita, M.S.</td>
<td>Research Assistant</td>
<td>June 6, 1967</td>
</tr>
<tr>
<td>Dora Padilla</td>
<td>Laboratory Assistant</td>
<td>June 12, 1967</td>
</tr>
<tr>
<td>Tracy Fitz</td>
<td>Laboratory Assistant</td>
<td>July 10, 1967</td>
</tr>
<tr>
<td>Fina Sanchez</td>
<td>Steno-clerk</td>
<td>September 1, 1967</td>
</tr>
<tr>
<td>Teshia Zimmerman</td>
<td>Laboratory Assistant</td>
<td>January 16, 1968</td>
</tr>
<tr>
<td>(Schweedler)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jannet Heinz</td>
<td>Secretary I</td>
<td>May 1, 1968</td>
</tr>
</tbody>
</table>

1= All or part of salary paid from research grant
2= Part-time
3= Temporary appointment
### I D. Separations from the Staff

The following separations occurred:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Separation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracy Fitz</td>
<td>Laboratory Assistant</td>
<td>August 5, 1967</td>
</tr>
<tr>
<td>Jannet Heinz</td>
<td>Secretary I</td>
<td>August 31, 1967</td>
</tr>
<tr>
<td>Robert Murgita</td>
<td>Research Assistant</td>
<td>September 1, 1967</td>
</tr>
<tr>
<td>Fina Sanchez</td>
<td>Clerk-steno</td>
<td>April 15, 1968</td>
</tr>
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</table>
During this academic year the Department of Obstetrics and Gynecology has continued to increase remarkably its teaching and service functions; an increase in research and full-time personnel has also been realized, but these aspects have not kept pace with the former ones.

1. Teaching: The voluntary and full-time staff have continued to meet in a limited fashion with the first year students in such basic areas as anatomy, physiology, and endocrinology. It is hoped next year that we will be able to expand and magnify this contact.

The second year teaching block was highly successful this year. In the one week block several members of the volunteer, part-time and full-time staffs gave a rather complete introduction to the pathophysiology of obstetrics and gynecology to the students.

Third year students continued to take an eight week clerkship in the hospital. During this time they had intimate experience in patient management, supervised by the above staff members and the resident housestaff. They also participated in four informal teaching sessions each week, and we believe that they are now far better prepared in general obstetrics and gynecology than was last year's class.

No fourth year elective was offered this year. Next year two students will be involved in the program. Two fourth year students, one from the University of Nebraska and one from the University of Colorado,
took clerkships here. These were conducted as substitute internships.

We continued to increase the size of the housestaff and to improve the quality of their supervision and teaching. Two or three interns, two first, one second, and one third-year resident were here this year. We will take on one more resident next year, so that in one more year we will have a six-man resident staff. In addition to the instruction on daily rounds, clinics, delivery and operating rooms, the following teaching sessions were held each week, to which the housestaff and third year students contributed: Grand Rounds, Staff Conference, Informal Conference, Chart Rounds, Staff Meeting, and Pathology Conference. The Journal Club met monthly.

2. Community Health: The principal improvements seen in in-patient care were realized in an up-dating of equipment for the delivery and operating rooms; the increase in out-patient clinic space with resultant increase in clinic load; great improvement in interdepartmental communications, especially with pediatrics and surgery; an expansion of the satellite prenatal clinics, now four in number; and, finally, the institution of cancer screening clinics. In the Autumn, over 700 women were provided free cancer screening evaluations. We plan to expand this program next year.

Other advances made were the development of Rh diagnostic testing services, including spectrophotometric analyses and interpretations and bilirubin extractions; we are currently attempting to develop a rapid estriol determination in order to make available still another unique service by which we can provide the most modern, complete diagnostic and therapeutic services in the State.
Because of the above modalities, services and staff, the numbers of referral patients from within and without the County has increased measurably from previous years. Hence, the quality of the teaching material has improved immensely.

3. Research: Research projects currently being conducted are modest. They include an evaluation of the accuracy of the diagnosis of trichomoniasis, postpartal IUCD insertions, and several clinical reports. More will be done in research as soon as funds are available and time is provided through an increase in full-time staffing.

4. Department Staff: Dr.'s Branch and Cohn continued their active contributions as Adjunct Instructors. Perry A. Henderson, M.D., joined the Department in January, 1968, as Assistant Professor, and his clinical efforts have already resulted in great improvements in obstetrical care and teaching. Although he has not yet received support for research, we hope that he will receive a grant next year for continuing support of his hematologic research. We will also be fortunate to have Helmut Vorherr, M.D., Associate Professor in both Pharmacology and Obstetrics and Gynecology, join us on July 1, 1968. Dr. Vorherr brings with him excellent training in obstetrics and gynecology, chemotherapy of malignancy and exciting research in neurohypophysial endocrinology. When grant support is obtained, he and Dr. Munsick will proceed with several investigative aspects of mammalian reproductive endocrinology.

The Clinical Associates have this year contributed even more than in previous years to student and housestaff teaching and patient supervision.
We are pleased to have the following new Clinical Associates:
Neal Mortenson, M.D., and James Hutchison, M.D., Sandia Base Hospital;
Howard Wadstrom, M.D., Los Alamos; Howard Fleetwood, M.D., Santa Fe;
and Jack Pearson, M.D., William Beaumont Army Hospital, El Paso, Texas.

5. Other: For individual contributions, see the attached biographical records.

Our Visiting Professor this year was Emanuel A. Friedman, M.D.,
D. Med. Sci., who gave several lectures and provided the students, staff
and faculty with much new information and thought concerning labor,
techniques of completing abortions, and other clinical matters. Dr. Friedman
is Professor and Chairman of Obstetrics and Gynecology at the Chicago Medical
School and Chief of the Obstetrics and Gynecology Service of the Michael
Reese Hospital in Chicago, Illinois.
I. General Departmental Information

A. Achievements During Academic Year 1967-68

Participation of the Department of Pathology in Medical Biology I remained essentially the same as in previous years with only minor revisions. However, the department enlarged its activities with respect to the third and fourth years. The latter participation took the form of a 3-month elective clerkship for senior students and combined responsibility for the pathophysiology and hematology conferences.

The responsibilities of the department in the ongoing operations of the Bernalillo County Medical Center continued to grow and a large amount of effort was spent in the recruitment of a good residency staff.

In the field of research, active investigation continued in the department of pathology and included investigation involving radiation-induced accelerated aging in germfree animals, pathology and electron microscopy of Rous sarcoma infection in Japanese quail (Coutournix japonica), electron microscopic pathology of other viral diseases, ultrastructural changes in human emphysema and diabetic microangiopathy and
cytogenetic investigation of select pediatric conditions. At the closely allied Veterans Administration Hospital Pathology Department, pathology staff investigations are currently pursued in the immunology of tissue transplantation phenomena, immunoelectrophoresis patterns in certain disease states and gross and microscopic pathology of human emphysema.

As evidence to the research accomplished, the department was able to publish the following papers:


The following are abstracts of papers presented at national and international meetings:


5. Louise Leonard, Ph.D., "Effects of blood pressure and salt injection on red blood cell shift in mouse parabionts", American Association for Advancement of Science, April 1967.


Grants awarded to the members of the Department of Pathology are as follows:


B. Plans and Recommendations

At the present time the Department of Pathology is grossly understaffed at all levels. It is difficult to meet the more routine demands made upon the department much less move with dispatch and vigor into exciting new areas of current national and regional interest (Allied Health Professions, Regional Medical Program, etc). The primary responsibility of the department, therefore, is to recruit a quality staff of senior and resident physicians. In so doing it will enable us to broaden our present program in teaching, research and patient-oriented service.

C. Appointments to Staff

Robert S. Stone, M.D., Professor & Chairman, Sept. 1963
(appointed Dean, School of Medicine, July 1, 1968)

Robert E. Anderson, M.D., Associate Professor, July 1, 1964
(named chairman, Department of Pathology, July 1, 1968)

Scott W. Jordan, M.D., Assistant Professor, July 1, 1965

Mario Kornfeld, M.D., Assistant Professor, Jan. 1, 1968

Thomas S. McConnell, M.D., Assistant Professor, June 1, 1967

Martin L. Ovitz, M.D., Assistant Professor, July 1, 1966

Roger L. Sopher, M.D., Assistant Professor, July 1, 1968

William Hentel, M.D., Associate Professor, Jan. 1, 1964 (VA)

Louise Leonard, Ph.D., Assistant Professor, July 1, 1964 (VA)

Stanley Weitzner, M.D., Instructor, July 1, 1967 (VA)
Serving as 1967-68 Clinical Associates within the Department of Pathology:

George C. Chaney, M.D.
Edwin B. Herring, M.D.
Robert K. Jones, M.D.
Burton O. Leeb, M.D.
Harry D. Ellis, M.D.

D. Separations from Staff

Martin L. Ovitz, M.D., Assistant Professor, July 1, 1968 (moved to VA)
I. General departmental information

A. Significant achievements during the academic year 1967-1968 have been primarily in the area of expansion and refinement of teaching programs in pediatrics. The acquisition of four additional full-time staff members and the appointment of an assistant chairman for the first time permitted the department to do more than the bare minimum. Teaching rounds, preceptorship programs, teaching conferences, and student-faculty contacts have been considerably expanded and upgraded. The acquisition of a resident staff of quantity and quality, so necessary to clinical teaching programs for students, has contributed greatly to the teaching program.

The provision of additional space for outpatient care of children has relieved to a large extent the woefully inadequate facilities previously available. As a result the department has been able to expose...
both junior and senior medical students to the care of children other than those who are hospitalized.

An additional benefit that has accrued from the expansion of faculty and staff to adequate size has been the ability of the department to look outside the hospital in areas of the community that might provide opportunities for teaching, research and various pilot programs. To cite an example, early in the year the department was approached by Dr. Patrick Lynch, Director of the Educational Service Center, regarding health problems of children in remote school districts served by his facility. The department agreed to send small teams of students and faculty to these school districts to screen problems presented by the children. It was found that this was a very useful teaching experience for students and, for the faculty, a revealing learning experience in terms of some of the problems of providing medical care in these areas. As a result, the department is presently planning to participate in several pilot programs in other areas of the state that might afford similar valuable learning experiences.

During the year the research plans of the faculty
were continued and expanded. Dr. Mortimer's investigations of streptococcal diseases continued and two students participated for three months each in these efforts. Dr. Alice Cushing and Dr. William Michener, in cooperation with members of the Department of Medicine, have initiated an extensive study of enteric disease in infancy. Dr. Robert Castle has continued his investigations of the effects of high altitude on the hearts of children. Dr. Russell Snyder, in cooperation with members of the Educational Service Center, has established relationships that will permit a cooperative investigation of the problem of specific reading disabilities in childhood. Dr. Wilma Castle has initiated a Birth Defects Clinic under the sponsorship of the National Foundation which has also supported the development of her cytogenetic laboratory.

A disappointment has been the withdrawal of the Los Lunas State School from a cooperative agreement made in April of 1967. According to this agreement, the School of Medicine would participate in the selection of a top-quality medical director for Los Lunas who would have a faculty
appointment. From the standpoint of the School of Medicine, this would have facilitated teaching programs in clinical pediatrics in the areas of neurology, mental retardation, psychiatry and metabolic disease. The benefits to the Los Lunas State School of such a cooperative arrangement are obvious. Unfortunately the lack of stability in the administration of the State School made it impossible for either party to continue negotiations.

B. Plans for the immediate future include primarily the further development of presently existing teaching and research programs in the department. The availability of the Mental Retardation Center in the middle of the next academic year should provide a remarkable opportunity for teaching and investigation.

The faculty of the department believes that the basic original purpose of this School of Medicine is to contribute ultimately to the improvement of medical care in the State of New Mexico. Of course, the School of Medicine cannot directly provide such medical care. Accordingly, participation in extramural programs is believed by
the department to be desirable only when one or more of three criteria are met. Thus, such programs are valuable to the school if, first, they provide optimum opportunity for teaching, secondly, if they represent endeavors that contribute to the acquisition of new knowledge through research, or thirdly, if they comprise pilot or demonstration programs in terms of developing new modes of health care. With these criteria in mind, the department is exploring several possible approaches which are expected to be implemented during the next academic year.
C. Appointments to staff

William M. Michener, M.D., Assistant Professor and Assistant Chairman of Pediatrics, effective January 12, 1968.

J. Albert Browder, M.D., Assistant Professor of Pediatrics and Program Coordinator for the Mental Health Division, effective July 1, 1967.

Ann E. Pressman, M.D.; Assistant Professor of Pediatrics and Epidemiology and Community Medicine, effective November 1, 1967.

Russell D. Snyder, M.D., Assistant Professor of Pediatrics and Medicine (Neurology), effective July 1, 1967.

Charles A. Weymuller, M.D., Visiting Professor of Pediatrics, December 1, 1967 through March 31, 1968.

The following appointments as Clinical Associates in Pediatrics were effective during this academic year:

George W. Brown, M.D.
John M. Casebolt, M.D.
Donald J. Davis, M.D.
Paul Eicher, M.D.
Fred W. Heaton, M.D.
Louis F. Kuehn, M.D.
James Miller, M.D.
James L. Pollock, M.D.
David B. Post, M.D.
Oscar Syme, M.D.
Lawrence R. Schwartz, M.D.
Matthew A. Tandysh, M.D.
Robert Tully, M.D.
William K. Woodard, M.D.
John T. Tyson, M.D.

D. Separations from staff
None

II. Composite of information requested

1. Advanced study
None

2. Sabbaticals, etc.
None

3. New scholastic honors
Alice H. Cushing, M.D., Fellow, American Academy of Pediatrics

4. Publications
Mortimer, E. A., Jr. and Vastine, Ellen L.
Production of Capsular Polysaccharide
(Hyaluronic Acid) by L Colonies of Group

Schmidt, W. C., and Mortimer, E. A., Jr.
Streptococcal infections. The Biologic
Basis of Pediatric Practice, edited by

Mortimer, E. A., Jr. Nasopharyngitis (The
Common Cold). In Current Pediatric Therapy.
S. S. Gellis and B. M. Kagan, ed.,

Mortimer, E. A., Jr. Streptococcal Pharyn-
gitis. In Current Therapy, H. F. Conn, ed.,
W. B. Saunders Co., 1968.


Snyder, R. D. and Nellhaus, G. Brain Damage as a Predisposing Factor in Bacterial Meningitis, accepted for publication in Developmental Medicine and Child Neurology


5. Other research projects

Army contract for project entitled "Role of Group A Streptococcal L Forms in Natural History of Streptococcal Disease; Type 31 Group A Streptococci and Acute Nephritis" in the amount of $18,800, 1967-68; renewal applied for in the amount of $17,600 for 1968-69, E. A. Mortimer, Jr., M.D.

National Institute of Health research grant for studies on Group A Streptococcal L Forms in Vivo in the amount of $62,915 in progress through August 31, 1969, E. A. Mortimer, Jr., M.D.

Disaccharidase Determinations in Infants with Diarrhea, Borden Milk Co., in the amount of $1,000, William M. Michener, M.D.

Studies on Salmonella and Shigella, particularly Colon Biopsy, Disaccharidase Determination and Antibody Production against the Rat Colon (Ulcerative Colitis Antigen), William M. Michener, M.D.

National Foundation-March of Dimes, in the amount of $22,000 for period of October 1967 to June 1968, Wilma L. K. Castle, M.D.
Birth Defects Clinic and operation of Cytogenetics Laboratory, Wilma L. K. Castle, M.D.

Initiation of project to study neurological basis of developmental dyslexia, Russell D. Snyder, M.D.

Laboratory for the study of metabolic causes of mental retardation (amino acid chromatography) "Special Mental Retardation Fund" in the amount of $1,381, New Mexico Association for Retarded Children, J. Albert Browder, M.D.

Renewal of a $4700 grant-in-aid from the New Mexico Heart Association for research concerning variables affecting the evaluation of the electrocardiogram, vectorcardiogram and phonocardiogram in infancy, Robert F. Castle, M.D.

6. Activities in professional societies

Dr. Mortimer presented papers at the Ruidoso Summer Clinic; the San Miguel County Medical Society; the American College of Physicians. He participated in seminar of the Armed Forces Epidemiological Board, Committee on Prophylaxis of Streptococcal Infection in the
Armed Forces; annual Markle meeting; Panel on Otitis Media at meeting of the American Academy of Pediatrics; Program entitled "New and Old Antibiotics" at the University of Southern California School of Medicine Postgraduate Division.

Dr. Mortimer attended the following meetings:
New England Pediatric Society; Committee on Infectious Diseases of the American Academy of Pediatrics; Association of Medical School Pediatric Department Chairmen as well as a meeting of the Executive Committee of that organization; Rheumatic Fever Committee, American Heart Association.

Dr. Mortimer served as Visiting Professor at William Beaumont Hospital in El Paso for several days; in addition, he served for a few days as Visiting Professor at the University of California School of Medicine.

Dr. Mortimer was selected to serve as Secretary-Treasurer of the Association of Medical School Pediatric Department Chairmen and as a member of the Board of Directors of the New Mexico Heart Association.
Dr. Browder attended the convention of the American Academy of Pediatrics, and as a Board Member, he attended the convention of the National Association for Retarded Children. In addition, he is Chairman of the New Mexico Mental Retardation Program Coordinating Council.

Dr. Cushing is serving as Secretary of the New Mexico Pediatric Society.

Dr. Snyder is serving on the Program Committee of the Bernalillo County Medical Association.

Dr. Wilma Castle attended a meeting of the Mammalian Cytology and Somatic Cell Genetics and a symposium on Fetal Medicine.

Dr. Robert Castle presented a paper at the annual meeting of the American Academy of Pediatrics. He continues to serve as College Governor for New Mexico in the American College of Cardiology and attended the annual meeting of that group in San Francisco.

Dr. Michener served as Visiting Professor at Raymond Blank Children's Hospital in Des Moines, Iowa, April 18 and 19, 1968. He
presented papers at a meeting of the New Mexico Medical Society, New Mexico Pediatric Society and American Gastroenterological Association.

7. Other professional activities
Dr. Mortimer gave numerous lectures to medical and paramedical organizations as well as to civic organizations; he served as a Consultant at Sandia Base and for Project Head Start.

Dr. Browder gave several radio talks as well as a talk at the Technical-Vocational Institute.

Dr. Cushing participated in Circuit Post-Graduate seminars; served as Visiting Professor at Western Reserve University for several days, gave radio talks, and participated actively in Poison Control Week on both radio and television.

Dr. Snyder served as a Consultant at Sandia Base Hospital and at the Los Lunas Hospital and Training School; he participated in the New Mexico Medical Society Mental Health and Alcoholism Conference as well as a Teacher Training Course in Socorro; he also made several PTA appearances in Albuquerque.

Dr. Wilma Castle made several television appear-
ances and talked before various civic groups.

Dr. Robert Castle served as a Job Corps Consultant, evaluating medical care facilities at various Job Corps Centers; in addition, he made several television appearances.

Dr. Michener was President of the Dartmouth Club of New Mexico; he served as Southwestern Enrollment Representative of the United States Lawn Tennis Association, and he made a television appearance in Des Moines, Iowa.

8. Non-teaching university service

Dr. Mortimer served as Chairman of the Third and Fourth Year Curriculum Committees of the School of Medicine; he served on numerous ad hoc Committees within the School of Medicine.

Dr. Cushing continues to serve as Director of the Poison Control Center of the Bernalillo County Medical Center.

Dr. Wilma Castle served as Chairman of the Medical Records-Utilization Review Committee and as a member of the Medical College Admissions Committee.
Dr. Robert Castle was Chairman of the Third Year Promotions Committee of the School of Medicine and was a member of the Pharmacy and Therapeutics Committee of the Bernalillo County Medical Center.

9. Dr. Mortimer participated actively in the New Mexico Medical Society, New Mexico Pediatric Society, Albuquerque Pediatric Society and the Bernalillo County Medical Association.

Dr. Browder served as a Troop Committeeman, Boy Scouts.

Dr. Cushing was MacArthur School PTA Health Chairman.

Dr. Robert Castle was active as a Board Member of the Bernalillo County Heart Association; he served as a volunteer physician for the Bernalillo County Cardiac Clinic.

Dr. Michener served on the Advisory Board of St. Anthony's Home for Boys.
The Report of the Départment of Pharmacology
July 1, 1967 - June 30, 1968
Sidney Solomon, Acting Chairman

I. General Departmental Information

A. Achievements During Academic Year 1967-1968

During the month of October, 1967, the Department of Pharmacology vacated its temporary quarters in Building No. 5 and occupied its new space in the southwest wing on the first floor of the recently completed Basic Medical Sciences Building. During succeeding months, departmental office space and research space was equipped and the administrative, teaching and research functions of the department are now operational at the highest level permissible with the current number of staff.

The integration of the teaching of pharmacology into the medical program was further developed with significant participation in the first, second and third years of the medical curriculum. A "bloc" of lectures in "Basic Pharmacology", in conjunction with appropriate laboratory exercises, was presented to the first year medical students by Dr. Vernon Jones, Dr. Donald Priola and Dr. Agamemnon Despopoulos participated heavily in the teaching of cardiovascular physiology and pharmacology to the first year students. The heaviest participation of the Department of Pharmacology was committed to the second year teaching program. Throughout the year, members of the department lectured on the various special areas of pharmacology, including autonomic drugs, autonomic nervous system, chemotherapeutic agents, anti-biotics, anti-hypertensives and the like. For the first time, pharmacology teaching laboratories were
scheduled for the second year students and executed with generally good results. Further development of this portion of the teaching program of the Department of Pharmacology is anticipated for the 1968-1969 academic year (vide infra). In order to continue the exposure to pharmacology beyond the first and second years of medical school, members of the Department of Pharmacology initiated, organized and executed a series of integrated basic-clinical science conferences for the third year students. The purpose of these sessions was to discuss problems in clinical medicine in the light of information from basic pharmacology so that the relevance of basic science information to the clinical practice of medicine could be demonstrated.

In addition to the intensive teaching activity, a significant portion of the staff's time was devoted to basic pharmacological research. Dr. Vernon Jones, with the generous support of the Dean's office, has equipped and is now operating a sophisticated research laboratory devoted to the study of the effect of drugs on the kidney. He is presently applying to the National Institutes of Health for long-term support of his research and is hopeful of gaining such support. Dr. Donald Priola is actively involved in investigating the role of the nervous control of the heart and blood vessels in the response of the cardiovascular system to various drugs. His work is presently supported by a grant from the National Heart Institute totalling in excess of $200,000 for a period of five years. In addition, Dr. Priola is being supported in another research effort by the Life Insurance Medical Research Fund in the amount of $33,000 for three years (7-1-68 to 6-30-71). During the past year, Drs. Jones and Priola have been successful in the solicitation of unrestricted gifts from various private agencies which now total in excess of $17,000. These
monies will be used for improvement of departmental facilities, both for research and for teaching and also for the support of various research projects which require an additional financial outlay not available from any current source.

With the return of Dr. Thomas Burks from his postdoctoral year in London at The National Institute of Medical Research, we expect to enlarge and improve both the teaching and research functions of the department. Dr. Burks has presently applied for and is awaiting approval of a grant from the National Institutes of Health for the purpose of supporting his research in autonomic pharmacology. The level of research activity in the Department of Pharmacology is adequately represented in the biographical section of this report. It is expected that research involvement will continue to grow during the next academic year while maintaining its current level of excellence.

As part of the Dedicatory Symposium schedule celebrating the year of opening of the Basic Medical Sciences Building, the Department of Pharmacology was able to enlist Dr. Eugene Braunwald as its dedicatory speaker. Dr. Braunwald is a world-famous scientist who was formerly Chief of Cardiology at the National Institutes of Health and is presently Chairman of the Department of Medicine at the University of California School of Medicine located at La Jolla, California. Dr. Braunwald's seminar was attended not only by the basic and clinical science faculties of the Medical School, but also by many practicing physicians who represented virtually every area of the State of New Mexico.

B. Plans and Recommendations

Dr. Theodore Cooper, Professor and Chairman of the Department of Pharmacology, has recently accepted the position of Director of the
National Heart Institute and will not return as Chairman of the Department of Pharmacology. At present, Dr. Sidney Solomon, Chairman of the Department of Physiology, is Acting Chairman. A search is presently underway for a new Chairman of the Department. An appointment is expected to be made early in the next fiscal year. To discuss plans for the next year, in the absence of an appointed Chairman, would be somewhat presumptuous. However, there are some obligations of the department which must and will be met during the next academic year.

Dr. Thomas Burks is returning from his postdoctoral fellowship in London, England as of June 1, 1968, and will resume his duties in pharmacology with promotion to the rank of Assistant Professor. With the presence of Dr. Burks, Dr. Jones, Dr. Priola, Dr. Despopoulos, and our new staff appointment, Dr. Vorherr, it is expected that the teaching program of the Department of Pharmacology will be solidified and extended. Although the participation of the department in the didactic portion of the medical curriculum has been extensive, we must develop within the next academic year a schedule of teaching laboratories for second year medical students. This was impossible during the last academic year because of the paucity of staff. However, with the complement of staff members now being adequate, we feel that the development of such a didactic laboratory program is essential to the teaching function of the department.

Again, with the presence of adequate staff, the graduate teaching of the department may now be developed so that participation in the graduate program of the University will become significant. During the next academic year, it is expected that three graduate courses will be offered. Dr. Jones and Dr. Despopoulos are planning to offer a course in "Metabolic Pharmacology". Dr. Priola is developing a course in "Techniques of Evaluation of Cardiovascular
Dr. Burks, in cooperation with other members of the staff, will present a course in "Pharmacology of the Autonomic Nervous System". At present, the department has one graduate student who is enrolled in the combined M.D.-Ph.D. program. However, many applications for graduate study in Pharmacology are being received by the Graduate School and the Committee on Graduate Studies of the Medical School. It is anticipated that within the next academic year, additional graduate students will be accepted to begin a program of advanced study in Pharmacology.

In order to implement the desire of the department for a program in clinical pharmacology, Dr. Helmuth Vorherr has received a joint appointment in the Departments of Obstetrics and Gynecology and Pharmacology. He will assume this position as of July 1, 1968, and it is hoped that he will spearhead the development of such a program. This appointment will also provide needed liaison between the Department of Pharmacology and the clinical departments. In addition, the contribution Dr. Vorherr can make to the teaching of pharmacology in his specialized area of endocrine pharmacology fills a gap in Department specialties.

C. Appointments to Staff

Helmuth Vorherr, M.D., Associate Professor, July 1, 1968 (joint appointment with the Department of Obstetrics and Gynecology).

Antonios Coutselinis, M.D., Visiting Assistant Professor, October 1, 1967.

Charles T. Spalding, Ph.D., Postdoctoral Fellow, July 1, 1968.

D. Separations from Staff

Theodore Cooper, M.D., Ph.D., Professor and Chairman, June 30, 1968.

Antonios Coutselinis, M.D., Visiting Assistant Professor, June 15, 1968.
II. **Information on Individual Biographical Supplements**

A. **Advanced Study** - None

B. **Leave of Absence** - (LWOP) London, England, Dr. Thomas F. Burks,

C. **New Scholastic Honors** - Dr. Thomas F. Burks, Postdoctoral Fellowship,

D. **Publications** -

**Dr. A. Despopoulos:**


**Dr. Donald V. Priola:**

**Publications:**


5. Priola, D.V.: Delineation of cardiac sympathetic nerve distribution in the dog by chamber sensitivity to norepinephrine following unilateral denervation. Am. J. Physiol., 1968. (Submitted for publication)


**Abstracts:**


Dr. Vernon D. Jones:


Dr. Thomas F. Burks:


E. Other Research Projects

Dr. Despopoulos: PHS Grant AM 8719, "Active Transport and Cellular Metabolism, $33,690. 9/1/67 to 8/31/68.

Dr. Priola: NHI Grant HE-10869, "Response of the denervated heart to drugs", $219,000. 9/1/66 to 8/31/71.
Dr. Priola: Life Insurance Medical Research Fund, "Influence of electro-mechanical synchrony on cardiac function", $33,000. 7/1/68 to 6/30/71.

Dr. Jones: Research grants have been obtained from the Merck Institute; Smith, Kline & French Foundation; and Burroughs Wellcome & Co.

F. Activities in Societies -

Dr. Despopoulos:


Elected to membership in American Society for Pharmacology and Experimental Therapeutics, 1967.

National Institutes of Health Workshop, Renal Manifestations in Hepatic Diseases; presented invited lecture.


Dr. Priola:


American Heart Association Meetings, San Francisco, California, October 1967.

FASEB Meetings, Atlantic City, New Jersey, April 1968.

Dr. Jones:

Meeting of Federation of American Societies of Experimental Biology, Atlantic City, New Jersey, 1968.


G. Other Professional Activities -

Dr. Despopoulos:


Student Union Forum, "University Students and Drugs", September 1967.


KUNM Radio Interview on "Use of Drugs on Campus", February 29, 1968.

Guest Lecture series in Endocrinology presented to the students in Biology 430.


Dr. Priola:

Participated in "Coronary Care Course for Nurses", St. Joseph Hospital; gave 6 hours of lectures.

Spoke before coronary care unit nurses, Presbyterian Hospital, on "Cardiac Drugs".

Spoke before cardiology staff, Presbyterian Hospital, on "Clinical Uses of Adrenergic Blocking Agents".

Dr. Jones:

Addressed New Mexico Pharmaceutical Association on "Pharmacology in the Medical School".

Addressed Department of Pharmacology at the University of Minnesota on "Control Mechanisms in Renal Energy Metabolism".

H. Non-Teaching University Service:

Dr. Despopoulos:

Member of Cultural Affairs Committee, UNM.

Medical School Committees:
  Safety Committee (Chairman)
  Medical Biology Curriculum, 1st year
  Medical Biology Curriculum, 2nd year
  Pharmacology & Therapeutics Committee
  Advisory Committee for Post Graduate Education

Dr. Priola:

Graduate Studies Committee
Animal Care Committee
First Year Promotions & Academic Standing Committee
First Year Curriculum Committee

Dr. Jones:

Second Year Curriculum Committee
Ad Hoc Committee for Search for Chairman of Pharmacology
I. Public Service -

Dr. Despopoulos:

Participated as judge at the 9th Annual N.W.N.M. Regional Science Fair, March 22, 1968.

J. Personal Information -

Dr. Priola:

Child born May 20, 1967, Donald Thomas.
A. One resignation took place during the past year. Dr. Harald Sonnenberg, Assistant Professor in this department, moved to the University of Toronto. Dr. Albert Ratner was appointed Assistant Professor in this department. In addition, Mr. P. George Simon, a graduate student finishing work on his Ph.D., has been recommended to appointment at the rank of Instructor effective July 1, 1968. Funds to pay the latter salary will come from a research grant.

A major revision in the laboratory programs of Medical Science 501-502 was implemented during the past year. The number of assigned laboratory sessions under the direction of the department was reduced to less than one third of that offered in previous years. The time thus released was utilized by the students for an in-depth study of a problem in experimental biology. Seven such projects were implemented in cooperation with members of other departments. Students read in depth, formulated an experiment and then carried out the experiment. The exercise ended in submission of papers covering the work and in a formal oral presentation of results. The oral presentations were held in the format of a national meeting.

Whereas this educational experiment was viewed by some with some scepticism before its implementation, it is uniformly endorsed by both faculty and students now that our first experience with it has been finished. Such endorsement ranges from lukewarm to highly enthusiastic, but nobody that we know is negative. This experiment will be continued with certain modifications which we think are desirable.

Still working under the impetus given by last year's emphasis on scholarly activity, research productivity has remained reasonably high.
The following full-length papers were published by members of this department:


The following papers were presented at meetings of scholarly societies:


5. A possible non-cholinergic action of hemicholinium No. 3 (HC-3). D.T. Frazier, Western Conference of Neurophysiology and Brain Research, February 1, 1968.
6. Site of action and active form of local anesthetics in nerve fibers.


Papers numbered 2, 4, 5 and 6 resulted in published abstracts.

Members of the department were involved in the following additional scholarly activities:

1. Associate Editor, "The Kidney", Sidney Solomon.
2. Refereeing papers for various journals, S. Solomon and A. Despopoulos.
3. Giving talks on various aspects of biology to high schools, civic groups, etc., S. Solomon, A. Despopoulos, D.T. Frazier.
4. Serving on panels and study sections for the National Science Foundation (S. Solomon) and the National Institutes of Health (A. Despopoulos).
5. Planning committee of Western Conference of Neurophysiology and Brain Research, D.T. Frazier.

As a final point on scholarly activities, S. Solomon was honored by being asked to become Program Director of the Metabolic Biology Program of the National Science Foundation for one year. He will be on leave from the University effective September 1, 1968. Both S. Solomon and A. Despopoulos were invited to chair sessions at the Symposium on Semi-Arid Environments held at UNM.

The members of this department have continued to serve the University and community. Such service has been primarily through serving on various committees, but has also involved activities such as judging at the Regional Science Fair, participating in civic organizations, etc.

B. Future plans for the next year should involve the addition of one other staff member to this department, as well as filling the budgeted position
now open. A great urgency exists for finding monies to equip the second student laboratory.

The change of the name of the Department to Physiology and Biophysics has been delayed until a cooperative program can be implemented which involves all segments of the campus with interests in biophysics.
THE REPORT OF THE DEPARTMENT OF PSYCHIATRY

July 1, 1967 - June 30, 1968

Robert A. Senescu, M.D.
Professor and Chairman
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I. Changes in Faculty

A. New Appointments

Name: Carol Calkins, R.N.
Name: Carlin, James, M.D.
Name: Douglas, Bill G., Ph.D.
Name: Gervais, Robert H., M.D.
Name: Goates, Delbert T., M.D.
Name: Graham, John R., M.D.
Name: Hancock, James C., M.D.
Name: Hartl, Joyce, O.T.
Name: Hoogerbeets, Jacob D., M.D.
Name: Neighbor, Catherine, MS, PHN
Name: Ruebush, Britton K., Ph.D.
Name: Snyder, Ross L., M.D.
Name: Trick, O. Lee, M.D.

Rank: Instructor (Nursing) 11/1/67
Rank: Assistant Professor
Rank: Instructor
Rank: Assistant Professor
Rank: Assistant Professor
Rank: Assistant Professor
Rank: Adjunct Assistant Professor
Rank: Instructor (Occupational Therapy) 11/1/67
Rank: Assistant Professor
Rank: Assistant Professor (Nursing) 11/1/67
Rank: Associate Professor
Rank: Adjunct Instructor (July 1, 1967)
Rank: Instructor (October 1, 1967)

B. Changes in Status

Dilatush, Lois, Ph.D.
Snyder, Ross L., M.D.

Rank: Assistant Professor (Psychiatry only 2/1/68)
Rank: Assistant Professor (1/1/68)

C. Departures

Alexander V. Monto, M.D.

Santa Clara County Mental Health Program
San Jose, California

D. Professional Non-faculty Appointments

Name: Doyle, Jacqueline

Rank: Program Associate (Behavioral Sciences)

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D. Professional Non-faculty Appointments (Cont.)

Name:                                    Rank:
Fitzgerald, Dorothy                      Sustained Contact Team Nurse
Gealy, Joanne                           Psychiatric Social Worker
Graham, Bette                           Psychologist (CMHC)
Harty, Robert                           Mental Health Worker
Otero, Frank                            Psychiatric Social Worker
Van Hoose, Jack                         Assistant Program Director (CMHC)
Zepeda, Willie                          Mental Health Worker
Rachiele, Arlene                        Sustained Contact Team Nurse

II. Changes in House Staff

A. Appointments

Name:                                    Rank:
Hickey, Micheal, M.D.                   First Year (GP)
Napoliello, Michael, M.D.               First Year (Basic Residency)
White, Malcolm E., M.D.                 First Year (VAH Career)

B. Reappointments

Selck, Wolfgang, M.D.                   Second Year

III. Students, Teaching

Dr. John R. Graham has been Coordinator of the Undergraduate teaching program since his arrival in July 1967. During this time a major attempt has been made to use the facilities of this Department to the fullest possible extent. The faculty have all been involved in formal and informal contact with the medical students in all four undergraduate years.
III. Students, Teaching (Cont.)

The second year Psychosocial Medicine course involved members of the Behavioral Science Team and other faculty. A major emphasis was placed on small group learning exercises and independent study. Both staff and students seemed to respond enthusiastically and the course was very well received.

In the third year, a total of sixteen students rotated through various facilities in the Department during the Clinical Clerkship. The clinical staff were very much involved in this program which attempted to build on the student's interest in an anticipated career in medicine.

Two fourth year students took electives in the Department. Miss Kagan gained more clinical experience in psychiatry with special attention on psychotherapeutic techniques. Mrs. Medford worked on a special project in conjoint family therapy with a special focus on problems of adolescence.

During the summer of 1967, five students were involved in a work program supported by the National Institute of Mental Health. Steve Nichols, Richard Dhanes, Hal Arthur Martin, Jerry Fitz, and Arthur Hartz were involved in clinical and research activities.

IV. Residents, Teaching

Dr. Walter W. Winslow has been named Coordinator of the Residency Training Program and Chairman of the Residency Training Committee. Three first year resident and one second year resident were in the
IV. Residents, Teaching (Cont.)

1967-68 program. The residents were rotated, at six month intervals, through the Bernalillo County Medical Center, Ward 2-West and the Consultation Liaison Service; the Veterans Administration Hospital, Inpatient Service; and the Comprehensive Community Mental Health Center, Outpatient Clinic.

Their work has been adequately supervised by faculty of the Department of Psychiatry. Formal teaching programs are as follows:

1. Psychiatric Seminar - weekly, 1 1/2 hours
2. Clinical Conference with Dr. Senescu - weekly, 1 1/2 hours
3. Psychiatric Grand Rounds - weekly, 1 1/2 hours
4. Literature Seminar - bi-weekly, 1 1/2 hours

V. Clinical Services

A. Inpatient and Consultation - Bernalillo County Medical Center

An active treatment and teaching program was developed on the psychiatric inpatient unit. As the residency program in the Department of Psychiatry was further developed, the inpatient service was utilized as an area of training for one psychiatric resident at a time.

In addition, an active program for rotating interns was instituted. This included regular meetings with the director of the service, bi-weekly meetings with Dr. Boyden from the Department of Medicine, and a weekly seminar with the Chairman of the Department. Interns and residents were also exposed to the teaching in child development with Dr. Goates, and learned about the community and its resources through Mr. Leo Romero, a psychiatric social worker.
V. Clinical Services (Cont.)

An active program for medical students also came into being.

Concerning the treatment modalities, a definite attempt was made to change the inpatient unit from a service for very short-term care into one which also included moderately long-term psychiatric treatment. To realize this concept, activity therapy, group therapy, and ward meetings were organized. These new programs helped to establish the growth of a therapeutic milieu on the inpatient service.

As the inpatient unit developed in this direction, it became a place where future mental health workers for the Community Mental Health Center could be trained. In the last year, through the energetic and dedicated work of all members of the staff, the program has developed quite satisfactorily.

During the fiscal year 1967-68, the Consultation Service has functioned on a prompt response to consultation requests. We have been able to see consultations within twenty-four hours after the request was made. In addition, we have made an effort to do a more comprehensive evaluation of patients, in which Mrs. Curran, our social worker, was involved. More emphasis was placed on the teaching function of our Consultation Service. Therefore, more direct conferences with the referring physicians were planned and we insisted that the referring physician be involved in conferences with the family of the patient.

Statistics on the service were kept up-to-date as well as the
V. Clinical Services (Cont.)

statistics on our suicide survey. Another focus of attention was the evaluation of how efficient referrals to the psychiatric outpatient clinic are. Figures show that only one-third of patients referred there would show up. The small number of patients who followed our suggestions either dropped out after one to three sessions or were discharged from outpatient care by the physicians in the outpatient clinic. From a total of twenty-eight patients in this group, four were placed in a "drug group," six were seen in either individual or group therapy, sixteen were only seen one to three times, one died, and one went to the State Hospital where he committed suicide. The overall "yield" from an original group of seventy-eight patients referred to the clinic was thus only six patients. We are presently looking into this problem in the hope of improving followup care.

B. Outpatient and Emergency Services

The number of patient visits increased, yet no waiting list developed. Functioning from a patient-centered point of view, with initial appointment as soon as desired, is one currently achieved goal. This has required ten periods a week, where a mental health professional is in the role of intake worker set to be face to face with a patient within fifteen minutes if necessary. The worker and patient plan a "next step" with a definite person, place and time from among multiple alternate treatment plans. Through the use of six district teams and a master appointment
V. Clinical Services (Cont.)

record, most patients make crisis contact with a sustained contact team member. Initial telephone contacts are routed by the mental health professional on intake to the appointment with a team member from the team in the patient's neighborhood. Thus, multiple people being involved in the initial contact is usually avoided. A psychiatrist is on backup position to all mental health professionals in the intake role.

A common treatment plan involves brief crisis psychotherapy, usually limited to six hours or less. If necessary, a long-term treatment plan, based on a sustained contact in the neighborhood or in one of twenty groups functioning in the outpatient clinic, can be added. The crisis functioning seems to fit with the style of our patient population. It is, however, much appreciated by high income groups on occasion, as such help is often unavailable at any price. The dynamic unit involved is most commonly the whole family rather than the identified patient. Children in a crisis situation are always seen in this dynamic unit. Alcoholism, heroin addiction, and senility as special problem areas are not excluded with alcoholism being a common presenting problem.

Basically, the outpatient operation is seen as a technical backup to the sustained contact team function. Many caretakers and helping persons have been involved in the sustained contact role, with the team members backing up in the field or at the outpatient clinic. Mental health workers from the neighborhood and nurses (public,
V. Clinical Services (Cont.)

waiting and school) and school counselors are particularly effective in the sustained contact role. Welfare workers and probation officers are naturally in this role; but, because of lack of districting, effective backup is currently not possible. The history of the outpatient clinic involved and still involves the patient group of the field office of the state mental hospital, plus the patients coming from the psychiatric ward of BCMC. (The expanding patient population during this year often have not been hospitalized.) This does not mean they are a less distressed group of families. The number hospitalized on 2-West has significantly decreased. Hospitalization from Bernalillo County has at least not increased. Individuals from local jails and individuals facing voluntary commitment continued to be evaluated.

The Field Office staff now remains the same while the Mental Health Center staff has increased by about six mental health professionals in a direct clinical role.

C. Veterans Administration Hospital Program

1. Inpatient Service

The staff consists of two psychiatrists, two psychologists, two social workers, plus the usual complement of nurses and nursing assistants. Ancillary therapies are also available. The major treatment modality is "milieu therapy" although a wide range of other modalities are available.
V. Clinical Services (Cont.)

2. Day Treatment Center
The staff consists of one psychologist, one social worker, one occupational therapist, one psychiatric nurse, one nursing assistant, and one secretary. Medical treatments, such as drug prescriptions, are supervised by one of the psychiatrists in the Mental Hygiene Clinic.

3. Mental Hygiene Clinic - Outpatient
Staff includes two psychiatrists and three social workers. The psychologist transferred to another station in February 1968 and has not been replaced. A number of new groups have been developed in the MHC during the past six months.

VI. Community Mental Health Center Activities

A. Teaching
The CCMHC departmental staff has been involved in the entire departmental teaching program. This involves participation in Grand Rounds, literature seminars for residents, direct contact with medical students and student nurses.

The second year psychiatric resident is actively involved in the outpatient clinic. Medical students and student nurses from the College of Nursing are actively deployed and involved in sharing clinical interviews and groups in the ward, OPD, and OEO Center.

Alexander Quenk, Ph.D. has given a seminar on psychodrama and role playing to the VAH staff. Joanne Gealy, Catherine Neighbor, and Frank Otero have been involved with the Nelson Amendment Training
VI. Community Mental Health Center Activities (Cont.)

Program for nursing assistants for four months. Alexander Quenk and Catherine Neighbor have been conducting a T-Group for the Visiting Nursing Association over the last four or five months. Leonardo Garcia and Frank Otero have been involved in a sensitivity group with the director of the OEO program and the five neighborhood centers' directors. There is another sensitivity group presently functioning with Alexander Quenk, Carol Calkins and the staff of the South Broadway Center. Leonardo Garcia and Catherine Neighbor have completed a seminar with the police recruits at the Police Academy. Bette Graham has been co-therapist for a sensitivity group program for freshman medical students. Catherine Neighbor is currently a full-time instructor during the month of May in the Psychosocial Medicine Course for sophomore medical students. There has been general participation in the evening literature seminars for psychiatric residents.

B. Community Activities

The CCMHC departmental staff have been actively involved in numerous community activities; numerous speeches and discussions have been held with interested citizens' groups. There is ongoing involvement with the Armijo Neighborhood Citizen's Association concerning heroin addiction within that neighborhood. The CEI section of the CCMHC has been involved with the local chapter of the Mental Health Association on an ongoing basis. Close involvement with the forthcoming Suicide and Crisis Center has been accomplished.

The Model Cities Program has a Model Cities area which is in the core...
VI. Community Mental Health Center Activities (Cont.)

of our primary service area of the Mental Health Center. A
definite relationship has been established with the leadership
of the Model Cities Project, and Alexander Quenk has been appointed
as Health and Welfare Coordinator for the Model Cities Project.

The clinical teams have been spending four to eight hours per
week in the five neighborhood centers operated by the Anti-Poverty
Program. This has brought the teams in direct contact with the
non-professional outreach workers and this relationship has been
very fruitful.

Considerable effort has been given to the cooperation in the
Comprehensive Alcoholism Project. Further development of this
project is under way to see if it can be brought into reality
by involving Model Cities, Comprehensive Health Planning, and
the National Institute of Mental Health for funding support. A
comprehensive heroin treatment project with a research-evaluation
component has also been drafted and submitted to NIMH and is under
consideration at this time.

C. Building Program

Bids for the construction of the CCMHC facilities were opened on
September 7, 1967. The award was made to the K. L. House Construction
Company on a low bid of $1,269,761.00. This was a pleasant surprise,
since it was below the estimate of the architect, W. C. Kruger, made
almost two years prior to the actual call for bids.

Construction began almost immediately and has progressed well with
VI. Community Mental Health Center Activities (Cont.)

the exception of one short period of inclement weather.

The overall program calls for a total of six buildings. Two two-story buildings will accommodate administration, outpatient services, day hospital, and activities therapy services; two one-story buildings of twenty-four beds each will accommodate inpatient services. The remaining two buildings will provide area for the Mental Retardation portion of the services; one will be for outpatient and one for day hospital patients.

The actual construction is approaching the 40% completion stage and should not miss the target date by very much. This, of course, is assuming there are not setbacks such as weather, supply procurement, strikes, etc.

As of the present, opening of the Center, hopefully, will be near the beginning of 1969.

VII. Continuing Education

Continuing education is seen as a crucial part of the entire departmental educational program. Thus, continuing education activities have been carried out and are being further developed for: 1) senior practitioners in psychiatry and related mental health disciplines working in the State of New Mexico; 2) non-psychiatric physicians in New Mexico; 3) staff members of the Department of Psychiatry, itself; and 4) practitioners and educators in related fields, such as social work, corrections, law counseling, higher education and others.
VII. Continuing Education (Cont.)

A proposal has been submitted to the National Institute of Mental Health for a large scale statewide program of continuing education. A site visit was made on this proposal in December and we are now awaiting official word of action taken by NIMH in funding this proposal. The "trainees" in this proposed program will consist of: 1) persons in the traditional mental health disciplines of psychiatry, clinical psychology, psychiatric social work and psychiatric nursing; 2) persons with specialized skills and knowledge, although not professionally trained mental health workers, such as general medical practitioners, clergy, public health and public welfare workers, etc.; and 3) non-traditional new sources of manpower such as the "indigenous non-professionals." This program will function on a statewide basis and will utilize a variety of educational techniques to develop and provide continuing education experiences to program participants. In developing the application, the support and involvement of a variety of key persons and agencies in the State has been secured (New Mexico State Hospital, Combined Hospitals Board, Department of Public Health and Social Services, etc.). In carrying out this program, the Department will function as: 1) an assessor of specific needs for continuing education on the part of the target trainee population; 2) a catalyst to pull together Departmental, Medical School, University, and other agency and professional resources to accomplish the task; 3) a developer of pilot continuing education programs; 4) an evaluator of the effectiveness of these educational efforts; 5) a resource to assist other agencies to develop related continuing education programs; and 6) a consultant.
VII. Continuing Education (Cont.)

on methods and techniques of continuing education in the mental health field on a state, regional and national basis.

When funded, it is expected that the statewide continuing education program mentioned above will become a significant part of the total activity of the Department. Additional faculty and secretarial services will be provided by the grant to carry out the program. A great deal of interest has already been expressed by the Western Interstate Commission on Higher Education about the possibility of this program being made available, when appropriate and feasible, to serve as a stimulus and "a model" for other western states.

The development of a more comprehensive and coordinated program for continuing education (or professional development) of faculty members of this Department is now under way. As departmental faculty has grown, particularly the new staff members added to carry out the program of the Comprehensive Community Mental Health Center, the need for such a program has become more evident. In the field of mental health, where developments are moving ahead at a very rapid pace, we must insure that staff are "updated" in skills and knowledge in order to make maximal use of extremely short mental health manpower. We are developing program plans for a variety of Departmental activities to meet this need, such as Departmental Rounds, workshops and seminars, a coordinated program of visiting consultants, and faculty participation in national meetings and conferences of special importance.
VII. Continuing Education (Cont.)

It is anticipated that in the immediate future the program of postgraduate education in psychiatry for non-psychiatric physicians will be expanded. This effort is now largely being carried out by the Chairman, with assistance from other departmental faculty, in one area of the state. Local programs of this kind, as well as statewide programs such as the seminar for general practitioners sponsored by the Department on "Depression and Suicide" in the Spring of last year, will be increased in number and diversity.

VIII. Behavioral Science Program

The Behavioral Science Program staff has been active in the first and second year medical student teaching programs and, to a lesser extent, in the third and fourth year programs and in residency training. It has also been active in consultation on research, teaching, and clinical services with other members of the Department of Psychiatry, the Department of Epidemiology, and the Department of Physiology. In the future, it is planned to expand the consultation services to other departments and to engage in additional collaborative projects. The Behavioral Science staff, in collaboration with the Department Chairmen of Psychiatry and Epidemiology and the Medical School Graduate Committee, is developing a proposal for establishing a Ph.D. program in Medical Sciences with a Health Behavior Science concentration. Members of the Behavioral Science staff have also been involved in sensitivity group training for first year medical students. This activity, conducted weekly throughout the school year, is expected to be continued and may be expanded to other interested medical student groups during the coming year.
IX. Research

A. Research Committee

The Department of Psychiatry formed a Research Committee which holds regular meetings bi-weekly. Its functions are to coordinate information about research resources and interests within the Department, to stimulate research activity, and to provide research consultation to Department faculty and staff. The Research Committee has reviewed several research proposals during the past year, including projects concerned with community mental health service programs with multi-problem families, narcotics addiction treatment and rehabilitation, evaluation of medical students' backgrounds and experiences, and the use of videotape for discriminative learning by hospitalized psychiatric patients. The Research Committee is an advisory board to the Department Chairman on questions involving the use of human subjects in research and has established communication with the Medical School Human Research Review Committee. A Departmental Research Seminar, meeting semi-monthly, was inaugurated this year. A survey of Departmental resources and interests in research was conducted by the Research Committee and an inventory file has been established.

B. Individual Projects

Dr. Hollingsworth  Comprehensive Alcoholism Project
                     Comprehensive Heroin Treatment Project

Dr. Libo  Planning Coordinator, City of Albuquerque-

Research Project on Learning Disabilities in Children (in progress - collection of data was sponsored by the University of Minnesota.)

Developed grant application to the National Institute of Mental Health for statewide program titled "Comprehensive Continuing Education for New Mexico."

Coordinated statewide program of eleven institutions of higher education on "Providing Mental Health Services to New Mexico's College Population."

Longitudinal Study of Medical Students and Medical Education (in progress)

Study of Effects and Process of a Student Sensitivity Group (in progress)

Cross-cultural Study of Emotion Terms (in progress)

Study of Intake Process in a Mental Health Clinic (in progress)

Longitudinal Study of Medical Students at UNM School of Medicine - Preliminary Section of Development.

Curriculum Planning in Psychiatric Education

Evaluation Procedures in Medical/Psychiatric Education

Culture Cognition and Emotion - Investigation of Lexicon of Emotional Labels: Their Cognitive Organization and Behavioral Correlates Among Athabaskan Speakers - Navajos of Puertocito, New Mexico (formulation in progress - outside support will be sought).

Study of Poverty Neighborhood - Self-help Project in Treatment of Narcotics Addiction

Study of Medical Education Process: Pilot Study Plus Plans for Longitudinal Study.

Work in Research Design for Study of Community Mental Health Center Intake Procedures and Treatment Networks.
X. Publications


X. Publications (Cont.)


XI. Visiting Lecturers

September 1967
C. H. Hardin Branch, M.D.
Professor and Chairman
Department of Psychiatry
University of Utah

October 1967
Miss Joy Tuxford
Social Worker
Dingleton Hospital
Melrose Scotland

January 1968
Mr. John Jasper, Director
New Mexico Department of Public Health and Welfare
Santa Fe

February 1968
William E. Powles, M.D.
Associate Professor
Department of Psychiatry
Queen's University
Kingston, Ontario, Canada

March 1968
Bernard Glueck, M.D.
Director of Research
Institute of Living
Hartford, Connecticut

Walter N. Stone, M.D.
Assistant Professor
Department of Psychiatry
University of Cincinnati
Cincinnati, Ohio

Willis Bower, M.D.
Superintendent
Arizona State Hospital

April 1968
Albert M. Honig, M.D.
Medical Director
Delaware Valley Mental Health Foundation
Doylestown, Pennsylvania
XI. Visiting Lecturers (Cont.)

April 1968

John Romano, M.D.
Professor and Chairman
Department of Psychiatry
University of Rochester
Rochester, New York

Professor Jim Morley
Chairman of Speech and Drama
University of Albuquerque
Albuquerque, New Mexico

Maxwell Jones, M.D.
Physician Superintendent
Dingleton State Hospital
Melrose, Scotland
I. General Information

A. This reporting period encompasses the initial year in the development of a vigorous Department of Radiology in the University of New Mexico School of Medicine. The acquisition in July 1967 of a departmental chairman, a senior associate professor, an administrative coordinator and a departmental secretary provided the nucleus for the continuing expansion of departmental activities.

The Faculty of the Department of Radiology at the beginning of the academic year include the following:

- B. G. Brogdon, M. D., Professor and Chairman
- D. A. Wolfel, M. D., Associate Professor
- R. W. Papper, M. D., Assistant Professor
- J. A. Craig, M. D., Clinical Associate
- P. M. Fox, M. D., Clinical Associate
- J. W. Grossman, M. D., Clinical Associate
- O. Legant, M. D., Clinical Associate
- M. B. Lesser, M. D., Clinical Associate
- C. M. Thompson, M. D., Clinical Associate

Despite the relatively small full-time staff, the department was able to participate actively in all phases of medical
education. Doctors Brogdon and Wolfel gave a series of lectures in radiographic anatomy which were integrated into the freshman anatomy course. Both participated in the Year II curriculum as the various organ systems were taken up. Many conferences provided instruction for third year students assigned to Medicine, Surgery and Pediatrics. A very successful senior elective program was introduced with three senior medical students spending six to twelve weeks in the department as clinical clerks. One intern spent two months in the department; two residents spent four months full-time in the department. Other residents and interns received instruction from daily conferences and individual consultation.

The clinical service in the Bernalillo County Medical Center was developed quite rapidly in the early part of the year. Many new radiologic procedures were introduced for the first time to this hospital by Dr. Wolfel. All scheduling delays were dispensed with. The productivity of the clinical department was increased by approximately 13%.

Daily teaching conferences were held with medical and surgical staffs. Weekly conferences for the Pediatric
Department of Radiology

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Department were introduced. Biweekly conferences with the Neurology and Neurosurgery groups were held throughout the academic year. A postgraduate teaching session with Albuquerque and Santa Fe area radiologists were instigated at their request on a monthly basis.

B. In the coming year development of a Division of Nuclear Medicine is anticipated. Beginning July 1968 the Department of Radiology will take over responsibility for clinical work and teaching at the Veterans Administration Hospital. A residency training program in Diagnostic Radiology will begin in July 1968. During the following year, the development of a radiobiology program and a closer liaison with the Los Alamos meson facility is anticipated.

C. During this reporting period two clinical associates were added to the faculty, Dr. A. Curtis Hass and Dr. M. E. Harris on 25 September 1967.

D. Renee W. Papper, M. D., Assistant Professor of Radiology resigned effective 30 June 1968.

II. Biographical Information

1. All members of the full-time faculty have their doctorates and professional certification and, hence, no advanced study was performed during this reporting period.
2. Absences and travel were limited to activities in learned and professional societies which are reported below.

3. No new scholastic honors or fellowships were achieved.

4. The following publications by members of the department appeared during the period:


5. Other creative work in progress or completed during the period includes:


Wolfel, D.A. and Brogdon, B.G. Intrahepatic Air - A Sign of Trauma. Accepted for publication in Radiology.


6. Activities in learned and professional societies:

B. G. Brogdon, M. D.

Radiological Society of North America - Attended meeting November 1967. Presented Refresher Course entitled "Departmental Planning".

American Roentgen Ray Society - Member, attended annual meeting September 1967.

Society for Pediatric Radiology - Member, attended annual meeting September 1967.

Southern Radiological Conference - Presided as Chairman at annual meeting January 1968. Presented Chairman's Address "A Comparison of Venous Angiography and Photascanning in the Diagnosis of Pericardial Effusion".

Association of University Radiologists - Attended annual meeting May 1968. Chairman, Rules Committee. Member, Executive Committee. Chairman, Constitutional Revision Committee.

Society of Chairman of Academic Radiology Departments - Member, attended annual meeting May 1968. Member, Executive Committee.

American College of Chest Physicians - Fellow. Member, Committee on Chest Radiology.


American College of Radiology - Fellow. Attended annual meeting December 1967. Vice-Chairman, Commission on Public Relations. Member, Commission on Education. Member, Committee on Recruitment.
New Mexico Society of Radiologists - Member, attended two quarterly meetings. Chairman, Committee on Technologists Salaries.

D. A. Wolfel, M. D.

Association of University Radiologists - Member, attended annual meeting May 1968.

New Mexico Society of Radiologists - Member, attended two quarterly meetings.

7. Other professional activities

B. G. Brogdon, M. D.

Participant, Symposium on Respiratory Medicine, UNM November 1967.

Guest appearance on KNME-TV February 16, 1968.

Interview on KGGM Radio May 1968.

Participant, Annual Seminar, Houston Society of Clinical Pathologists April 1968.

Building and Equipment Consultant to Hershey Medical School May 1968.

D. A. Wolfel, M. D.

Participant, Symposium on Respiratory Medicine, UNM November 1967.

8. Non-teaching University Service:

B. G. Brogdon, M. D.

UNM School of Medicine
Member, Advisory Committee on School of Medicine Deanship.
Chairman, Building Expansion Committee.
Member, Committee on Senior Classweek.
Member, Deans Committee VAH.
Chairman, Auditorium Building Committee.
Member, Chairman's Committee.
Member or Chairman, three ad hoc committees on promotion.
Department of Radiology

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Bernalillo County Medical Center
Medical Director.
Chairman, Chiefs of Service Committee.
Member, Executive Committee.
Member, Patient Referral Study Committee

Veterans Administration Hospital
Member, Isotope Committee

D. A. Wolfel, M. D.

UNM School of Medicine
Chairman, Medical Isotopes Committee
Member, Professional Practice Plan Committee
Sandia Base Hospital Consultant in Radiology

M. B. Lesser, M. D.

Bernalillo County Medical Center
Member, Executive Committee

9. Public Service

B. G. Brogdon, M. D.

Boy Scout Troop Committee.
I. General departmental information.

A. Significant achievements during the academic year.

The Department of Surgery consists of five academic Divisions. These include the Division of General Surgery headed by Doctor James S. Clarke, the Division of Thoracic Surgery headed by Doctor John N. Wilson, the Division of Neurosurgery headed by Doctor Michael Polley, the Division of Orthopedics headed by Doctor James Weaver, and the Division of Urology headed by Doctor Ian C. S. Knight. It is helpful to group the activities of the Department according to these Divisions.

During the past year, there were eight full time academic members of the Department of Surgery. In addition, there was an active staff of physicians in private practice in the Albuquerque area who contributed to the teaching of medical students and house staff. Doctor James Clarke was a member of the Division of General Surgery. Doctor Edward T. Peter, W. Randall Blakeley, Daniel Smith, and John N. Wilson were members of the Division of General Surgery and of the Division of Thoracic Surgery. Doctor Michael Polley and Doctor Ralph Kaplan were in the Division of Neurosurgery. Doctor James Weaver and Doctor Jack Simpson were in the Division of Orthopedic Surgery. Doctor Ian C. S. Knight was in the Division of Urology.

In August of 1967, Doctor Edward T. Peter joined the faculty as Assistant Professor in the Division of General Surgery. The full time and clinical staff has continued to be active in teaching of medical students and house staff. There has been a great deal of participation in the teaching of the first and second year medical students, including a
significant block of teaching in the general surgical area on the gastrointestinal tract in the second year. The third year medical students were assigned to the Surgical Service for a period of two months, and their time was equally divided between the Veterans Administration Hospital and the Bernalillo County Medical Center. In addition to their clinical clerkship responsibilities, the students had an hour session with some member of the staff each day to discuss selected topics in surgery, the list of topics being adequate to give a general background in the basic principles of surgery. Fourth year medical students spent six weeks either on a surgical specialty service or on General Surgery at the Veterans Administration Hospital. The conferences in the two hospitals were reorganized to improve training of the students and house staff, and several new conferences were instituted. An excellent new conference was a daily X-ray conference at the Bernalillo County Medical Center, and a weekly surgical physiology conference to give the house staff a better background in the basic science area.

A major advance during the year was the completion of the new Basic Science Building with its laboratory facilities. Surgery was assigned a block of laboratories and two operating suites. Certain basic equipment has been acquired so that these laboratories are now being used for some basic research.

Doctor Edward T. Peter and Doctor Robert Fulton have conducted experiments on pulmonary contusion at the Veterans Administration Hospital laboratory.

The Surgical Service at the Veterans Administration Hospital has continued to be an active teaching service and bed occupancy and numbers of operations has continued at about the same level as the previous year.
There has been increased activity in Ophthalmology, and Doctor Samuel Leslie has participated in teaching of third and fourth year medical students. Otolaryngology has been done at Veterans Administration Hospital by three private attending men and some teaching in this area has been given to the third year medical students. Plastic surgeons have increased their range of interest to include reconstructive maxillofacial procedures, submucous resections, and hand reconstruction. During the past year, fourth year medical students have been given added responsibility on the General Surgery Service and seven of the fourth year medical students spent a part of their elective time in ophthalmology.

Doctor John N. Wilson arrived in December of 1967 to head the Division of Thoracic Surgery. In the clinical area there has been a moderately active Cardio-Thoracic Service at the Bernalillo County Medical Center with a good variety of pulmonary, esophageal and cardiac problems and a rather large number of patients with chest trauma. Referral of both pediatric and adult cases with congenital and acquired lesions has increased from outside the Bernalillo County area.

Of particular interest has been the initiation of a cardiac surgery program. Starting in January of 1968, cardiac surgical procedures have been performed so that by the end of June, 1968, a total of 23 cases have been done. These included a wide spectrum of cardiac lesions ranging from congenital defects of infancy to acquired valvular disease in the elderly patient. A heart-lung machine for extracorporeal circulation has been obtained by the Bernalillo County Medical Center and an experienced technician employed by the University to operate it. Four open heart procedures have been done including three patients who have had mitral valve replacements.
Two additional open heart procedures have been done using inflow occlusion and hypothermia. The increasing interest and support on the part of physicians in the Bernalillo County area as well as other parts of the State are hopeful indexes of an increasingly active program in the future.

In the laboratory area, two major projects are under way by the Division of Thoracic Surgery. The first is a study of the feasibility of using autogenous fascia lata for mitral and aortic valve replacements. This project is being carried out in the laboratory using dogs with the heart-lung machine. The second project is a comparative study of the pathophysiology of shock produced by cardiac insufficiency and shock produced by hypovolemia.

The development of a cardio-thoracic unit at the Bernalillo County Medical Center is contributing significantly to the excellence of the general surgical residency program and the teaching of medical students as well as to the sophistication of patient care in many other areas in the hospital.

The Division of Neurosurgery has continued to be extremely active in both the clinical and research areas. The total number of operative procedures for the past year is approximately 500 cases. The responsibility for these cases has been taken by Doctor Michael Polley and Doctor Ralph Kaplan. Although Doctor Kaplan has primary responsibility at the Veterans Administration Hospital, he has also been very active on the clinical service at the Bernalillo County Medical Center. The members of the Division of Neurosurgery have also been involved in teaching medical students at all levels. The neurology and neurosurgery patients have been placed in a single area in the Veterans Administration Hospital allowing close cooperation between the Divisions of Neurology and Neurosurgery.
of Neurosurgery have given lectures in the Neurobiology I teaching course as well as being involved in the neuro-anatomy laboratory sessions. They have also given lectures in the second year courses in neuro-pathology. They have been very active in supervising medical students and house staff on the clinical services at both hospitals. The research program carried on by Doctor Palley in his laboratories in the Basic Medical Science Building has been outstanding.

The past year has been one of reorganization for the Division of Orthopedic Surgery. In October of 1967, Doctor James Weaver left the full time staff to become Adjunct Assistant Professor of Orthopedics, and Doctor Simpson continued on the full time staff as Assistant Professor and Chief of the Orthopedic Service at the Veterans Administration Hospital. Under these new conditions the clinical work of the Division of Orthopedics continued with senior medical students being appointed to the Orthopedic Services for elective periods. One orthopedic resident, Doctor David Munger, spent his third year of residency at the Carrie Tingley Hospital. Among visiting lecturers in the area of Orthopedics were Doctor Albert Ferguson, Professor of Orthopedic Surgery at the University of Pittsburgh; Doctor David Lloyd Griffith, Professor of Orthopedic Surgery at the University of Manchester; and Doctor Harold Soffield, representing the American Board of Orthopedic Surgery, who made a site inspection of our residency in Orthopedic Surgery on May 5-7, 1968.

In October of 1967, Doctor Ian Knight resigned as a full time member of the faculty but continued on a part-time basis as Adjunct Assistant Professor of Surgery (Urology) to supervise the work of the Division. He continued his teaching activities and was assisted at the Veterans Administration Hospital by the Chief of the Urology section there, Doctor Charles Weingarten.
D. Significant plans and recommendations for the near future.

Unfortunately, Doctor Edward T. Peter will leave the University of New Mexico on September 1, 1968, to join the Department of Surgery at the University of Mississippi. On August 15, 1968, Doctor Jerry Shuck will join our faculty as Assistant Professor of Surgery and will be based at the Albuquerque Veterans Administration Hospital. As of that time we will still have five full time faculty in the areas of general and thoracic surgery, and we hope to add one additional man based at the Bernalillo County Medical Center within the next year.

Our increased work load and teaching and research responsibilities require an additional full time faculty member in the Division of General Surgery. It is planned that Doctor Frederica Vota will join our staff on January 1, 1969, as Assistant Professor of Surgery (Neurosurgery).

The Division of Urology will be greatly strengthened by the coming of Doctor Henry Lackner as Assistant Professor of Surgery (Urology) and Chief of the Division of Urology on July 1, 1968. At the same time, Doctor Lynn Barsky will join us as Assistant Professor of Surgery (Urology) and Chief of Urology at the Veteran's Administration Hospital. We hope to increase the size of the Division of Urology to a total of three men by July 1, 1969.

Beginning July 1, 1968, Doctor James Hester will continue as Chief of the Division of Orthopedics and Adjunct Associate Professor of Surgery (Orthopedics). In addition, Doctor Lewis Overton has joined the faculty as full time Chief of the Orthopedic section at the Veteran's Administration Hospital. It is recommended that he be made Associate Professor of Surgery (Orthopedics). Doctor Hester is organizing the Orthopedic Service for good supervision by the clinical staff and has already recruited four residents for the year beginning July 1, 1968, in the Orthopedic area.
Surgical areas which have not as yet been developed as academic entities include Anesthesiology, Ophthalmology and Otolaryngology. It is strongly recommended that Anesthesiology be developed as an independent Department as soon as possible. Clinical Anesthesiology at our two teaching hospitals is excellent at the present time because of the presence of Doctor W. Talley and Doctor Peggy Clarke-Roberts. But this area could be much better developed in its teaching and research functions with independent status and more staff.

It is anticipated that the development of a full time corps faculty in Ophthalmology and Otolaryngology will be deferred for approximately two years until the completion of the new addition to the Bernalillo County Medical Center. This is necessary to allow adequate outpatient space and beds in these hospital disciplines.

A major need for the Department of Surgery is adequate office space in the Medical School complex. At the present time, the offices of the various members of the Department are centered and inadequate, and do not allow efficient communication between the members of the Department and efficient use of secretarial help. It is hoped that this situation can be remedied at the time the addition to the Bernalillo County Medical Center is completed.

3. Appointments to staff.

Edward T. Peter, M.D., appointed as Assistant Professor of Surgery.

August 15, 1967.

John N. Wilson, M.D., appointed Associate Professor of Surgery.

effective December 1, 1967.

D. Separations from staff.

James K. Weaver, M.D., from Assistant Professor of Surgery (Orthopedics)

to Adjunct Assistant Professor of Surgery (Orthopedics) effective

October 1, 1967.
Ian C. S. Knight, M.D., from Assistant Professor of Surgery (Urology) to Adjunct Assistant Professor of Surgery (Urology) effective October 1, 1967.

II. Composite of information requested.

1. Advanced study.
   None.

2. Sabbatical, etc.
   None.

3. New honors.
   Doctor James S. Clarke was elected to membership in the Southwestern Surgical Congress and in the International Society of Surgery in 1968. He was elected to the Honorary Scholastic Society, Phi Kappa Phi, in June of 1968.

   Doctor W. Randall Mukelby and Doctor James Varner were elected to fellowship in the American College of Surgeons in October, 1967.

   Doctor Vann E. Floyd, Clinical Associate in Surgery, was elected to membership in the Western Surgical Association in November, 1967.

4. Publications.


   D. B. Smith, M.D., E. S. Wang, M.D., and R. Warg, M.D.: Preoperative Liver Function at 4,545 Feet Above Sea Level, Rocky Mountain Medical Journal.


3. Other research Projects:


Pesch, Roger N., M.D.: R.H.S Grant to the Arthritis Foundation of New Mexico for Operation of Flying Arthritis Clinic of which Dr. Pesch is a member.

Peters, Edward P., M.D.: Physiologic Effects of Pulmonary Contusion, sponsored by Veterans Administration Hospital.


Smith, D., M.D., Clark-Roberts, Peggy, M.D. and Ridelpho, Paul, Technician: Correlation of Blood Gas and CO₂ tension during anesthesia and postoperative period.

6. Activities in Professional Societies:

Dr. Michael Poley - Participant, AAGP Summer Clinic, Ruidoso Summer Clinic, Ruidoso, New Mexico, July 20, 1968.

Guest Lecturer, Roswell Medical Society Meeting, Roswell, New Mexico, March 1, 1968.


Dr. J. C. P. Simpson - Orthotic-Prosthetic Course in California in October, 1967.


Dr. William R. Blakley - Western Surgical Association, November 18, 1967, Presented Paper #3 on biographical record.

Southwestern Surgical Congress, April 27, 1968, presented paper entitled "N Loss of Sympathetic, etc." (Denver)

Dr. Ralph J. Kapina - Lecturer, Athletic Injury Symposium, March 9, 1968, University of New Mexico

Participant, Trauma Conference, Holiday Inn, Albuquerque, New Mexico, April 2, 1968.

Participant, Postgraduate Course in Neurological Diagnostic Procedures, March 30, 1968, University of New Mexico School of Medicine.


American Congress of Rehabilitation Medicine, Miami Beach, August, 1967.
6. Activities in Professional Societies: (Continued)

Dr. James S. Clarke — Gave papers in University of New Mexico
Postgraduate Course (Jan. 24); Rudoso Summer Clinic (July 24-25);
Gallop USPHS Hospital (Sept. 13-15); American College of Surgeons
(Oct. 4); Tucson Surgical Society (March 15); Beaumont Army Hospi-
tal (April 10); University of Tennessee (May 8-9)

Dr. Edward T. Peters — Attended New Mexico — El Paso Chapter of American
College of Surgeons and presented paper — "Effect of Pitressin on
Portal Hemodynamics"

Attended Society for University Surgeons Meeting in February.

Dr. Daniel E. Smith, — Attendance at American College of Surgeons Meeting,

Attendance at meeting of Veterans Administration Research Group,

James K. Weaver, M.D. — At the September 23 meeting of the New Mexico
Chapter of the Western Orthopedic Association in El Paso, two of
the University of New Mexico School of Medicine Orthopedic Resi-
dents presented papers; Dr. Haddad presented a paper on "Open
Fractures" and Dr. McElhinney presented a paper on "Surgical
Wound Infections".

Attended meeting of the American Academy of Orthopedic Surgery,
January, 1968, and presented paper, "Problems of Patellar Malign-
ment.

Attended meeting of the Rocky Mountain Traumatological Association
February 1, 1968, in Aspen, Colorado, and presented paper, "Criterion
for the Management of Civilian Gun Shot Wounds".


Division of Neurosurgery — Guest Consultant: Robert G. Grassman, M.D.,
Assistant Professor, Department of Surgery, Division of Neurological
Surgery, Southeastern Medical School at Dallas, Dallas, Texas. May
7-9, 1968. Lecture: Functional Relationships Between Neurons and
Neuroglia in the Cerebral Cortex. Medical School Colloquium, May 7.

Participant: Medical Legal Lecture Series, University of New Mexico.

7. Other professional activities.

None

8. Non-teaching University service.

Dr. James Clarke was a member of the Policy Committee.

Dr. Michael Polley was a member of the Ad-Hoc Curriculum Planning
Committee, Utilization Committee, Postgraduate Education Committee,
Radiological Control Committee, Finance Committee of the Bernalillo County Medical Association, and Library Committee.

Dr. Edward T. Peter served on the Curriculum II Committee, Graduate Committee, Records Committee and Professional Practice Plan Committee.

Dr. Donald R. Smith was Chairman of the Research Committee at the Veterans Administration Hospital and a member of the Human Research Review Committee.

Dr. J.C.P. Simpson was a member of the Second Year Curriculum Committee and Postgraduate Committee.

Dr. Roger W. Petch was a member of the Clinical Sciences I and II Committee.


None.
This year has shown some advance, but also some reversals due primarily to staffing in critical areas. The Public Health Research Grant Number 1 ROI Lm0053 which had been renewed in 1967 was renewed for 1968-69 for the amount of $66,743.

During the year it became increasingly apparent that the research grant objectives could not be achieved with current programming staff. In November Stanley S. Millwright, formerly with Xerox Corporation, Rochester, New York, joined the Library as a systems programmer to assist Wayne Jones, chief systems programmer. In December Lin E. Lewis joined the staff as a Library Technician with a portion of his time assigned to programming. He, also, took over the scheduling, ordering and screening of films and other audiovisual aids. With the formation of this team, progress has been made toward fulfilling the research grant's objective. Due to the unavailability of certain software programs from IBM, a contract was let in April to Dikewood Corporation, Albuquerque to write the necessary programs. Early in the fiscal year an IBM-2848 and two IBM-2260 cathode ray tube remote consoles were ordered and were finally installed in the Library in May. Programs for acquisitions, cataloging, serials control, circulation and several peripheral support programs have been written and will be tested for use with the IBM-2260 consoles.

In the interregnum before the 2260's are to become operational other existing programs have been refined and consolidated. One such program was
written to merge the daily circulation records into two lists rather
than the previous five. This greatly facilitated service at the
Circulation Desk. All library programs are now operational in the batch
mode of computer operation.

Resources Grant Number 1 P12 IM00170-01 for $33,607 to purchase
serials was renewed by the Public Health Service for the Calendar year
1967 and for $28,004 for the calendar year 1968. This has made possible
the building up of our serial runs where they were weak and to add new
titles to the collections.

In October 1967 the Dean’s office moved into the Basic Sciences
Building freeing that space on the second floor of the Library Building.
Mr. Divett, his secretary, and the programming staff moved into these
new quarters making possible the acquisition of much needed work area for
the staff. At this time the Circulation Desk was shifted and what was
formerly an administrative office became the Circulation Section Office.
This made possible the consolidation of various operations in that area.
The Reference Desk was moved from the main reading room to the area
formerly occupied by the Circulation Desk.

In September Mrs. Virginia Algermissen joined the staff to replace
Miss Marian Ausherman who had left the previous June. Mrs. Algermissen
is one of 26 MEDLARS strategists certified by the National Library of
Medicine. She came to the Library from the National Institutes of Health
Library. Since her arrival more than 60 MEDLARS searches have been done
in comparison to less than 12 requested before by this Library. These
searches have been made for the faculty, some senior students, and in
keeping with our role with the Regional Medical Program, for town and
state physicians. In April Mrs. Algermissen gave one of the Tuesday colloquia in which she explained to the faculty and students what MEDLARS could do for them.

Another effort to improve service to both the faculty and the members of the Bernalillo County Medical Association was the institution of the Bulletin of Library of the Medical Sciences. This monthly publication attempts to keep its readers advised of the Library's activities and new acquisitions. It has been edited by Dr. Sargent, Deputy Librarian.

Mr. Divett, Mrs. Algermissen and Dr. Sargent took an active part in the development of the plans for the Regional Medical Program. Mr. Divett and Dr. Sargent, together with other members of the RMP task force, spent two days in Santa Fe working on the operational grant proposal for the New Mexico Regional Medical Program. Mr. Divett later presented the Library's program to the site visitor team in April.

Under the sponsorship of the RMP, a Conference on Information Health Services Education was held in Albuquerque on October 20. Librarians from the academic and major special libraries of New Mexico were invited to attend and to discuss the plans of the Regional Medical Program and the possible impact on their libraries. Approximately 30 librarians attended the Conference.

Mr. Divett was invited to several meetings of the Texas Council of Health Libraries for the purpose of discussing the possibility of New Mexico joining with Arkansas, Louisiana, Oklahoma, and Texas in a plan to create a South Central Regional Medical Library. In December Dr. Fitz and Mr. Divett attended a meeting in San Antonio at which time the School of Medicine agreed to participate in the regional medical library
planning. Subsequent to this Mr Divett was appointed to the Steering Committee for planning of the regional medical library.

During the year the Library became a member of the Southwest Academic Library Consortium. The Consortium, made up of academic libraries in New Mexico, Oklahoma and Texas, seeks closer cooperation in the areas of acquisitions and interlibrary loans. In April further cooperation was sought from medical libraries in various surrounding states in the area of free exchange of photo copies of journal articles. In May the Library entered a more formal agreement with the Medical libraries of Texas and New Mexico for the same purpose. These efforts have been made in order to obtain interlibrary loans faster and thereby give better service. A teletypewriter was also installed during the year as a means of speeding interlibrary loans.

A major book acquisition by the Library was the purchase of the Bruno Kisch Collection. Dr. Kisch, a pathologist, was for many years a professor at Yeshiva University.

During the fiscal year the Library's holdings reached 42,996 bound volumes, of which 5,070 were added during the year. This represents over 1300 monographs and some 3700 bound serial volumes. Eighty new serial titles were added to the Library during this period. By actual count there are currently 27,388 bound journals on the shelves including indexes and abstracts.

In January Mr. Divett served as a consultant to the Mayo Clinic and Foundation Library. The Mayo Library had become interested in the future automation of its activities and sought advice from this Library which is comparable in size to its own. Mr. Divett's recommendations to Mayo were
incorporated in a report.

Other professional activities by the staff included attendance at the following meetings of professional societies:

American Documentation Institute, New York, N. Y., October 22-26. Attended by Mr. Divett and Dr. Sargent.


Joint meeting of the Rio Grande Chapter and the Colorado Chapter, Special Libraries Association, D. H. Lawrence Ranch, Taos, New Mexico, May 10-11. Papers were presented by Miss Anna Frances Burke, Mrs. Virginia Algermissen, and Dr. Charles Sargent.

Medical Library Association, Denver, June 9-13. Attended by Mr. Divett, Mrs. Virginia Algermissen and Dr. Charles Sargent. Mr. Divett was the Program Chairman for the meeting, and Dr. Sargent was chairman of the Contributed Papers Sessions and presented a paper at one of the General Sessions.

Dr. Sargent was appointed to the New Mexico Library Development Council under the Library Services and Construction Act, Title III.


Other staff members who joined the Library during the year in addition to those already mentioned were Mr. George Bevil, Photographer in the Medical Illustration Division; Miss Jane Jacobson, Library Assistant...
in the Technical Services Division; Miss Linda Klaus, Library Assistant, Administration; and, Mrs. Marjorie Morrow, Library Assistant, Serials Section of the Technical Services Division.

Terminations during this period included Miss Donna Frentzel, Library Technician, Circulation, who left at the end of August to take a teaching position in El Paso; Mrs. Rebecca Mayo, Medical Television Consultant who terminated in September; Mrs. Betty Speechly, Library Assistant who was terminated in August; Mr. William Wittekind, Library Technician who terminated in September; Mr. Stanley Millwright, Systems Programmer who terminated in June to return to Xerox Corporation, Rochester, New York; Mr. Harold Bellingham, Associate Librarian for Public Services who terminated at the end of June to return to Zimmerman Library of the University of New Mexico; Mrs. Ann Spence, Key Punch Operator who terminated the end of June; and Dr. Charles W. Sargent who also terminated at the end of June to accept a joint appointment in the School of Medicine and the School of Library and Information Science, University of Missouri.
COLLEGE OF NURSING

The report for the College of Nursing for 1967-68 will be reflected in the 1968-69 Annual Report.
1. General College Information

A. Significant achievements during the year.

1. Perhaps the most significant achievement during the year under review was the successful effort of the Administration and the College to defer the imposition of probationary status in regard to accreditation by the American Council on Pharmaceutical Education, the national accrediting agency for pharmaceutical education.

The examining team, which visited the College in October, 1967, reported a number of weaknesses in the College and, as a result of their report, the Council, in January, 1968, notified the President that it was their decision that the College should be placed on a probationary status for a period not to exceed three years when the Council met in June.

The Council indicated that the College and the Administration were at liberty to appear before the Council in June and to present any information which might have a bearing on the progress of the College in overcoming the weaknesses. On June 30, 1968, the Academic Vice-President-Elect and the Dean appeared before the Council. As a result of their presentations, the Council
rescinded its previous decision and continued the College in its regular accreditation status, requesting that a progress report be submitted by May 1, 1969.

2. Also significant was the installation of Gamma Beta Chapter of The Rho Chi Society, the national pharmacy honor society, in the College on May 25, 1968. Much credit is due Dr. William C. Fiedler who assumed responsibility for the many details involved in preparing the application and arranging for the installation ceremony. It was especially fitting that Dr. Roy A. Bowers, first dean of the College and a past president of the society, served as the installing officer.

3. While the enrollment declined, the decline was virtually inconsequential. From 130 in the spring of 1967, it fell to 128 in the fall and 127 in the spring of 1968. The Class of 1968 was the largest ever to graduate from the College. It numbered 32 (with one more expected to complete the requirements during the summer of 1968). In addition to being the largest, the Class was one of the best, scholastically, with 25% of the class achieving at least a 2.9 grade average.

8. Significant plans and recommendations for the near future. As a result of discussions among the faculty of the College, with the Administration as well as with the Dean of the
School of Medicine, and under the impetus resulting from the accreditation problem referred to above, the following are in the planning or developmental stages.

1. Discussions are under way with several local hospital pharmacists regarding the introduction of an elective course in Hospital Pharmacy. It is planned to initiate the course in Semester II, 1968-69. The course will be coordinated by a member of the College faculty but will be taught primarily by the hospital pharmacists who, it is hoped, will be given clinical appointments to the staff of the College. The course will include didactic work and practical experience in the hospital pharmacies. It is hoped that the students in the course will be able to accompany the medical staff on ward rounds thus providing an opportunity for them to observe the effects of the administration of drugs at first hand.

The development of a complete program of education and training for the specialty of Hospital Pharmacy will be a logical sequel to the introduction of the course in Hospital Pharmacy and is under active consideration.

2. The addition of a new faculty member in the fall of 1968 will make possible the realization of two much needed and long hoped-for goals.
a. A substantial part of the assignment of the new faculty member will be the development of a program of continuing education for the practicing pharmacists of the state.

In pharmacy, as in all the health professions, new developments are occurring at an ever-increasing pace. The practitioner is hard put to keep abreast of the increasing stream of new knowledge. One answer to this problem is, as Medicine has found, post-graduate, continuing educational programs. Several colleges of pharmacy already have such programs in operation. It is vital that the College should develop such a program. In its absence, the level of professional practice in New Mexico must surely fall and the citizens of the State will not receive the quality of service to which they are entitled.

b. The rest of the new faculty member's assignment will be the teaching of the courses in Pharmacy Administration and the development of new offerings in this important field. In the past, the lack of time due to heavy teaching loads has precluded the introduction of new courses.

c. An additional consequence of the addition of the new faculty member will be the reduction of the Dean's teaching load, thus freeing him so that he
may give much more attention to the administration of the College and especially to the direction of the formulation and implementation of future plans.

3. The decision to construct a building to be located on the Medical Campus to be jointly occupied by the Colleges of Pharmacy and Nursing and the Dental Programs should now be quickly followed by the initiation of active planning and the establishment of communication with the appropriate local and federal agencies.

It seems clear that many problems will arise in the planning and their solutions may be time-consuming.

It would appear that time is of the essence.

II. Composite of biographical information (see accompanying report of the Dental Hygiene Program for information concerning faculty members in that Program.)

1. Advanced study, etc.

BOURN, WILLIAM M.

Was registered as a pharmacist in New Mexico.

FERGUSON, GARY G.

Spent the year on leave to work toward the Ph.D. degree at the University of Colorado.

2. Sabbaticals, travel, etc.

BAKER, GEORGE L.

Brief visit to the Netherlands, France, West Germany, Austria, Jugoslavia, Greece, Italy, and England, Summer of 1967.
3. New scholastic honors, etc.

BOURN, WILLIAM M.

Elected to membership in The Rho Chi Society, national pharmacy honor society.

4. Publications

None.

5. Other research projects in progress.

BAKER, GEORGE L.

Phytochemical analysis of Contra Yerba.

STAHL, KENNETH H.

Synthesis of hydrazides as possible psychotherapeutic agents.

6. Activities in learned and professional societies.

BAKER, GEORGE L.

Re-elected Vice Chairman from New Mexico of the Western States Drug Conference at annual meeting in Reno, Nevada.

BOURN, WILLIAM M.

Vice-President of Gamma Beta Chapter, The Rho Chi Society.

CATALINE, ELMON L.


Attended annual convention American Association of Colleges of Pharmacy, Miami Beach, Florida, May 3-6, 1968.

Attended Mid-year meeting, Hobbs, January 21, 1968, and annual convention, Carlsbad, May 19-21, 1968, of the New Mexico Pharmaceutical Association. Chairman of Committee on Constitution and By-Laws of N.H.Ph.A.

FIEDLER, WILLIAM C.

Secretary-Treasurer and Faculty Adviser, Gamma Beta Chapter of The Rho Chi Society.

7. Other professional activities.

BOURN, WILLIAM M.

Consultant to local pharmacists on activities of various drugs.

CATALINE, ELMON L.


FIEDLER, WILLIAM C.

Talk to Student Chapter, A.Ph.A., November, 1967

Career Day Speaker, Pius X High School, April 24, 1968.


BAKER, GEORGE L.

Secretary, Pharmacy Faculty

Academic Advisor

Director, Health Professions Scholarship Program,

College of Pharmacy.
BOURN, WILLIAM M.

Faculty Adviser, Student Chapter, A.Ph.A

CATALINE, ELMON L.

Administrative Committee
Committee on Entrance and Credits, and member of its Subcommittee.

Academic Adviser.

FIEDLER, WILLIAM C.

Faculty Adviser, "The Aesculapean", student publication.

Academic Adviser

STAHL, KENNETH H.

Special Adviser, University College
Policy Committee
Faculty Adviser, Women's Pharmacy Organization.


CATALINE, ELMON L.

Member, Task Force on University and College Level Health Programs and Manpower Development, New Mexico Comprehensive Health Planning Program.
I. General Information

In June, 1968 the Dental Hygiene Program for the first time realized its goal of granting certificates to 20 qualified individuals. Previous classes had been slightly short of the desired goal. Since the first class was awarded certificates in June, 1963, ninety-eight people have completed the two-year program.

The Dental Hygiene Program presented the annual postgraduate dental seminar on January 29 and 30 in cooperation with the University's Division of Extension and the New Mexico Dental and Dental Hygiene Associations. Dr. Claude Nabers, a periodontist practicing in San Antonio, Texas, led the group in a study of Periodontics. Fourth semester dental hygiene students participated in the seminar.

Since the inception of the Dental Hygiene curriculum, the dental staff of the Veterans Hospital in Albuquerque has cooperated with the University by permitting students of the Program to receive some of their clinical experience in the hospital's dental department. Both the hospital's dental staff and the Dental Programs faculty have felt a more varied experience, emphasizing general hospital procedures, would enrich the dental hygiene students' professional educations. In the 1967-'68 academic year such an enriched program was added to their clinical training. They received instruction in surgical and operating room procedures, emergency treatments, routine
routine laboratory tests, and observed in the pathology laboratory and radiology department. This additional experience was well-received by the students. Its benefits were evident in the clinical performances of the participants.

Early in May the faculty of the Dental Programs participated in a two-day conference at the Lawrence Ranch. The purpose of the meeting was to review the curriculum and to plan for immediate and long range improvements in it. All four of the full-time faculty and ten of the twelve part-time faculty attended. Their hard work resulted in specific suggestions for changes in the various course offerings and in a more functional organization of the faculty into committees.

The entire faculty is hopeful that its suggested Bachelor of Science Degree in Dental Hygiene will meet with administration and faculty approval in the near future. The degree proposal includes four years of academic work and one year of clinical employment to qualify an individual as a recipient. The proposed degree's emphasis is on advanced clinical education and preparation for teaching dental health and dental hygiene. Both the need and demand for such a degree have been evident to the faculty and the profession since the institution of the two-year certificate program.
Personnel Changes

Staff appointments:  Bernard Archuleta as Maintenance Worker  
Effective October 1, 1967
Evelyn Brennan as Clinic Assistant  
Effective September 1, 1967
Bonnie Kostelnik as Secretary  
Effective September 1, 1967

Faculty Appointments:  Lucille Baca (Dental Hygienist) as Laboratory  
and Clinical Instructor  
Effective September 18, 1967
Darby Chávez (Dental Hygienist) as Clinical  
Instructor  
Effective September 18, 1967
Elspeth Ferguson (Dental Hygienist) as Clinical  
Instructor  
Effective February 9, 1968
Wayne W. Thornberry (Dentist) as Instructor in  
Radiography and Supervisor of Clinical Radiography  
Effective September 18, 1967

Note: All faculty appointments are temporary and salaries are paid from an  
Allied Health Professions Basic Improvement Grant

Staff Separations

Evelyn Brennan (Clinic Assistant) - Effective June 30, 1968
Thomas Walker (Maintenance Worker) - Effective September 15, 1967
II. Composite of Information - Faculty Members

1. Advanced study

KEEFFE, MARGOT LUE

11 credits in UNM College of Education

MELLOTT, VELMA R.

a. Course in Radiography for Dental Assistants, University of Southern California Dental School, February, 1968
b. 8 week Summer in Teacher Training in Dental Assisting, Marquette University School of Dentistry

2. Sabbaticals, leaves of absence, etc.

None

3. New scholastic honors, fellowships, etc.

None

4. Publications

duFAULT, M. LOUISE


5. Other research projects, etc.

None

6. Activities in learned and professional societies, etc.

duFAULT, M. LOUISE - Attend regular meetings of the New Mexico Dental Hygiene Association

KEEFFE, MARGOT LUE - Member of the American Dental Hygienists' Association

MELLOTT, VELMA R. - Sponsor of dental assisting students in the in the local Dental Assistants Society.
NOVITSKI, MONICA - Regular meetings: Albuquerque District Dental Society
  Council on Professional Dental Education
  of New Mexico Dental Association serving as the secretary
  American Society of Dentistry for Children
  Annual meetings: New Mexico Dental Association
  New Mexico Dental Hygienists' Association
  American Association of Dental Schools
  (Discussion leader of Dental Hygiene Directors)

7. Other professional activities, etc.

NOVITSKI, MONICA - Consultant: Council on Dental Education
  of the American Dental Association
  New Mexico Elks Club (Cerebral Palsy Evaluation
  Division of Dental Health, New Mexico Dept.
  of Public Health
  Advisor: New Mexico Dental Assistants' Association
  Staff Member: St. Joseph Hospital
  Coordinator: Certification Examinations for American Dental Assistants' Association,
  October, 1967 and May, 1968
  New Mexico State Board of Dental Examiners
  Dental Hygiene Licensing Examination, June, 1968.
  Administrator: National Board Examinations in Dental Hygiene, December, 1967 and April, 1968
  Off-Campus talks: January, 1968, Albuquerque District Nursing Association
  February, 1968, Senior class, Regina School of Nursing
  February, 1968, Albuquerque Dental Auxiliary
  March, 1968, Association for the Mentally Retarded

8. Non-teaching University service, etc.

duFAULT, M. LOUISE - Assistant to Director

KEFFE, MARGOT LUB - Chairman: Honors Ceremony
  Chairman: Workshop Conference - D.H. Lawrence Ranch
  Chairman: Curriculum Committee

NOVITSKI, MONICA - University College Advisor
9. Public service, etc.

duFAULT, M. LOUISE  - Collected for Multiple Sclerosis

KEEFFE, MARGOT LUR - Member - Aquinas Newman Center

MELLOTT, VEUna R. - Member - First United Presbyterian Church
Member, American Association of University
Women, Albuquerque Branch

NOVITSKI, MONICA  - Director, Coronado Credit Union
Member, Citizens Committee for Fluoridation
of Albuquerque's City Water Supply