

AD-A241 762

2



NAVAL POSTGRADUATE SCHOOL

Monterey, California

DTIC
UNCLASSIFIED



THESIS

ARBITRARY BUDGET CUTS AND THE
U.S. NATIONAL SECURITY POSTURE

by

LCDR Clyde J. McCaleb III

December, 1990

Thesis Advisor:
Second Reader:

Dr. Robert E. Looney
Dr. Patrick J. Parker

Approved for public release; distribution is unlimited

91-13893



DTIC 28 019

REPORT DOCUMENTATION PAGE				
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE				
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION Naval Postgraduate School		6b. OFFICE SYMBOL (If applicable) 56	7a. NAME OF MONITORING ORGANIZATION Naval Postgraduate School	
6c. ADDRESS (City, State, and ZIP Code) Monterey, CA 93943-5000		7b. ADDRESS (City, State, and ZIP Code) Monterey, CA 93943-5000		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS		
		Program Element No	Project No	Task No
				Work Unit Accession Number
11. TITLE (Include Security Classification) ARBITRARY BUDGET CUTS AND THE U.S. NATIONAL SECURITY POSTURE				
12. PERSONAL AUTHOR(S) McCaleb, Clyde J. III				
13a. TYPE OF REPORT Master's Thesis		13b. TIME COVERED From To	14. DATE OF REPORT (year, month, day) DECEMBER 1990	15. PAGE COUNT 140
16. SUPPLEMENTARY NOTATION The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
17. COSATI CODES			18. SUBJECT TERMS (continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUBGROUP	U.S. Budget Process, U.S. National Security, Needed Changes to the U.S. Budget Process, PPBS, Long-Range Defense Strategy, Industrial Base, The Federal Deficit, Gramm-Rudman-Hollings, Stabilization of Defense Spending	
19. ABSTRACT (continue on reverse if necessary and identify by block number) This thesis examines the problems confronting the decision-makers today as they are forced to make tough budgetary decisions affecting the U.S. national security posture. Due to the dramatic changes occurring throughout the world, particularly in Eastern Europe and the Soviet Union, there is growing pressure upon Congress to reduce defense expenditures and realize a 'peace dividend.' The danger to U.S. national security lies not within the cuts themselves, but rather, within arbitrary budget cuts implemented to appease the American public and realize a quick 'peace dividend.' Both the executive and legislative branches of government must consider the impact of current changes in defense spending on the long-range U.S. defense posture. This first requires a consensus between both branches of government on exactly what the future U.S. defense strategy should be, a dilemma made more difficult due to their political differences. The planning methods used by the Office of Management and Budget and the Department of Defense must become more realistic, and the budgetary perspective and practice of Congress must become more long-range in scope. The U.S. must learn to operate more efficiently with less resources, while maintaining an adequate U.S. national security posture.				
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED UNLIMITED <input type="checkbox"/> SAME AS REPORT <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL Dr. Robert E. Looney		22b. TELEPHONE (Include Area code) (408) 646-2228		22c. OFFICE SYMBOL 56/LX

Approved for public release; distribution is unlimited.

Arbitrary Budget Cuts and the
U.S. National Security Posture

by

Clyde J. McCaleb III
Lieutenant Commander, United States Navy
B.S., University of North Alabama

Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

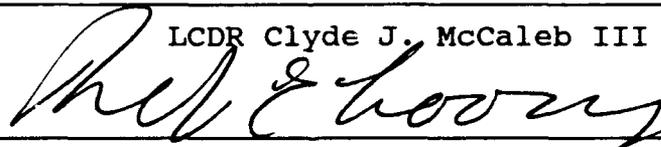
NAVAL POSTGRADUATE SCHOOL
December 1990

Author:



LCDR Clyde J. McCaleb III

Approved by:



Dr. Robert E. Looney, Thesis Advisor



Dr. Patrick J. Parker, Second Reader



Dr. Thomas Bruneau, Chairman
Department of National Security Affairs

ABSTRACT

This thesis examines the problems confronting the decision-makers today as they are forced to make tough budgetary decisions affecting the U.S. national security posture. Due to the dramatic changes occurring throughout the world, particularly in Eastern Europe and the Soviet Union, there is growing pressure upon Congress to reduce defense expenditures and realize a "peace dividend." The danger to U.S. national security lies not within the cuts themselves, but rather, within arbitrary budget cuts implemented to appease the American public and realize a quick "peace dividend." Both the executive and legislative branches of government must consider the impact of current changes in defense spending on the long-range U.S. defense posture. This first requires a consensus between both branches of government on exactly what the future U.S. defense strategy should be, a dilemma made more difficult due to their political differences. The planning methods used by the Office of Management and Budget and the Department of Defense must become more realistic, and the budgetary perspective and practice of Congress must become more long-range in scope. The U.S. must learn to operate more efficiently with less resources, while maintaining an adequate U.S. national security posture.



Accession For	
NTIS Users	<input checked="" type="checkbox"/>
DTIC Tab	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution	
Availability Codes	
Avail and/or	
Dist	Special
A-1	

TABLE OF CONTENTS

I. INTRODUCTION	1
A. A BRIEF INTRODUCTION TO THE CURRENT BUDGET PROCESS	2
1. The Budget: To Whom Does The Responsibility Belong?	2
2. Civilian Control Over Defense	9
B. THE FUTURE INTERNATIONAL ENVIRONMENT	14
C. THE FUTURE THREAT TO U.S. NATIONAL SECURITY ASSOCIATED WITH THE BUDGET-MAKING PROCESS	20
II. THE PROBLEMS ASSOCIATED WITH THE CURRENT BUDGET PROCESS	25
A. THE POLITICAL PRESSURE TO REDUCE DEFENSE SPENDING	34
1. The Soviet Threat	38
2. The Need for a New Threat to U.S. Interests	43
3. Is There Too Much Concern Over Reducing the Deficit?	44
B. THE NEED FOR A VIABLE LONG-RANGE DEFENSE STRATEGY	46
C. THE NEGLECTED INDUSTRIAL BASE	52

D. THE THREAT TO THE U.S.' TECHNOLOGICAL SUPERIORITY	61
1. The Importance of Continued Research and Development	62
2. The Threat to the U.S.' Lead in Aerospace Technology	66
3. Other Considerations	70
III. REFURBISHMENT OF THE SYSTEM	72
A. THE DEPARTMENT OF DEFENSE	73
1. Fraud, Waste, and Abuse	75
2. Declarative Policy and Defense Capabilities	79
3. Congress in the PPBS Process	82
B. THE EXECUTIVE BRANCH	82
1. More Realistic Economic Planning Assumptions	84
2. Better Cooperative Planning Between DoD and OMB	88
C. THE U.S. CONGRESS	92
1. Cooperation with the Executive Branch	92
a. The Federal Deficit	94
b. The Gramm-Rudman-Hollings Legislation	97
2. "Macro" vice "Micro" Management of the Budget	103
3. Stabilization of Defense Spending	106
4. Stabilization of Procurement Numbers	111

IV. CONCLUSION	116
SELECTED BIBLIOGRAPHY	121
INITIAL DISTRIBUTION LIST	128

LIST OF TABLES

I. BUDGET PROCESS TIMETABLE 27

II. ECONOMIC FORECASTERS' RANKINGS, 1983-1986 . . . 86

III. DEFENSE BUDGET TRENDS 107

IV. COSTS OF PRODUCTION STRETCHOUTS 115

LIST OF FIGURES

1.	CLAIMS ON FUTURE RESOURCES	22
2.	THE DIFFICULTIES WITH DEMOCRATIC GROUP DECISIONS	31
3.	HIGH PRIORITY THREATS	36
4.	U.S. AND SOVIET BUDGET DEFICITS: 1975-1988 . . .	39
5.	DEFENSE SPENDING AS A PERCENTAGE OF GNP IN 1988	42
6.	THE DOD BIENNIAL PLANNING, PROGRAMMING AND BUDGETING SYSTEM	51
7.	U.S. MILITARY SPENDING 1966-1976	54
8.	TOP 10 U.S. DEFENSE CONTRACTORS' DEPENDENCE ON THE PENTAGON	56
9.	NORTHROP'S DEPENDENCE ON THE B-2	57
10.	FY 1991 PRESIDENT'S BUDGET ECONOMIC ASSUMPTIONS	88
11.	DEFENSE-MILITARY BUDGET PLANS	90
12.	FORTY FIVE-YEAR DEFENSE BUDGET TREND	92
13.	THE FEDERAL FUNDS DEFICIT AND THE SOCIAL SECURITY & OTHER TRUST FUND SURPLUSES	95

14. GRAMM-RUDMAN-HOLLINGS DEFICIT TARGETS	98
15. AMENDMENT POINTS IN THE DEFENSE BUDGET PROCESS .	105
16. U.S. MILITARY SPENDING 1950-1990	109
17. U.S. MILITARY SPENDING TREND 1950-1990	110

I. INTRODUCTION

The following chapters will examine the problems associated with the current budget process, and outline specific proposals which are important for improving the current system. The study begins with a brief introduction into the current budget process, an examination of the future international environment, and the threats to U.S. national security associated with the budget-making process. Chapter two will address specific problems with the current budget process that affects the U.S. national security posture, and chapter three will outline specific corrective action for those problems.

All of the problems which will be discussed are not, in the slightest degree, expected to be abolished over night. Likewise, the corrective concepts proposed are not expected to be easily implemented. In fact, because of the indigenous divergence of opinions present in a pluralistic democracy such as ours, it tends to be more difficult for the political leadership to attain a consensus on problems, such as what must be done to improve the budget process, or implement measures to correct deficiencies in its own process.

This point was so vividly epitomized during the budget negotiations at the end of FY-90, when Congressional leaders were forced to try to reach an agreement on a plan to cut the

federal deficit prior to October 1st, at which time mandatory Gramm-Rudman-Hollings (G-R-H) cuts were to take effect. Even though the leadership of Congress reached an agreement with the executive branch, the full congressional membership still rejected the proposal.

The necessary changes will be difficult to implement, however, the importance of the need for change has already become very apparent to the political leadership and the American public. America's patience with fickle governmental policy and process is deteriorating. Changes must be made within government, either through procedural adjustments or simply a more personal awareness, and therefore, modification of behavior, by members of Congress. Hopefully, some small contribution toward improving the system may be realized through the efforts of this paper.

A. A BRIEF INTRODUCTION TO THE CURRENT BUDGET PROCESS

1. The Budget: To Whom Does The Responsibility Belong?

There is nothing more fundamental to the power of the legislative branch than the concept of the "power of the purse." It is the essence of strength from which the Congress has operated since the U.S. Constitution was placed in power. It takes money to function in society, and governmental matters are no different.

Congress was granted the "power of the purse" in Article I, Section 8, of the U.S. Constitution as stated, "To

lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and general welfare of the United States."¹ The founding fathers gave the House of Representatives predominant control over federal spending primarily because they better represented the populace. James Madison, in defending the system in The Federalist, No. 58, argued that:

 this power over the purse may, in fact, be regarded as the most complete and effectual weapon with which any constitution can arm the immediate representatives of the people.²

By regulation and allocation of governmental spending through the budgetary process Congress has enormous power over the governmental system.

There are a number of citizens within the mass public who believe the government operates with an unlimited supply of money. These people are unaware of the very real budget by which the government operates, and become disturbed when there is talk of possible program cutbacks which may affect their livelihood. Nothing will arouse the mass public's fury faster than speculation of possible cutbacks in Medicare, Social Security, employment opportunity, or other programs that may affect their pocketbook. The elected representatives

¹The Constitution of the United States.

² Quoted in W. Thomas Wander, F. Ted Hebert, and Gary W. Copeland, Congressional Budgeting: Politics, Process, and Power (Baltimore, Maryland: The John Hopkins University Press, 1984), pp. 57-58.

in Washington know the special interest groups will ensure they receive word of such cuts as quickly as possible. Herein lies the volatility of the budgetary process as it concerns the civilian sector. This point must be understood and kept in mind when discussing the budget's affect on defense structure and policy, especially when it impacts civilian programs.

The U.S. Government became much more involved in the country's economy with the enactment of the Full Employment Act of 1946. This legislation institutionalized the Roosevelt administration's "New Deal." Basically the legislation stated the government has a responsibility to strive to maintain full employment. It was assumed the government could influence the economy in one of three ways to achieve this goal: (1) control over the interest rates; (2) manipulation of taxation; and (3) regulation of governmental spending. It was believed these three tools would allow the government to control the public's propensity to save and invest.

Two organizations were formed to assist in the task. The first was the Council of Economic Advisors which was formed to monitor the economy and brief the President on the status of employment. The other was the Joint Economic Committee of the Congress which was designed to investigate the economy in a micro-economic view. This legislation placed even more pressure on the legislative and executive branches by placing the responsibility for employment in their hands.

The most recent major reform of the budgetary process was the Congressional Budget Act of 1974. Due to the immense power granted Congress with respect to budgetary matters, it is understandable that tensions might surface from time to time as a result of the allocation of resources. These tensions surface most frequently between the executive and legislative branches of government. Prior to 1974, only five periods of major reform to the congressional budget process can be identified:

- the creation of the appropriations committees after the Civil War;
- the dispersal of the appropriations power in the House between 1877 and 1885;
- the dispersal of the appropriations power in the Senate in 1899;
- the consolidation of the appropriations power in the House (1920) and the Senate (1922);
- the creation of the legislative budget and the Joint Budget Committee in 1946.³

The fact there have been so few major reforms over the years indicates the strength of the budgetary system, but also that tensions in the system have been resolved primarily through minor adjustments vice major reforms.

³W. Thomas Wander, F. Ted Hebert, and Gary W. Copeland, Congressional Budgeting: Politics, Process, and Power (Baltimore, Maryland: The John Hopkins University Press, 1984), 3&4.

To understand the necessity for reform in 1974 one must examine the economy between World War II and the early 1970's. Without an examination of specific details, let us suffice to say the U.S. economy, with the exception of the mid 1960's, was confronted with growing fiscal deficits, as a result of post war recovery and the Vietnam conflict, and fluctuation of inflation rates. Not wanting to take the blame, the executive and legislative branches were content to point the finger in the opposite direction. Unfortunately this finger pointing battle usually ended with the President receiving favorable attention and Congress holding the smoking gun. This was not too surprising since the Congress, as directed by the U.S. Constitution, is in charge of the nation's budget and ultimately responsible.

In the early 1970's President Nixon rubbed salt in the wound by publicly attacking Congress for causing the increase in the national deficit, inflation, and unemployment from 1969 through 1971. He also attempted to encroach on Congress' "power of the purse" by suggesting the President should decide program cutbacks.

In attempting to place the blame for past and current economic ills on Congress and in trying to wrest control of spending decisions away from Congress, the Nixon administration was striking at the fundamental legislative power, the power of the purse, and finding it soft, weak, and vulnerable.⁴

⁴Ibid., 11.

Congress realized it was in a losing war with the "Imperial Presidency." The executive branch was infringing on Congress' purse power and must be contained. Reforms were needed to check and constrain the executive branches' influence over fiscal policy.⁵

The purpose of the Congressional Budget Act of 1974 was to restore to Congress control over governmental spending. Because of the new legislation, Congress was forced to get serious about budgetary matters. In the past they were content to voice their objection to the executive branch for infringing on their responsibility, however, now that they had won the fight they were confronted with the reality of actually performing the job. The legislation required Congress to adopt two budget resolutions each year which would coordinate taxing and spending policies by including recommended levels of revenues and expenditures. They were also tasked with establishing priorities for spending among nineteen functional areas.

Congress realized the necessity to "get smart" on budgetary matters. Therefore, the Congressional Budget Act lead to the establishment of the Congressional Budget Office

⁵The executive branch actually began accumulating their influence in the early 20th century when Congress began to encounter difficulties in handling the budget. These difficulties were caused by complications in the budget as the country developed and became more complex. This lead to the Budget and Accounting Act of 1920, which was an attempt by Congress to place the burden of developing a budget on its primary user, the executive branch.

(CBO). Congress recognized they lacked the expertise needed regarding the economy and budget. In the past they relied on the executive branch, particularly the Office of Management and Budget (OMB), to furnish the necessary information.

The CBO was tasked with collecting data regarding the economy and budget solely for the use of Congress. The CBO would also serve to checkmate the OMB, its counterpart in the executive branch. In addition each house created its own budget committee, which would recommend the budget resolution to the whole body and would employ a sizable professional staff. The Office of Technical Assessment (OTA) was another specialized office organized to judge whether particular issues, primarily defense and energy related, are feasible and warrant further consideration. A side benefit of this major reform has been the renewed interest and extra emphasis placed on the budget by Congress.

The responsibility for the United States budget rests with the Congress! The blame can be placed with no other department of government. There are some uninformed members of the mass public who still believe the President is responsible for governmental spending, and therefore, the poor fiscal condition of the country.

During August and September, President Bush launched an offensive against Congress, particularly its Democratic leadership, to inform the American people of Congress' rightful responsibility for the budget. The President

recognized that due to the effect mandatory Gramm-Rudman-Hollings budget cuts would have on the livelihood of many Americans, which were to automatically begin October 1, the public should know the right direction to point their finger.

2. Civilian Control Over Defense

The essence of policy making is budget making. The policy programs and goals of administrations must be funded to be placed into operation. Therefore, it can be said: budget determines strategy. As all citizens of this great capitalistic society know, money is power. The person who controls the money controls the power, and as we have discussed in the United States the civilian Congress controls the money. Ferdinand Eberstadt stated:

The budget is one of the most effective, if not the strongest, implements of civilian control over the military establishment.⁶

From a military perspective this is all too true, however, there are those who feel it is a necessary check of our governmental system.

Robert McNamara, Secretary of Defense for the Kennedy and Johnson administrations, was one who strongly advocated the necessity of civilian control of the military. General Curtis E. LeMay was probably McNamara's strongest antithesis as Chief of Staff of the Air Force during McNamara's term.

⁶Quoted in Arnold Kanter, Defense Politics: A Budgetary Perspective (Chicago: The University of Chicago Press, 1979), 6.

McNamara did not believe the civilian control of the armed forces was necessary due to constitutional reasons. He actually believed the military and its leaders were somewhat incapable of making the proper decisions concerning defense, primarily because he felt they would always tend to be biased in their decisions. He strongly felt the military leaders' solution to international problems, or domestic issues such as the budget, would always result in a solution to strengthen the military through an enhancement of their position, or further justification for their existence. His reluctance to solicit and utilize the advice and recommendations of the military was the reason McNamara was contested most by LeMay. Speaking on this subject LeMay wrote:

I AM well aware that political considerations can, do, and must transcend military ones when formulating national policy. . . . My quarrel is with those who usurp the military professional's position--those who step in front of him and who volunteer and enforce strictly military advice and guidance with little knowledge of or experience in such matters. These are the men who have endangered America. . . . As soon as a man in uniform questions the competence of any civilian to make military judgements, he is charged out of hand with questioning the virtue of civilian control of the military. This is an unfair charge.⁷

Throughout both LeMay's and McNamara's careers in Washington there existed an ambience of disparity between the two due to philosophical differences in defense strategies. As General LeMay was the Chief of Staff of the Air Force, this

⁷Curtis E. LeMay, America Is in Danger (New York: Funk & Wagnalls, 1968), 1 (emphasis in original).

friction was between one of the top military officers in the country, and the top civilian executive of the Department of Defense (DoD). Of course, McNamara prevailed in all major disagreements. This example points out an important element in the complicated defense budget formulation process. As civilian administrations and their associated structure and policies change, so changes defense structure and policies by virtue of their hierarchy over the military.

The Kennedy-Johnson era presents a good example. Prior to President Kennedy, the Eisenhower administration was criticized for its failure to utilize the budget system and achieve a coordinated defense structure. Their defense budget was concerned with arbitrary ceilings in spending for each of the services without much thought of how the spending related to defense strategy and weapon systems. Eisenhower was more concerned with how much money was spent, rather than for what it bought.

As a result each of the services had their own priorities for spending, attempting to prove the necessity of their respective department as the primary tool for national defense, and in this particular period, deterrence as well. In many instances weapon systems were being developed by all services which were similar in design and purpose, but only designed for different modes of employment.

The Kennedy administration recognized the previous administration's wasteful practices of defense spending and

vowed to take a more economical approach. President Kennedy did not intend to cut back on the defense budget. Quite the contrary, he only wished to ensure the money allocated was being spent wisely. In his last State of the Union message to Congress, Kennedy stated:

This country, therefore, continues to require the best defense in the world--a defense which is suited to the sixties. This means, unfortunately, a rising defense budget--for there is no substitute for adequate defense, and no "bargain basement" way of achieving it. . . . For threats of massive retaliation may not deter piecemeal aggression--and a line of destroyers in a quarantine, or a division of well-equipped men on a border, may be more useful to our real security than the multiplication of awesome weapons beyond all rational need. . . . While we shall never weary in the defense of freedom, neither shall we abandon the pursuit of peace.⁸

An example of how changes in the decision-making process or administration will produce changes in policy can be found in the Kennedy administration. Kennedy selected Robert McNamara for the job of shaping up and stream-lining the defense budget. At the time of his selection as Secretary of Defense, Robert McNamara was President of Ford Motor Company, and prior to World War II he had taught at the Harvard School of Business Administration. He had an impressive business background.

To accomplish the task before him he developed the "Planning-Programming-Budgeting System," or PPBS. The PPBS was designed to first identify the requirements for defense

⁸John F. Kennedy, The State of the Union Messages of the Presidents: 1790-1966, Volume III 1905-1966 (New York: Chelsea House Publishers, 1967), 3153.

strategy, and then ensure the defense system as a whole was organized to meet those requirements. PPBS assumed:

- forces should be structured by tasks, not organizational interests;
- costs should be measured in relation to benefits;
- alternative methods of accomplishing objectives should be capable of evaluation;
- short-term planning should reflect long-term goals;
- the Secretary of Defense should have the capacity (and the staff) to make such judgements independently of the individual services.⁹

Simplified, PPBS was intended to eliminate the wasteful spending practices of the previous administration, while at the same time producing a more economically credible defense force. There were to be no more predetermined budget limits. Decisions were to be made concerning defense programs rather than budgets. The system was designed to eliminate the duplication of similar weapon systems among the services. The original concept developed by McNamara was very good, however, because of the inconsistencies within the operating styles of administrations over the years, the original aspirations of PPBS have not been realized (the PPBS system will be discussed further in chapter two).

The budget process is a powerful force capable of exercising considerable influence on the U.S.' national

⁹John Lewis Gaddis, Strategies of Containment (New York: Oxford University Press, 1982), 225-226.

security posture. To fully understand its importance and influence within the international system, one should examine the role of economics within the future international environment.

B. THE FUTURE INTERNATIONAL ENVIRONMENT

The future international environment is one of great speculation and concern to all social scientists and students of the field. The future structure will be more complex and interconnected than in the past. Countries will tend to concentrate more on international trade issues and the status of their balance of payments. They will monitor the value of foreign currencies and markets around the world, apprehensive of possible implications at home.

The complexity of this interconnection will not only revolve around economic issues, but also around a concern for the world's future. As we progress into the final years of the twentieth century, nations are becoming more aware of their shared interests and dependence in the areas of ecology, technology and other sciences.

This growing interdependence between states will continue to have a profound affect on the division of power. A nation's interdependence upon other nations is an important component in determining its strength in times of crisis, and tends to weaken the country, making it vulnerable to

manipulation by the powers of the world. According to Robert O. Keohane and Joseph S. Nye:

. . . interdependence restricts autonomy, but it is impossible to specify a priori whether the benefits of a relationship will exceed the costs. This will depend on the values of the actors as well as on the nature of the relationship.¹⁰

Richard Rosecrance and Arthur Stein view interdependence in a much more basic sense:

. . . a relationship of interests such that if one nation's position changes, other states will be affected by that change.¹¹

In the future, the concept of interdependence will bring to mind ideas of mutual survival and new technological discoveries around the globe.

Caution must be exercised by the world leadership to protect the delicate stability that will accompany this seemingly utopian environment. The increase in interdependence throughout the system will inevitably produce the potential for more volatility. It is only natural for this to occur, as nations reluctantly release part of their sovereignty as they open their doors to outside influences. This openness relinquishes control of certain domestic affairs which, in turn, affects the control over their own internal stability. The natural tendency of government is to resist

¹⁰Quoted in James E. Dougherty and Robert L. Pfaltzgraff, Contending Theories of International Relations (New York: Harper & Row, 1981), 136.

¹¹Ibid, 137.

such change, which is why the transformation process will not happen immediately.

In the future, interdependence will play a more predominant role throughout the international structure than any other period in history. The world will be more educated in terms of economic and technological cooperation, a realization of our coexistence in the same environment, and in respect to an awareness of our capability to destroy everything we hold precious.

The international system, in effect, is transforming from an "actor" to a "systems" oriented structure. A bi-product of this new international paradigm will be a restructuring of the decision-making process throughout government. As Charles William Maynes, editor of Foreign Policy magazine, recently wrote:

. . . the task of government is changing, and so must the people chosen to head it. The challenge is now less military vigilance than diplomatic change.

Economists will be more important than geopoliticians, diplomats more critical than warriors. Multilateralists for the first time will be more important than bilateralists - people who understand international financial institutions may be more valuable than people who know the names of Salvadoran guerrilla leaders.

Experts in fields like the environment or development may become serious candidates for major positions on the N.S.C. or in the State Department.¹²

¹²Charles William Maynes, "For New Foreign Policy . . .," The New York Times, 23 May 1990, A17.

Unlike the immediate postwar period, governmental leadership today is cognizant of the present stalemate that exists with nuclear deterrence. They are beginning to mutually agree on the futility of this standoff and the horrible consequences to our shared environment if these weapons are ever put to use. In this sense, interdependence relates to a concerted effort on the part of both superpowers and the remainder of the industrialized world to protect our only source of life: planet Earth.

If the stability and rationality of the international system is maintained, the nuclear standoff and arms control negotiations will become less predominant an issue in summit discussions. Evidence of such a shift can already be noticed. Prior to the summit last May between Presidents Bush and Gorbachev in Washington D.C., some concern was raised over the agenda for the discussions. As Robert C. Toth of the Los Angeles Times wrote:

As the superpowers prepare to consider a nuclear weapons treaty and a pact to cut conventional forces in Europe, critics are questioning whether what is on the table is very meaningful - or even necessary - any more.

With the Soviet bloc disintegrating, and Moscow already pulling its troops out of Eastern Europe on its own, the arms control negotiations are being overtaken by events . . .¹³

¹³Robert C. Toth, "As Cold War thaws, critics question need for arms pact," San Jose Mercury News, 28 May 1990, 18A.

The discussions will invariably expand to include other critical issues which are shared by the superpowers and the world community.

However, if the stability of the international system breaks down, there is a very real possibility of a shift back to a tight bi-polar system similar to the postwar era. As we progress further into the future, the possibility of this scenario becomes less likely. Many would argue, however, that the stability of the world has been successfully maintained over the years because of the nuclear standoff. These people would argue that as the world shifts into a more horizontal diffusion of power and multi-polar blocs, the environment will become more unstable. The potential for increased instability is present, however, the real potential threat to world stability lies not between the U.S. and Soviet Union in the near term, but rather within regional disputes which may arise, such as Iraq's invasion of Kuwait.

The decreased emphasis over concern of a future nuclear conflict contributes to the predominant element of national power in the future international system: economic power. Economic power will be the primary determinant of a nation's hierarchial position in the system, and the multi-polar structure which will develop in the decade of the '90's. The multi-polar environment will become increasingly centered around the economic relationships between countries and communities of countries, such as the European Economic

Community (EEC), the Organization of Petroleum Exporting Countries (OPEC), and the Association of Southeast Asian Nations (ASEAN), just to name a few.

The environment will continue to shift from a position of "every nation for himself," to a more cooperative dependence among the nations, both in terms of economic relationships and ecological considerations. This expanding economic interaction may be deceiving in terms of its benefits to the world in general, and especially to U.S. national security. This predominant economic system of international trade will further bind the world together in an intricate collection of interdependencies between countries.

An analysis of international economics is, therefore, an analysis of world power, and directly affects the manner in which nations interact with one another. Paul Kennedy maintained this proposition with a historical comparison which examined the relationship between national power and a state's economic well-being.¹⁴ Today, more than ever, the subject of economics is in the forefront of international discussions, negotiations and agreements, and will only continue to increase in importance in the '90's.

In the present age where economic interdependence is developing into a complex array of intricate trade agreements, treaties and sanctions; which are closely monitored by

¹⁴See Paul Kennedy, The Rise and Fall of the Great Powers (New York: Random House, 1987; Vintage Books, 1989).

individual governments, multinational firms and international investors; regional economic fluctuations now produce significant repercussions around the world. The United States' economy will certainly play a large part in the delicate balance of the current world market, and its economic well-being will further determine the U.S.' future degree of influence as this economic system continues to develop. An understanding of these delicate relationships is imperative!

C. THE FUTURE THREAT TO U.S. NATIONAL SECURITY ASSOCIATED WITH THE BUDGET-MAKING PROCESS

The heart of policy making is the budget. As Robert McNamara stated:

. . . policy decisions must sooner or later be expressed in the form of budget decisions on where to spend and how much.¹⁵

As administrations change so do their ideas concerning the preeminence of policies. Even changes in administrations of the same political party will have differences in their views toward certain policies and programs. The more emphasis an administration places on a particular policy issue the more emphasis will be placed on ensuring it receives the necessary funding.

A strong defense budget is a signal to foreign countries, both allies and adversaries, of the U.S.' commitment to remain

¹⁵Quoted in Kanter, 5.

strong militarily. It is the necessary backing to indicate the intent of the U.S. to keep their promise of protection to key allies and the rest of the free world. In February 1982 President Reagan was asked, "Why are you so strong in your support of this additional [military] spending?" The President replied:

In the last several years before this administration, the military was literally starved. There is a dangerous window of vulnerability. Even with our military buildup, we will not even be back in the range of ability to stand in the face of our adversaries, the Soviet Union, until the mid-eighties. . . . But we have to show our adversaries that we have the will to defend ourselves. They have thought for several years we don't.¹⁶

As pressure grows to reduce the fiscal deficit, the greater the likelihood many politicians will opt for short-term "quick-fixes," rather than long-term solutions to the problems at hand. The end result of these domestic political decisions will impact the U.S. defense posture as the political pressure grows to cut defense spending and realize a "peace dividend."

Although the pressure has recently become less conspicuous as a result of the Middle East crisis, there remains a considerable urgency to repair the U.S.' poor fiscal

¹⁶President Reagan was interviewed by Skip Weber of the Iowa Daily Press Association in Des Moines, February 9, 1982. Transcripts found in Public Papers of the Presidents of the United States: Ronald Reagan, 1982, Volume I (Washington D.C.: U.S. Government Printing Office, 1983), 150.

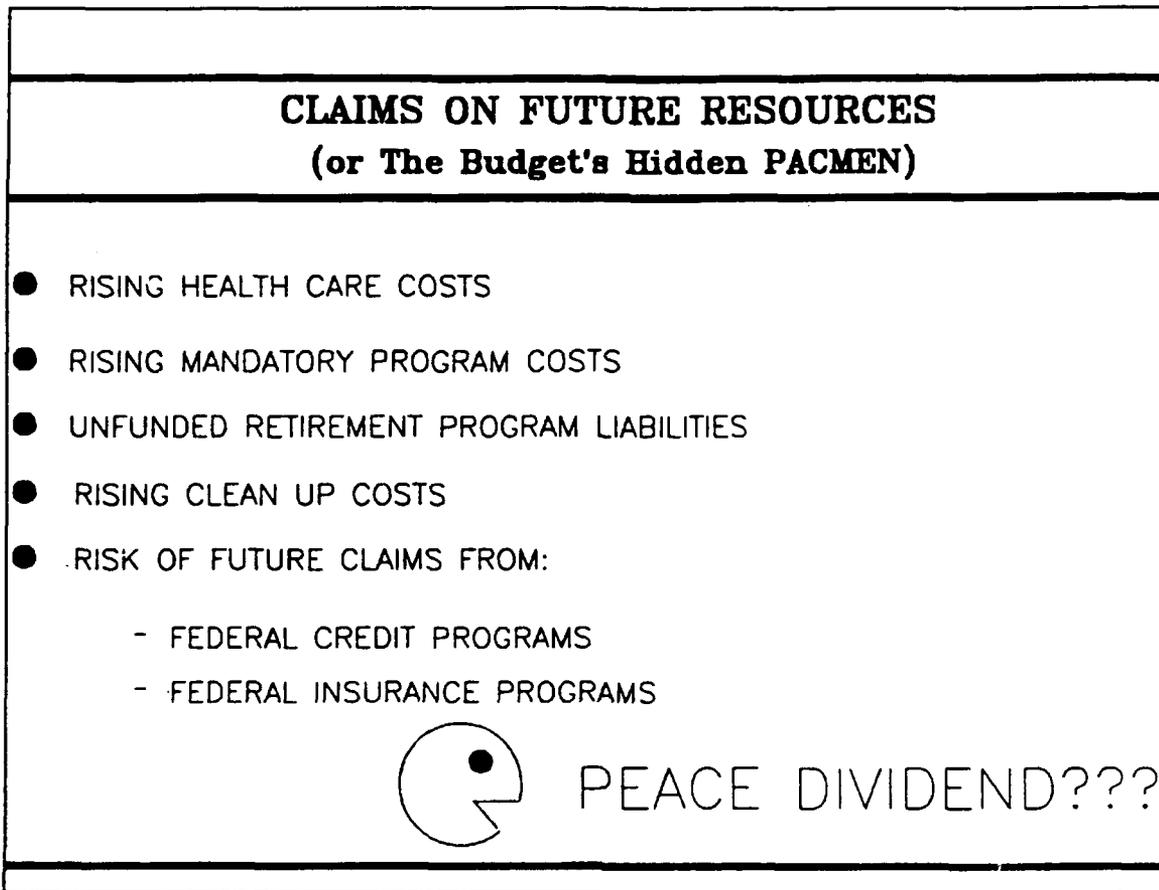


Figure 1

condition. As Figure 1¹⁷ illustrates, the "peace dividend" many Americans hope for will quickly be absorbed by demands from other sectors of the economy, and likely will never be realized in terms of its affect on the federal deficit.

Nonetheless, the problem facing the DoD and Congress is the determination of what, and how much, should be cut from the total U.S. budget. It is no longer a question of whether

¹⁷Donald E. Gessaman, Acting Deputy Associate Director for National Security, Office of Management and Budget, Executive Office of the President, interviewed by author, 23 October 1990, Washington D.C.

or not the cuts will be made, at this point they are inevitable. The danger to U.S. national security lies not within the specific requirement to reduce government expenditures, but rather in the irrational implementation of that requirement in order to appease the American public, without the proper long-range consideration of their implication to future U.S. defense strategy. Therefore, it is critical at this point that the U.S. research methods for cutting back on defense spending, while at the same time preserving an adequate level of defense.

An important variable which will influence the tough decisions on what must be cut from the budget will be, of course, "pork-barrel" politics. Many Congressmen are quick to support the outcry for a reduced defense budget, however, the same are also vigilant to protect the interests of their constituents. A good example was the proposed list of military base closures submitted to Congress earlier this year. Many Congressional members quickly took the defensive "not in my district" attitude. This traditional "pork-barrel" political posture poses the most serious threat to U.S. national security, because it tends to force the politician to think in terms of "what's good for the district" or "home state," rather than on "what's good for the nation."

At a time where drastic defense reductions appear imminent, the decisions to be made concerning what to keep and what not to keep, must be unbiased and intelligent. It would

seem the most unbiased decisions could only come from the department of government not concerned over being reelected: the Department of Defense. Naturally, the Congress, who ultimately holds the constitutional "power of the purse," is reluctant to release control of such authority, especially since that control would fall into the hands of the executive branch and DoD.¹⁸ DoD should not be granted carte blanche with respect to defense spending, however, a more objective process will be required to properly decide on a long-range defense strategy, and the associated budget necessary to achieve it.

¹⁸The Congress can be credited today with making greater attempts to include the Department of Defense, and more importantly the military, in national security decisions, an example being the Goldwater-Nichols Act of 1986.

II. THE PROBLEMS ASSOCIATED WITH THE CURRENT BUDGET PROCESS

The United States is faced with a dilemma! That perplexity is how to arrive at a consensus among the Congress to repair the ailing fiscal health of the nation. As the nation grows older, its capability to work cooperatively for a common goal seems to deteriorate. It may be argued at times that this partisanship which exists in the governmental system is dysfunctional. However, it can also be argued quite assertively that it serves a vital role in strengthening our pluralistic democracy.

Today partisan politics is clouding the vision of the elected officials in Washington, which prevents them from taking action for the greater good of the nation. The concept of making compromises has become an unthinkable proposition among the legislators. This unwillingness to accept resolutions for the overall benefit of a package, due to particular concessions which go against personal or party principles, impedes the enactment of legislation the nation needs to properly conduct business. It is a weakness of the government's solidarity, which contributes to a weakness in its national security.

This weakness became all too evident during the budget crisis last October. As fiscal year 1990 drew to an end, Congress was once again confronted with the deadline of

October 1st without much promise of an acceptable resolution for the budget. Once again, the people's representatives could not agree on the fiscal requirements necessary to steer the economy in the direction for a future balanced budget, while simultaneously achieving their own personal economic objectives and protecting their bid for reelection in November.

Recognizing the familiar paradigm surfacing from capital hill, the president sought to prevent the redundant pattern from occurring, which habitually results in a temporary solution to an aging problem. The president launched a verbal offensive, and reprimanded Congress for not performing its constitutional duty in a timely manner. At a news conference on August 14th, President Bush stated:

Our current budget or lack thereof constitutes a real threat to the economic well-being of this country. And in this case the problem is a lack of action on the part of the Congress, and abdication of responsibility that endangers our economic vitality and the jobs that go with it.

It is no secret to the American people that the Congressional budget process has broken down.¹⁹

The President was seeking a permanent solution to the economic problem before the nation, rather than a temporary resolution that would only postpone significant action into the new fiscal year. Congress requires the executive branch to submit its federal budget proposal on time each year, the

¹⁹"Bush News Conference On Budget and Middle East," The New York Times, 15 August 1990, All (N).

Table 1

BUDGET PROCESS TIMETABLE

January	President submits budget to Congress.
February 15	CBO issues annual report to Budget Committees.
February 25	Committees submit views and estimates to Budget Committees.
April 15	Congress completes first concurrent budget resolution.
June 15	Congress completes reconciliation process.
June 30	House completes action on annual appropriations bills.
August 15	OMB and CBO estimate deficit for upcoming fiscal year.
August 20	CBO issues its initial report to OMB and Congress.
August 25	OMB issues its initial report to President and Congress. President issues initial sequester order.
September 15	Congress completes second concurrent budget resolution.
September 25	Congress completes second and final reconciliation process.
October 1	Fiscal year begins.
October 10	CBO submits revised report to OMB and Congress.
October 15	OMB issues its revised report to President and Congress. President issues final sequester order.

Source: "The Budget Process," Congressional Digest (November 1989): 261-263; and Lee D. Olvey, et al., The Economics of National Security.

first monday after January 3rd (see Table I), and the executive branch consistently meets this deadline. Congress should approve the federal budget within the same time constraints.

Once again as the deadline approached, Congress could not agree on a meaningful solution, and passed a continuing budget resolution that would temporarily keep the government running for another week. Steven Mufson and John E. Yang, of the Washington Post, wrote of the problem:

The resounding defeat of the deficit-reduction accord in the House . . . raises two questions: Can any package big enough to deal with the deficit problem pass Congress, and will anything that passes Congress be big enough to deal with the problem?²⁰

The president exercised his right of veto over the continuing resolution in order to emphasize, both to Congress and the American people, the importance of the positive measures needed toward a reduction in the budget deficit and control over fiscal policy. This action sent a clear signal to the representatives that the administration was intolerant of further postponement of the real problem before them: the repair of the nation's economy.

The inability of Congress to reach a consensus when dealing with national problems, such as choosing the correct action to solve the U.S.' economic and budgetary ills, has

²⁰Steven Mufson and John E. Yang, "As crises go, the U.S. deficit just isn't sexy," San Jose Mercury News, 7 October 1990, 1A.

been the subject of a number of different publications, and the focus of research by a number of social scientists over the years.²¹ The research of particular interest and relevant to this discussion is the studies which looked into the effective operability of group decision-making, more specifically, its relationship to, and implications upon, a democratic governmental system. The next few paragraphs will focus attention on the particular work accomplished by Kenneth J. Arrow.

Arrow addressed the difficulties in the establishment of assimilation procedures for the various preferences of a particular group's members. Basically, his research and conclusions outlined the difficulties similar to those encountered within the U.S. Congress, as 435 representatives and 100 Senators try to represent the desires of their respective constituents and, simultaneously, reach an agreement on a particular piece of legislation. His procedure was to come up with some logical criteria by which social decisions were made, and then to examine their implications within the process. As stated by William J. Baumol, Arrow originally proposed the following four minimal conditions which social choices must meet in order to reflect individuals' preferences:

²¹See Dennis C. Mueller, Public Choice II, rev. ed. (Cambridge: Cambridge University Press, 1989).

- social choices must be consistent (transitive) in the sense that if A will be decided in preference to B, and B in preference to C, then C will not be decided in preference to A;
- the group decisions must not be dictated by anyone outside the community or by any one individual in the community;
- social choices must not change in the opposite direction from the choices of the members of that society; that is, an alternative which would otherwise have been chosen by society must never be rejected just because some individuals come to regard it more favorably; and
- a social decision as between two alternatives must not change so long as no individual in the community changes the order in which he ranks these alternatives in accord with his preferences. In other words, the social preference as between two alternatives, A and B, must depend only on people's opinions of just these two alternatives, A and B (and not on any other alternative which does not happen to be immediately relevant).²²

Arrow's intent was to illustrate that although the above criteria appear to be a typical set of characteristics which would represent or define a democratic process, the interaction of the principles offer a much more complicated process. He demonstrated that it is impossible to successfully choose between all the desires of a particular social group without violating at least one of the above criteria.

William J. Baumol illustrated Arrow's concept through the use of the three diagrams shown in Figure 2. Three individual's (Smith, Jones, and Mznch) are to choose between

²²William J. Baumol, Economic Theory and Operations Analysis, 3d ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1972), 405.

THE DIFFICULTIES WITH DEMOCRATIC GROUP DECISIONS

I.					A	B	C	
	Smith	3	2	1				
	Jones	1	3	2				
	Mznch	2	1	3				
II.	A	B	C	D	III.	A	C	D
	4	3	2	1		3	2	1
	4	3	2	1		3	2	1
	2	1	4	3		1	3	2
Total point vote	10	7	8	5	Total point vote	7	7	4

Source: William J. Baumol, Economic Theory and Operations Analysis, 3rd ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1972), 404-408.

Figure 2

three alternatives (A, B, and C) by ranking their favorite alternative "3," their next favorite "2," and their least preferable alternative "1." Diagram I of Figure 2 shows that Smith and Mznch prefer A to B, Smith and Jones prefer B to C, and Jones and Mznch prefer C to A. Therefore, the majority prefers A to B and B to C but it also prefers C to A. This results in a violation of Arrow's first criteria.

In diagram II and III of Figure 2, Baumol illustrates how alternatives which are considered unimportant in normative decision-making (e.g., candidates who enter elections with no

apparent chance of winning) can play a factor in the outcome of choice between the remaining alternatives. In Diagram II, alternative A wins the vote by 10 points over alternative C with 8 points. However, as Diagram III shows, if alternative B is dropped from consideration, A and C become equally desired alternatives by the group.²³

Arrow's research continued to point out that the situation only becomes more complicated when personal emotion is introduced. As Arrow's fourth criteria stated, a social group's preference between two alternatives must depend only on the consideration of those two alternatives. If a segment of the group holds a deep personal sentiment, due to moral or religious convictions, toward a particular alternative, this consideration might affect the decision-making process in violation of the fourth criteria.

The adversity and frustration of the democratic process manifests itself, as one becomes familiar with the result of Arrow's study. As William J. Baumol stated:

. . . these requirements for social choice may seem a rather appropriate set of conditions for democratic decision-making. However, Arrow has shown that the matter is not so simple. . . . In other words, it would appear that social choice must be in a sense inconsistent or undemocratic!²⁴

The same ineptitude which prevents Congress from reaching a compromise on a solution to the budget, also complicates

²³Ibid., 406-407.

²⁴Ibid., 405.

its capability to work in a united fashion toward other objectives necessary for a strong national security posture. It is an intangible problem (as Arrow's study illustrated) which is very difficult to define, and therefore, difficult to diagnose a solution. It is an abstract characteristic of our democracy which, many would argue, makes the system strong.

The strength of the United States throughout its history has intensified in times of crises, due to the resolve of the American people and their representatives in Congress to unite and, if necessary, make sacrifices for a common goal. During periods when America has been unable to come together as one, such as during the Vietnam era, the weakness of the democratic system has been very apparent. The implication of this discord to U.S. national security is real, and significant consequences can be identified which will only be resolved through recognition and execution of corrective measures. Both the executive and legislative branches of government must be cognizant of the following deficiencies which threaten the strength and security of the nation, especially in an era of such sweeping change throughout the international system.

- The perception of a reduced threat to U.S. national security, and the associated political pressure to reduce defense spending.
- The deterioration of the U.S.' overall defense posture due to impulsive defense cuts without a viable long-range defense strategy.

- The impact of cutbacks in defense spending on the already neglected and deteriorating defense industrial base.
- The deterioration of the U.S.' technological superiority due to cutbacks in research and development expenditures, and through the transfer of technology to competing countries.

A. THE POLITICAL PRESSURE TO REDUCE DEFENSE SPENDING

Today, after four decades, the international landscape is marked by change that is breath-taking in its character, dimension, and pace. The familiar moorings of postwar security policy are being loosened by developments that were barely imagined years or even months ago. Yet, our goals and interests remain constant. And, as we look toward--and hope for--a better tomorrow, we must also look to those elements of our past policy that have played a major role in bringing us to where we are today.²⁵

President George Bush
March 1990

President Bush wrote the above statement in the preface to The White House publication, National Security Strategy of the United States. The elements the President spoke of, which have brought the U.S. to the position it holds today, will not be present by the mid '90's. The growing political pressure within the U.S. to cut back militarily, caused by the sweeping changes in Eastern Europe and fiscal problems at home, will cause a significant reduction in future U.S. force levels. In a speech May 29th before the Naval Postgraduate School, Sean O'Keefe, the Department of Defense Comptroller, said the

²⁵The White House, National Security Strategy of the United States ([Washington D.C.]: The White House, March 1990), v.

U.S. military force level of 1995 should be 75 percent of the 1985 level if current planned reductions are continued.

There is no question as to the downward trend in future defense spending, both in terms of real dollars and as a percentage of GNP, as long as the world remains tranquil. In the present era of the diminished Soviet threat to the West, competing demands for defense dollars will force politicians to re-evaluate the resources allocated to defense. As Jacques S. Gansler stated:

. . . there are other demands on the nation's resources--among them the huge national deficit; the valid calls for a refurbishing of the nation's highways, bridges, and harbors; the trade imbalance and the consequent need to revitalize the nation's industrial competitiveness; and the nation's growing needs for health care, education, Social Security, child care, and other social measures. Thus, an increasing number of people are questioning the affordability of America's security posture.²⁶

As Figure 3²⁷ illustrates, the priorities of the American people are changing. The possibility of war with the Soviet Union, be it conventional or nuclear, is no longer the preoccupation of American concerns. The anxieties of today's population are over issues concerning the environment, proliferation of nuclear and chemical weapons, social problems, and drugs. As the interests of the people change,

²⁶Jacques S. Gansler, Affording Defense (Cambridge, Massachusetts: The Massachusetts Institute of Technology Press, 1989), 1-2.

²⁷Office of Management and Budget.

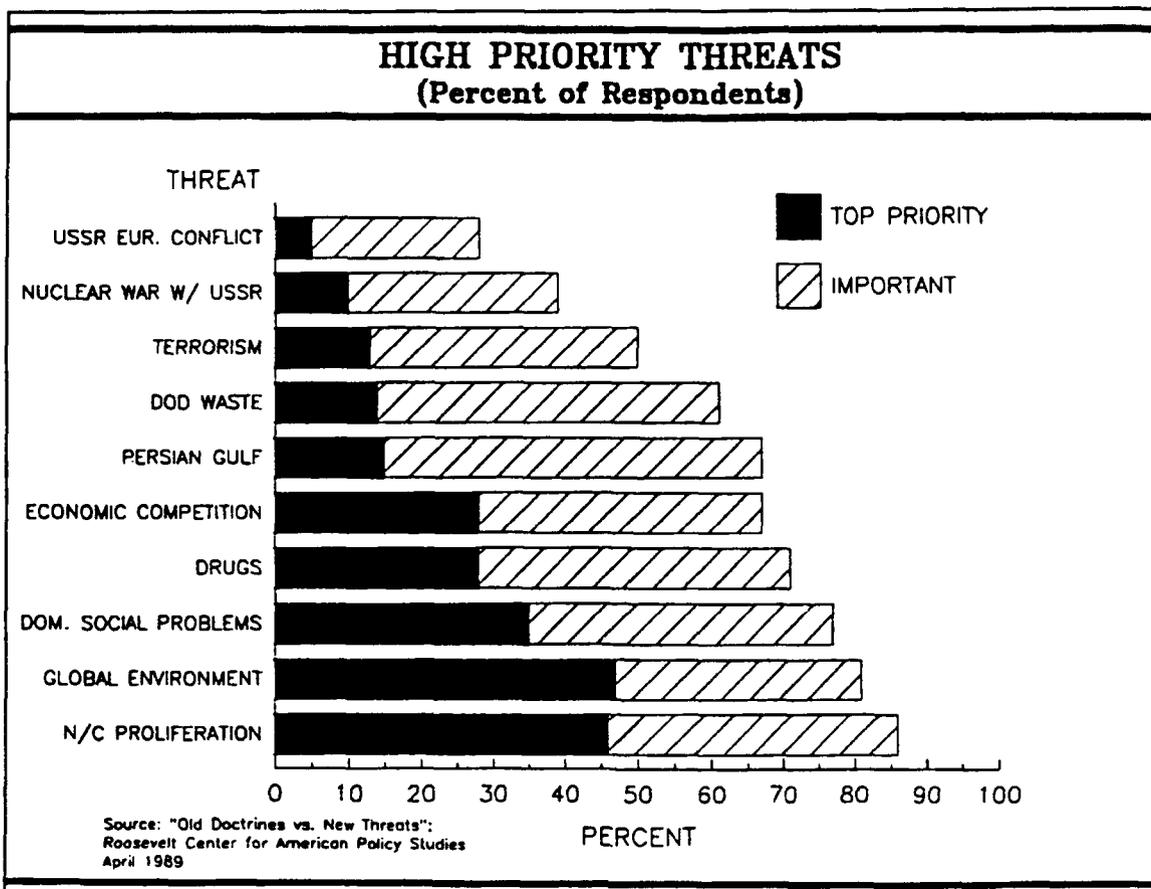


Figure 3

so will the attention of Congress, just as our political process was designed to operate.

The United States must be careful not to allow the sweeping enthusiasm over "no more enemy" to lead the country in a direction where it might find itself in a precarious defense posture. In the committee markup of the FY91 Defense Authorization Bill, the House Armed Services Committee wrote:

Abroad, the conventional military threat posed in Europe by the Soviet Union and its Warsaw Pact allies virtually

evaporated. Threats elsewhere declined as well, although none so dramatically.²⁸

The report was released 31 July 1990, and a week later the U.S. found itself assembling the largest warfighting force since Vietnam in the deserts of Saudi Arabia. No event could have done more to drive the point home, both to the American legislators and people, of the potential for unforeseen events that may suddenly occur and threaten the U.S.' vital interests. Saddam Hussein may have done more to prevent the dangerous deterioration of the U.S.' national defense posture, than the U.S. proponents of a strong national defense force could have accomplished in a decade.

If history has taught America any "one" lesson, it should be that in every instance where the U.S. has thought it possible to demobilize and capitalize on the "peace dividend," it has found itself later in a position necessary to re-arm. As will be addressed below, the Soviet military is undergoing change which represents a reduced immediate threat to the U.S. However, as President Bush stated above, we must remember the circumstances which brought about the change in the Soviet Union, as well as the remarkable events in Eastern Europe. America should not be too eager to relinquish the position of

²⁸Congress, House, Armed Services Committee, FY91 Defense Authorization Bill, Committee Markup, Summary of Major Actions, Washington D.C.: House Armed Services Committee, 31 July 1990, 1.

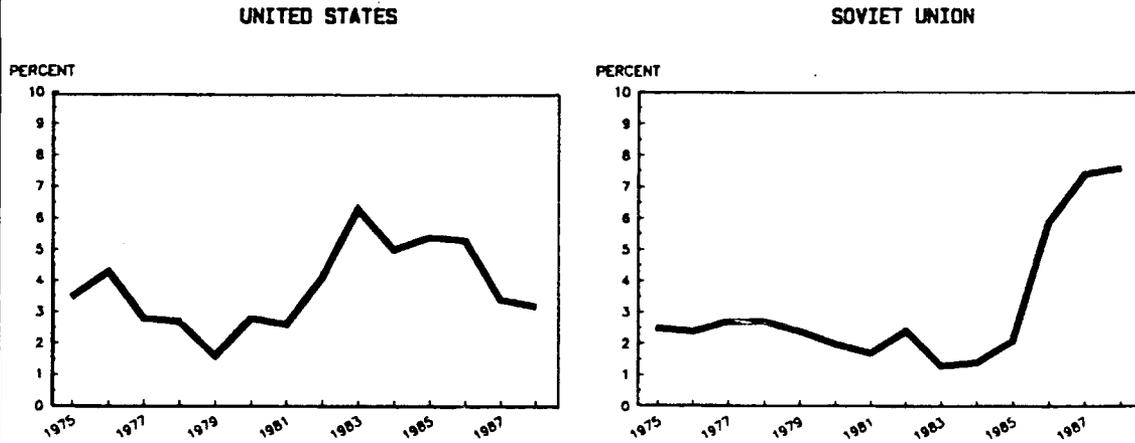
strength which has brought about so much positive change, and influenced so much stability around the world.

1. The Soviet Threat

There is no question today that Gorbachev is seriously cutting back on Soviet defense. A year or two ago the experts might have debated the validity of that point, but today the evidence is too clear, and the Soviet economy too weak to support a sizeable military. The CIA estimates the Soviet Union's own budget deficit exceeds 7 percent of its GNP (see Figure 4) and continues to grow. The U.S.' response to date has been cautious. However, due to the reasons discussed above, and in light of the changes sweeping Eastern Europe, the U.S. is pressured to also display pragmatic support for the end of the "Cold War." It is also in the best interest of the U.S. to support President Gorbachev's "perestroika," which is all the more reason to respond to the Soviet's reductions with cuts in U.S. forces. The question now becomes, how far will the Soviets cut-back militarily?

There are two terms developed by Gorbachev that describe his "new thinking" toward Soviet defense: (1) "Reasonable sufficiency," which is the guidance the Soviets will use to determine what resources are necessary to maintain an adequate defense; and (2) "defensive doctrine," which alludes to the future Soviet strategical orientation of defending the homeland. Otherwise stated, "Reasonable

U.S. AND SOVIET BUDGET DEFICITS: 1975-1988
(AS PERCENT OF GNP)



Source: Office of Management and Budget.

Figure 4

sufficiency" is the political leadership in Moscow informing the military of the limited amount of resources available for defense (a radical departure from past doctrine). "Defensive doctrine" is the military's guidance as to how to carry out its assigned tasks. Both concepts reflect an acceptance by the Soviet Union, of the futility of maintaining an unnecessarily large military force. This is obviously good news for the West. However, there is still uncertainty among analysts of the sincerity of these new concepts.

Skepticism in the West can not be contributed to a lack of outspoken support from the Soviet leader. In a speech to the U.N. in December 1988, Gorbachev announced that the Soviet Union needed to move "from an economy of armament to an economy of disarmament." He also announced:

- unilateral reductions of 500,000 troops by 1991;
- a reduction of Soviet inventory west of the Urals by 10,000 tanks, 8,500 artillery, and 800 aircraft;
- Warsaw Pact strength would be reduced by 110,000 troops--about 50,000 of them Soviets, including six tank divisions;
- and that the remaining East bloc forces are to be restructured to become unambiguously defensive.²⁹

In January 1989, President Gorbachev also announced the Soviet Union would reduce weapons procurement by 19.5 percent and defense spending by 14.2 percent.³⁰ So what does this radical departure from traditional Soviet behavior mean, especially to the West?

As Rear Admiral Thomas A. Brooks pointed out:

In 1988, the Soviets scrapped or otherwise took out of active service more ships than any year in recent history. In 1988, Moscow also began selling major combatants for scrap on the world market. . . .

²⁹Michael MccGwire, "About Face: How the Soviets Stopped Planning for World War," Technology Review 92 (November/December 1989): 40.

³⁰Statement of Rear Admiral Thomas A. Brooks, United States Navy, Director of Naval Intelligence, before the Seapower, Strategic, and Critical Materials Subcommittee of the House Armed Services Committee on Intelligence Issues, 22 February 1989, 7.

But counting numbers of ships in the order of battle is a fundamentally flawed methodology for measuring naval capability. The question which must be asked is not "how many ships have they" but rather "how capable is their Navy to achieve its mission."³¹

The Soviet Union has indeed begun to carry through with its intention to reduce its military force. However, it is important to note the type of equipment being cut.

The Soviets are decommissioning their oldest classes of ships such as the Riga's, Kotlin's, Kanin's, and Kashin's; and their older submarines such as the Whiskey's, Romeo's, Foxtrot's, and November's. The numbers of ships and subs being removed from the fleet sounds impressive, but the types of equipment were not very capable by today's standards.

Their production of new classes of warships has not drastically decreased. The Soviets continue to produce Kiev class aircraft carriers; Sovremennyy and Udaloy class destroyers; and Akula, Victor III, and Oscar II class submarines. The result is a much smaller naval force in terms of numbers, however, a much more capable fleet in terms of advanced technology, weapons and tonnage. The same holds true for their ground forces in Europe. The reports of Soviet troops and equipment leaving Eastern Europe returning home is true. However, the forces that remain in the area, though much smaller, contain only the most advanced technological equipment and weapons. Where there was once a large standing

³¹Ibid., 8-9.

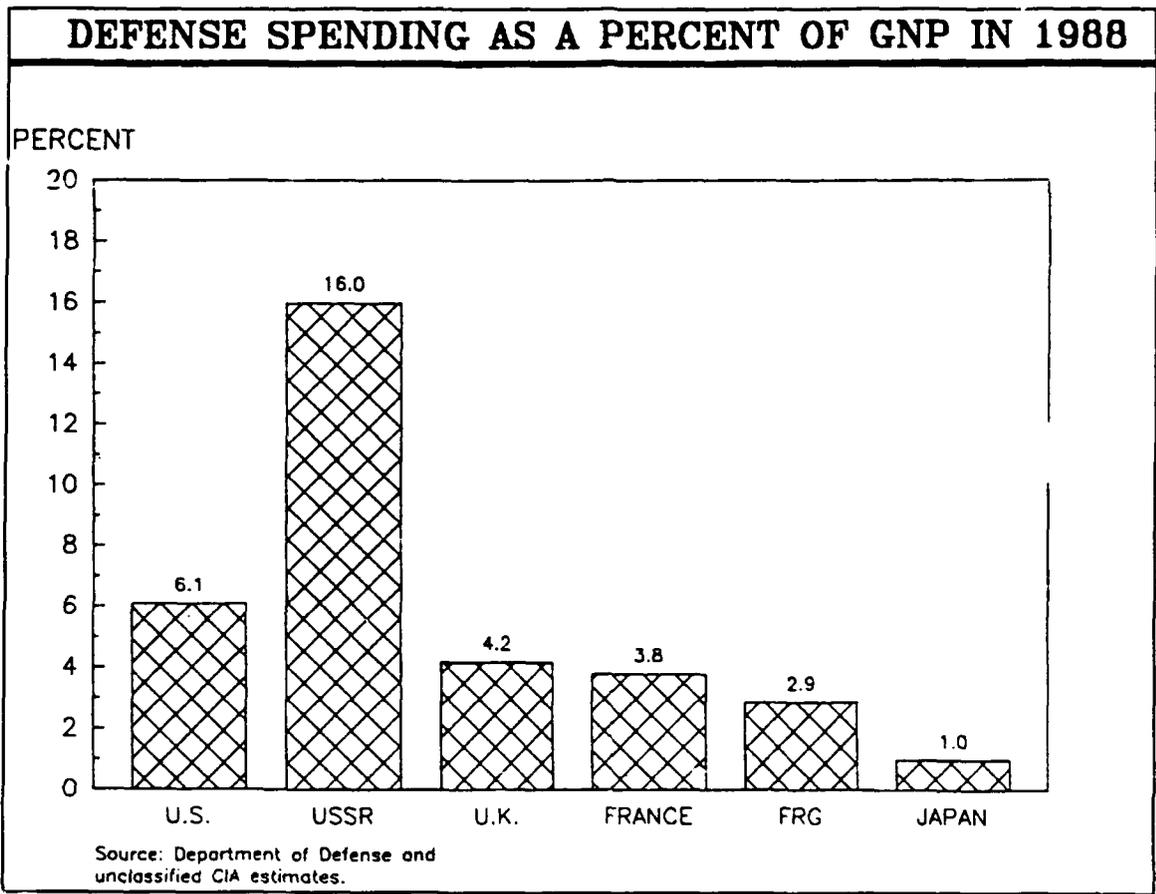


Figure 5

Soviet force, consisting of a large number of troops which included older, less advanced equipment, there now exists a much smaller presence with a greater capability in terms of technology.³²

As Figure 5³³ illustrates, the Soviet Union continues to allocate more resources to defense spending than any other industrialized country. However, it is believed the Soviet

³²Admiral Trost, Chief of Naval Operations, in a speech before the Naval Postgraduate School, 8 May 1990.

³³Office of Management and Budget.

economy is not capable to support the continuation of such spending. Are these cut-backs part of a concerted effort by President Gorbachev to decrease the military structure of the Soviet Union? Do they represent a departure from traditional Soviet ideology, and represent a shift in the ideological mindset of the Soviet leadership? Or, are they part of a grand plan to rebuild the Soviet Union's economic strength, then rebuild their military with a much stronger and much more advanced capability? These are the unanswered questions confronting the analysts today, and the major Soviet concerns for the '90's.

2. The Need for a New Threat to U.S. Interests

With the dismantling of the Warsaw Pact, and the apparent disappearance of the Soviet threat to western Europe, there is a real need for the public's recognition of other potential threats to U.S. national security. In the past, other less predominant, but nonetheless equally threatening adversaries, have been overshadowed by the Cold War standoff. The absence of a secondary peril to serve as a replacement for the vacant Soviet menace has contributed to the political pressure to reduce defense spending. The fallacy of this concept lies in the apparent need for some immediate entity to be present which threatens the livelihood or interests of the American people before it becomes necessary to maintain an adequate defense force.

For too many years, an adequate level of defense spending has dangerously lagged behind the necessity for a strong defense posture. The U.S. has always found itself in a position of playing catch-up when it comes to actually needing a strong defense force. At the end of both World War I and II, the U.S., bowing to the political pressure to realize a "peace dividend," thought it safe to demobilize its forces in light of a much safer world environment, only to find it necessary to rebuild its forces a few years later.

After the Vietnam War, similar pressure forced the policy-makers to neglect the U.S.' defense posture once again, only to find itself in a strategically vulnerable position in the early '80's which necessitated the largest peacetime military buildup in this nation's history. Why must the U.S. always find itself in a position to re-arm? Some form of "peace dividend," be it monetary or psychological, may have been realized in past periods of reduced defense spending, however, certainly the savings have only been temporary, and nullified by the increased spending in subsequent years.

3. Is There Too Much Concern Over Reducing the Deficit?

If the policy-makers had overlooked the lessons of past periods of increased pressure to reduce defense spending, Iraq's recent aggression against Kuwait should have served as a reminder that the world may not be as safe a place as it sometimes seems. All too often, easy numbers are quickly

translated into a justification for action. As a result, variables that are difficult to quantify are quickly overlooked in terms of their importance or value in the overall process.

Reagan's defense build-up in the early '80's was often questioned in terms of its real benefit to U.S. national security, as opposed to its impact on the economic condition of the country. The real cost-benefit analysis of the Reagan military build-up would, undoubtedly, depend on the value assigned to the specific variables measured, and therefore, would greatly depend on the priority assignment of the variables by the individual analyst. A hundred different analysts may arrive at a hundred different answers depending on their particular value judgement.

If one credits the deterioration of communism throughout eastern Europe, and the resultant break-up of the Warsaw Pact, partially or in full to the strong defense posture of NATO and the U.S., how does one quantify the changing environment in order to measure the benefit received from the increase in defense spending? If someone had guaranteed to the American people 10 years ago that a build-up of the U.S. defense posture, which would include a dramatic increase in defense spending and a further increase in the federal deficit, would result in the current democratic transformation throughout Eastern Europe and within the Soviet Union, would there not have been sweeping bi-partisan support

to make the sacrifices necessary to bring about the deterioration of communism?

When one speaks today of the high fiscal deficit confronting the U.S., there appears to be an alarming trend among the American people to point to past defense spending and the current defense budget as the cause. The politicians recognize this tendency and turn to the defense budget as an easy target for reductions in governmental spending. It must sometimes be remembered that the most valuable commodities in life don't come cheap. Sacrifices must sometimes be made for the overall good of the desired result. There are those who might consider the strengthening of the U.S. national defense posture, and the corresponding increase in the fiscal deficit, a small price to pay for the magnitude of change realized in Europe, and the end to the "Cold War."

B. THE NEED FOR A VIABLE LONG-RANGE DEFENSE STRATEGY

If the United States is determined to make major cuts in defense, then the opportunity should be used to effectively structure the remaining force in a more efficient method to ensure further defense savings over the long-term. This proposes that the decision-makers in the executive and legislative branches of government adopt a longer perspective view of defense, a radical departure from their current system of planning and programming.

Although the Planning, Programming and Budgeting System (PPBS) instituted under McNamara was designed to instill such reforms, those reforms have not developed in the manner they were originally intended. PPBS was intended to influence the rational development of a defense budget, based on the assessment of the U.S.' national threats and its future defense strategy.

Simplified, the process was designed to plan for the future by determining clear objectives, and the necessary national defense strategy to meet those objectives 2 to 7 years into the future. Next, the system called for the development and/or identification of specific defense programs to meet the planning objectives. The budgeting phase simply called for the allocation of the necessary resources to fund the identified programs.

The process faltered due to the lack of support throughout government. Despite DoD's efforts to focus on the long-range defense strategy and fund programs for the future, Congress continued to focus on the short-term. The same problem exist today. Instead of "strategy determining the budget," it is more often, "budget determining the strategy."

This is not to say that the system does not work at all, only that it tends to adapt itself to the constraints of Congress. The emphasis today remains, as it has since PPBS was instituted, on the immediate year's programs and budget, vice a long-range perspective plan. Gansler stated:

Although the reforms that have given us the current system were designed to instill orderliness and encourage rationality in the budget process, in many respects these improvements have not yet come to pass.³⁴

The U.S. strategists and policy makers must revert back to the basics. They must first determine the potential conflict the U.S. might find itself facing in the future, and then plan accordingly to select the proper weapon systems and force structure needed to fight that conflict. This is what PPBS was designed to do from the beginning. As any politician will admit, this is a task much easier said than done. As the Honorable Russell Murray, former Assistant Secretary of Defense for Program Analysis and Evaluation during the Carter Administration, stated in a recent interview:

I thought for a long time that the biggest problem, and probably the most elemental problem of all, is we don't have a rational way of determining our national security policy. We just completely miss the idea of matching ends with means, deciding what it is that [the U.S.] would like to do . . .³⁵

³⁴Gansler, 102. Gansler cites 4 specific examples: (1) if Congress makes changes in the budget on which it is conducting hearings, there is a direct effect not only on the DoD's plans for that year but also on the two other "out-year" budgets that the DoD is concurrently planning; (2) in the executive branch, the tendency is to focus all attention on the budget for the next year due to pressures from the Congress and DoD to economize; (3) the executive branch tends to budget for inflation using overly optimistic estimates for the coming year; and (4) there is a major difference between the amount Congress authorizes the DoD to spend in any one year and how much the DoD actually lays out in payments during that year.

³⁵Russell Murray, Hon., former Assistant Secretary of Defense for Program Analysis and Evaluation during the Carter Administration, interviewed by author, 22 October 1990, Alexandria, Virginia, tape recorded.

The determination and declaration of a national security policy by the chief executive is, unquestionably, the first essential step in the PPBS procedure. Whether or not the present administration, or past administrations, has successfully produced a clear and concise policy statement is up for debate. Mr. Murray clearly felt the present administration had failed to do so, therefore, the present disagreements between Congress and the president over future defense spending is due, in part, to the absence of such guidance.

There are many others who believe the present administration has clearly stated its policy objectives regarding national defense. As Dr. James G. Roche stated:

The reason Russ Murray can say with a straight face that the administration doesn't have a national security policy, is that the administration has not articulated national security policy with which Russ Murray agrees. I know Russ very well. Factually, there are documents that come out at the beginning of each year, its called National Security Policy, just as the Congress asks for. It is reflected in the statements from the State Department. It is reflected in the Chairman's brief to the Congress. It is reflected in the Secretary's posture statement. It exists. It ain't bad as a global [policy], but it isn't what Russ [Murray] wants.³⁶

³⁶James G. Roche, Ph.D., Vice President and Special Assistant to the President and CEO of the Northrop Corporation, interviewed by author, 26 October 1990, Los Angeles, California, tape recorded. Prior to joining Northrop, Dr. Roche was the Democratic Staff Director, Senate Armed Services Committee, where he worked for Senators Scoop Jackson and Sam Nunn. Dr. Roche had earlier served as the Principal Deputy Director of the State Department's Policy Planning Staff during 1981 and 1982, served as a senior professional staff member of the Senate Select Committee on Intelligence (1979-80), and was Assistant Director of the

As Dr. Roche stated, the White House publishes a document at the beginning of each calendar year entitled National Security Strategy of the United States, which specifically outlines the administration's national security policy. In addition, the present administration has re-enforced its security policy in public statements, such as the president's speech to the Aspen Institute Symposium on 2 August 1990, and the Secretary of Defense's speech to the International Institute for Strategic Studies on 6 September 1990. The problem is that there are 535 other "Secretaries of Defense" in Congress who have their own personal idea of what the U.S.' national security policy should be. Therefore, the president's policy statement is virtually ignored, particularly by the membership of the opposite political party.

Assuming the president has articulated a concise national security policy, the PPBS process has the foundation required to successfully begin and fulfill its requirements. One of the major setbacks of the system is not the system itself, but the failure of Congress to work under the same guidelines of PPBS.

PPBS assumes that after the national security policies are clearly stated and objectives are outlined, the means (i.e. weapons required, force levels needed, etc.) to meet those objectives are programmed into the process and long-range

Office of Net Assessment in the Office of the Secretary of Defense (1975-79).

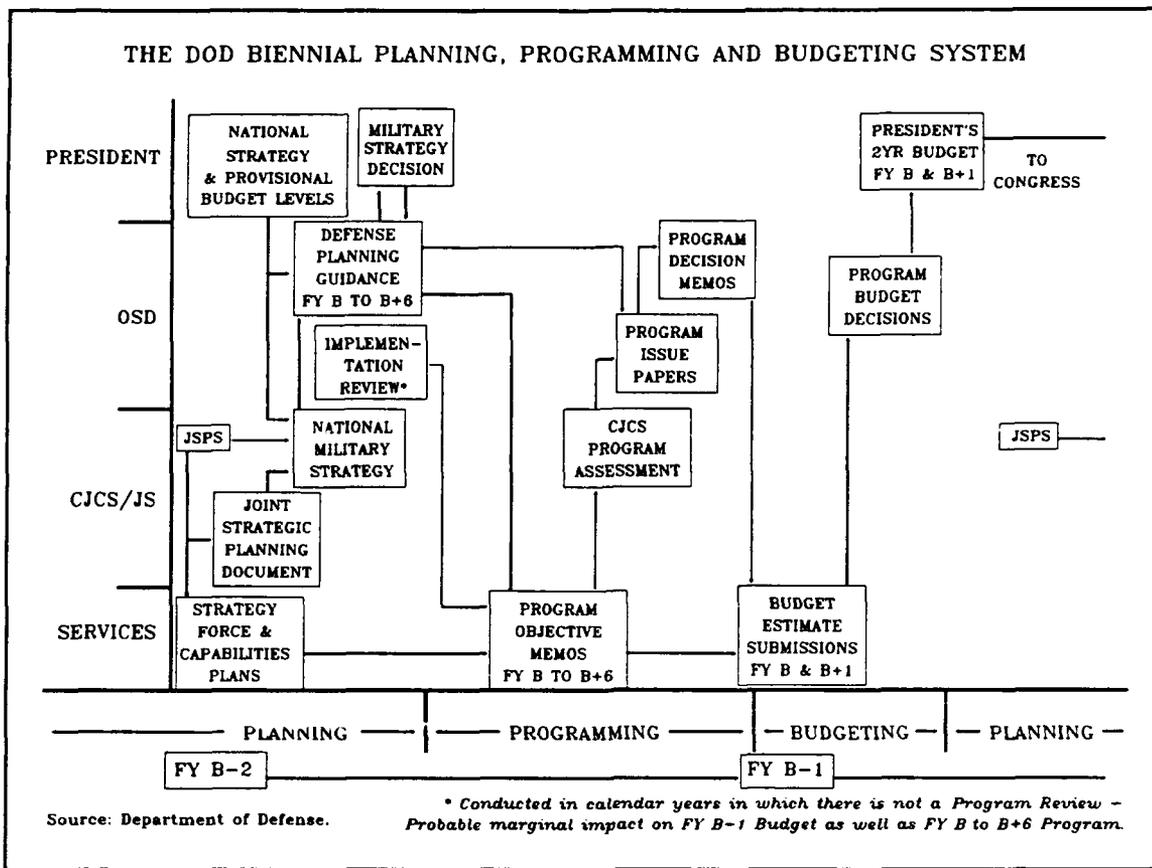


Figure 6

spending is allocated to fund them. Until Congress adopts a longer view of defense spending, the original objectives of PPBS will not be realized.

DoD continues to operate under the assumption that PPBS is alive and well. Figure 6 illustrates the process by which DoD operates today. However, for the most part, their efforts are in vain as long as Congress only funds for the short-term, and continually changes procurement quantities from year to year on existing programs. There must be more stability in the defense budget and procurement system before real defense objectives will be met, and real dollar savings will

be realized over the long-term as PPBS was designed to produce. The need for stability within the Pentagon's budget is also important for rebuilding the industrial base.

C. THE NEGLECTED INDUSTRIAL BASE

One of the most serious military concerns facing the U.S. in the '90's, especially in light of future cutbacks in defense spending, is the strength of the industrial base. As stated by The White House:

The defense industrial base must be strong, and include manufacturers that are highly flexible and technologically advanced.³⁷

The problem has been that the U.S. government, both the executive and legislative branches, have relied on the large defense contractors and market conditions to maintain an adequate number of subcontractors and part suppliers. This strategy has not worked.

The decision-makers have been content to make statements, much like the one above, without much more involvement or interest in the problem. As a result, the present health of the U.S. industrial base is poor in terms of its capacity to surge if necessary to respond to crises that may develop. There are probably three primary reasons why this situation developed:

³⁷The White House, 32.

- instability in the defense market place;
- the excessive amount of government regulations throughout the defense industry; and
- a reduced demand, and therefore, a reduction in the required suppliers due to the absence of any conflict over the years.

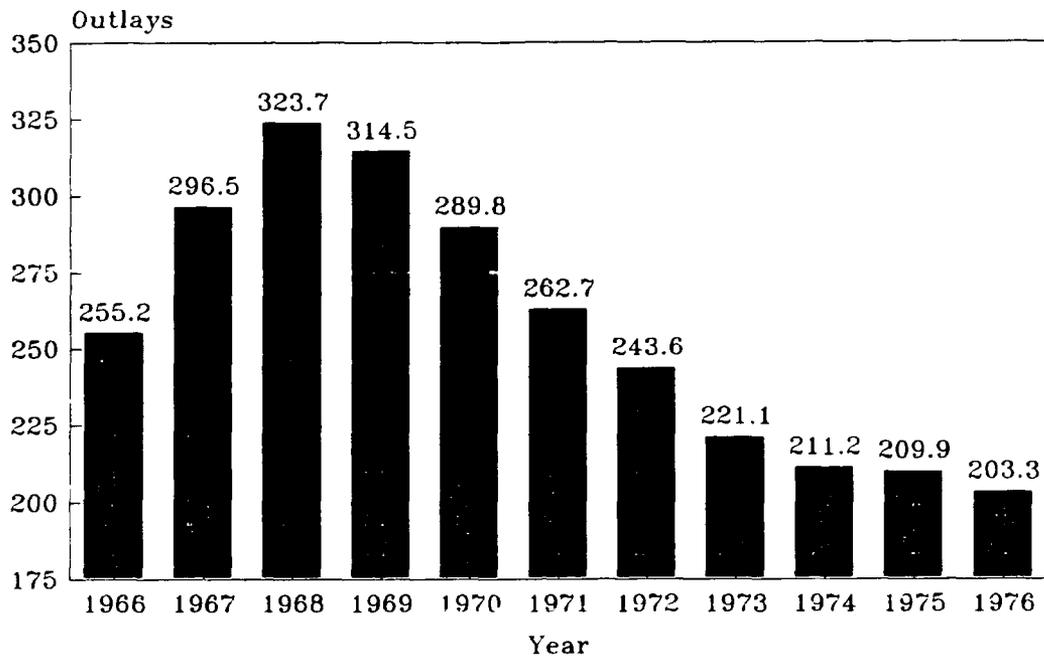
In addition to the above factors, there has been a willingness to ignore the problem in hopes that it would either cure itself, or not be necessary to rely on the industrial base because of the maintenance of peace around the world.

Although the industrial base is in poor condition, the majority of the large defense contractors themselves are not in jeopardy of collapse. The defense industry has been down this road once before during the post-Vietnam era, and during a much tougher economic environment. At that time, many of the largest defense contractors were forced to look for new areas to diversify, or face virtual extinction due to a lack of business.

At the height of the Vietnam War, military spending peaked at \$323.7 billion (in 1990 dollars), then continually declined to a low of \$203.3 billion by 1976 (see Figure 7). Companies such as General Motors, Boeing, United Technologies and General Electric have since become much more dependent on their civilian businesses, and less concerned with defense contracts (see Figure 8). Boeing's commercial backlog alone

U.S. MILITARY SPENDING 1966-1976

(in billions of 1990 dollars)



Source: William W. Kaufmann, "A Plan To Cut Military Spending In Half,"
The Bulletin of the Atomic Scientists (March 1980): 37.

Figure 7

has grown from \$18.6 billion in 1985 to \$73.9 billion at the end of 1989.³⁸

Other companies, such as General Dynamics, McDonnell Douglas, Grumman and Lockheed, have continued to rely heavily on the government for business, and as a result, have good reason to be concerned of future budget cuts. The Defense Budget Project, a Washington think tank, predicts that defense spending will fall by 13.6 percent, to \$261 billion, by 1995,

³⁸"The Pentagon's menagerie," The Economist, 16 June 1990, 69.

and to perhaps \$225 billion by the year 2000. As outlined in an article for Business Week magazine, cutbacks in defense spending of this magnitude will have detrimental effects on the labor force around the country.

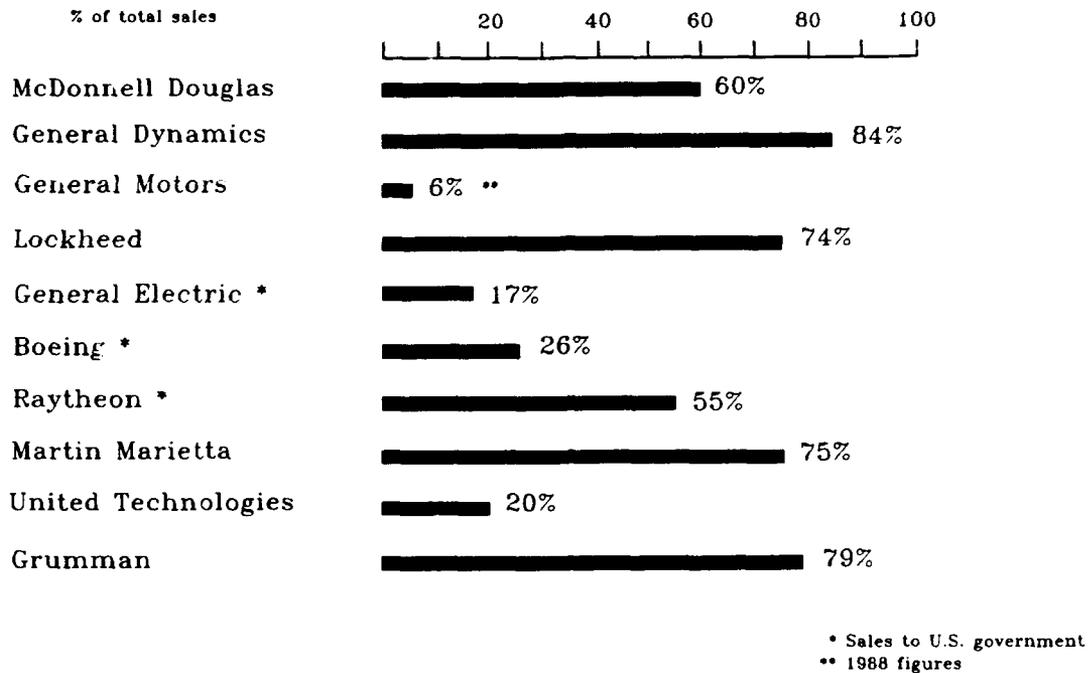
Economic forecaster DRI/McGraw Hill predicts that perhaps 1 million defense-related jobs could vanish between 1989-1995, including 830,000 in the private sector, or 20% of all jobs in defense-related industries. And the people who lose them, workers with specialized skills in building ships or guided missiles,³⁹ will find few comparable jobs in commercial industries.

The real problem of the industrial base lies in the lower tiers below the large defense contractors: the subcontractors and parts suppliers. This is where the effects mentioned above will be felt the hardest, and do the most damage to the industry as a whole. Other variables such as the reduction in demand for parts, the excessive requirements and regulations on the manufacturing of components, and an over dependence on the government for business, threaten to further eliminate, or severely damage, more companies in the lower tiers.

Even companies who feel fairly secure with their future position are preparing for the rocky road ahead by cutting back where ever possible to reduce future costs. William J. Hunter, Manager of Tiburon Systems, Inc., Washington D.C. Operations (a leading supplier of software to various weapon systems), stated that their company has been "forced to let

³⁹James E. Ellis, Eric Schine, et al., "Who Pays for Peace?" Business Week, 2 July 1990, 64-65.

TOP 10 U.S. DEFENSE CONTRACTORS' DEPENDENCE ON THE PENTAGON



Source: "The Pentagon Menagerie," The Economist,
16 June 1990, 70.

Figure 8

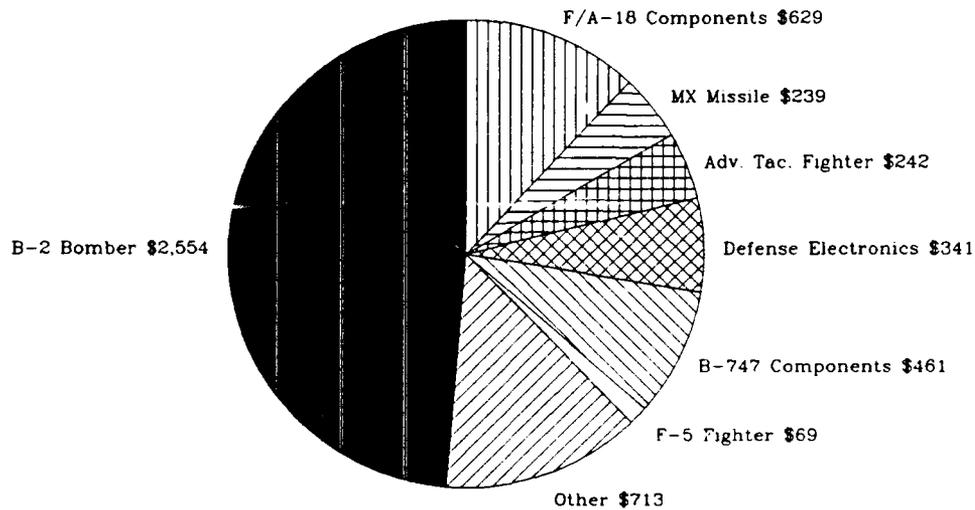
go 20 or 25 people this year." The numbers seem small at first, however, the company only employs approximately 200. He pointed out that the reduction in defense spending has forced his company to "become more efficient" throughout their operations.⁴⁰

Other companies, some of which would not be considered small businesses, are in jeopardy of losing much more as

⁴⁰William J. Hunter, Manager, Tiburon Systems, Inc., Washington D.C. Operations, interviewed by author, 22 October 1990, Crystal City, Virginia.

Northrop's Dependence on Stealth Bomber 1989 revenues from major programs (in millions)

Total 1989 revenues: \$5,248 million



Source: Richard W. Stevenson, "Scandals, cutbacks may ground Northrop," San Jose Mercury News, 31 October 1990, 1C.

Figure 9

spending cuts are made. Northrop's B-2 program, having just weathered another storm at the end of FY-90, is undoubtedly in for more difficult times as more concern is raised over the high costs and necessity for future U.S. defense needs. As Figure 9 illustrates, Northrop relies heavily on the B-2 program as a percentage of its total revenues from major programs. As Richard W. Stevenson reported:

Northrop can survive without the B-2, albeit as a smaller⁴¹ company. But it probably will never thrive again

Northrop is probably not in any immediate danger of collapse. However, drastic cutbacks in defense spending, especially the outright elimination of major programs such as the B-2, would undoubtedly have a detrimental effect on the industrial base as a whole, both in terms of the loss in its capacity to surge if needed, and through the signal which is sent to other firms who may be considering government contracts in the future. If firms such as Northrop can be damaged by budget cuts, more companies will be less likely put up with the governmental bureaucracy required in the defense industry, and more defense firms will, if able, look toward the commercial sector for future business. This will result in a further reduction of the critical suppliers necessary in a crisis situation.

Gansler pointed out an example that clearly shows the problem is not a new one. In 1974 Congress authorized a doubling of tank production. Despite the fact the Army had insisted, if necessary, it would be able to double production, initially the Army could not produce the tanks in increased numbers. Gansler wrote:

Surge capability, through excess capacity (including extra capital equipment) was built in at the prime-contractor level, but at the lower level there was neither sufficient

⁴¹Richard W. Stevenson, "Scandals, cutbacks may ground Northrop," San Jose Mercury News, 31 October 1990, 1C.

capacity nor competition. Thus, both the benefits of peacetime competitive efficiencies and the benefits of wartime surge capability were totally lost. Perhaps most surprising, the DoD had failed to notice the problem.⁴²

The lack of a surge capability is not the only problem that needs to be addressed. There is one other very important point to consider with regard to the shrinking number of critical subcontractors and part suppliers. The decreasing availability of critical parts and systems in the U.S. will force a reliance on suppliers outside the U.S. A growing dependence on foreign suppliers for critical components within weapon systems is not healthy to U.S. national security. Gansler wrote:

The U.S. defense industry is now heavily, if not totally, dependent on foreign sources for computer memory chips, silicon for high-powered electronic switching, gallium arsenide-based semiconductors for high-speed data processing, precision glass for reconnaissance satellites and other military equipment, liquid crystal and luminous displays, and advanced fiber optics.⁴³

Daniel Burstein wrote of the problem:

Japanese Consumer technology is so studded with military applications that a majority of all new American military hardware systems use at least some components made in Japan. Carbon-fiber composites originally developed in Japan for tennis rackets are now used in U.S. jet fighter frames. Electro-optics breakthroughs in Toshiba's home

⁴²Gansler, 259-260. Gansler cited a number of other examples where the U.S. has been unable to meet increased demands for weapon systems, and discussed other problems confronting the condition of the industrial base.

⁴³Ibid., 271.

video equipment are used in the Pentagon's most advanced missile guidance systems.⁴⁴

A report released 31 July 1990 by the Defense Science Board, conducted for the U.S. Department of Defense, also warned of the growing threat of foreign dependence. The report stated:

[Because foreign firms now dominate] the leading edge of many critical technologies . . . successive generations of ⁴⁵weapons are increasingly dependent on foreign parts . . .

In response to the report, Secretary of Defense Richard Cheney warned:

The United States cannot persist in its current laissez-faire approach to the competition in advanced technologies without incurring major economic and security problems of its own in the future.⁴⁶

The U.S.' interdependence on critical parts for weapon systems is alarming to consider in view of its perceived strength in advanced weapons and technology. The U.S. can only hope, if the need does present itself, that its adversary is not a leading supplier of a critical component. The problems with the industrial base will have to be addressed at some point. The politicians must decide whether to tackle

⁴⁴Daniel Burstein, YEN! Japan's New Financial Empire and Its Threat to America (New York: Ballantine Books, 1988; postscript 1990), 286.

⁴⁵Robert A. Rankin, "Foreign takeovers called a threat," San Jose Mercury News, 1 August 1990, 1F.

⁴⁶Ibid.

it now, or put it off as they have until a real crisis forces a quick solution to the issue.

Of all the problems being addressed in this paper, the current dilemma over the industrial base is probably the most difficult to solve. The United States was founded and grew to "superpower" status on the principles of free enterprise and competition. The introduction of governmental regulations, no matter how small or seemingly insignificant, to solve the various problems which arise from time to time throughout this country's infrastructure, only diverts this nation's path from the direction our founding fathers intended upon conception.

There are those who would argue that the problem of the industrial base belongs to the DoD. There are others who blame the lack of governmental intervention. No matter who is to blame, or what, if any, solution is instituted to try and correct the deficiencies, there will remain those who disagree with the steps taken, and those that will argue that the government isn't doing enough.

D. THE THREAT TO THE U.S.' TECHNOLOGICAL SUPERIORITY

Throughout the years, the United States has remained strong militarily through possession of the most technologically advanced military in the world. It was not, necessarily, through possession of the largest military force. Of course, the U.S. military structure has grown substantially

in the past decade, and its large size is a factor that must be considered by potential adversaries. However, since the end of World War II, it has primarily been the superior technology of the U.S. arsenal that has deterred the Soviet Union from any aggressive behavior in Europe, or toward America. The Soviet Union undoubtedly possessed the larger military force of the two superpowers, so there had to be something other than sheer numbers deterring them from attack.

1. The Importance of Continued Research and Development

It is the natural tendency of most human beings to strive to better their welfare and environment. This progressive behavior has been the catalyst for scientific research, and responsible for the world's high standard of living today. Without investments in R&D, the airlines would still be flying two engine, reciprocating propeller aircraft (if they existed at all), the earth would be a much more polluted place, and the moon would be unexplored. The U.S. must be careful not to obstruct the progress of R&D, because of the demand to realize short-term savings.

In FY-60, President Eisenhower's last budget, 80.3 percent of federal R&D expenditures went for defense projects. By FY-79, midway through the Carter administration, the portion of federal R&D obligations going for defense had declined to 48 percent. In President Reagan's 1983 State of the Union Address, he stated:

This administration is committed to keeping America the technology leader of the world now and into the 21st century.⁴⁷

By FY-87, the portion of federal R&D expenditures spent on defense had climbed to a high of 73 percent. In FY-88, DoD spending for all categories of R&D comprised about 62 percent of all federal R&D spending. DoD spent \$38 billion while the entire federal government spent about \$61 billion. The total expenditures on R&D in the U.S., including private sources, totaled about \$130 billion.⁴⁸

Statements made by President Bush indicate his recognition of the importance of continued R&D funding. In remarks made by the president at the Aspen Institute Symposium on 2 August 1990, he stated:

Time and again, we have seen technology revolutionize the battlefield. The U.S. has always relied upon its technological edge to offset the need to match potential adversaries' strength in numbers.

And we must realize the heavy price that we will pay if we look for false economies in research and development for defense. . . . The nature of national defense demands that we plan now for threats on the distant horizon.⁴⁹

The federal government funds nearly half of the total investment in R&D each year. This investment is not for the

⁴⁷James Savage, "Federal R&D Budget Policy in the Reagan Administration," Public Budgeting & Finance (Summer 1987): 37.

⁴⁸Breck W. Henderson, "U.S. Defense Budget Cuts Could Imperil Nation's Research and Development Effort," Aviation Week & Space Technology, 18 December 1989, 38.

⁴⁹The White House, Office of the Press Secretary, Remarks by the President to the Aspen Institute Symposium, 2 August 1990.

sole purpose of research into more destructive weapon systems. It is also going to pay the salary and expenses of scientists researching a number of projects, some of which may have implications for civilian use, as well as the military. Boeing's High Technology Center, Lawrence Livermore National Laboratories, and NASA Ames Research Center are just a few places where this work is carried out.

The greatest threat to U.S. national security is losing the technological lead. Weapons projects should not be continued only to save the corresponding R&D growth, however, before Congress places programs on the chopping block, they should be required to resolve how to save and continue the technological progress.

For example, if it is decided by Congress that the B-2 does not have a mission in today's force structure, that does not necessarily mean it won't be needed in future years. To abandon all of the progress achieved to date would be a gross waste of the taxpayer's money, no matter what the savings would be in the short-term. Progress must be preserved and continued. Breck W. Henderson wrote:

R&D is viewed as a "luxury" that can be painlessly done away with. Generals cannot fly in it or shoot it and Congress sees few voters employed by it, so it is the first item to be cut when spending must be reduced.

Before some of this nation's best scientists and engineers who are working in defense-supported research and development projects are thrown out of work by hurried

spending cuts, I believe we must think carefully about what that may do to our technology base.⁵⁰

If reductions are to be made in federal or defense R&D expenditures, then careful consideration should be made to redistributing the funds into civilian research institutions and projects. To assume that the money saved from a reduction in defense R&D spending would be redirected into civilian R&D projects, is the wrong assumption. As Dr. Roche stated:

. . . but the people who want to link the defense investment, are assuming that if they didn't put money into defense R&D they will be putting money into civilian R&D. And my argument is, oh really? And how would they make those choices?⁵¹

Some would argue that the United States has been paying the bill for the major portion of R&D, while most of the industrialized world has gotten a free ride from the U.S.' generosity and blundering. To some degree this may be true, however, the U.S. can not simply stop all its efforts in hopes that some other country will continue the progress and share their future discoveries. Such a strategy would place the U.S. in a much more vulnerable position.

At the same time, it should not be necessary for the U.S. to sink large sums of money into prototype development to test each new discovery. The funding of basic research should remain the number one priority and concern of U.S. efforts. Prototype testing and full-scale development should

⁵⁰Ibid., 39.

⁵¹Interview with Dr. Roche.

only be funded after a detailed analysis into the real need for the technology and its application in the future U.S. force structure.

2. The Threat to the U.S.' Lead in Aerospace Technology

The United States cannot afford to give up its quest to remain technologically superior, even though the fight to remain there is getting tougher. Today, more and more industrialized countries are gaining ground on the U.S.' lead in all categories of science. In fact, it can be argued that the U.S. only holds the absolute technological lead in one major area, "aerospace," and that lead is being threatened.

The U.S. remains the world's aerospace leader. Aerospace products are America's leading export, however, since 1985, the U.S.' share of the global market has declined from 73 to 62 percent, while the European share has increased from 21 to 31 percent. This market is clearly one example where, many feel, the U.S. has contributed to its own decline through the sharing of R&D technology. Japan is probably the one country who has capitalized the most through U.S. assistance, although, certainly not the only country threatening the U.S.' dominance in the industry.

In order to expedite an advancement in the field, Japan had to rely on the assistance of an established expert to gain the required aerospace knowledge. Japan chose to look toward the U.S. for this assistance, as would be expected due

to the close security ties between the two countries. They managed to acquire the technology through a number of cooperative ventures between U.S. and Japanese companies, such as Japan's coproduction with McDonnell Douglas of the F-15, the present mainstay of the Japanese Air Self-Defense Force; and Boeing's venture with Mitsubishi Heavy Industries (MHI), Kawasaki Heavy Industries (KHI), and Fuji Heavy Industries (FHI) on the production of fuselage components for the 767 aircraft, of which the Japanese companies have achieved a cost/quality advantage.⁵²

U.S. concern over the escaping aerospace technology, and its possible affect on U.S. national security, was very discernible during the controversy over the FSX⁵³ cooperative venture between Japan, lead by MHI, and General Dynamics. In the beginning of 1989, U.S. Commerce Secretary Robert A. Mosbacher questioned the security of the technology transfer involved with the original FSX agreement between Japan and the Reagan administration. His concern sparked a series of heated debates in Congress over the risks involved with the FSX venture.

America is feeling the growing aerospace competition in Europe as well. In 1989, Daimler-Benz made great strides

⁵²John R. Harbison, "Japan's Emerging Aerospace Industry," USA Today, March 1990, 34.

⁵³The FSX, short for Fighter Support Experimental, will be the follow-on aircraft for the Japanese Air Self-Defense Force. It is intended to replace the ageing F-4's and F-15's.

to acquire a large share of the country's aerospace market. Already purchasing two leading aerospace firms, Motoren-und-Turbinen-Union (MTU) and Dornier, Daimler then acquired West Germany's largest, the Bavaria-based Messerschmitt-Bölkow-Blohm (MBB). The three firms were combined to form Deutsche Aerospace with annual sales of around DM14 billion (\$7.5 billion), roughly the same size as British Aerospace. This venture alone was enough to frighten the critics in Europe. As reported in The Economist:

Critics complain that Daimler will have excessive power in aerospace and military hardware and be too big a recipient of government contracts and money.⁵⁴

To further complicate the U.S.' concern, on the 3rd and 4th of March this year, secret discussions were held between West Germany's Daimler-Benz and Japan's Mitsubishi in Singapore. The outcome of the discussions was a plan for cooperation and technological exchanges in three fields: (1) aerospace; (2) electronics; and (3) services.

Less than a year after Daimler-Benz develops into a potential leading competitor in aerospace, they conclude a cooperative agreement with Mitsubishi. Is this a deliberate move on the part of Mitsubishi, or just coincidental timing in relation to the Boeing and FSX deals? One can only guess, however, just days after the discussions in Singapore, the chairman of MHI announced his firm would build a 75-seat

⁵⁴"Daimler-Benz: On the runway," The Economist, 8 April 1989, 72.

commuter plane with Deutsche Aerospace. As it turned out this announcement was a little premature on the part of MHI's chairman, Yotaro Iida, and sparked a series of denials throughout Mitsubishi Corporation and Daimler-Benz.⁵⁵ However, it indicated the volatile nature of this new cooperation effort between the two conglomerates.

The intricate reverberations possible with this deal between Daimler and Mitsubishi are fascinating! Boeing's leading European competitor is the European consortium of Airbus Industrie, of which MBB is a partner. Through their new deal, Mitsubishi not only serves as a subcontractor for Boeing, but now also is a partner with MBB. Along with their co-development project with General Dynamics, Japan has managed to gain a penetrating insight into aerospace technology around the world.

Deutsche Aerospace, through their cooperative venture with Mitsubishi, has gained access to Japanese technology, which, as we have discussed, has important implications to U.S. national security. The repercussions possible throughout the world aerospace market because of the Daimler-Mitsubishi accord are only limited to the imagination. It will be very interesting to watch future events for their impact on an already volatile situation. The discussions in Singapore excluded talks on defense related issues, due primarily to

⁵⁵Jeff Shear, "German-Japanese Flirtation Sure to Produce U.S. Jitters," Insight, 16 April 1990, 37.

Japan's self-imposed ban on arms exports. However, there are differing opinions as to just how long such a ban will last.

3. Other Considerations

As more and more pressure is placed upon the policy-makers to reduce defense spending, the threat to U.S. national security through the decline of technological superiority becomes all the more important. The technological advancement within the industrialized countries of the world can affect U.S. national security through indirect means. It became of foremost concern after Toshiba Corporation exported computer-guided propeller milling machines to the Soviet Union, which severely damaged the U.S.' technological advantage in submarine noise reduction. However, despite this concern, the U.S. continues to provide Japan with access to technology critical to its national security.

In 1987 the U.S. and Japan signed an agreement establishing the conditions for Japan's participation in the Strategic Defense Initiative (SDI) research. With the recent debate within the U.S. Congress over future funding for SDI, one wonders what will become of the progress made to date. Is it conceivable that Japan could continue to pursue the project, and may some day acquire such a system? Burstein wrote:

Having brought Japan into the initial stages of Star Wars research, the United States may at some point abandon the program as too costly or unworkable. Japan, with its combination of high-tech proficiencies and financial

resources, may be quite willing to develop and perfect such a system.⁵⁶

All of the above mentioned issues require the attention of the U.S. executive and legislative branches of government. They are all affected, either directly or indirectly, by the budgetary priorities and decisions. The U.S.' technological edge, or what remains of it, should not be sacrificed because of a failure by the policy-makers to recognize the problem until its too late.

⁵⁶Burstein, 291.

III. REFURBISHMENT OF THE SYSTEM

The refurbishment necessary within the governmental bureaucratic system to lessen the detrimental affects of budget cutbacks on the U.S. national security posture can not be focused on one individual branch or department of government. The necessary changes must incorporate both the executive and legislative branches, as well as the Department of Defense. The required refinements are not designed to improve conditions within that particular area of government alone. Instead, the changes must work in conjunction with an awareness and cooperation from the other components of the process to more effectively transform the system.

Without the recognition and cooperation by all involved, the process will continue to frustrate both the American people and the membership working within the system. But more importantly, without full cooperation within the three decision-making components which primarily affect U.S. national security (i.e., DoD and the executive and legislative branches), any meaningful exertion by only one component will go unrewarded in terms of the benefits possible with sweeping enthusiasm by all involved. It will not be easy!

This thesis is not attempting to expel reality through a miraculous transformation of the process overnight, nor is a miraculous transformation required. The democratic system of

government that has been in place within the U.S. for well over 200 years may not be the most efficient governmental process, and it may have a number of weaknesses. However, the fundamental principles upon which the country was founded remain sound, and they have successfully proven themselves to be far superior to any other political bureaucracy which has challenged those principles in modern times.

The U.S. governmental foundation is not in need of reform. The following recommended changes are only to those bureaucratic appendages which have grown over the years into counter-productive elements within the process. The following sections will address specific problem areas within each of the primary components which influence the U.S. national security posture: the Department of Defense, the president, and the Congress.

A. THE DEPARTMENT OF DEFENSE

It does not fall within the scope of this paper to address all the current problems or needed improvements within the DoD's procurement and acquisition process.⁵⁷ A paper of that scope and magnitude would provide a very challenging task for a Doctoral Dissertation alone. This thesis addresses the

⁵⁷See Jacques S. Gansler, The Defense Industry (Cambridge: The MIT Press, 1980); and also Gansler, Affording Defense (Cambridge: The MIT Press, 1989). On competition see Donald L. Pilling, Competition in Defense Procurement (Washington D.C.: The Brookings Institution, 1989).

needed changes which will impact the efficiency of DoD's operations, thus, providing a more receptive framework for effective utilization of allocated resources. Progress in this area has, and will continue to be slow in its development simply because of the complex bureaucracy and intricate economic relationships throughout the defense industrial base.

There have been numerous improvements within DoD in recent years toward the correction of deficient areas throughout the department. Unfortunately, not enough of the change has been due to DoD's initiative and concern for the problems. Primarily, change has come as a result of investigations from outside parties. Examples of such outside involvement include the "Presidential Blue Ribbon Commission on Defense Management" lead by David Packard in 1986, and more currently the "Ill Wind" investigation looking into fraud throughout the Pentagon's procurement process.⁵⁸

Some would say that investigations from parties not connected with DoD is the only way meaningful change will manifest itself and lead to a betterment of the process. DoD must begin to dispel that supposition, through the enactment

⁵⁸The "Ill Wind" investigation does not focus so much on the wrongdoings within DoD, as it does the fraud between defense executives and industries. So far, the investigation has lead to the convictions of 39 defense executives and consultants, former government officials, and corporations. It focuses on efforts by U.S. defense companies to obtain classified government documents that helped them win lucrative contracts. "Probe of defense-buying fraud picks up force for new phase," San Jose Mercury News, 23 November 1990, 12A.

of more critical self-examinations of its own operational procedures.

The reason is simple. Much of the change within DoD has been brought about because of the growing concern among the American public over the effective use of limited resources throughout the government. A primary catalyst for the increased attention and criticism over DoD's internal operations is due to unfavorable disclosures concerning fraud, waste, and abuse throughout the system. Simply stated, both the Congress and the American people have lost confidence in DoD's ability to efficiently conduct business.

Therefore, the first step in the process is, without question, for DoD to regain the confidence of the Congress and the American people. As Russell Murray stated:

If there is a lack of trust between Congress and the Pentagon, that idea of long-range commitments will never come up. If the military services really want to have longer term commitments, and I think there are a lot of good arguments to have them, they just have to be much more open about how they [manage programs].⁵⁹

1. Fraud, Waste, and Abuse

The Packard Commission conducted a survey in 1986 and noted that Americans believe, on average, that half the defense budget is squandered away on waste and abuse.⁶⁰ How can one really blame the public when stories surface about

⁵⁹Interview with Mr. Murray.

⁶⁰Gansler, Affording Defense, 195.

\$640 toilet seats for military aircraft, and \$435 hammers?⁶¹ Disclosures such as these were the impetus for a flurry of investigations into the military's procurement process beginning in the '70's. This growing anxiety among the American people over the credibility of military spending, only heightens concern when one hears of revised estimates of the increased costs associated with military procurement (e.g., projections in August of \$840 million per B-2 aircraft due to plans to cut production in half).⁶²

The most important step in the process of restoring America's confidence is to take the initiative to uncover its own internal problems. So long as the Congress and the American people believe that only the investigations conducted by impartial parties will deliver results, confidence will continue to suffer. Examinations initiated by the executive branch do not count as internally conceived. The source of the internal examinations must be no higher than the members of the Joint Chiefs of Staff (JCS).

These internal examinations, or inspections, must critically appraise the intricate activities ongoing in all phases of their budgetary process. The task will be large and time consuming! However, the long-term effects of regaining

⁶¹Eric Schmitt, "No \$435 Hammers, But Questions," The New York Times, 23 October 1990, 16.

⁶²Eric Schmitt, "House Panel Votes to Cut Off Bomber," The New York Times, 1 August 1990, A10.

public respect will more than offset the short-term costs required to do the job.

When internal problems are discovered, they must be publicly acknowledged. If the problem is due to some iniquity or negligence within DoD, then the rectifications must be expedient and comprehensive. If the problem is due to the indecorous behavior by some defense contractor, the issue must be brought to the attention of the government.

Positive measures are already being taken in this direction, however, more of the same need to continue. One example is the Air Forces' investigation into its own dealings with the Northrop Corporation, which was lead by Brigadier General Robert Drewes. Drewes said he found "some problems" in every program he investigated, some of which included the B-2 stealth bomber, the Tacit-Rainbow anti-radiation loitering missile, and the ALQ-135 jammer.⁶³

It should also be pointed out that this investigation did not place all the blame on Northrop. There was some question as to the Air Forces' role. Drewes apparently avoided questions which involved the Air Force acquisition chief John Welch, but did comment, "I was impressed by the scope of the problems."⁶⁴

⁶³Jessica Eve Budro, "Air Force Investigators Say Every Northrop Program is Substandard," Inside the Pentagon 6, no. 41, 11 October 1990, 11.

⁶⁴Ibid.

Wrongful practices by defense contractors must be punished! The punishment must be sufficient to deter future temptation by the same company and others to repeat the crime. Critics maintain that the results of investigations such as "Ill Wind" are only transitory, due to the excessively light punishment (i.e., in many cases only hefty fines or jail terms for involved personnel). They insist that fraudulent business practices must be punished by barring defense contractors from future business with the Pentagon.

The Pentagon's argument is that such punishment would jeopardize national security through further deterioration of the industrial base. If companies such as Grumman and Lockheed, with 79 and 74 percent (respectfully) of their total sales going to the Pentagon,⁶⁵ were barred from future defense business, one could see how this argument would be true. Nonetheless, punishment must be administered, and it must be sufficient to deter further offenses.

In order to minimize the detrimental effects on the industrial base, the Pentagon should adopt a program of punishment which would prohibit companies from bidding on future defense contracts for a specified period of time (of course, in addition to continued stiff penalties of fines and imprisonment when necessary). This program would not severely damage their present industrial structure or the contracts

⁶⁵"The Pentagon's menagerie," The Economist, 16 June 1990, 70.

already established. However, it would provide the necessary deterrence within the defense industry to prevent companies from the considering wrongful practices.

The services must not be afraid of disturbing the status quo of present day operations. If the job is done properly shake-ups will, undoubtedly, occur throughout the system. What must not happen is a half-hearted attempt to appease the American public and Congress with a superficial internal examination which does nothing more than increase paperwork. The services must not under estimate the public's intelligence. If a weapon system is not meeting design specifications, or if a defense contract was fraudulently acquired, then DoD must be the one to "blow the whistle," not the network news, or shows like "60 Minutes."

2. Declarative Policy and Defense Capabilities

The present day military structure has been thoroughly bombarded with criticism that it has been too structured toward fighting the East-West war in Europe (and critically questioned if it could successfully accomplish that mission), especially, since most administrations truly felt such a war would never materialize. The bombardment intensified with the recent mobilization of forces to Saudi Arabia and the Persian Gulf region. The criticism was not without justification, nor did it fall on deaf ears. In order to win the respect of the

American public, the Pentagon must begin a campaign to "put its money where its mouth is."

It is one thing to declare certain capabilities in order to deceive an enemy into believing the corollary circumstances of aggression would be unacceptable in terms of the damage and personnel losses sustained. It is another to deceive one's own country into believing its national security posture is much more capable than it really is, permitting a false sense of security to permeate within government. The Pentagon has not deceived its government, however, there appears to be some question, both within government and the American people, as to the military's true capabilities, primarily due to disturbing reports from the media of military equipment and systems not capable of performing as advertised.

If weapon systems do not work as advertised, whether it is because of a deficiency in the military or the defense industry, that issue must be brought to the attention of government. Publicizing such information as early as possible accomplishes three important goals:

- it will clearly outline the true capabilities of military hardware, thus, leaving no doubt as to the status of the U.S. national security posture;⁶⁶

⁶⁶Of course, national security should not be jeopardized just to ensure the flaws within the military are made public. There is a fine line which must be observed in accomplishing this goal.

- it will assist in the restoration of public confidence in the Pentagon's ability manage its own internal affairs; and
- it will shift some of the responsibility for correcting the problems to the executive and legislative branches, for ultimately they are responsible for providing resources and needed attention to deficient areas.

Defense Secretary Cheney has committed himself to improving the defense acquisition process, by streamlining operations and insuring weapon systems work properly. His commitment only intensified after personal embarrassments, such as the time he testified the Navy's A-12 program was on track, and only a few weeks later General Dynamics and McDonnell Douglas announced the program was at least a year behind schedule.⁶⁷

When dealing with the congressional process, DoD appears to be fighting an uphill battle. Even if Secretary Cheney successfully managed to streamline the procurement process, there is no guarantee the money will be used to offset the growing fiscal debt. As long as Congress continues to redirect federal funds toward such items as a \$5 million building for the Solomon Islands' 38-member Parliament and the \$100,000 study on how to protect people in New Mexico from falling space capsules,⁶⁸ the illusive "peace dividend" will continue to circumvent public recognition.

⁶⁷Schmitt, "No \$435 Hammers, But Questions."

⁶⁸Mark Thompson, "Congress cuts Pentagon, then adds its own projects," The Baltimore Sun, 23 October 1990, 1.

3. Congress in the PPBS Process

DoD should include Congress in the PPBS process. As mentioned earlier, DoD continues to operate under the principles of PPBS. However, their efforts are nullified as long as Congress continues to fund for the short-term, and changes the yearly procurement quantities of the various defense programs. As was illustrated earlier in Figure 6 (see page 51), Congress does not appear on the PPBS diagram until the president submits his final budget proposal for the new fiscal year. The president's budget proposal should not be the first time Congress is introduced to DoD's planning and programming objectives, especially when they are responsible for the ultimate budget.

Figure 6 should be redrawn to include Congress in both the planning and programming phase. The congressional micromanagement of the defense budget is currently much too time intensive (as will be discussed below), and further involvement by Congress during these phases would have to be restricted to an advisory position. However, this would provide Congress with an input to DoD's planning and programming strategy, and may inject more realism and stability into the process.

B. THE EXECUTIVE BRANCH

Although DoD must take the initiative to regain the public's confidence, the ultimate responsibility for the

actions within the department falls within the executive branch. They must provide the necessary oversight and direction to ensure the proper measures are taken, however, they must be careful not to extend unnecessary micro-management. To do so would undermine the attempts by DoD to regain the trust of Congress.

It is important to briefly note the political relationship between the president and Congress, because of the corresponding constraints due to the democratic party's majority in Congress. One can easily recognize the problems encountered by a Republican administration interacting with a Democratic Congress, or vice versa. One can also discern the advantages of an administration with a party majority in Congress. This relationship is significant in analyzing the process by which budgetary decisions are made within government.

This factor will be discussed in more detail in the following section. For now, let us suffice to say that the present political relationship between the executive and legislative branches of government is much too antagonistic. As was mentioned earlier, the strength of the U.S.' democratic system has been clearly demonstrated during times when it collectively joined together, no matter what political relationships or majorities existed. Both the current administration and Congress needs to recognize that now, because of the fiscal condition of the U.S.' economy and the

deployment of troops in the Persian Gulf region, it is crucial that the decision-makers within government abandon the childish rhetoric of political "soap boxes," in favor of a united stand for the good of the nation.

The president has his own problem areas which require attention, other than those specific to DoD. Both areas addressed below will assist in the establishment of a better relationship between the chief executive and Congress. Many of the problems and weaknesses within the government today could be more quickly and easily solved if the members of the bureaucracy would, simply, look through the "political cloud" blurring their vision of the real problems at hand.

1. More Realistic Economic Planning Assumptions

When asked, "Would the budget submitted by the president in January 1990, or for that matter any budget submitted by the executive branch over the years, successfully lead to a balanced budget in future years if Congress approved it as it was written?," Mr. Murray responded:

There was no real rationale behind the plan. It was a useless plan. There was nothing different about [their plan] than almost any other administration, Democratic or Republican. So much of [their budget] is extrapolation, and just based on what [the administration] got last year and what [the administration] can get away with this year. [There is] almost no correlation with what it would really take to do what [the president] announced [his] policy is. And one of the problems is that when they announce their policy, the policy is so vaguely stated, you don't have a clear definition of [the policy].⁶⁹

⁶⁹Interview with Mr. Murray.

Mr. Murray firmly felt that President Bush's budget plan would not have produced a balanced budget in future years. The point is America will never know due to the extreme modification the President's budget proposal goes through after it arrives at the Capitol.

At the present time, it seems the executive branch simply wastes its time and effort to formulate a budget, only to have it chopped to pieces once its submitted to Congress in January. Much of the reason this occurs is due to the impediments involved with a Republican president interacting with a Democratic Congress. However, some of the fault can be blamed on the poor economic planning assumptions used by the executive branch to formulate their budget proposal.

Historically, the executive branch has been guilty of using overly optimistic economic planning assumptions in developing their short and long-range budget plans. In fact, as an economic forecaster the OMB has consistently ranked near the bottom in terms of the accuracy of future predictions. In a study conducted by Charles Wolf of fifteen leading economic forecasters between 1983 and 1986 (Table II), OMB came in last place two out of the four years examined, and ranked number twelve out of fifteen the other two years. In the composite ranking of the four years, OMB finished last. It is also interesting to note the CBO's (OMB's counterpart in Congress) score in the study. The CBO finished with a

Table II

ECONOMIC FORECASTERS' RANKINGS, 1983-1986

<i>Forecaster</i>	<i>1983 Rank Score</i>	<i>1984 Rank Score</i>	<i>1985 Rank Score</i>	<i>1986 Rank Score</i>	<i>Composite 1983-1986 Rank Score</i>
Bank of America	14	12	5	8	10
Chase Econometrics	9	8	13	3	6
Data Resources	13	1	1	4	1
Dean Witter	2	13	15	12	12
DuPont	1	9	9	2	3
Evans Economics	15	7	3	14	13
Fortune	3	11	11	11	11
Manufacturers Hanover	11	5	2	10	7
Merrill Lynch	6	14	8	5	8
Morgan Guaranty	10	3	6	7	5
Pennzoil	8	10	14	13	14
Wharton	5	4	10	1	2
Blue Chip Consensus	4	6	7	9	9
OMB	12	15	12	15	15
CBO	7	2	4	6	4

Source: Charles Wolf, Jr., "Scoring the economic forecasters," The Public Interest (Summer 1987): 52

composite score of fourth place over the same period, scoring an impressive 2nd place in 1984.⁷⁰

It would logically appear preferable, given the uncertainties involved with economic predictions and the large amount of money at stake, that one should plan for the most realistic possible outcomes, vice overly optimistic assumptions which, in many respects, are only hopes for future

⁷⁰For more detailed information on the methodology used and the exact scores obtained, refer to Charles Wolf, Jr., "Scoring the economic forecasters," The Public Interest (Summer 1987): 52.

economic conditions vice realistic predictions. It goes without saying that most households throughout America budget for future uncertainties by planning for the worst possible scenario. Why should the office in charge of developing the president's budget proposal do just the opposite?

As Figure 10⁷¹ illustrates, once again the president's economic assumptions for the future were more optimistic than those of Congress. In the areas of GNP, unemployment, inflation, and the interest rate, OMB's estimates for the future U.S. economy consistently fell to the more optimistic side of the CBO's, with a significant difference between predictions of inflation and interest rates.

There is nothing wrong with striving for the optimum economic environment for the future. However, one should not base planning assumptions on unrealistic variables, especially when the economy of a nation is at stake. If the executive branch wants Congress to place more credibility on its yearly budget proposal, then it must become more realistic in its aspirations for the future.

Likewise, in order to stimulate the executive branch into submitting more realistic budgets, the Congress must publicly commit itself to accepting the proposals as valid economic plans for the nation. For this to happen, there must be more interaction and cooperation between OMB and CBO

⁷¹Office of Management and Budget.

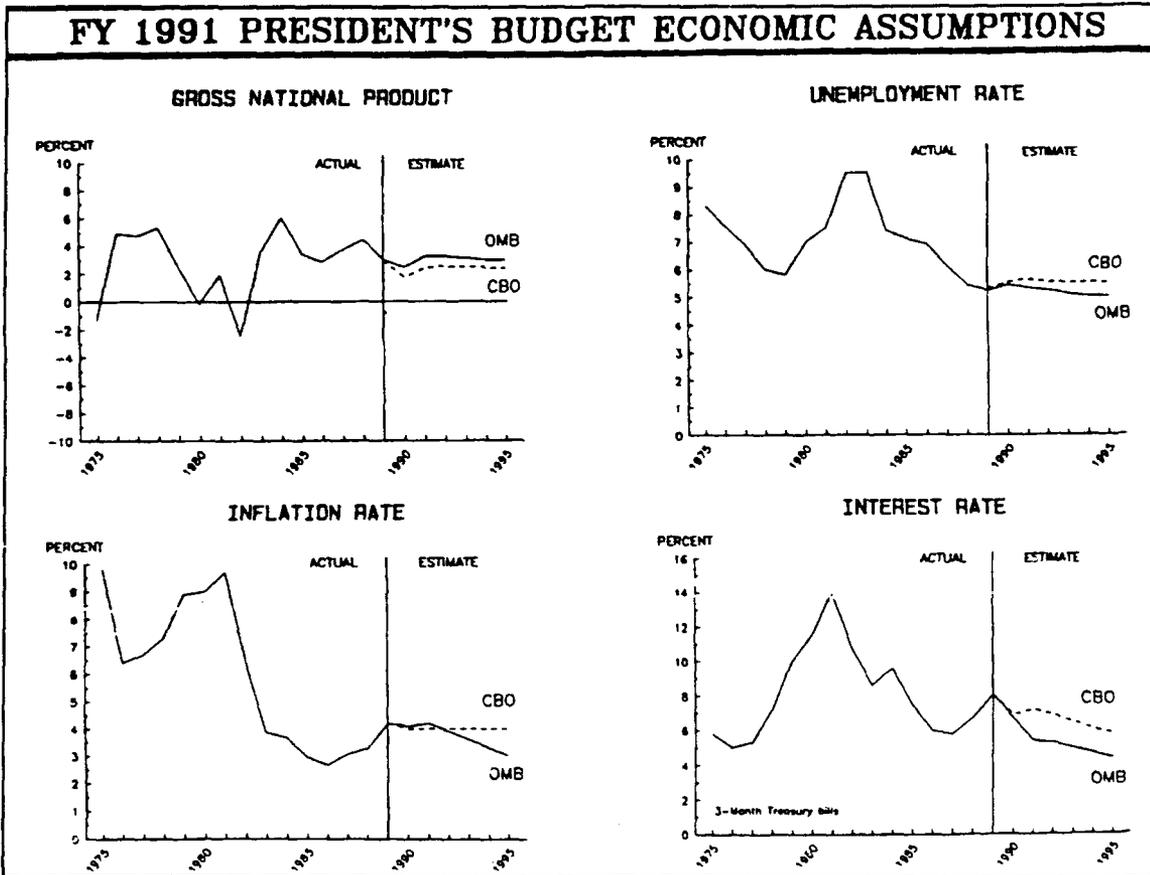


Figure 10

planners. The elimination of the adversarial relationship between Congress and the president must begin here.

2. Better Cooperative Planning Between DoD and OMB

The other area where the executive branch must make procedural improvements is within the interaction between OMB and DoD. In theory, OMB should be the office which formulates all the inputs from the president's sources into one very realistic and workable budget. In terms of defense, OMB should be matching the economic assumptions and recommendations from the President's Council of Economic

Advisors and the Secretary of the Treasury, with the national security requirements as outlined by DoD.

With the inputs from the various sources at its disposal, OMB should be able to provide DoD a realistic projection of the available resources it will have for future defense needs, which will facilitate the forwarding of a much more realistic national security plan to Congress. However, that particular supposition does not hold true.

For years, DoD's 5-year projection of the required budget authority needed to fund current and future defense programs, has consistently been unrealistic in terms of the future defense budget projection. In other words, the required funding to fulfill DoD's 5-year defense plan (FYDP), and the projections by OMB of future defense spending, have not been anywhere close to the same dollar amounts. The OMB and DoD are fully cognizant of this fact, and still it continues. Why?

Figure 11⁷² depicts this consistent pattern. DoD's FYDPs for 1986 through 1989 are represented in terms of their required resources. Also, the actual defense budget authority (BA) for the past fiscal years, and the estimate for the current and future fiscal years is presented. One clearly notices that the projections are in the opposite direction.

⁷²Office of Management and Budget.

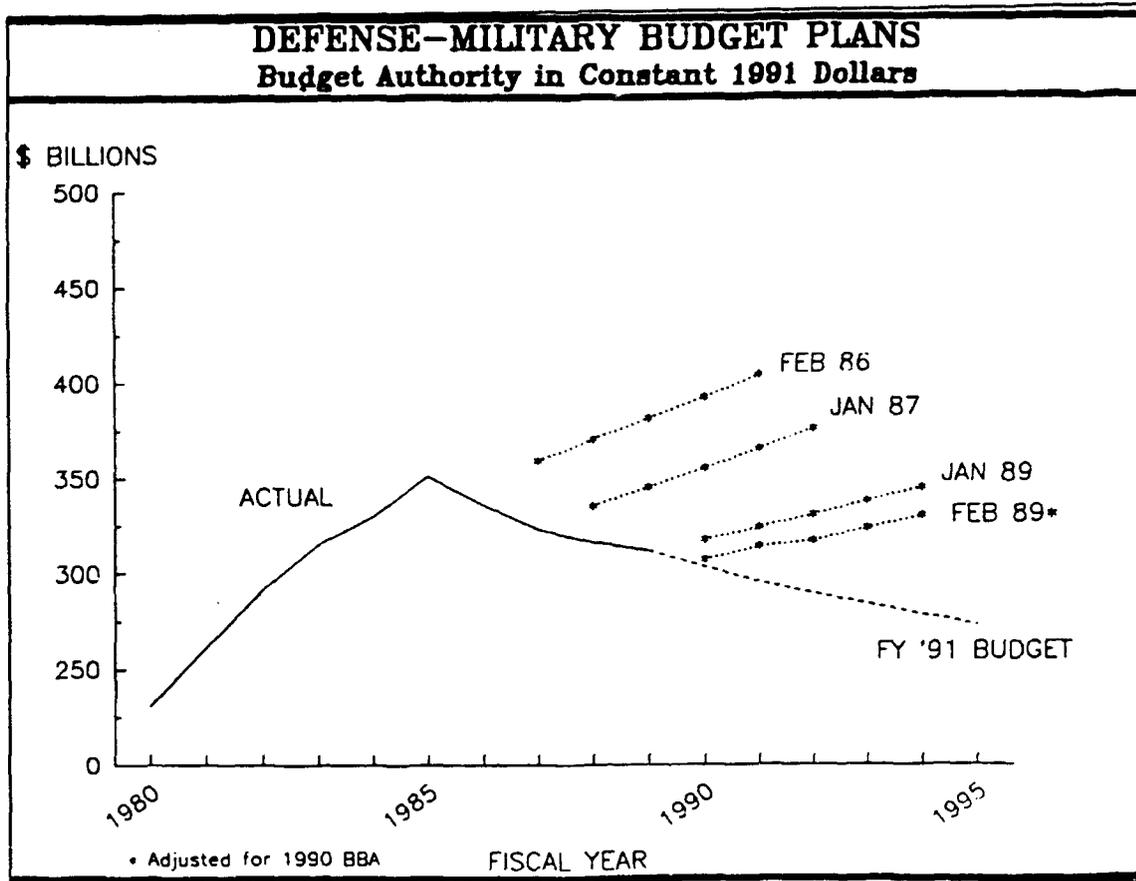


Figure 11

Defense spending will continue to experience a real decline into the future (barring any major military confrontation in the Persian Gulf).⁷³ The declining trend of defense spending is not debated within the executive or

⁷³Defense spending for operation "Desert Shield" is not considered additional budget authority at the present time, due to continued debate over where the funding may actually be obtained. The Pentagon has estimated it will need about \$15 billion in additional funding for FY-91, but many in Congress say that estimate is too high. The CBO has roughly estimated \$7.5 to \$9.0 billion in FY-91. It is still uncertain to what degree foreign contributions will offset costs.

legislative side of government. Figure 12,⁷⁴ which was part of an OMB report to the president at the beginning of the year, clearly revealed the expected decline in defense spending for the next five years. Why then shouldn't the FYDP submitted by DoD not realistically reflect the availability, or lack of, future resources?

The disparity between the DoD's FYDP and available resources developed due to the sudden cutback in military spending after the Reagan build-up in the mid '80's. Basically, the nation had been on a defense "blue light special" spending spree, buying everything in sight with not enough consideration for where or how the equipment would be used in the future.

The problem will slowly correct itself. As more and more budget cuts are realized, the two diverging lines depicted in Figure 11 will slowly come closer together. Compounding the problem today is the constantly changing international environment which was discussed in the first chapter. The solution lies in restructuring the military into a more efficient and effective fighting force to counter the realistic threats for the future. The U.S. must first identify those threats to national security. It is very evident that at least one resides in the Middle East.

⁷⁴Office of Management and Budget.

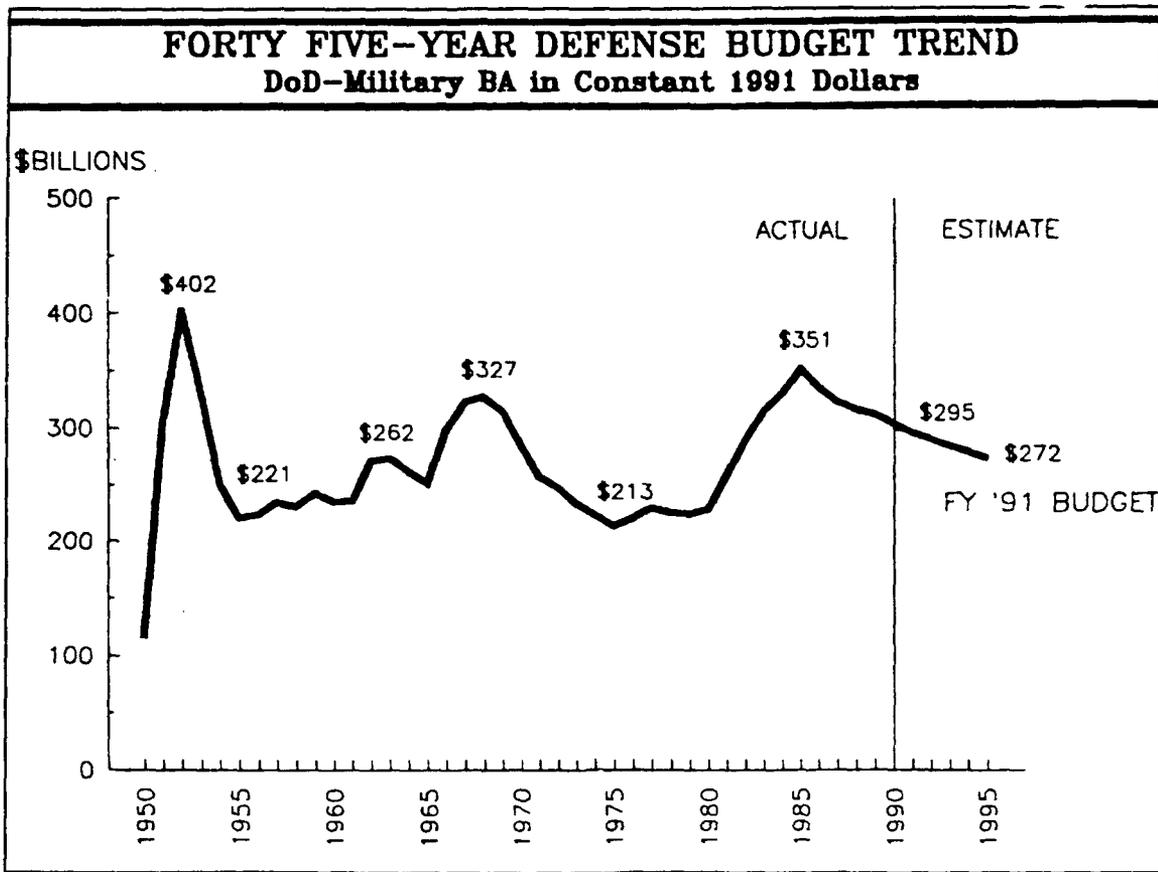


Figure 12

C. THE U.S. CONGRESS

1. Cooperation with the Executive Branch

There could have been a sub-section included in the previous section with a title similar to this one. The point to be made is that there must be more cooperation between the two branches of government. Naturally, the first thought is that this is a natural consequence of partisan politics, especially when opposite parties dominate each branch. However, the dilemma over the budget summit at the end of FY-90 illustrated that even the president and the Republican

leadership of Congress could not influence the political decisions of their own party members. Republican Representative Newt Gingrich of Georgia, even lead a coalition to persuade fellow Republicans not to be influenced by the president.

In a speech before the Naval Postgraduate School on 6 November 1990, Rear Admiral Flanagan, director of the Office of Legislative Affairs, firmly stated that this dichotomy was essential for our democratic system to operate properly. The pluralistic nature of our governmental system is a major strength of the democratic process, so long as this partisan dichotomy is due to the desires of the nation's citizens being voiced in Congress by their representatives. If the friction surfacing from the House or Senate is simply due to the representatives steadfast objection to differing political beliefs, possibly from members of their own party, then the dichotomy is dysfunctional. Whatever the case, in order for the democratic system to continue to operate effectively and maintain its strength, political compromises will have to be made.

As we noticed in Arrow's study, it is extremely difficult for a democratic system to exactly reflect the wishes of all the members of the group, or of society. Therefore, it is virtually impossible to completely satisfy the desires of every citizen in the U.S. Objections to congressional resolutions will continue to be voiced

throughout the country despite efforts by their congressmen to represent their concerns.

As more special interest groups, minorities, and differing political philosophies are represented and elected to Congress, the difficulty in reaching a satisfactory consensus will continue to magnify itself. It will increasingly become more difficult to arrive at a solution that represents the desires of everyone. Given this arduous dilemma facing the elected officials, it is even more important for the elected leadership to be cognizant of this fact, and aware of the potential problems before they surface.

By "cooperation," this is not to suggest that both branches should share the same political beliefs, for such an ideal would completely go against the principles by which the government has operated since its conception. In this context "cooperation" means there should be more interaction between the two branches to define particular issues where obvious differences exist in the fundamental definition of problems.

a. The Federal Deficit

An example of the ambiguity described above is illustrated in Figure 13.⁷⁵ Of fundamental concern to the nation, as indicated by the increased media attention and public interest in the situation, is the federal deficit facing the country. It was just reported that the federal

⁷⁵Office of Management and Budget.

THE FEDERAL FUNDS DEFICIT AND THE SOCIAL SECURITY & OTHER TRUST FUND SURPLUSES

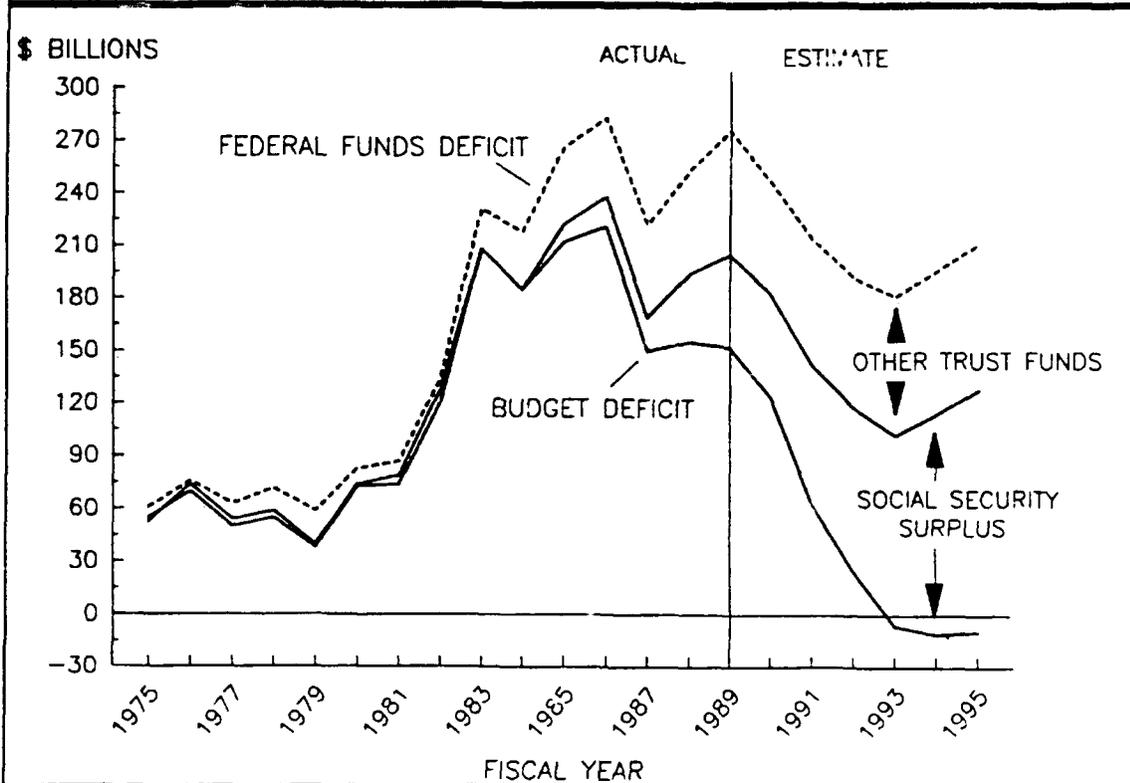


Figure 13

government began fiscal 1991 with a \$31.5 billion deficit for October, which was 21 percent higher than the \$26.1 billion deficit of October 1989. According to the Treasury Department, the increase reflects the buildup of forces in the Persian Gulf, and increased costs in the savings and loan bailout. Richard Darman, director of the OMB, said he

expected the 1991 budget deficit to fall between \$250 and \$300 billion, more if a war starts with Iraq.⁷⁶

The uncertainty lies with the exact measurement of the deficit. Just exactly what is counted in the deficit figures, and what isn't? Figure 13 shows the OMB's projection of the "budget deficit" at the beginning of 1990 (illustrated by the solid lines, one including the social security surplus funds and the other without), and the total federal funds deficit (depicted by the dash line where none of the various trust fund surpluses are counted).

In August 1990, Richard Darman projected the FY-90 federal deficit to be \$170 billion if the S&L bailout is not counted, and \$232 billion if the bailout is included. Then in September, Darman said the new top figure would be closer to \$250 billion.⁷⁷ The question remains, what do we count? Senator Moynihan raised concern earlier in the year over counting the social security surplus toward offsetting the federal deficit. Moynihan said it was not fair to the American people.

Here is an example of one particular area where the executive and legislative branches could cooperate more

⁷⁶"October deficit hits \$31.5 billion; record budget gap predicted in '91," San Jose Mercury News, 24 November 1990, 8C.

⁷⁷David E. Rosenbaum, "With Time Running Out, Budget Negotiators Prepare for Heavy Bargaining," The New York Times, 6 September 1990, A16 (N).

effectively, by arriving at a definitive determination on exactly what will be included in the deficit total, and what will not. It only seems logical that before attempting to reduce the federal deficit there should be a clear definition of what is included in its figure.

b. The Gramm-Rudman-Hollings Legislation

The other ambiguity facing the decision-makers today is that of how to actually reduce the deficit. The original Gramm-Rudman-Hollings (G-R-H) legislation adopted in 1985 would, in theory, have provided a balanced budget in FY-91 (see Figure 14).⁷⁸ However, the G-R-H targets were revised in 1987, amending the balanced budget target to 1993.

It has become apparent that further modification of the G-R-H targets will be required to prevent drastic cuts in defense and domestic programs at the beginning of FY-92. As was mentioned above, Darman has already said he expected a \$250 billion to \$300 billion budget gap at the end of FY-91. Therefore, to comply with G-R-H legislation, \$222 billion to \$272 billion would have to be eliminated from the FY-92 budget to meet the \$28 billion G-R-H target for 1992 and prevent automatic spending cuts from going into effect, a far greater amount than the approximate \$85 billion required this year.

The original concept behind G-R-H, which was to force the government to become more responsible in balancing

⁷⁸Office of Management and Budget.

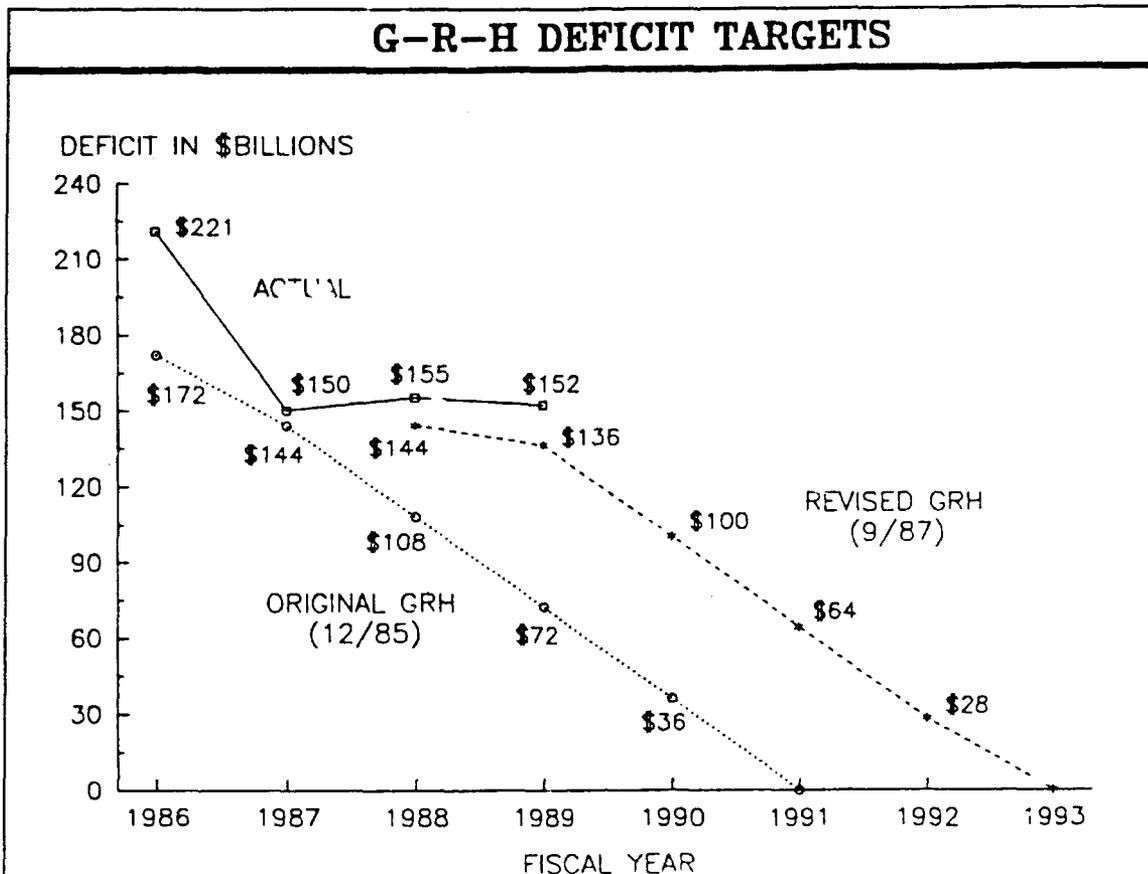


Figure 14

the budget, may be debated as to its original value or current necessity. However, the present targets are unrealistic given the present state of the economy, and will require further modification if it is to remain in effect. The Congress can not afford a mandatory spending cut of anywhere near \$220 billion. When one examines the discretionary and non-discretionary numbers in the budget, it is easy to see the restrictive latitude the lawmakers have in trying to find dollars to cut.

Out of the President's 1991 budget proposal, only \$121.1 billion, out of the total proposed \$306.4 billion for military programs, was subject to cutbacks. Those military programs exempt included such items as contracts already awarded, maintenance of the Pentagon, and military personnel expenses.

As for the domestic programs, only \$228.5 billion of the total proposed \$964.7 billion would be subject to cuts. Domestic programs exempt from the hatchet include such things as social security, federal retirement, disability, workers compensation, medicare, food stamps, and net interest (just to name a few).⁷⁹

Many people immediately equate such things as defense spending, tax cuts, and government waste to the poor fiscal condition of the country. However, some see the problem as the U.S.' commitment to the elderly. Social security has grown to be one of the largest components of the federal budget. As Rudolph Penner, economist for the Urban Institute in Washington, stated:

The New Deal commitment to the elderly was by far the single most important budget event of the 20th Century. Virtually the entire growth in the civilian, non-interest budget has been related to our commitment to the elderly.⁸⁰

⁷⁹"What Could Be Cut," The New York Times, 20 September 1990, A15 (N).

⁸⁰Quoted in Gary Blonston, "Budget-gobbling programs for elderly bloat U.S. debt," San Jose Mercury News, 20 September 1990, 1A. Blonston added that Social Security totalled nearly \$250 billion, Medicare was nearly half that amount, and if

Whether or not G-R-H was necessary before any real progress toward balancing the budget would have been made by Congress, is questionable. What isn't questionable at this point is that the legislation doesn't appear to be sufficient to achieve a balanced budget alone. It would appear that there are other variables affecting the federal balance sheet which simply can not be controlled by prescribed deficit targets.

G-R-H can be credited with forcing the government to seriously examine the federal deficit issue. It is sad that it actually required legislation to stress its importance to the lawmakers. As Dr. Jack R. Borsting, dean of the School of Business Administration at the University of Southern California, stated in a recent interview:

From a rational standpoint, you have to say that you shouldn't have Gramm-Rudman-Hollings. It was not a good way to balance the budget. From a practical sort of way, maybe its been okay. At least, it tried to get some discipline [into the system]. But it is far from perfect in even getting discipline, because the people get around it. They put things off-budget to get out of the Gramm-Rudman-Hollings ceilings.⁸¹

the other elderly programs were added, the total came to \$427 billion last year.

⁸¹Dr. Jack R. Borsting, Dean of the School of Business Administration at the University of Southern California, interviewed by author, 26 October 1990, Los Angeles, California, tape recorded. Prior to his current position at USC, Dr. Borsting was Dean of the School of Business Administration at the University of Miami and Professor of Management Science. He has also served as Assistant Secretary of Defense in the position of Comptroller for the U.S. Department of Defense.

It is obvious that changes must be made. Congress must choose between three options in the coming year:

- proceed under the current targets in hopes that the fiscal deficit will not develop as forecast due to some miracle during the year;
- adopt a new revision to the G-R-H legislation which will set new target deficits for the next five years, postponing a balanced budget until 1997; or
- abolish G-R-H legislation in favor of a more responsible approach by all concerned, both in the executive and legislative branches, toward constrained spending and increased revenues.

If option two is chosen, Congress should abolish the five year time period required for a balanced budget. The most important consideration should be the trend of the deficit, not the actual amount. The foremost consideration should be reducing the growing deficit numbers, while maintaining a healthy and growing economic environment. Therefore, extend the time period to between six to ten years for a balanced budget, to permit more realistic goal setting without jeopardizing the state of the economy.

In effect, the Congress has already adopted the latter option. By agreeing to the five-year, \$500 billion deficit reduction package in October, Congress has set aside the G-R-H legislation for the time being, as long as they fulfill the requirements of the new package. However, some experts feel the new package is too optimistic in its economic assumptions, and too restrictive in its requirements. As

Carol Cox, director of the Committee for a Responsible Federal Budget, stated:

For the first time, we're going to have meaningful expenditure controls in this country . . . I don't think most members of Congress actually realize what they have done to themselves. Legislative bodies hate spending discipline.

In the same article, Joseph White, a Brookings Institution analyst, stated:

The idea that this deficit-reduction package will have a favorable short-term effect is certainly dubious . . . And while it may modestly improve the economy over the longer run, the notion that it will lead to a great new era of economic growth is even more doubtful.⁸²

The United States, despite its fiscal deficit, maintains the strongest economy of any nation in the world. Renewed attention to the U.S.' trade relations and industrial base, both civilian and defense related, coupled with the responsible management of federal spending and revenues, will eventually lead to a decrease in the deficit and promote continued economic growth over time.

This may appear to be too optimistic, or idealistic, in dealing with the deficit dilemma, however, there are variables affecting the budget that can not be influenced by the establishment of mandated deficit targets. The past five years has proven that point. The future

⁸²Quoted in Tom Redburn, "Analysts Doubt That Plan Would Yield Balanced Budget by Mid-'90s," Los Angeles Times, 26 October 1990, A23.

problems confronting both the president and Congress should not be compounded by the annual impasse over the budget.

2. "Macro" vice "Micro" Management of the Budget

Probably the one single change Congress could make which would yield the greatest improvement in terms of streamlining the budgetary process, would be the adoption of a more "macromanagement" policy, vice the detailed "micromanagement" policy which has prevailed in recent years. In order to realize more long-term stability in the defense planning and budgeting process, and also assist in the strengthening of the industrial base, the detailed examination and modification of the federal budget each year by Congress needs to end.

As pointed out in a White Paper on the Department of Defense and the Congress:

The microscopic focus of the budget review is evidenced by the number of line-item adjustments Congress makes to the defense authorization and appropriation bills. . . . appropriations line-item adjustments doubled during the 1970s and then grew by another 85% between 1982 and 1987. Authorization adjustments grew more slowly during the 1970s, but took a quantum leap between 1982 and 1985, almost quadrupling in four years.

. . . The 1977 budget justification ran 12,350 pages. For 1988, the justification took 30,114 pages--almost two and a half times as many pages as eleven years earlier. The fact that no one person can comprehend this material in total contributes to a myopic and disjointed review process.⁸³

⁸³Report to the President by the Secretary of Defense, White Paper on the Department of Defense and the Congress, January 1990, 6.

The real problem behind the increase in the micromanagement of the budget is the increase in the number of congressional staff personnel. From 1955 to 1985, the congressional staff personnel grew from approximately 5,000 to 20,000.⁸⁴ From 1960 to 1985, the total congressional committee staff grew by 237 percent, and personal staffs grew by 175 percent.⁸⁵ This large staff permits a more detailed account of the various line items within the budget. Dr. Borsting commented:

The Congress, with the large staff that they have, have become too "micro." They should be "macro" policy-makers, and they the check and balance of government. . . . I think it was on the '81 appropriations report that the Congress had in there that we shouldn't be doing some painting of government vehicles in Hawaii. There was that level of detail.⁸⁶

Another major problem which developed because of the congressional micromanagement, is the required time spent preparing for and testifying before the multitude of committees within Congress. As Gansler wrote:

In 1983, 1,306 DoD witnesses testified, for 2,160 hours, in hearings before 96 committees and subcommittees (a 357 percent increase since 1975). In that same year, there were approximately 85,000 written congressional budget inquiries to the DoD, and 21,753 pages of supporting documents were submitted by the DoD to justify the fiscal 1984 budget request (an increase of over 300 percent since 1975).⁸⁷

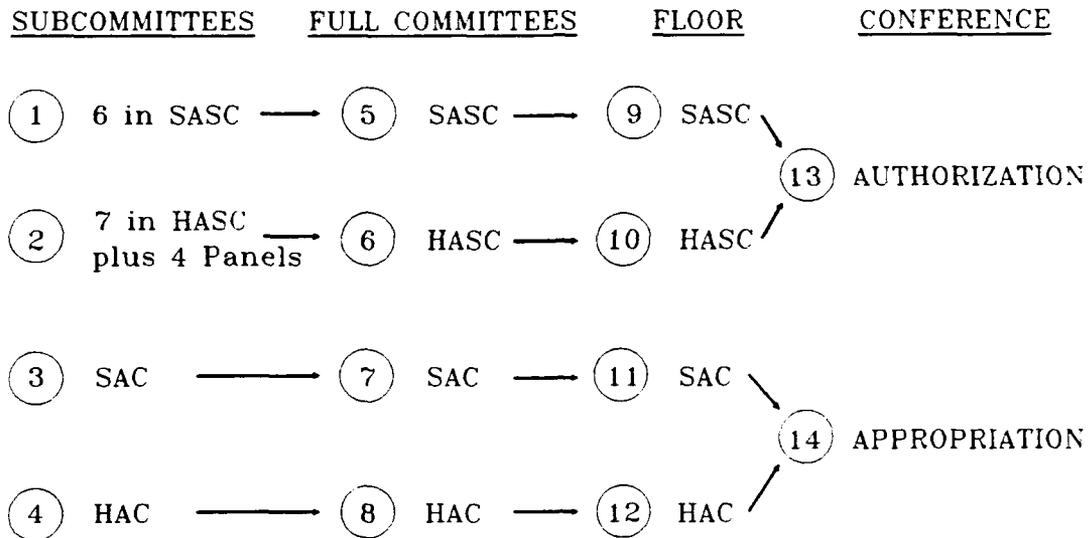
⁸⁴Gansler, Affording Defense, 110.

⁸⁵White Paper on the Department of Defense and the Congress, 8-9.

⁸⁶Interview with Dr. Borsting.

⁸⁷Gansler, 113-114.

AMENDMENT POINTS IN THE DEFENSE BUDGET PROCESS



Source: Report to the President by the Secretary of Defense, White Paper on the Department of Defense and the Congress, January 1990.

Figure 15

As a consequence, much of the testimony before the congressional committees is redundant. Even though there are a number of different committees examining the same line items in the budget, the coordination between the committees is poor. Therefore, conflicts often occur due to simultaneous adjustments to the budget.

As Figure 15 illustrates, there are at least 14 points in the annual legislative process where a single program's

budget can be adjusted, not counting the budget resolution.⁸⁸ Congress must find some way to decrease the amount of time required of DoD personnel to appear before the large number of committees, while at the same time, reducing the redundancy in committee jurisdiction and investigation.

This problem is certainly not a new one, and certainly is not an easy one to solve. It requires coordination between the various House and Senate committee staffs to combine hearings wherever possible.⁸⁹ This concept is most difficult because of the authority which must be relinquished as committee chairmen grant privileges and authority to outside parties.

3. Stabilization of Defense Spending

The U.S. must stabilize its defense spending practices if it truly desires to realize tangible savings over the long-term, and make concrete progress toward rebuilding the industrial base. The defense budget has been declining for the last five years as a percentage of GNP (see Table III), and as a percentage of total federal outlays, defense spending has been in a downward spiral since Vietnam.

⁸⁸White Paper on the Department of Defense and the Congress, 21.

⁸⁹See Gansler, Affording Defense, 107-121.

Table III

DEFENSE BUDGET TRENDS

<i>Fiscal Year</i>	<i>DoD Percent of GNP</i>	<i>DoD Percent of Federal Outlays</i>
1984	6.0	25.9
1985	6.2	25.9
1986	6.3	26.8
1987	6.2	27.3
1988	5.9	26.5
1989	5.7	25.8
1990*	5.2	24.0
1991*	5.0	23.7
1992*	4.7	23.3
1993*	4.4	22.6
1994*	4.2	21.6
1995* * estimates	4.0	20.6

Source: *United States Department of the Navy. Report to the Congress: Fiscal Year 1991.*
prepared by Navy Internal Relations Activity, Alexandria, Virginia.

In 1965, defense accounted for 43 percent of federal spending. Other non-defense programs (space, education, national parks, etc.) accounted for about 22 percent, and payments to individuals (social security, disability, retirement, etc.) totalled about 28 percent. Last year, the payments to individuals had climbed to 47 percent of total federal outlays, while defense had decreased to around 26 percent.⁹⁰ As Table III illustrates, these declining trends

⁹⁰Blonston, 18A.

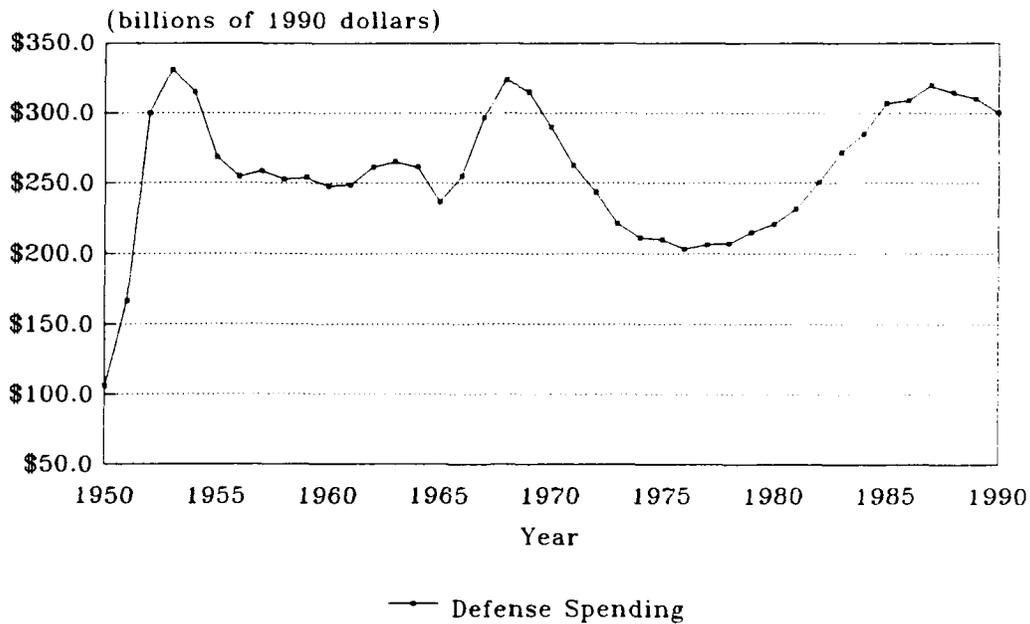
are projected to continue, at least for the next five years, and may possibly continue well into the future.

It is difficult to attract new companies into the defense sector, both at the primary contractor level, and at the lower sub-contractor and part-supplier levels, when the projections for future defense spending are so discouraging. It is also difficult to entertain the current defense contractors (especially those who have a life outside the defense sector) into maintaining some level of interest for future employment when such grim outlooks for future military spending permeate throughout government.

If one plots out defense spending over the last forty years, the inconsistency of the defense budget becomes readily apparent (see Figure 16). Although some of the irregular anomalies in military spending can be explained by national crises, the uncertainty of other years can also be distinguished. It has already been discussed that the current and future momentum of military spending is in a downward trend. However, just how long will that trend continue?

As mentioned earlier in this paper, if history has taught the American leadership and people anything, it should be that whenever the international environment seemed secure enough to permit cuts in defense spending, the nation has later found it necessary to redirect federal spending in order to reassemble an appropriate national security posture. The nation is following the same pattern today, and it will only

U.S. MILITARY SPENDING 1950-1990



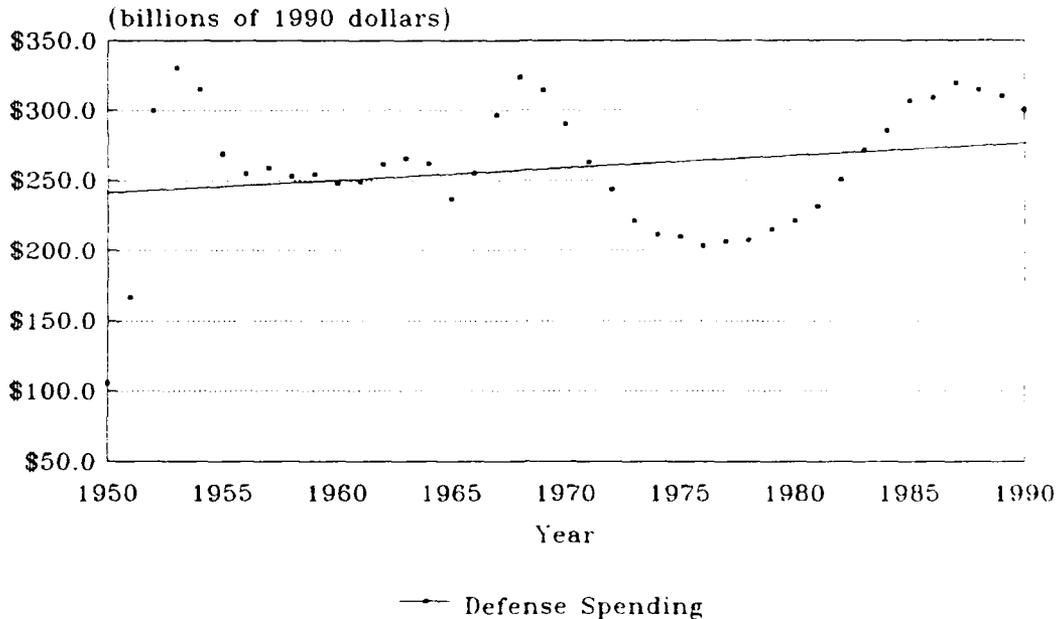
Source: William W. Kaufmann, "A Plan to Cut Military Spending in Half,"
The Bulletin of the Atomic Scientists (March 1990): 37.

Figure 16

be a matter of time before attention is once again focused on the depletion of national security (it may be even sooner if the crisis in the Persian Gulf is not peacefully resolved). Why must the U.S. follow this erratic cycle?

Using the same data from Figure 16, if the trend in military spending is plotted over the same period (see Figure 17), a much more consistent pattern emerges. Roughly speaking, the trend depicted in Figure 17 equates to a real

U.S. MILITARY SPENDING TREND 1950-1990



Data Source: William W. Kaufmann, "A Plan to Cut Military Spending in Half,"
The Bulletin of the Atomic Scientists (March 1990): 37.

Figure 17

growth rate over the last forty years of less than 1 percent.⁹¹ Therefore, if the assumption was made (and agreed to by both branches of government) that military spending should follow a real growth rate of 1 percent, the dilemma over how much to spend for defense would be much easier to solve each year.

With such a system, the amount allocated to defense would have to depend on the most up-to-date forecast of the

⁹¹By approximating the figure off the trend line in 1950 to be \$240 billion, and the approximate amount in 1990 to be \$280 billion, the real growth rate over the period would equal 0.39 percent. This is not, by any means, an exact extrapolation of the data, nor is it intended to be.

nation's economic growth. In order to alleviate unnecessary bickering over the projected amount, the economic forecast would have to be agreed to and obtained through the cooperation of both the OMB and CBO.

The established growth rate of defense spending would have to be negotiated and agreed to by the president and Congress. However, the establishment of some consistent pattern of military spending would inject stability into the defense budget, and more confidence into the defense industrial base. Certainly from a national security perspective, the larger the share allocated for defense the better. Nonetheless, a consistent pattern of only 1 percent real growth will largely contribute to a reversal of the detrimental effects caused by the present unpredictability of the defense budget.

4. Stabilization of Procurement Numbers

The U.S. government wastes millions of dollars each year due to stretch-outs in defense programs. This is especially true during periods of decreasing defense budgets. As more pressure is applied, both by the people and the government, to cut military spending, the tendency is to look for short-term savings vice the efficiency of long-term investments. Another bad habit of government is its unwillingness to totally cut or postpone defense programs.

When faced with the task of cutting the defense budget, the tendency has been to simply reduce the number of items procured, rather than maintain the level of procurement originally planned. By stretching out the programs, the per-unit cost of each individual system (i.e., tank, airplane, missile, etc.) goes up as the overhead costs are redistributed among fewer products.

The most publicized example of this phenomenon over the past years has been the continued cutbacks in the number of B-2 stealth bombers the Pentagon and Congress are willing to buy. In April of this year, Secretary Cheney reduced the planned number of B-2 aircraft to be procured in FY-91 from 132 to 75. This raised the per-unit cost of each plane from approximately \$530 million to \$865 million.⁹² Therefore, based on these numbers, for FY-91 the Pentagon would spend \$64.8 billion, vice \$69.9 billion for the B-2. This equates to a short-term savings of \$5.1 billion for FY-91. However, if the total number of B-2 aircraft originally planned to be procured is realized in the future, the total cost of the program will be much higher than if the original procurement schedule had been maintained.

The defense companies themselves would prefer to maintain the originally intended procurement schedule, despite

⁹²Eric Schmitt, "Star Wars and Stealth Bomber Given Limited Funds in Accord," The New York Times, 18 October 1990, A1 (N).

the fact that they will inevitably raise the per-unit cost of each system to cover their expenses. As in the case of the B-2, Northrop has not exactly benefited from the publicity received each time it has been forced to raise the B-2's cost due to the Pentagon's decisions to cut procurement numbers. Dr. Roche of the Northrop Corporation, made the following recommendations for the procurement process:

- Kill [programs] early. Don't drag [programs] on and then have all kinds of investments on the part of companies, and then wind up not being able to [follow through with original plans].
- If you're not going to kill them early, pay the companies to [procure one program, not enter into competition for different programs]. Competition at every level had its own inherent stupidity.
- If you decide to build the program, stabilize the funding.
- If you don't want that many things produced, you may have to pay up front for an inefficient buy, in terms of inefficient order quantities, but with the option to produce more. That's not what the [U.S. does]. We price things at some volume, an efficient rate, and then we beat the hell out of the companies, or the Congress beats the hell out of the services, when we don't procure them at that rate.

Concerning the B-2 per-unit cost, Dr. Roche also stated:

The biggest price increase in the B-2 had absolutely nothing to do with the B-2. It had to do with the rate at which they're being acquired.⁹³

Table IV illustrates five examples of how production stretch-outs raise the per-unit procurement costs. In each case listed, the total production costs over the measured

⁹³Interview with Dr. Roche.

period (1983-1987) was less than originally planned. However, as in the case of the Patriot missile system, the actual savings over the five year period only totaled \$158.2 million, while the per-unit cost of each system went up by 68 percent. As in this example, one has to weigh the advantage of saving \$158.2 million over the five year period, with the significantly lower number of weapon systems in the U.S.' inventory due to cutbacks in the procurement schedule.

The U.S. government must strive to stabilize its defense systems procurement rate. This will require a commitment by Congress to authorize funding over the life of a contract, and adhere to its production schedule. The Congress is well aware of this problem and has considered a plan for "milestone budgeting" to assist with the problem.⁹⁴ "Milestone budgeting" would identify stages within the life of a defense program where a review of its progress would be required. Thus, the process of reviewing each program during the yearly budget negotiations would, ideally, decline to only include those programs which have reached a particular milestone.

"Milestone budgeting" would not guarantee program stability, because Congress would always retain the option to revisit particular programs. However, it may provide the

⁹⁴See U.S. Congress, Congressional Budget Office, Assessing the Effectiveness of Milestone Budgeting, Washington D.C.: GPO, July 1987.

Table IV

COSTS OF PRODUCTION STRETCHOUTS
FISCAL YEARS 1983-1987

<i>System</i>	<i>Total 1983-1987 Quantity</i>	<i>Total 1983-1987 Cost (In millions of FY-83 dollars)</i>	<i>Procurement Unit Cost (In millions of FY-82 dollars)</i>
F/A-18			
Planned	552	11,772.0	21.3
Actual	420	10,367.8	24.7
SH-60B			
Planned	186	2,828.3	15.2
Actual	107	1,834.5	17.1
Sparrow			
Planned	13,705	1,690.7	0.12
Actual	10,099	1,539.8	0.15
Patriot			
Planned	3,742	4,064.9	1.09
Actual	2,427	3,906.7	1.61
F-15			
Planned	390	10,204.0	26.2
Actual	207	7,124.4	34.4

Source: U.S. Congress, Congressional Budget Office, Assessing the Effectiveness of Milestone Budgeting, [Washington D.C.: GPO], July 1987.

necessary incentive to maintain the originally agreed to production schedule, both by Congress and the defense contractor. The CBO estimated that "production stretch-outs between 1981 and 1984 added an average of \$4 billion (in budget authority) each year to total acquisition costs."⁹⁵ At a time when every dollar counts, Congress should be searching for every possible formula of efficiently spending its limited funds.

⁹⁵Ibid., ix.

IV. CONCLUSION

This thesis has attempted to point out particular deficiencies within the budgetary process which have a detrimental effect on the U.S.' national security posture. It has also presented some recommendations by which to correct those deficiencies. The process of physical change within an established system of government is difficult to implement, especially one as diverse and complex as ours. However, in such a pluralistic form of government, a significant degree of positive change may develop from, nothing more, than a realization of the need for change within the decision-making membership.

We noted the complexities incorporated into our governmental process at the time of conception by the founding fathers. The U.S. Constitution was written with the intent to fragment the powers of government. This separation of powers inherently placed enormous constraints on the functioning of both the legislative and executive branches. However, these same constraints can be credited with providing the strength which produced the most stable and powerful government in the world.

Changes in the decision-making structure, and membership within that structure, will produce changes in policy. An important point one should consider is the minimal impact of

these changes on our governmental system as a whole. Presidents and congressmen come and go with elections, but our governmental foundation remains firm. The constitutional structure adopted over 200 years ago is the infrastructure by which the citizens temporarily operate their country. It is structurally unyielding to withstand the unending change of occupants, however, flexible enough to allow a pluralistic adaptation to changes in domestic and international priorities.

As was noted earlier by William J. Baumol's analysis of Kenneth J. Arrow's theorem on group decision-making, the dilemma facing the congressional representatives, over how to successfully represent the desires of their constituents, will not be easily solved. It will only continue to become more difficult as special interest groups and minorities gain more control in Congress.

The current problems facing the nation, coupled with the difficulty of reaching a consensus within government, are even more troubling. In an era of such sweeping change throughout the international system, and increased pressure at home to realize some sort of "peace dividend," four particular budget issues were identified which, if left alone, may weaken the U.S.' national security posture:

- The perception of a reduced threat to U.S. national security, and the associated political pressure to reduce defense spending.

- The deterioration of the U.S.' overall defense posture due to impulsive defense cuts without a viable long-range defense strategy.
- The impact of cutbacks in defense spending on the already neglected and deteriorating defense industrial base.
- The deterioration of the U.S.' technological superiority due to cutbacks in research and development expenditures, and through the transfer of technology to competing countries.

The eradication of the above issues, and the refurbishment of the system will not be easy. However, the most important element of the process must be the cooperation between both branches of government, and between the elected leadership and DoD. Without full cooperation and coordination between all the parties, the benefits of the efforts by one participant will only meet the unyielding bureaucratic barrier of the others.

The Pentagon must strive to re-establish the confidence of Congress and the American people. The only means by which this will occur is if DoD continues to purge illicit behavior throughout the defense industry. It must also endeavor to operate more efficiently through continued reorganization of its defense management practices.

Realism must be injected into the defense planning and budgetary process. This will require a cooperative effort between OMB, CBO and DoD. There must be more interaction between OMB and DoD to determine the realistic quantity of resources available for defense, and promulgate that

information throughout the Pentagon to promote a more pragmatic and effective planning process. This effort will result in the formulation of a much more precise and effectual defense budget for the president to submit to Congress.

The micromanagement of the budget, particularly the defense budget, by the congressional staff must be eliminated. The Congress must adopt a "macro" perspective of dealing with budgetary issues. One method of dealing with this problem is to enforce a freeze on further increases in congressional staff personnel, holding the number at the current levels. A more effective policy would be to reduce the current level of staff positions, thus reducing the ability of Congress to consider every line item in the budget.

Partisan politics must be placed aside for the overall welfare of the nation. The adversarial relationship which permeates between parties seems to cloud the vision of American decision-makers, preventing them from electing that course of action which would benefit the overall prosperity of the country. There must be a more cooperative relationship between the executive and legislative branches of government, no matter what political parties dominate each.

Now more than ever, American policy should turn inward to examine our own fundamental practices and well-being, while working feverishly to re-institute the principles and competitiveness that originally built this nation. The U.S. must work diligently to rebuild its own industrial base, the

same economic base that placed the U.S. in a position of leadership throughout much of the twentieth century. Instead of whining over unfair trade practices by foreign countries, the U.S. should be searching for methods to repair the deficiencies that created the interdependency on other countries in the first place. The U.S.' attention for the '90s should be on our own economic problems, vice worrying about the economic problems, or the strengths of other countries around the world.

The U.S. national security may be defined by a variety of different methods. The concept itself is broad and subject to an assortment of differing interpretations, each unique to individual perceptions of importance. This paper has attempted to prejudice opinions on those budgetary issues important for the future security of the United States. Its purpose was to point out significant problems that should be on the minds of governmental decision-makers and Pentagon analysts in the development of the future defense spending strategy. There are, without doubt, many other considerations to be factored into the equation, all of which have their own specific role in the grand strategy of national defense. The dilemma becomes finding the proper mix of budgetary variables to satisfy the will of the people, while also maintaining the strength of the nation.

SELECTED BIBLIOGRAPHY

Sources Consulted:

Borsting, Jack R., Ph.D., Dean of the School of Business Administration, University of Southern California. Interviewed by author, 26 October 1990, Los Angeles, California. Tape recorded.

Dailey, Brian D., Ph.D., Professional Staff Member, United States Senate Armed Services Committee. Interviewed by author, 22 October 1990, Washington D.C.

Gessaman, Donald E., Acting Deputy Associate Director for National Security, Office of Management and Budget, Executive Office of the President. Interviewed by author, 23 October 1990, Washington D.C.

Hunter, William J., Manager, Washington D.C. Operations, Tiburon Systems, Inc. Interviewed by author, 22 October 1990, Crystal City, Virginia.

Murray, Russell, Hon., former Assistant Secretary of Defense for Program Analysis and Evaluation during the Carter Administration. Interviewed by author, 22 October 1990, Alexandria, Virginia. Tape recorded.

Roche, James G., Ph.D., Vice President and Special Assistant to the President and CEO of the Northrop Corporation. Interviewed by author, 26 October 1990, Los Angeles, California. Tape recorded.

Sauer, Ann Elise, Professional Staff Member, United States Senate Armed Services Committee. Interviewed by author, 22 October 1990, Washington D.C.

Reports:

Lloyd, Richmond M. Reducing the Deficit. [Newport, Rhode Island]: The United States Naval War College, March 1990.

Report to the President by the Secretary of Defense. White Paper on the Department of Defense and the Congress. January 1990.

Statement of Rear Admiral Thomas A. Brooks, United States Navy, Director of Naval Intelligence, before the Seapower, Strategic, and Critical Materials Subcommittee of the House Armed Services Committee on Intelligence Issues, 22 February 1989 and 14 March 1990.

The White House. A Report to the President by the President's Blue Ribbon Commission on Defense Management. National Security Planning & Budgeting. June 1986.

The White House. National Security Strategy of the United States. [Washington D.C.], March 1990.

The White House. Office of the Press Secretary. Remarks by the President to the Aspen Institute Symposium. 2 August 1990.

U.S. Congress. Congressional Budget Office. Assessing the Effectiveness of Milestone Budgeting. Washington D.C.: GPO, July 1987.

U.S. Congress. Congressional Budget Office. Meeting New National Security Needs: Options for U.S. Military Forces in the 1990's. Washington D.C.: GPO, 1990.

U.S. Congress. House. Armed Services Committee. FY91 Defense Authorization Bill Committee Markup: Summary of Major Actions. [Washington D.C.], 31 July 1990.

U.S. Department of the Navy. Navy Internal Relations Activity. Report to the Congress: Fiscal Year 1991. [Alexandria, Virginia, 1990].

U.S. General Accounting Office. Briefing Report to the Honorable John Heinz, U.S. Senate. Industrial Base: Defense-Critical Industries. August 1988.

Newspaper Articles:

Blonston, Gary. "Budget-gobbling programs for elderly bloat U.S. debt." San Jose Mercury News, 20 September 1990, 1A.

"Bush News Conference On Budget and Middle East." The New York Times, 15 August 1990, A11 (N).

Cohen, William S. "Defense Consensus, Defense Cuts." The Washington Post, 9 April 1990, A19.

Dowd, Maureen. "Backing Pentagon, Bush Says Military Can Be Cut 25% in 5 Years." The New York Times, 3 August 1990, A13 (L).

Gordon, Michael R. "Chaney Gives Plan to Reduce Forces by 25% in 5 Years." The New York Times, 20 June 1990, A1 (L).

_____. "Chaney's Cuts Called Inadequate Because of Programs He'd Spare." The New York Times, 21 June 1990, A18 (L).

_____. "Pentagon Drafts Strategy for Post-Cold War World." The New York Times, 2 August 1990, A1 (L).

Lewis, Anthony. "After The Cold War." The New York Times, 13 July 1990, A27 (L).

"October deficit hits \$31.5 billion; record budget gap predicted in '91," San Jose Mercury News, 24 November 1990, 8C.

"Party Hearty." The Wall Street Journal, 6 November 1989, A16.

"Pentagon Will Cut Generals and Admirals." The New York Times, 29 June 1990, A14 (L).

"Probe of defense-buying fraud picks up force for new phase," San Jose Mercury News, 23 November 1990, 12A.

Rankin, Robert A. "Fed chairman admits economy has him stumped." San Jose Mercury News, 20 September 1990, 1A.

Rasky, Susan F. "Moynihan Revises Plan for Tax Cut." The New York Times, 1 August 1990, B6 (L).

_____. "New Deployment in Gulf May Slow Drive for Deep Cuts in Military Budget." The New York Times, 12 August 1990, 10 (L).

_____. "Stealth Bomber Backed By Senate." The New York Times, 3 August 1990, A13 (L).

Redburn, Tom. "Analysts Doubt That Plan Would Yield Balanced Budget by Mid-'90s." Los Angeles Times, 26 October 1990, A23.

Schmitt, Eric. "House Panel Votes to Cut Off Bomber." The New York Times, 1 August 1990, B6 (L).

_____. "Nunn Panel Cuts Pentagon \$18 Billion." The New York Times, 14 July 1990, 7 (L).

_____. "Star Wars' and Stealth Bomber Given Limited Funds in Accord." The New York Times, 18 October 1990, A1 (N).

Silk, Leonard. "National Security: New Priorities." The New York Times, 22 June 1990, D2 (L).

Summers, Harry G. "Is Our High-Tech Military a Mirage?" The New York Times, 19 October 1990, A17 (N).

Tyler, Patrick E. "Powell Resists Deeper Pentagon Cuts." The Washington Post, 23 June 1990, A10.

Weinberger, Casper W. "Too Soon to Slash Defense." The New York Times, 28 November 1989, A25 (L).

"Why So Defensive at Defense?" The New York Times, 21 June 1990, A22 (L).

Periodicals:

Adams, Gordon and Stephen Alexis Cain. "Defense Dilemmas in the 1990s." International Security 13, no. 4 (Spring 1989): 5-15.

Auster, Bruce B. "Choose your weapon." U.S. News & World Report, 13 August 1990, 47.

Bond, David F. "Army Preserves Big Aviation Programs, Seeks OH-58D Upgrade, Shelves FOG-M." Aviation Week & Space Technology, 12 February 1990, 127-130.

Borsting, Jack R. "Decision-Making at the Top." Management Science 28, no. 4 (April 1982): 341-351.

Chandler, Alfred D. "The Enduring Logic of Industrial Success." Harvard Business Review (March-April 1990): 130-140.

Cohen, Eliot A. "The Future of Force." The National Interest (Fall 1990): 3-15.

Covault, Craig. "Defense Cut Savings Should Be Pumped Into Civilian Research & Development." Aviation Week & Space Technology, 18 December 1989, 48.

Crocker, Thomas E. "Challenges and Opportunities in Base Negotiations." The Washington Quarterly 12, no. 2 (Spring 1989): 55-67.

Dalgleish, D. Douglas. "One Missile for the Triad." Proceedings, August 1989, 74-77.

- "Defense Budget: Bombdive." The Economist, 3 February 1990, 26-27.
- Ellis, James E., Eric Schine, Dave Griffiths, Barbara W. Carlson, Karen Pennar, and Elizabeth Ehrlich. "Who Pays for Peace?" Business Week, 2 July 1990, 64-70.
- Ellsworth, Robert F. "Maintaining U.S. Security in an Era of Fiscal Pressure." International Security 13, no. 4 (Spring 1989): 16-24.
- Griffiths, Dave. "Chaney Goes to Battle." Business Week, 12 February 1990, 28-30.
- Henderson, Breck W. "U.S. Defense Budget Cuts Could Imperil Nation's Research and Development Effort." Aviation Week & Space Technology, 18 December 1989, 35-39.
- Holland, William J., Jr. "The End of the Triad? Why SSBN Advances Make a Dyad Possible." Arms Control Today, September 1989, 10-15.
- Kaufmann, William W. "A Plan To Cut Military Spending in Half." The Bulletin of the Atomic Scientists (March 1990): 35-39.
- MccGwire, Michael. "About Face: How the Soviets Stopped Planning for World War." Technology Review 92, no. 8 (November-December 1989): 32-40.
- Morrocco, John D. "Navy Avoids Major Program Cuts, Faces Modest Force Reductions." Aviation Week & Space Technology, 12 February 1990, 123-125.
- Nunn, Sam. "Defense Budget Blanks: The Peace Dividend." Vital Speeches of the Day LVI, no. 13 (15 April 1990): 386-392.
- _____. "Implementing a New Military Strategy: The Budget Decisions." Vital Speeches of the Day LVI, no. 15 (15 May 1990): 450-457.
- Ramirez, Anthony. "The Pork Barrel and the Stealth." Fortune, 14 August 1989, 14.
- Schneider, Ernest. "Causal Factors in Variations in US Postwar Defense Spending." Defense Analysis 4, no. 1 (1988): 53-79.
- Smith, Lee. "How Big a Military Does the U.S. Need?" Fortune, 31 July 1989, 140-152.

"The Pentagon's menagerie." The Economist, 16 June 1990, 69-70.

Trost, Carlisle A. H. "Maritime Strategy for the 1990s." Proceedings, Naval Review 1990, 92-100.

Weinberger, Casper W. "The B-2 - A Low-Cost Insurance Policy." Forbes, 21 August 1989, 31.

Williams, Cindy. "Strategic Spending Choices." International Security 13, no. 4 (Spring 1989): 25-35.

Wolf, Charles, Jr. "Scoring the economic forecasters." The Public Interest (Summer 1987): 48-55.

Woods, Wilton. "The Pentagon's Pork Barrel." Fortune, 3 July 1989, 14-16.

Books:

Dougherty, James E. and Robert L. Pfaltzgraff. Contending Theories of International Relations. New York: Harper & Row, 1981.

Gaddis, John Lewis. Strategies of Containment. New York: Oxford University Press, 1982.

Gansler, Jacques S. Affording Defense. Cambridge, Massachusetts: Massachusetts Institute of Technology Press, 1989.

Kanter, Arnold. Defense Politics: A Budgetary Perspective. Chicago: The University of Chicago Press, 1979.

Kaufmann, William W. and Lawrence J. Korb. The 1990 Defense Budget. Washington D.C.: The Brookings Institution, 1989.

Kennedy, Paul. The Rise and Fall of the Great Powers. New York: Vintage Books, 1989.

Kirkland, J. R., Eugene B. Konecni, George Kozmetsky, and Robert L. Kuhn. Initiatives for Accelerating the Technology Diffusion Process: A Conference on Commercial Application of Defense R&D. Edited by Raymond W. Smilor. Washington D.C.: RGK Foundation, 1983.

Mandelbaum, Michael, ed. America's Defense. New York: Holmes & Meier, 1989.

Mintz, Alex. The Politics of Resource Allocation in the U.S. Department of Defense. Boulder, Colorado: Westview Press, 1988.

Olvey, Lee D., James R. Golden, and Robert C. Kelly. The Economics of National Security. Garden City Park, New York: Avery Publishing Group, 1984.

Pilling, Donald L. Competition in Defense Procurement. Washington D.C.: The Brookings Institution, 1989.

Wander, W. Thomas, F. Ted Hebert, and Gary W. Copeland. Congressional Budgeting: Politics, Process, and Power. Baltimore, Maryland: The John Hopkins University Press, 1984.

Mueller, Dennis C. Public Choice II, rev. ed. (Cambridge: Cambridge University Press, 1989).

INITIAL DISTRIBUTION LIST

	<u>No. of copies</u>
1. Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	2
2. Library, Code 52 Naval Postgraduate School Monterey, California 93943-5002	2
3. Director, Net Assessment OSD/NA Room 3A930 Office of the Secretary of Defense Washington, D.C. 20301	1
4. Sean O'Keefe Comptroller, Department of Defense Office of the Secretary of Defense Washington, D.C. 20301	1
5. Director, National Security Affairs Office of Management and Budget Executive Office of the President Washington, D.C. 20503	1
6. Dr. Brian Daily Committee on Armed Services United States Senate Room 232-A Russell Senate Office Building Washington, D.C. 20510	1
7. Dr. Jack Borsting University of Southern California School of Business Administration, HOH-800 Los Angeles, California 90089-1421	1
8. Dr. James S. Roche Vice President & Special Assistant to the President Northrop Corporation ORGN 100/CC 1840 Century Park East Century City Los Angeles, California 90067-2199	1

9. RADM P. D. Smith, USN 1
OP-60, The Pentagon, Room 4E556
Office of the Chief of Naval Operations
Washington, D.C. 20350
10. Thomas C. Bruneau, Code NS/BN 1
NSA Department Chairman, Code NS/BN
Naval Postgraduate School
Monterey, California 93943-5002
11. Dr. Robert E. Looney, Code NS/LX 1
Naval Postgraduate School
Monterey, California 93943-5002
12. Dr. Patrick C. Parker, Code NS/PR 1
Naval Postgraduate School
Monterey, California 93943-5002
13. LCDR Clyde J. McCaleb III 1
211 West 40th Avenue
San Mateo, California 94403