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### **A Study Of The Deficiencies Of The Federal Budgetary System As It Applies To The United States Air Force.**

William J. Provance

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A STUDY OF THE DEFICIENCIES OF THE  
FEDERAL BUDGETARY SYSTEM AS IT APPLIES  
TO THE UNITED STATES AIR FORCE

By  
William J. Provance

A Thesis  
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## INTRODUCTION

Study of the Federal Budget is a never-ending process because its influence touches every citizen, significantly affects the national economy and generally extends throughout the free world. Although great strides have been made in improving the budget document during recent years, many believe that further improvement is not only possible but essential. Many change proposals have been submitted over the past two decades. Some have been impractical or impossible to inaugurate. However, other proposals, though difficult to apply to existing budget procedures, seem to offer great promise. This thesis is a study of the deficiencies of the federal budgetary system as it applies to the United States Air Force, with appropriate recommendations concerning future changes to the system. To this end, proposals of several leaders in the budgeting field will be examined and evaluated. Finally, a model will be proposed for more responsive governmental budgeting.

The point of departure or premise of this thesis is that the nature of the decision matrix in which top management of government functions is essentially the same as industry. The view is here taken that the budgetary process, whether in government or industry, is fundamentally the monetary expression of planning; the purpose of which is to optimize the utilization of scarce resources in the achievement of determined goals.

It is recognized that the philosophy of this premise is not accepted by all students of government.<sup>1</sup> To examine critically this premise is

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<sup>1</sup> Baldwin, Hanson, "Arms and the Atom--I," New York Times, May 14, 1957, p. 21.

not the purpose of this thesis. However, at the outset, it is necessary to show that the premise of this thesis is confirmed by trustworthy authority.

David E. Bell, former Director of the Bureau of the Budget, in a statement on August 1, 1961, during the hearings before the United States Senate Subcommittee on National Policy Machinery, said:

The essential idea of the budget process is to permit a systematic consideration of our Government's program requirements in the light of available resources; to identify marginal choices and the judgment factors that bear upon them; to balance competing requirements against each other; and, finally, to enable the President to decide upon priorities and present them to the Congress in the form of a coherent work program and financial plan.<sup>1</sup>

In testimony before the same Senate Subcommittee on July 24, 1961, Charles J. Hitch, Assistant Secretary of Defense, stated:

The financial management system must serve many purposes. Certainly it must produce a budget in a form acceptable to the Congress. It must account for funds in the same manner in which they are appropriated. It must provide to managers at all levels in the Defense Establishment the financial information they need to do their particular jobs in an efficient and economical manner. It must produce the financial information they need to do their particular jobs in an efficient and economical manner. It must produce the financial information required by other agencies of the government--The Bureau of the Budget, the Treasury, and the General Accounting Office. But all this is not enough. The financial management system must also be made to provide the data needed by top Defense Management to make the really crucial decisions, particularly on the major force and weapon systems needed to carry out the principal missions of the Defense Establishment. These decisions cannot be made rationally without an adequate knowledge of the available alternatives, in terms of their military worth in relation to their cost. Because of the long life cycle of major weapon systems, the cost of the systems must be projected over a period of years, ideally over their lifespan. Only in this way can the full cost implications, present and future, of program decisions be appreciated. And, finally, the entire system must be oriented to provide top management with essential data in terms of programs, since it is in terms of programs that major decisions have to be made.<sup>2</sup>

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<sup>1</sup>Senate Committee on Government Operations, Organizing for National Security, (Washington, D. C.: U. S. Government Printing Office) Part VIII, pp. 1134-1135.

<sup>2</sup>Ibid., p. 1006.



Wilfred J. McNeil, former Assistant Secretary of Defense and Comptroller, has said:

From a long-range viewpoint, we must have a total national strategy in which each element is in proper balance. Resources must be allocated on that basis and the allocation shifted in line with shifts in overall strategy. Fortunately or unfortunately, the allocation cannot be entirely on a scientific basis. Allocation usually must be a matter of judgment. It is not simply a matter of figuring requirements and adding up their costs. The test of the correctness of these judgments is in how well the needs of the country have been met and how efficiently the government managers have used the resources placed at their disposal. Neither of these tests is subject to any immediate or precise standard or measurement. This is an aspect of budgetary planning which often is not clearly understood.<sup>1</sup>

In an editorial in the April 1963 issue of the Armed Forces Management magazine, the following comment was made:

Clearly, from the fuss and furor welling up around some of Defense Secretary McNamara's weapon system decisions this year, quite a few congressmen and some old-line military officers have found a couple of hookers they don't like in the Program Package matrix. The hookers: A McNamara insistence on alternative solutions to broad strategy problems and on cost-effectiveness studies for the proposed weapon systems. In essence, economic factors are strongly influencing weapon buying decisions, i.e., if you want to travel from here to there, must you buy a Cadillac or can you do just as well walking?<sup>2</sup>

In an address delivered at the twenty-second national meeting of the Operations Research Society of America on November 7, 1962, Mr. Hitch stated:

Military planning and budgeting have traditionally been treated as independent activities in the Department of Defense, the first falling within the province of the Joint Chiefs of Staff and the planning organizations of the Military Departments, and the second within the province of the Comptroller. As a result, the Secretary of Defense each year found himself in a position where he had to make major decisions on forces and programs without adequate information, and all within a matter of the few weeks allocated to his budget review. Obviously, some new means was needed to bridge the gap between military planning and budgeting, and this is the role the new programming function, introduced last year, is designed to fill. Programming is not a substitute either for military planning or for budgeting, but rather

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<sup>1</sup>Ibid., pp. 1062-1063.

<sup>2</sup>"Systems Analysis: How the Budget Decisions are Reached," Armed Forces Management (Washington, D. C.: American Aviation Publications, Inc., April 1963), p. 13.

is the essential link between the two. It has long been my view that the job of economizing which some would delegate to budgeteers and comptrollers, cannot be distinguished from the whole task of making military decisions. Thus, our efforts over the last year and three-quarters have been directed to the integration of these three related phases of the decision-making process into a single planning-programming-budgeting system.<sup>1</sup>

Maurice H. Stans, President of the Western Ban-Corporation and former Director of the Bureau of the Budget has said:

Budgeting is choosing among spending alternatives. If there is enough money to meet all demands, and no choices are necessary, then the plans are no longer a budget but a spending list. Actually, there is never enough to go around--which means that it is necessary to fix the priority of claims on resources. Priority may be recognized by inclusion of a request in whole or in part, or by rejection.<sup>2</sup>

Although the Federal budget is developed primarily as a decision-making tool within the Federal Government, it serves as a major source of data and information for economic planning and analysis by government agencies, business, labor, and various other groups and individuals throughout the nation.<sup>3</sup>

During 1960, Governor Nelson Rockefeller's Committee on Government Organization recommended the establishment of an Office of Executive Management whose basic function would be to give staff aid to the President in the business management end of the government and provide a better way to organize the various activities that fall within that responsibility. It was recommended that one of its subordinate elements should be the present

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<sup>1</sup>Hitch, Charles J., "Plans, Programs, and Budgets in the Department of Defense," Operations Research, (Chicago: Peat, Marwick, Caywood, Schiller and Company, January-February 1963), pp. 5-6.

<sup>2</sup>Senate Committee on Government Operations, op. cit., Part VIII, pp. 1094-1095.

<sup>3</sup>Weidenbaum, Murray L., "Improving the Federal Budget," The Federal Accountant, (Washington, D. C.: Federal Government Accountants Association and George Washington University, December 1963), p. 101.

Bureau of the Budget.<sup>1</sup>

And finally, Eric Kohler and Harold Wright have written:

The budget of the United States Government is more than a financial outlook for a forthcoming fiscal year--it is the primary instrument employed in planning, adopting, executing, and reviewing national fiscal policy. As such, it has had and will continue to have a most important influence on the nation's economy and well-being; its impact goes far beyond the interests of the comptroller and accountant and reaches into many areas of economic activity throughout the world.<sup>2</sup>

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<sup>1</sup>Senate Committee on Government Operations, op. cit., Part VIII, pp. 1115-1116.

<sup>2</sup>Kohler, Eric I. and Wright, Harold W., Accounting in the Federal Government, (Englewood Cliffs, N.Y.: Prentice-Hall, Inc., 1956), p. 85.

## I. THE AIR FORCE BUDGET

Maurice Stans, a former director of the Bureau of the Budget, is reported to have said that, "good budgeting is the uniform distribution of dissatisfaction."<sup>1</sup> While such an aspiration may appear to be the result of good budgeting, it can hardly be considered to be a major goal or objective. Nevertheless, the minimization of dissatisfaction and philosophy of "making the foot fit the shoe" seems to present a general description of the existing budget process.

The Federal Budget in the United States is a twentieth century innovation. Although budgets were widely used in Europe as early as the eighteenth century, our nation had no budgetary system worthy of the name until 1921. Systems, processes, and procedures for rudimentary budgets had frequently been proposed but the need was not nationally apparent until the vast increase in federal expenditures occasioned by World War I. After much study, the federal budget was born when President Warren G. Harding approved the National Budget and Accounting Act on June 10, 1921.<sup>2</sup>

Today the Air Force and other federal agencies continue to operate within many of the provisions of that original act. There have been frequent changes, primarily attributable to the growth of governmental expenditures, but these changes have really only been alterations and modifications of an established system.

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<sup>1</sup>Weidenbaum, Murray L., "The Military Budget's Crooked Mile," Armed Forces Management, (January 1961), p. 17.

<sup>2</sup>Buck, A. E., "Budgets", The Encyclopedia Americana, Volume IV, (1957), p. 678.

The Air Force Budget Cycle, that period of time from the initiation of the budget process to the completion thereof for a particular fiscal year, ideally covers a period of thirty-four months.<sup>1</sup> Because of this extended duration, there are three distinct budgets in process within a single fiscal year.<sup>2</sup> Each budget cycle is usually considered as having three stages; a formulation stage, a review and enactment stage, and an execution stage.

The formulation stage normally begins in September, twenty-two months prior to the beginning of the fiscal year in which the budgeted funds are to be spent. The President, on the advice of the Council of Economic Advisors, the National Security Council, and the Bureau of the Budget, charts the course of the national government for the budget year under consideration. An analysis is made of the national economy in order to institute programs which will promote economic growth and stability. At the same time, international commitments are reviewed and the national security aspects of federal programs are examined.

Then, acting for the President, the Bureau of the Budget issues the annual call for the budget estimates. This document announces the President's policies for the budget year as well as the economic and security assumptions required for the preparation of the budget estimates. The call for the estimates, in the case of the Air Force, is first received by the Department of Defense which, in turn, transmits the "call" to the military departments. It is then sent down the military hierarchy until

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<sup>1</sup>Information on the Air Force budget process was obtained from the Air Force Manual of Budget Administration. Unless otherwise cited, the statements concerning the Air Force budget and procedures were obtained from this source.

<sup>2</sup>The military fiscal year is the twelve-month period beginning on 1 July and extending through 30 June of the following calendar year.

it reaches base level or an intermediate level at which the estimate is to be prepared. This downward transmission of the "call" is augmented by amplifying and clarifying documents as deemed necessary and the preparation of the actual estimate is begun.

Approximately five months are required to complete this flow of guidance and directive documents from the President to the level at which the estimates will be prepared. The estimates are then formulated to reflect the necessary fund requirements of the organization. Without becoming overly-burdened with the intricacies of the Air Force Budget Code, estimates are prepared for the following appropriation categories:

100 - Aircraft and Related Procurement

200 - Procurement other than Aircraft

300 - Military Construction

400 - Operation and Maintenance

500 - Military Personnel

600 - Research and Development

700 - Reserve Personnel

800 - Air National Guard

The categories are further sub-divided into budget programs, project and sub-projects, but such details become obscured as the estimates retrace their path up the hierarchy. The Congressional review is limited to essentially the categories previously listed.

Each staff agency at the estimating level prepares an estimate of its fund requirements for the budget year. The Comptroller consolidates the staff estimates and puts them into the proper format. The estimates are then forwarded back up the chain-of-command for review and approval at each echelon until the consolidated budget estimate reaches the office

of the Secretary of the Air Force. Review and approval by the Secretary constitutes the last step in the formulation stage and usually occurs eleven months after the budget process started.

Frederick C. Mosher pointed out that:

It is a curious and significant fact that the effort and attention given to the initial preparation of estimates are but a fraction of that given to the review of those estimates. . . . Installations are customarily allowed between one and two weeks for preparation of their estimates and part of this time is dedicated to review at the installation level.<sup>1</sup>

In addition to the review which takes place within the Air Force, eleven more months of review are required outside the Air Force channels before an appropriation bill is finally enacted. The next eleven months, the review and enactment stage, consists of four steps which are relatively self-explanatory. Step one is comprised of the review and approval of the estimates by the Department of Defense and the Bureau of the Budget. Step two consists of the preparation and printing of the Budget of the United States Government<sup>2</sup> and its presentation to the Congress by the President. The third step of the review and enactment stage consists of the Congressional review; a five-month period when the military services are engaged in justifying and defending their fund requests before the committees of Congress. The final step is the preparation and passage of an appropriation bill by Congress and the signature of the President permitting the bill to become law.

There is a six-month overlap between the review and enactment stage and the final phase of the budget cycle, the execution stage.

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<sup>1</sup>Mosher, Frederick C., Program Budgeting: Theory and Practice, (New York: American Book-Stratford Press, Inc., 1954), p. 165.

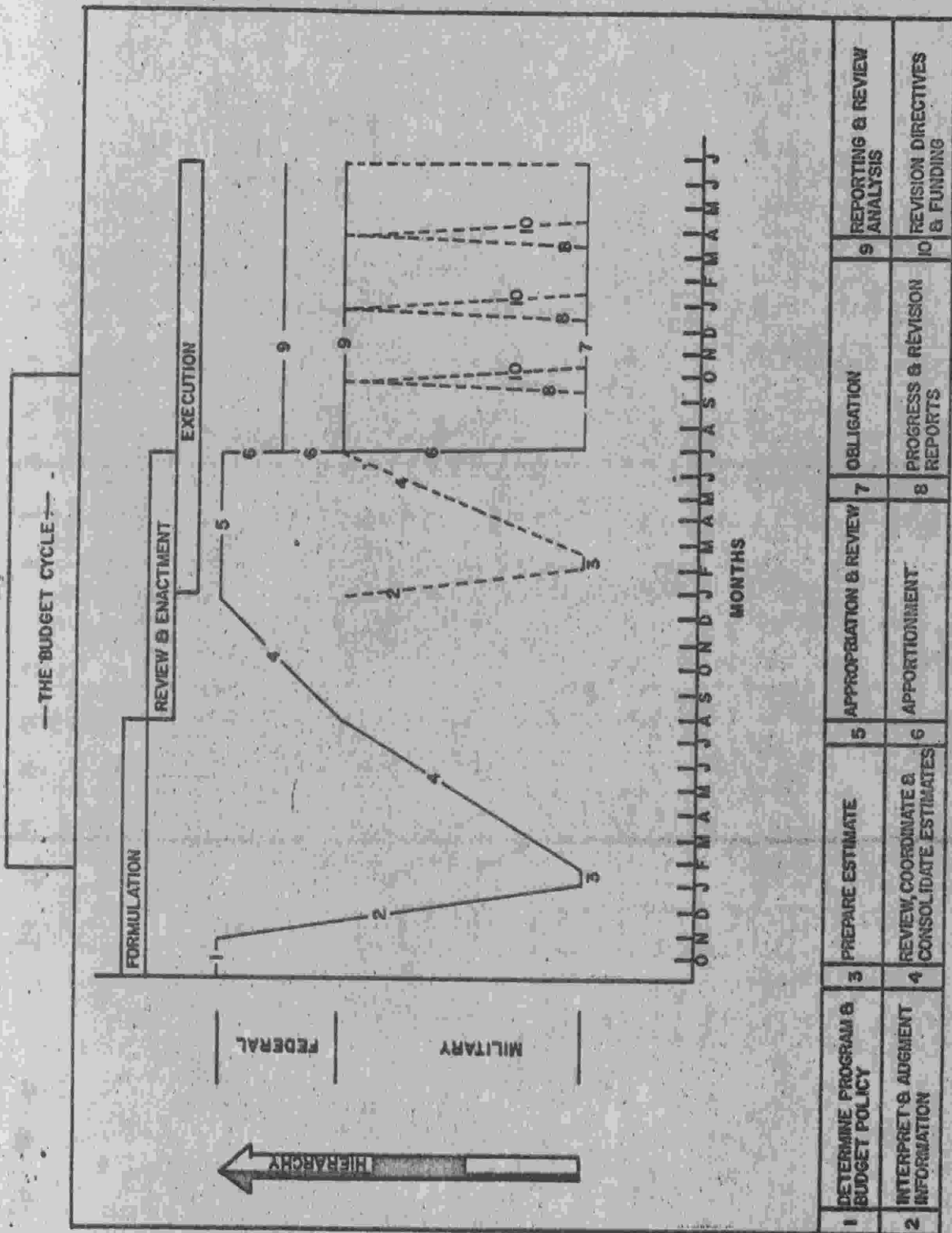
<sup>2</sup>This is no mean feat. For example, the Budget of the United States Government for fiscal year 1964 contained 1045 pages of budget estimate data plus 207 additional pages of appendix information.

At approximately the same time that the President submits the Executive Budget to the Congress for review, Headquarters, USAF issues a call for the submission of annual financial plans. This "call" signals the start of the execution stage and actually amounts to a new budget planning procedure that covers approximately the same content as the original budget and applies to the same fiscal year. However, unlike the original budget estimates which were prepared in rather general form with a minimum of detailed justification, the financial plans represent a detailed statement of how, when, and why the appropriations are to be obligated. Approved financial plans are used as the basis for the apportionment of the appropriations by the Bureau of the Budget and are therefore subject to rigorous review by every echelon within the Air Force. When the appropriation bill has been signed and the financial plans approved, funds are apportioned to the various federal agencies for obligation. Apportionments are made quarterly based upon approved, revised financial plans. Therefore, throughout the fiscal year the process of reporting program progress goes on at all echelons within the military hierarchy.

Figure 1 represents a simplified graphic presentation of the budget process. The vertical axis represents the chain-of-command with the estimating echelons at the bottom and the uppermost echelons (President, Congress, and Bureau of the Budget) at the top. The horizontal axis portrays the element of time. The period involved in each of the three stages is shown above the action lines.



FIGURE I



## II. SHORTCOMINGS OF OUR PRESENT SYSTEM

The Air Force budget process displays some inherently good features. It creates an awareness of supervisory control and provides officials with a continuing review of financial requirements. The process allows the lower echelons of the Air Force to state their financial requirements and thereby enables top management to become aware of future proposals and problem areas. Perhaps the greatest advantage of the present system rests with its slow evolutionary development. Because changes have been of the relatively minor variety, the present process has been well-learned and any drastic innovations would require a vast re-education program.

Nevertheless, these advantages are not peculiar to this particular system. They are basically attributable to the budget's slow evolutionary process and are therefore characteristic of any number of control systems. More importantly, they do not begin to offset the many disadvantages of the present system--disadvantages which hamper our military effort and reduce the effectiveness of our budgetary expenditures.

### DISADVANTAGES

#### 1. FAILURE TO CHANGE WITH ENVIRONMENT

Perhaps the basic fault of the budgetary system rests with its inability to cope with a rapidly changing environment. Frederick C. Mosher suggests that "a significant factor in our budgetary problems is that we have inherited from the past budgetary practices and philosophy which were originally developed for organizations of less size and complexity."<sup>1</sup>

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Mosher, Frederick C., op. cit., p. 5.

During the thirties only one percent of our Gross National Product was allocated to the military services. In recent years we have spent as much as fourteen percent of a much larger GNP for national security.<sup>1</sup> The present military dollar purchases hardware of almost unbelievable sophistication but the budgetary procedures can still only identify the "nuts and bolts". While the detailed costs of the various pieces of hardware are important and the present budget includes this information, the various budget approval agencies are not provided any information that would permit them to correlate these costs with end-product programs to determine and compare the value of the various national defense programs.

In his testimony before the Senate Subcommittee on National Policy Machinery on July 24, 1961, Charles J. Hitch, Assistant Secretary of Defense, stated that the present budgetary system "did not facilitate the relating of costs to weapon systems, tasks, and missions. . . . Its time horizon was too limited. . . . It did not disclose the full time-phased costs of proposed programs. And it did not provide the data needed to assess properly the cost and effectiveness of alternative programs."<sup>2</sup>

## 2. LENGTHY PREPARATION CYCLE

Even a cursory examination of the present budget process reveals the disparity between the preparation time and the ability to produce a responsible estimate. Since the actual estimate is prepared between eighteen and thirty months prior to the appropriation obligation, it is virtually impossible to accurately state the Air Force requirements. This problem is not new. In 1955 the "Hoover Committee" was "impressed

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<sup>1</sup>Ibid., p. 22.

Senate Committee on Government Operations, Part VIII, pp. 1005-1006.

with the importance of reducing the time required in budget preparation."<sup>1</sup> This committee's task force on budget and accounting suggested a maximum period of one year for the complete budget planning cycle.<sup>2</sup> A one-year budget planning period is really quite possible, provided that some of the trivia requiring a great deal of time to compile and subsequently a great deal of time to review, is eliminated and replaced with meaningful end-product data. Similarly, while the fiscal year may be a convenient device for accounting and control purposes, it encourages single year thinking. Presently the planners tend to consider each fiscal year as an autonomous unit completely divorced from past and future years. This is very deceptive since many billions of dollars are authorized in one fiscal year which must be funded in another. In effect, the fiscal year encourages short-run rather than the much needed long-term planning and thought. An example of this is the budgeting effort expended by the Department of Defense for its participation in nuclear test programs. Funds are budgeted for annually to carry out various programs. Little consideration is given to funds expended in past years or required in future years to carry out the current program. In addition, little attention is given to the costs of past or future related programs which may dictate the scope and cost of current programs.

Another example of the problems of a too-lengthy preparation cycle is the typical tactical unit. The mission of a tactical unit is tied very closely to the international political situation. It is difficult enough for such a unit to keep its budget requirements current during the actual

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<sup>1</sup>Commission on Organization of the Executive Branch of Government, Business Organization of the Department of Defense, a report to the Congress, June 1955, p. 76.

<sup>2</sup>Ibid., p. 77.

execution phase, but to expect such a unit to prepare a budget 22 months in advance seems almost ridiculous. Obviously, the closer to the execution phase a tactical unit can prepare an operating budget, the clearer the mission requirements are, and therefore, the better the budget detail provided will be.

### 3. INABILITY TO IDENTIFY PERFORMANCE OR END PRODUCTS

Individuals not intimately concerned with the budget system might assume that the "program" budget is also a "performance" budget. In business a program is usually identified with an end-product thereby permitting budget reviewers to gain some insight on past performance and efficiency. However, the general categories of appropriation used by the Federal Government today, though they are termed "programs", are actually schedules detailing what will be bought rather than what will be done. This fact was emphasized by President Eisenhower in his message to the Congress which accompanied the 1960 Executive Budget. He said, "This budget proposes a rearrangement of appropriations for the Department of Defense in terms of major purposes rather than of organization units."<sup>1</sup> The rearrangement proposed listed appropriations in the following categories:<sup>2</sup>

1. Military Personnel
  - a. Active Forces
  - b. Reserve Forces
  - c. Retired Pay
2. Operations and Maintenance
3. Procurement
  - a. Aircraft
  - b. Missiles

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<sup>1</sup>U. S. Bureau of the Budget, The Budget of the United States Government, for the Fiscal Year Ending June 30, 1961, p. M-32.

<sup>2</sup>Ibid., p. 435.

- c. Ships
- d. Other
- 4. Research, Development, Test and Evaluation
- 5. Construction
  - a. Active Forces
  - b. Reserve Forces
- 6. Revolving and Management Funds
- 7. Military Assistance

This change only reduced the number of categories; it in no way identifies a meaningful and end-product. How, for example, can the Congress judge the wisdom of spending over thirteen billion dollars this year under the broad category of "Procurement". This estimate accounts for more than ten percent of the total requested estimate for fiscal year 1964 and yet only a few hundred words of indistinct description are offered in support of it.<sup>1</sup> Nowhere is there any indication of the present air strength nor its distribution among the functional commands. The program entitled "Operations and Maintenance" doesn't tell the decision-makers anything about the incremental costs of keeping a squadron operational or the dollar maintenance requirement for the accomplishment of a specific mission. Charles J. Hitch and Roland N. McKean in their book, The Economics of Defense in the Nuclear Age, said of these categories, "Few of the items on this list are even remotely like end-product missions. Instead, the items are collections of objects used in a variety of tasks; and the dollar figures are the sums of selected

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<sup>1</sup>U. S. Bureau of the Budget, The Budget of the United States Government, for the Fiscal Year ending June 30, 1964, p. 435.

costs from all of them."<sup>1</sup> The continued use of these vague and meaningless categories can only cloud the problem of "program choice" and efficiency.

#### 4. FAILURE TO RELATE INVESTMENTS TO PRESENT AND FUTURE OPERATING EXPENSES

Another shortcoming of the existing budget is that there is no method of relating investment expenditures to annual operating expenses. Nor can the Congress determine the future costs entailed when a particular program is approved. The budget for any fiscal year really expresses only segmental costs of the approved programs and fails to identify anticipated future expenditures. It must be apparent that technical feasibility and low first-costs can not establish the practicability of any system. Support requirements, producibility, alternative costs, and operating expenditures must all be considered from the start. In this respect most of the present budget programs are analogous to an iceberg; ten percent is readily seen while the remaining ninety percent lies hidden beneath the surface.

#### 5. LOADED WITH UNNECESSARY DETAIL

The budget in its present form is physically cumbersome and unweildy. It lacks meaningful data and is overburdened with unnecessary detail. As an example, as late as fiscal year 1958, the Navy Department had to manage its financial affairs through some 136 separate accounts, each of which had to be separately considered and appropriated for by the Congress.<sup>2</sup> They ranged in size from \$50 for the payment of certain

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<sup>1</sup>Hitch, Charles J. and McKean, Roland N., The Economics of Defense in the Nuclear Age, (Cambridge, Mass.: Harvard University Press, 1960), p. 45.

<sup>2</sup>Senate Committee on Government Operations, Organizing for National Security, U. S. Government Printing Office, Washington, D. C., Part VIII, p. 1005.

claims to \$1,294 million for pay and subsistence of naval personnel. The Departments of Army and Air Force budgets were similar. Although the major appropriations paralleled the organization of the three Departments, they did not follow any functional pattern whatsoever. Furthermore, a large number of the appropriation accounts were for minor and obscure purposes which merely represented the accretions of some 150 years of history.

Under existing procedures the presentation of a single budget, lacking incremental and alternative cost estimates, forces the Congress to concern itself with minute details of operation. During the review sessions the Congressional committees often assume the role of a department head rather than fulfilling their duties as members of the board. Such action fosters inefficiency and reduces the effectiveness of the budget as a management tool.

#### 6. PROMOTES RIVALRY AND BARGAINING

It has been said, and it appears rather obvious, that our budgetary system is "a process of bargaining among officials and groups having diverse strengths, aims, convictions, and responsibilities."<sup>1</sup> Our budget process resembles a "states rights" establishment rather than a management tool of an integrated federal organization. The military departments furnish a prime example of these statements. Each of the services is assigned the same basic mission of providing for our national security. The method of accomplishing this mission varies with each service but in many areas there is a degree of overlap and duplication of effort. If the budget were responsive to the need, unbiased reviewers outside of the Department of Defense could decide upon the optimal method

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<sup>1</sup>Hitch, Charles J. and McKean, Roland N., op.cit., p. 45.



method of meeting defense needs. Since the information is not available, and in all probability the reviewers are not truly unbiased, uninformed bargaining ensues reducing the real meaning and efficiency of the budget.

#### 7. ENCOURAGES "PADDING"

Another disadvantage of this bargaining process was aptly expressed by Frederick C. Mosher:

An administrator expecting higher echelons to cut his estimates will ensure himself against serious damage by building them up to the maximum that he can reasonably defend--and sometimes beyond it. To the outsider this appears as "padding" and "empire-building", but the perpetrator can rationalize it only as common sense and self-protection. It is not unknown that budgets are padded as a favor to reviewing bodies; it gives them an opportunity to make and proclaim cuts without real damage.<sup>1</sup>

Much of this "padding" occurs because there is no one to blame for failures or inefficiency. The air of the accounting system seems to be that of ensuring that appropriated funds are not over-obligated. Since the present system of budgeting does not adequately reveal either available resources or cost of performance, the accountant has no basis for evaluating efficiency.

#### SUMMARY

S. Bayard Colgate, in an article in the Harvard Business Review, made the statement:

The key problem of controlling government spending is the federal budget process. The way the Executive Branch compiles a budget, the way Congress reviews it, and the way the budget is administered are of strategic importance in deciding what government should do and spend at any given time.<sup>2</sup>

This brief discussion of the disadvantages of the present system should serve to point up the immediate need for budgetary reform. In all

<sup>1</sup>Mosher, Frederick C., op. cit., p. 15.

<sup>2</sup>Colgate, S. Bayard, "A business Look at Government Spending," Harvard Business Review, (July-August, 1955), p. 113.

fairness, one cannot condemn all components of the budgetary system. In many cases within the Air Force, the organization responsible for the preparation of the budget, recognizes its inadequacies and has taken steps to compensate for them. Perhaps the most notable example is the attempt made by the Air Force Systems Command to relate their budget requirements to more meaningful end products. ARDC Manual 80-4 entitled, ARDC Program Management Procedures, outlines a budget program structure to be followed within the command. Essentially it identifies the aircraft, facilities, P-690 funds and manpower associated separately with operational development, advanced development, research, engineering services, and command operations. These categories are more meaningful than those provided in the Air Force Manual of Budget Administration and, while they do not appear individually in the Executive Budget, they are used as reference and justification during the Congressional budget hearings.

This is just one example of changes which are being incorporated within the budgetary system. But changes of this nature do not alleviate the situation; the fact that such changes are believed to be necessary at the working level only emphasizes the need for overall system revision. Ingenuity at the working level may make a bad system workable but it will not improve the system as a whole.

### III. SOME RECENT PROPOSALS

Having examined the existing budget cycle and procedures one almost certainly recognizes the need for budgetary reform. Most authorities on the subject of budgetary systems agree that for a budget to be complete and satisfy its intended purpose, it must comply with the following conditions:

1. It should be an estimate, usually itemized, of expected income and expense, or operating results, for a given period in the future.
2. It should be a plan of operations based on such an estimate.
3. It should be an itemized allotment of funds for a given period.<sup>1</sup>

While the federal budget may give the appearance of satisfying the above conditions, in practice it falls far short of its intended purpose.

In the past decade countless authorities have spoken out against the present system but the necessary changes have not been forthcoming. It is no easy task to inaugurate changes into the budgetary system of the Federal Government. The slightest change reverberates throughout the governmental establishment. If a new system is to be introduced it must be thoroughly thought out, well coordinated, and properly implemented in order to avoid chaos.

This chapter will investigate four budget system proposals; three advanced during the last decade and one during World War II. There are many points upon which the proposals are in agreement and yet, each is different. Each of the proposed systems offers some advantage over

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<sup>1</sup>Smithies, Arthur, The Budgetary Process in the United States, (New York: McGraw-Hill Book Company, Inc., 1955), p. 17.

the existing system but there are also some suspected disadvantages with each.

#### THE HITCH AND McKEAN PROPOSAL<sup>1</sup>

Charles J. Hitch and Roland N. McKean collaborated to present a budgetary system which would indicate the optimal allocation of the nation's resources for defense spending. A major departure of their proposal concerned the modification of the categories of budgeting. It has already been pointed out that the existing categories present decision-makers with information which is impossible to relate to performance. The Hitch and McKean proposal centered around the need for putting budget figures into categories which more nearly correspond to end-product missions.

They listed three major benefits to be derived from this change. First, they felt that our officials will be able to make more perceptive judgments if they know the missions that they are funding. Secondly, the change offers some hope for devising useful quantitative clues concerning the importance of end-product missions and thereby promote a more valid system of choice among alternatives. With such clues firmly established, an incentive for efficient resource utilization will also be established. Lastly, the inauguration of end-product missions and thereby promotion of a more valid system of choice among alternatives. With such clues firmly established, an incentive for efficient resource utilization will also be established. Lastly, the inauguration of end-product mission categories would give Congress a rough estimate of costs and an opportunity of gauging the gains derived from varying levels of appropriation.

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<sup>1</sup>Hitch, Charles J. and McKean, Roland N., op. cit., pp. 54-65.

The proposal outlines three broad categories, or programs, which justifiably transgress departmental lines: (1) deterrence or fighting of all-out war, (2) deterrence or fighting of limited war, and (3) research and development. Each category is to be divided into component missions, many of which would be greatly interdependent.

The following table represents a portion of a suggested format for the national security budget as advocated by the authors of the proposal.<sup>1</sup>

TABLE 1

PROGRAMS AND SUB-PROGRAMS	PROPOSED FORCE COMPOSITIONS (NO. MILITARY UNITS, WHERE APPLICABLE				EXPENDITURES IMPLIED BY PRO- POSED PROGRAMS			
	'64	'65...	'68	'69	'64	'65...	'68	'69
DEFERRENCE OR FIGHTING OF ALL-OUT WAR								
Nuclear Striking Force (AF, Navy)								
B-47								
B-52								
Atlas								
Polaris								
Active Defense (Army, Navy, AF)								
Early Warning								
Interceptors								
Local Defense								
Nike								
Passive Defense (OCM)								
Dispersal								
Shelters								
DEFERRENCE OR FIGHTING OF LIMITED WARS								
Ground Forces (Army, Marine)								
Sea Power (Navy)								

<sup>1</sup>Ibid, p. 56.

Tactical Air (AF, Navy)  
Mutual Air to Other Countries

RESEARCH AND DEVELOPMENT (AEC, AF, ARMY, NAVY)

Exploratory  
Weapons Systems

GENERAL ADMINISTRATION

MISCELLANEOUS

It must be emphasized that the programs outlined are only "suggested" or "possible" categories. The recent rise to importance of guerilla warfare or future activities of the Defense Department in space might necessitate the inclusion of other categories. Nevertheless, the simplicity of the program coverage and the understandability and comparability of the categories represents a significant contribution to more meaningful budgeting.

The proposed format for the national security budget also projects estimated expenditures several years into the future. Such projections will be difficult to assemble and justify but even broad generalities will give more information to decision-makers than is obtainable with the present system. Projected estimates would offset the problems encountered by uniformed approval of low, initial cost projects which have very high second or third year costs.

Hitch and McKean propose the use of approximate estimating rather than detailed estimating. To ensure the optimal decisions, they recommend that all of the promising programs be estimated. If the present detailed estimating procedures are followed, the costs of estimating (in terms of dollars and time) would be prohibitive. They insist that "it is uneconomic to insist upon precise estimates. In the budgetary exhibits suggested here, the costs of programs and program increments would be rough approximations.

Joint costs might be allocated among programs according to crude rules of thumb."<sup>1</sup> This proposal will probably meet with Congressional opposition but the derived benefits are obvious to anyone who has ever made an estimate. The inaccuracies of our present detailed estimating method have already been discussed; the limited time allotted for the preparation of the budget estimate; all and more contribute to the fallacy of detailed estimating.

The real disadvantage with this part of the proposal lies, not in the theory of rough cost estimating, but in the optimism of the estimators. New programs for which there is no experience factor will have to be costed. The basis for the estimates will, of necessity, come from contractor data which often tends to be over-optimistic. These estimates, when projected into the future, may be very misleading. Even established projects, such as the Titan III or TFX, will tend to be under-estimated when the vested interests of the individual service is involved. For this reason, this portion of the proposal will be very difficult to incorporate and, even if it were accepted, it would remain as a haunting spectre of the approved programs.

The Hitch and McKean proposal also recommended that budgets be submitted for various program levels. They point out that "when only one program level is presented, either additions to the budget or cuts in it must be made blindly. . . . Adjustments may require frantic and inefficient reprogramming."<sup>2</sup> If alternatives are considered in advance of the budget presentation, Congress will have alternatives from which to choose and can make any adjustments by selecting an alternative program level which best meets the fiscal and military needs. However, this recommendation is

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<sup>1</sup>Ibid., p. 57.

<sup>2</sup>Ibid., p. 58.

only practical if the principal of rough costing has been adopted.

Another advantage of this proposal is the probability of obtaining improved performance indicators. With the present system, no information is provided concerning alternative programs and very little is provided about performance because the categories are so remote from end-product missions. Even if the programs outlined in the suggested format were incorporated, it would still be difficult to compare the "worth" of defense programs since capabilities are not revealed by the force structure alone. A logical thesis put forth by Hitch and McKean suggests that "the pertinent question is whether or not we are buying sufficient strength, relative to potential enemy forces. . . . Discussion of the appropriate size of military budgets often misses this essential point of relativity. An increase in the absolute efficiency with which we use resources (more bang for a buck) creates no presumption that the budget can be cut when a potential enemy is correspondingly increasing his absolute efficiency (more rubble for a ruble)."<sup>1</sup> To this end they recommend that an analysis be made of the alternative ways of carrying out broad missions. These, they feel, would give highly relevant performance indicators. Retaliatory capability, active defenses, passive defenses, and recuperation planning must all be analyzed if the best programs are to be chosen and funded.

The research and development program was to be considered separately because of its unpredictability and the thought that there is no good way of indicating performance. The authors feel that the objective of research and development is to acquire knowledge and should therefore be managed differently than operational units. The validity of their beliefs in this area is subject to debate. Burton V. Dean and S. Sankar Sengupta,

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<sup>1</sup>Ibid., p. 62.



of the Case Institute of Technology, have constructed a workable model for research and development budgeting and selection.<sup>1</sup> The model estimates the effect of R and D expenditures on subsequent investments and growth and was used to determine the optimal allocation of R and D funds within a firm. If comparable procedures could be established for military research and development, more reliable cost projections might be obtained and the problem of choice might be minimized.

In summation, the Hitch and McKean proposal represents a significant departure from the concept of detailed budgeting for product programs. Their recommendation for mission-centered programs is one which must be accepted if the system is to become truly responsive. The methods recommended for implementing their proposal would meet severe opposition but if they were incorporated, the nation would have a tremendously improved budgetary system based upon knowledgeable choice rather than uninformed guesses.

#### THE MOSHER PLAN

Frederick C. Mosher in his book entitled, Program Budgeting: Theory and Practice, stated that "the two purposes of budgeting, the making of program decisions and the provision of an effective system of administration, must be linked; but they should not have to ride the same track at the same time."<sup>2</sup> This statement presents the keynote of, what can be termed, The Mosher Plan for reforming our budgetary system.

The Mosher Plan envisages tailoring the budgetary system and

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<sup>1</sup>Dean, Burton V. and Sengupta, S. Sandar, "A Dynamic Model for R and D Budgeting and Selection," Office of Special Studies, National Science Foundation, 1959, p. 29.

<sup>2</sup>Mosher, Frederick C., op. cit., p. 237.

classifications to the requirements of the different purposes they are intended to serve. Mosher contends that there is a need for a budget system which is designed to develop, appraise, and authorize future policies and programs at the uppermost level of the federal government. However, concurrent with this budget, Mosher recommends that another budget system also be adopted which is designed to facilitate internal programming, management, and control. Therefore, the basic provisions of the Mosher Plan visualize two separate budgets, a Program Budget and an Administrative Budget.

The plan calls for a Program Budget which will furnish meaningful information for top administrative and political review. The Program Budget would be designed so as to facilitate rational choices by decision-makers. To this end, Mosher listed the following suggested program classification for the Army:<sup>1</sup>

- Combat Operations
- Overseas Noncombat Operations
- Active Defense of the United States
- Operation and Support of Active Forces  
in the United States
- Training
- Mobilized Reserve
- Research and Development
- Construction
- Services

There is a close relationship between these categories and those set forth in the Hitch and McKean proposal. It is interesting to note that both plans recommend that research and development be considered as a separate category. However, unlike Hitch and McKean, Mosher felt that the classification of programs should be tailored to the respective missions of the department rather than to the missions required by overall national security. In all fairness, it must be pointed out that the

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<sup>1</sup>Ibid., p. 238

Mosher Plan was rather singularly directed toward budgetary reform in the Army and that the general recommendation could easily be applied to the whole federal government.

A significant contribution of this plan for program budgeting is a proposal to unify planning and budgeting. Mosher recommended that budget preparation be accomplished by operational planning personnel and not by the Comptroller. He felt that the pricing required for budget preparation is largely a matter of statistical record and, since operational planning personnel develop the end-product requirements, it would be an easy task for the planners to prepare the actual estimates. It is difficult to argue against the advisability of this proposed unification but, unless approximation estimating were incorporated within the proposal, the estimation requirement might pose a serious problem. The use of cost factors based upon an analysis of previous cost experience might be extremely hazardous although Mosher claims "such factors are well-known and frequently used in budget and program offices, and some obtain a high degree of accuracy."<sup>1</sup> The proposal would offer greater reliability because the program budget could be done faster and be more current. And, again, the incorporation of more meaningful categories would benefit the decision makers. Elaborate programming and rebudgeting would also be eliminated if the program budgets were prepared at departmental level and, unlike present procedures, the individuals preparing the estimates would have an opportunity to defend them before the Congress. This would be a substantial benefit.

Mosher recognized that the program budget offers no assurance of being honest and accurate, so he offered the Administrative Budget as the

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<sup>1</sup>Ibid, p. 239.

primary vehicle for internal planning and control. The Administrative Budget is to be based upon the approved Program Budget, covering the same missions but using different classifications. He recommended a classification which would be a frame of reference for work measurement, costing, and for the allocation of manpower and equipment. In this respect, the Administrative Budget bears a striking resemblance to the annual financial plans used under the existing system. In fact the only apparent difference was in the way the funds were to be apportioned. Under this plan, the Administrative Budget is to be prepared in detail but funds are to be allocated in lump sum so that "commanding officers at each echelon . . . have authority to apply the funds in the most effective way possible and to transfer funds as local circumstances require."<sup>1</sup>

The Mosher Plan is a radical departure from the present system. On the surface it appears to create more unnecessary detail than it removes. Upon a closer analysis of the proposal though, one sees fewer flaws. It provides a means (if incorporated with the Hitch and McKean proposal) of obtaining a more accurate and responsive program budget to facilitate optimal choice. It further offers a control device for administering the appropriations made for national security. Such a device was not apparent in the Hitch and McKean proposal.

#### THE LERNER PROPOSAL

Alba P. Lerner wrote a paper entitled, "Design for a Streamlined War Economy," in which he outlined a very radical approach to federal and military budgeting. Lerner's paper, though not published, was described

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<sup>1</sup>Ibid., p. 243.

by Hitch and McKean.<sup>1</sup>

Lerner proposed to organize the entire military establishment into a network of markets so that decentralized decision-making would enable it to operate like the private economy. He suggested that "lump sums" budgets be allocated to the theater commanders who would use them to buy or "bid" for resources. As in the case of the private sector of the economy, the prices of the various resources would be determined by demand. Lerner felt that this would motivate the theater commander to conserve resources. The Joint Chiefs of Staff were to be responsible for assessing the military worth of the theaters and for allocating the national security budget so that "the last million dollars given to the European command was neither more or less useful in the over-all war effort than the last million given to the Far East Command or to the defense of the Zone of the Interior."<sup>2</sup> Theater commanders would be given discretionary authority to reallocate their budgets to subordinate commanders who would then assume responsibility for bidding for resources.

There are three rather obvious benefits which might be derived if this system were instituted. First, the theater commanders and subordinates would be able to use their specialized knowledge of the situation to order required resources. This is consistent with the theory held by many that the operating level can best determine its needs. Secondly, Lerner claimed that the network of markets would provide exactly the information required by the suppliers of the resources. While this is indisputable, there is no reference to the time lag involved in filling the requirements. From the rather brief description of the process, one must conclude that the resources

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<sup>1</sup>Hitch, Charles J. and McKean, Roland N., op. cit., pp 221-224.

<sup>2</sup>Ibid., p. 222.

will remain in America until they have been "purchased", after which they are to be forwarded to the "buyer". This would result in severe hardships in time of national emergency in spite of the fact that the proposal, written in 1942, was designed for a wartime situation. Thirdly, budgeting and pricing in this suggested manner would tend to produce an efficient use of military resources.

Hitch and McKean discussed several of the disadvantages of this scheme; mainly, its unconventionality, its failure to consider the individual motivation of the theater commander and his subordinates, and the "sticky" requirement for interservice collaboration.<sup>1</sup> The method implies that the Joint Chiefs of Staff will be able to determine the optimal size of the national security budget and also be able to properly allocate the budget once it is appropriated. Again, as we have seen, a very difficult problem to resolve.

On the other hand, the system does serve to demonstrate two frailties of our present budgetary system; the lack of incentive for proper resource utilization, and the need for local or decentralized control of the budget expenditures. No system of budgeting can be effective unless there is adequate motivation for resource use efficiency. The budget must be a means for setting standards of performance, for measuring actual results, and for guiding the decision-makers. The use of the budget as a control device should occur at the lowest possible echelon within the military hierarchy if resources are to be used most efficiently. These are the valid lessons of the Lerner Proposal.

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<sup>1</sup>Ibid., p. 223.

## THE NOVICK PROPOSAL

The Novick Proposal is a plan for a new budget procedure which would permit quick, easy, and reasonably accurate answers to the following questions:

1. Which of the undertakings proposed by the departments are essential to the government's over-all program?
2. Is the quality of the activity proposed for a specific objective required to accomplish that objective?
3. Is the method proposed the most efficient and economical--cheapest--way of attaining the objective?<sup>1</sup>

David Novick felt that the present Air Force financial accounting and cost accounting system did not provide this required information. He blamed the Federal Government for "continuing use of outmoded classifications for budget, appropriation, and accounting purposes."<sup>2</sup> Novick proposed an interpretative and integrated classification of accounts which could be used for budgeting, appropriation, and expenditure accounting. The proposal included the requirement to project estimated expenditures in terms of these revised accounts over a period of years to permit an analysis of commitments over time. Accrual accounting was advocated rather than the then-existing cash-based accounting.

Essentially, this proposal centers around the need for better accounting systems as the first step toward a better budgetary system. Of the four proposals discussed in this paper, the Novick proposal is the only one

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<sup>1</sup>Novick, David, Which Program Do We Mean in "Program Budgeting?" (Santa Monica: The Rand Corporation, 1954), p. 12.

<sup>2</sup>Novick, David, Efficiency and Economy in Government through New Budget and Accounting Procedures, (Santa Monica: The Rand Corporation, 1954), p. v.

which offers a practical method for introducing a system change. By first altering the accounting classifications to conform to those used for accounting, the planners will be able to use the standards to produce more accurate budgets. Further, the standards will make planners knowledgeable concerning incremental costs thus facilitating any required reprogramming.

The Novick proposal first called for a summary sheet to present the department's (in this case the Air Force) force structure.

TABLE 2<sup>1</sup>

YEAR	WINGS		BUDGET COSTS	
	<u>IN PREPARATION</u>	<u>ACTIVE</u>	<u>INVESTMENT</u>	<u>ANNUAL OPERATING</u>
1953				
1954				
1955				
1956				
1957				
1958				
1959				
1960				

This is not entirely different from the present system. The Air Force does project its organizational strength in the future, but, upon presentation of the budget this data is separated from dollar requests making interpretive relationships difficult.

The grand summary would be supported by data originating at the lowest echelons with appropriate consolidation and summary sheets throughout the military hierarchy. To begin with, the individual squadron would prepare a budget estimate along the following lines:

<sup>1</sup>Ibid., p. 37.



TABLE 3<sup>1</sup>

ORGANIZATION: (specify wing or squadron)

EQUIPMENT: (designate type of aircraft or missile)

OPERATING RATE: (indicate duty hours per month)

<u>COST ELEMENTS</u>	<u>INVESTMENT</u>	<u>ANNUAL OPERATING</u>
Installations		
Aircraft Facilities	XXX	
Personnel Facilities	XXX	
Maintenance		XXX
Equipment		
Mission	XXX	XXX
Unit Support Aircraft	XXX	XXX
Organizational Equipment	XXX	XXX
Specialized Equipment	XXX	XXX
Stocks		
Initial Stock Level	XXX	
Readiness Reserve	XXX	
Initial Spares	XXX	
Transportation	XXX	XXX
Personnel		
Training	XXX	XXX
Pay and Allowances		XXX
Travel	XXX	XXX
Maintenance		
Mission Aircraft		XXX
Unit Support Aircraft		XXX
P O L		
Mission Aircraft		XXX
Unit Support Aircraft		XXX
Service and Miscellaneous		XXX
<b>TOTAL</b>	<b>XXX</b>	<b>XXX</b>

This squadron estimate would then be incorporated into a mission estimate. For example, if the squadron in question was a heavy bomber squadron it would support a summary sheet consisting of active and

<sup>1</sup>Ibid., p. 42.

projected heavy bomber units, as follows:

TABLE 4  
HEAVY BOMBER UNITS

YEAR	NUMBER		EXPENDITURE			
	ACTIVE	IN PREPARATION	INVESTMENT		ANNUAL OPERATING	
	B-52 B-70	B-52 B-70	B-52 B-70		B-52 B-70	
1960						
1961						
1962						
1963						
1964						
1965						
1966						
1967						
1968						

This summary sheet of heavy bomber units would then be used to compile a summary sheet for the Strategic Air Command. While these actions are being undertaken by SAC, the other major commands are following the same procedures within their command. The summary sheets of each major command would be used to compile a summary of Air Force command estimates. For example:

TABLE 5

YEAR	SAC		TAC		ADC		OTHER
	INVEST- MENT	ANNUAL OPERATING	INVEST- MENT	ANNUAL OPERATING	INVEST- MENT	ANNUAL OPERATING	
1960							
1961							
1962							
1963							
1964							
1965							

This summary as well as all substantiating estimates would form the basis of the Air Force Summary already explained in Table 2. The data would be available to the reviewers and to the Congress. If a decision were

made to curtail a particular program, the results of the cut would be readily apparent. With the development of planning and performance standards, the reprogramming problem would be diminished and capable of being accomplished during the appropriation review.

The Novick proposal is thoughtfully conceived and capable of rapid implementation. However, the proposal still fails to cope with the problem of preparation time. There are no provisions or guarantees that this proposal will reduce the length of the budget cycle. In fact, there are no reductions in the steps involved so the time factor will still offset much of the good derived from the system.

#### IV. RECOMMENDATIONS

Thus far this study has examined the existing budgetary system, discussed its many shortcomings, and considered four recent proposals which have been advanced for the improvement of the system. A quick summary of the basic faults of the present process is as follows:

1. A 34-month budget cycle is completely unrealistic in this era of nuclear weapons, missiles, and space exploration. The federal government budgets at the speed of a "Model T" Ford while the requirements appear to have surpassed the speed of sound.
2. The categories, for which the federal government budgets, are not very useful to the planners. It has neither a program budget nor a performance budget; the budget is a shopping list rather than a plan of action.
3. Investment and operating expenditures are impossible to relate under present procedures, consequently, the results of present investment decisions cannot be projected into the future. Investment decisions which are later abandoned due to excessive operating costs result in tremendous monetary waste and inefficiency.
4. The physical size of the budget is staggering. It is loaded with unnecessary detail and, because it is a shopping list, reviewers are forced to concern themselves with trivia.
5. There is no provision for consideration of incremental costs or alternative programs. The submitted budget must be approved in its entirety if any measure of performance is to be achieved. Any increase to

or reduction of the submitted budget offers the obligating agencies a future scapegoat since the effect of the changes cannot be reasonably predicted.

6. The present system encourages inter-service rivalry and dispute. Without a measure of performance or a means of optimal choice among alternatives, Congress is forced to accept duplication and overlapping mission assignment.

7. Budget "padding" and misleading estimates are almost encouraged under the present system because of improper motivation and the lack of adequate control measures.

These faults and shortcomings cannot be erased without instituting new procedures and practices. The budgetary system has matured and the process has gained settled acceptance. Any expected evolutionary changes will probably be in the form of minor modifications or alterations. This is not enough. The system is too unresponsive and sweeping reform is mandatory if economic and military challenge of the Soviet Union is to be met.

The first step in the establishment of a new budgetary system must be the provision of meaningful categories of obligation. To this end the categories proposed by Hitch and McKean seem to offer the most promise as a basis for informed review and choice. However, the categories are not appropriate for budgeting at lower echelons. What is needed is an Operational Budget which dovetails and substantiates a Planning Budget.

As a first recommendation of this study, the use of these two budgets is proposed. The Planning Budget is to be prepared at the highest possible level of the governmental hierarchy while the Operational Budget is to be prepared at the lowest possible level. Under this proposal,

the President and his advisors would establish the broad goals to be achieved. In the case of the military, the Department of Defense would translate these goals into specific mission requirements. For example, in the area of Deterrence, a requirement would be stated to provide a capability to deliver a certain type of weapon on specified targets; or to provide a capability of destroying a projected number of attacking jet aircraft of designated configuration; or to provide a 15-minute warning of an impending attack. These mission requirements would then be forwarded to the military departments or to any other federal agency possessing a capability of accomplishing the mission. The Army, Navy and Air Force would then prepare rough estimates of the costs and, in effect, would bid for the missions. Estimates would be based on past experience and performance in the particular mission areas and would be stated in terms of initial investment together with projected operating expenditures over a five-year period. Every available operations research technique known should be utilized to assist in optimizing costs and maximizing efficiency. Charles J. Hitch, Assistant Secretary of Defense, has said, "Operations Research has its place in virtually all facets of Defense activity and at all levels of the Defense establishment."<sup>1</sup>

Naturally, in some areas there would be no competition, but in others this proposal might suggest better ways of accomplishing a particular job. In the case of those missions that are joint or task force in nature, each service would bid primarily on the primary mission and where support is required from another service would use existing cost standards and quotations from stock or industrial fund functions to develop these

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<sup>1</sup>Hitch, Charles J., "Plans, Programs, and Budgets in the Department of Defense," Operations Research, (Chicago: Peat, Marwick, Caywood, Schiller, and Company, January-February 1963), p. 2.

cost estimates.<sup>1</sup> In any event it would provide the reviewers with both alternatives and incremental costs and would promote efficient resource utilization.

This Planning Budget is to be the basis for Congressional program choice and appropriation. Once the programs have been chosen and allocated to the particular service the Operational Budget will come into existence. The assigned missions will be translated into specific functions at departmental level. Then the functions will be delegated to the various levels within the department together with a bulk allocation of funds for function accomplishment. The Operational Budget will come into existence. The assigned missions will be translated into specific functions at departmental level. Then the functions will be delegated to the various levels within the department together with a bulk allocation of funds for function accomplishment. The Operational Budget should contain more detail than the Planning Budget but it should relate each item to a particular category in the Planning Budget. The Operational Budget must be approved at the level the Planning Budget was prepared. This is to insure that there is a direct relationship by item and category between the two budgets and also that the Operational Budget reflects the proper plan of accomplishment originally conceived by the Planning Budget.

A detailed example will perhaps better explain the procedures

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<sup>1</sup>A tremendous amount of standard cost detail is available on a cross-service basis particularly in the area of personnel, supplies, equipment, transportation, etc. Stock and industrial fund functions are those units that operate on purely a commercial accounting and budgeting basis. They derive their operating income solely from reimbursements from military "customers" who they have provided with a material and/or service. Each of the services has a number of functions operating under this concept and they are primarily in the functional area of support. Cost quotations are easily obtained from them merely by asking.

which have been proposed.

Step 1 The President and his advisors establish a need for a military force capable of fighting and winning an all-out war. This action starts the budget cycle for a particular fiscal year and should occur not more than 12 months before the beginning of that fiscal year.

Step 2 The Department of Defense translates this broad requirement into specific tasks, one of which might be a capability of delivering 200 multi-megaton warheads within a specified global area. This action should occur not more than 11 months prior to the beginning of the fiscal year under consideration.

Step 3 This is an example of a category which probably would not pertain to the Army, but one for which both the Navy and the Air Force would prepare a bid. To accomplish the mission, the Air Force would budget for a bomber and missile force capable of accomplishing the objective. At the same time, the Navy would establish its submarine, carrier, and missile requirements. The budgets would necessarily reflect total requirements including support facilities, construction, procurement, etc. Failure to meet the required performance would reduce the creditability of any future bids by that service and therefore represents a strong motivational force.

This bid would be submitted by the Air Force using a format similar to the following:

TABLE 6

## AIR FORCE PLANNING BUDGET

PROGRAM	FORCE COMPOSITION			INVESTMENT			ANNUAL OPERATING COSTS		
	'64	'65	'68	'64	'65	'68	'64	'65	'68
All-out War									
1. Mission 1									
a. B-47	X	X	-	X	X	-	X	X	-
b. B-52	X	X	X	X	X	X	X	X	X
c. ATLAS	-	X	-	X	X	X	-	X	-
d. MINUTEMAN	-	-	X	-	X	X	-	-	X



This action should occur during the period 8 to 11 months prior to the beginning of the fiscal year under consideration.

Step 4 The bids are submitted to the Department of Defense and the choice is made. In cases where diseconomies to scale occur or where capability is questionable the missions may be split among the bidders. This selection process should occur during the period 7 to 8 months prior to the beginning of the fiscal year under consideration.

Step 5 The Department of Defense prepares its total budget based upon those goals which have been assigned by the President. Today, the format would follow that suggested by Hitch and McKean but revised slightly to indicate investment and operation costs as shown above. To reiterate, the general categories suggested are:

1. Deterrence or fighting of All-Out War

- a. Nuclear Strike Force
- b. Active Defense
- c. Passive Defense

2. Deterrence or Fighting of Limited War

- a. Ground Forces
- b. Sea Forces
- c. Tactical Air
- d. Transport
- e. Military Air Abroad
- f. Reserve Forces

3. Research and Development

4. Miscellaneous

This action should occur during the period 6 to 7 months prior to the beginning of the fiscal year under consideration.

Step 6 With the budget submitted in the proposed format, Congress will be able to examine the total budget. The review will explain the missions to be accomplished and the military force proposed for their accomplishment. The initial investment can be examined and related to

the annual operating cost. Budget justification could really be limited to an explanation of the standards which were used to prepare the estimates and to the choice decisions made by the Department of Defense. Curtailment or reduction of funds in any category will have an obvious and readily apparent effect on the mission for which the budget was prepared.

Through the use of incremental costs, these cuts can be translated into tangible items giving the Congress a true picture of the results of their action. This review process should occur during the period 2 to 6 months prior to the start of the fiscal year under consideration.

Step 7 Upon passage of the Appropriation Bill, the Department of Defense will apportion the funds to the military departments.

Together with the funds will be a statement of the missions to be accomplished and the performance to be expected. This action should occur not later than 2 months prior to the beginning of the fiscal year under consideration.

Later passage could have a serious affect on the efficient implementation of the budget during the execution phase.

Step 8 Operational Budgets will be prepared by each echelon of the military hierarchy which is authorized to obligate funds and forwarded to the appropriate higher echelon for approval. The approval process for this budget should be quick and simple since there is a very close relationship and mission understanding between the level preparing the Operational Budget and the level approving it. The format of the Operational Budget might be similar to that proposed by David Novick (see page 35). However, under this proposal, the Novick format must be altered to reflect the category and mission of the appropriated funds. To continue the example, a base which contributes to the nation's all-out war capability by housing strategic bomber squadron for Mission I and a tactical air squadron for another

function, say Mission XXIV, might compile the following Operational Budget:

TABLE 7

## OPERATIONAL BUDGET

PROGRAM AND COST ELEMENTS	INVESTMENT				OPERATING COST			
	(Projected and actual by Quarters)							
	1	2	3	4	1	2	3	4

I. ALL-OUT WAR

## A. Mission I

## 1. Installations

- a. Aircraft facilities
- b. Personnel facilities
- c. Maintenance

## 2. Equipment

- a. Mission aircraft
- b. Organizational equipment
- .
- .
- etc.

II. LIMITED WAR

## A. Mission XXIV

## 1. Installations

- a. Aircraft facilities
- b. Personnel facilities
- c. Maintenance

## 2. Equipment

- a. Mission aircraft
- .
- .
- etc.

TOTAL \_\_\_\_\_

The Operational Budget has the advantage of enabling the local

commanders to have a voice in the budget and it allows the planners at higher echelons to follow the progress of their programs. Preparation of the Operational Budgets should occur during the last two months prior to the fiscal year under consideration.

Step 9 Each quarter the Operational Budgets are revised by the obligating levels to reflect actual expenditures and those proposed for the remaining quarters. This practice is identical to the present procedures used for Annual Financial Plans but under this proposal, the categories have a meaning.

After establishing a Planning Budget and an Operational Budget it is recommended that the implementation of some form of incentive system to reward efficient units. Since the military departments are bidding for the missions, they must be encouraged to use funds efficiently once the mission has been assigned. As a matter of fact, the degree of success of any budgetary or cost estimating system is directly related to the existence and/or quality of the incentive system.<sup>1</sup> Strict controls must be applied to the use of funds and the return of surpluses should be rewarded. The military must be prohibited from transferring funds among missions. The dangers here are obvious; sole-source missions, those which only one service could accomplish, would be highly over-bid and the surpluses would be used to augment under-bids made in competitive areas. Once such controls are established an incentive system could be developed. The rewards could be non-monetary such as the awarding of unit citations or a "performance flag," or a portion of the saved funds could be returned to the unit for use in special morale projects or base

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<sup>1</sup>Weidenbaum, Murray L., "The Military Budget's Crooked Path," Armed Forces Management, (January 1961), p. 20.

beautification projects.

In order to make any incentive system effective, it is essential that a system of standards be developed to support and serve as the basis for determining the validity and quality of performance. Each of the military services now has in effect a standard cost system that serves primarily as an accounting tool to facilitate costing of rapidly fluctuating costs of items of normal military use, such as, military salaries, clothing items, POL products, etc. This cost system has practically no relationship to the budget process and does not in any way reflect mission performance. The identification of meaningful workload data and the calculation of unit costs would provide a sounder basis for determination and reviewing appropriation requests for many programs. However, workload figures should not be a fetish and should not be cited in the absence of a significant relationship between the items of work and the funds requested.<sup>1</sup> It is proposed that the present accounting system be revised to gather cost data by item and category for identification against the Operational Budget. After several years of statistical experience, standards of performance, through the use of cost factors, can be developed to support, sustain, and improve judgments based on the Planning Budget. These performance standards also will serve as the basis for implementation of the incentive system.

The implementation of these recommendations would correct many of the ills of present budgetary systems. By using the Planning Budget as the instrument for appropriation decisions, the time duration of the budget cycle could be drastically reduced. A one year cycle does not appear

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<sup>1</sup>Weidenbaum, Murray L., "Improving the Federal Budget," The Federal Accountant, (Washington, D. C.: Federal Government Accountants Association and George Washington University, December 1963), p. 106.

unreasonable. The incorporation of meaningful budget and accounting categories will result in a program budget capable of providing reasonable indicators of performance as well as a plan for future action. The projection of investment and operating expenditures over a five-year period will eliminate the necessity for dropping funded projects after high operating costs become apparent. Using broad mission categories will eliminate much of the bulk of the Federal Budget which is presented to Congress and enable the reviewers to act in their rightful role of "members of the board." The proposed bidding system will automatically provide the Department of Defense with alternatives from which to choose and, while inter-service rivalry will not be eliminated, previously misdirected energy can be channeled into constructive competition. And lastly, budget "padding" will be discouraged by the proposed incentive system.

## V. CONCLUSIONS

This thesis has concerned itself with an investigation of the federal budgetary system. Study of the Federal Budget is a never-ending process because its influence touches every citizen, significantly affects the national economy and generally extends throughout the free world.

Although great strides have been made in improving the budget document during recent years, many believe that further improvement is not only possible but essential.<sup>1</sup> To this end, its shortcomings have been enumerated and a responsive model has been proposed. The interested reader will have noted that the proposal contained herein reflects little which has not already been suggested but rather that its originality is contained in the combining of past proposals. Voltaire has written that "originality is nothing but judicious imitation. . . . The instruction we find in books is like fire. We fetch it from our neighbor's, kindle it at home, communicate it to others, and it becomes the property of all."<sup>2</sup> The purpose of this thesis has been to kindle a fire.

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<sup>1</sup>The Federal Government Accountants Association and George Washington University, The Federal Accountant, (Washington, D. C., December 1963), p. 101.

<sup>2</sup>Prochnow, Herbert V., The Public Speaker's Treasure Chest, (New York: Harper and Brothers, 1942), p. 312.

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