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# FOUR CASE STUDIES IN CHANGING CONGRESSIONAL DEMOGRAPHICS AND MAJOR WEAPON SYSTEM PROCUREMENT

by

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14. ABSTRACT

Future defense budgets will undoubtedly get smaller yet new weapon systems will continue to get more expensive. Absent any clear threat, how can the Air Force get support for modern systems like the F-22? There seems to be no correlation between how Members of Congress vote on key defense programs and prior military service. Defense spending is more complicated than just a simple relationship between prior military experience and support for major weapon systems. To begin with, congressional oversight has increased enormously in the past four decades since the end of World War II. This increased oversight has allowed more opportunity for members to personally impact individual defense programs. Also, the increase in number and variety of issues addressed by Congress has led to an increased dependence on staff and congressional research agencies for background information on issues. With this increased dependence on staff comes the opportunity for staff to impact issues through their relationship with the member. Interest groups, Political Action Committees, and constituency groups all impact how a member votes. As the military experience of Congress declines, does the military stand to lose in terms of major weapons procurement? Not necessarily so, but future programs will require increased ?education? efforts and clear defining of the requirement against a threat, an emerging threat, or emerging capability. Congress understands the need to modernize forces in support of a plausible strategy and defense program. Competing priorities and smaller defense budgets all impact congressional support for defense programs. Some of the strongest defense supporters are non veterans, and some veterans may not have had a ?positive? experience in the military (i.e. Vietnam service) which would also impact how the member would vote. The future will present a great challenge for the military leadership. The balance between force structure, readiness, and modernization must be maintained within a continually decreasing budget. Yet the roles the military will perform, in many respects, will grow as the United States continues its strategy of engagement and enlargement. Despite these two seemingly opposing trends, congressional support for the military will continue in the future. To what degree and which programs will be funded will remain a complicated mix of threat versus capabilities versus the many influences acting on the congressional decision maker.

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## *Preface*

With the advent of the all-volunteer force in 1973, the number of Members of Congress who had military backgrounds or experience began to decline. Two decades later, a significant difference in the make up of Congress begs the question: Does the declining military experience in Congress impact their support for military programs in general, and Air Force programs in particular? On the surface one might believe that the declining number of members with military experience would indeed have a negative impact on support for Department of Defense (DOD) programs. However, Congress is a complex combination of personalities, traditions, motivations, and of course politics. In attempting to investigate any correlation between military experience and support for military programs, several variables need to be explored and understood. This paper will briefly look at Congress as an institution, the individual members and their competing motivations, and finally, use four case studies dealing with major Air Force weapon system programs to determine if there is indeed a correlation between military experience and support for military programs.

In researching this question, the Congressional Record was used extensively to investigate recorded votes on key legislation which is ultimately the proof of congressional support, or lack of support for military programs. Towards this effort, I would like to acknowledge the efforts of the Research Division of the Air Force Legislative Liaison Directorate, and in particular, Mr. Fred Baumgardner, whose data

bases were invaluable in identifying Members of Congress with previous military background. I would also like to express my gratitude to Rear Admiral Bill Pendley, USN (Ret) who, as my advisor, provided the focus of this research effort and lent needed advice on how to tackle such a topic. As with all research conducted at the Air University, a special thanks most deservedly is extended to the Air University Library staff. Their enthusiastic support and unceasing drive to ensure we have all the reference material needed to write on very diverse and, at times, obscure topics is often overlooked—they are true professionals in every respect.

## *Abstract*

Future defense budgets will undoubtedly get smaller yet new weapon systems will continue to get more expensive. Absent any clear threat, how can the Air Force get support for modern systems like the F-22? There seems to be no correlation between how Members of Congress vote on key defense programs and prior military service. Defense spending is more complicated than just a simple relationship between prior military experience and support for major weapon systems. To begin with, congressional oversight has increased enormously in the past four decades since the end of World War II. This increased oversight has allowed more opportunity for members to personally impact individual defense programs. Also, the increase in number and variety of issues addressed by Congress has led to an increased dependence on staff and congressional research agencies for background information on issues. With this increased dependence on staff comes the opportunity for staff to impact issues through their relationship with the member. Interest groups, Political Action Committees, and constituency groups all impact how a member votes.

As the military experience of Congress declines, does the military stand to lose in terms of major weapons procurement? Not necessarily so, but future programs will require increased "education" efforts and clear defining of the requirement against a threat, an emerging threat, or emerging capability. Congress understands the need to modernize forces in support of a plausible strategy and defense program. Competing

priorities and smaller defense budgets all impact congressional support for defense programs.

Some of the strongest defense supporters are non veterans, and some veterans may not have had a “positive” experience in the military (i.e. Vietnam service) which would also impact how the member would vote. The future will present a great challenge for the military leadership. The balance between force structure, readiness, and modernization must be maintained within a continually decreasing budget. Yet the roles the military will perform, in many respects, will grow as the United States continues its strategy of engagement and enlargement. Despite these two seemingly opposing trends, congressional support for the military will continue in the future. To what degree and which programs will be funded will remain a complicated mix of threat versus capabilities versus the many influences acting on the congressional decision maker.

# Chapter 1

# The Changing Role of Congress

> *Congress is not a manufacturer for the executive branch. It is a separate branch of government, and will accept responsibility only for matters it wishes to be within its purview often on its own timetable.*
>
> —Wilbur D. Jones, Jr.
> *Congressional Involvement and Relations*, April 1996

Constitutionally, Congress has the power to raise armies and build navies through its "power of the purse." Article One, Section 8 of the Constitution, which gives the Congress its mandate to provide for the common defense, has been debated and contrasted with the Executive Branch's role (Commander in Chief) in Article Two ever since the ratification of the Constitution. This is no less an issue today as the Executive Branch pursues its agenda while the Congress exercises its customary oversight role. Over the past forty years since the end of World War II, the Congress and Executive have experienced the full range of relationships which have seen the ebb and flow of political power and control from one branch to the other. Strong executives have sought more latitude in dealing with their domestic, international, and defense programs. Weaker executives (or more assertive Congresses) have led to the surrender of power in favor of the Legislative Branch. To a great degree, past presidents have had a measured amount of success in gaining power to carry out their programs when the issue fell into the rather large "gray area" in the division of powers outlined in the Constitution.

Recently, however, Congress has assumed the lead in overseeing many areas traditionally left to the executive branch. After what many in Congress have felt was abuse of power by the Executive including instances where the Executive Branch flat out lied to Congress, legislation and micromanagement of the Federal budget have become common place:

> Congress has expanded its capacity and willingness in recent years to conduct oversight. This change stems from several factors. These include the public's dissatisfaction with big government, revelations of executive agency abuses, the influx of new legislators skeptical of government's ability to perform effectively, the availability of congressional staff, and recognition that in a time of fiscal and resource scarcity Congress must make every dollar count.[1]

Defense oversight committees are noted for "conducting careful budgetary reviews and for reducing appropriations requests," as opposed to other committees which approve more funding than requested. In a similar example, the House Armed Services Committee (now the National Security Committee) has "carefully developed means for controlling defense spending, principally a requirement that most expenditures have specific annual authorizations."[2]

Where this has impacted the Department of Defense (DOD) most significantly is in the area of the defense budget and, in particular, the weapon system acquisition process. Having increased its oversight role through hearings and the bill mark-up process, Congress shows no sign of relinquishing any political power to the Executive Branch in the near future. This cycle is not new. What is unique is the degree to which Congress attempts to regulate the national budget and in particular, defense expenditures.

Although only one portion of the total national budget, defense spending represents the majority of discretionary spending (51.5 percent for fiscal year 1997 (FY 97) up from

47.7 percent in FY 96) in the Administration's Federal Budget proposal.[3] The economic impact of enormous defense expenditures increases the public interest of defense programs and likewise increases congressional attention. With the reality of declining defense budgets, congressional inputs into the defense budget have a very significant impact on future plans and programs. How Members of Congress vote on major weapons programs within the defense budget spell life or death for countless businesses, program directors, and constituents trying to gain/maintain employment. Congressional inputs also impact future Service capabilities as strategies and force structure decisions reflect improvements in effectiveness through the use of modern technologies.

Recent trends have not been limited to just changing the relationship between the Executive and Legislative Branches of Government. The Congress too has experienced significant evolutionary change as it faces the increasingly complex array of issues and concerns to which it exercises oversight. In the realm of defense, the Congress is losing military experience within its ranks. The 103rd Congress, for example had 175 Representatives with military experience and 60 Senators. In the 104th Congress this number decreased to 158 Representatives and 53 Senators. The 105th Congress continues this trend with 143 Representatives and 45 Senators,[4] (see table 1.) At the same time, the complexity and number of issues Congress addresses continually increase. The advent of the information age has resulted in the ability of constituents to easily contact their elected representatives and voice their concern over a wide range of issues. Electronic communication has made this almost instantaneous and there is great pressure on the Members of Congress to respond in a timely manner, effectively showing the voting constituency that Congress listens. Increasing areas of congressional preview have

resulted in a sharp increase in the number of committees and subcommittees over the past decade leading to an increase in the average number of assignments for members. Today, a member's schedule is often driven by constant committee or subcommittee meetings. This is especially true as the bill cycle mandates bill mark-up sessions and associated hearings, both of which require extensive preparation.[5] This leads to an increased dependence by members on key staff and outside agencies to provide critical information on important issues.

**Table 1. Veterans in Congress**

| | Senate | (Dem/Rep) | House | (Dem/Rep) |
|---|---|---|---|---|
| 102nd Congress | 68 | 38/30 | 213 | 130/83 |
| 103rd Congress | 60 | 32/28 | 175 | 94/81 |
| 104th Congress | 53 | 25/28 | 158 | 67/91 |
| 105th Congress | 45 | 19/26 | 143 | 60/83 |

The recent enlargement of congressional support staff seems to reflect the expanding role of each individual legislator. "As the government has done more the congressional workload, in terms of both legislation and constituency service, has increased, and staffing needs of Congress have expanded accordingly."[6]

## The Importance of the Staff

Congressmen have come to view their staff's assistance as valuable not only to policy formulation and constituency service, but to "power acquisition" which is a key congressional activity. While staffs have been a permanent characteristic of Congress since the nineteenth century, numbers have grown substantially. Staffs were increased noticeably as a result of the Legislative Reform Act of 1946 and accelerated in the 1970s. Personal staff in the House jumped from 870 in 1935 to 6939 in 1977. The Senate saw an

increase from 424 to 3903 during the same time period. Between 1969 and 1977 the committee staffs doubled in the Senate and tripled in the House.[7] Congressional staff is involved in most major activities of Congress and many "congressional outputs" can be traced to the research and writing of key staff members.[8] Harrison Fox and Susan Hammond, in their 1977 study of congressional staffs, summed up staff influence as they found it twenty years ago. Their observations are perhaps more relevant now due in large part to the increased workloads imposed on Congress today:

> Legislative aides have the capacity to significantly influence congressional decision making. Their expertise and judgment are often critical. For instance, staff exercise control over communications into and within a committee and personal office. They participate in identifying issues and developing legislative positions. They conduct research, gather background data on specific legislative matters, and draft legislation. They prepare testimony, speeches, Floor statements, explanations to constituents, and reports. Increasingly, they coordinate legislative strategy. They brief Congressmen on pending legislation. Most important, they are expected to offer their opinion and act as a "sounding board" for Senators and Representatives.[9]

In a sense, legislators are functioning more like the president or CEO of a corporation, defining broad policy objectives and leaving the details to the staff.[10] Congressional staffs are hired for a number of reasons. Military experience is usually not a prerequisite unless the Member has a large military presence in their state or district.

Furthermore, staff turn-over averages approximately two years and positions such as military legislative assistant (MLA) is often left vacant or assigned temporarily to another staff member.[11] Many MLAs are young and not familiar with the military. This is especially true of the House of Representatives where a large portion of personal staff are under thirty years old. Staff members of the Appropriations and National Security

Committees tend to be older, but their average tenure is still less than four years.[12] Junior staff members can move up to more senior jobs quickly, often in three to five years.

This high turnover rate often results in legislation that is based on hot issues of the moment and not well-thought out policy. The technical nature of weapon system acquisition is particularly susceptible to mistakes and omissions by inexperienced staff members. Short tenure and common lack of continuity also compounds the congressional requirement for comprehensive background information on key defense issues. As a result, several outside research agencies and lobby groups have emerged to lend their support and influence to Congress.

## Emergence of Outside Groups

Three legislative support groups are available to Congressional Members and staff: the Congressional Research Service (CRS), created in 1914, the General Accounting Office (GAO), formed in 1921, and the Congressional Budget Office (CBO), established in 1974.[13] Operating under strict rules of nonpartisanship and objectivity, these agencies give Congress the technical experts and analysts needed to compete on equal footing with the Executive Branch.

The creation of these agencies sprang from the growth of government in domestic and international affairs which made Congress increasingly dependent on the Executive Branch for information. Congress, as an outgrowth of the distrust of the Executive (especially true of the Johnson and Nixon administrations) authorized and expanded the role of these agencies to provide a source of congressionally-controlled information.[14] Today, these agencies are routinely used by Congress, not only as a source of facts and

background information on issues, but also to counter or support individual positions. Access to information for these agencies, even sensitive or classified, has improved (through legislative pressure) recently and so too has their technical expertise. In 1979, for example, the CRS, consisting of over 700 employees, answered nearly 200,000 requests from members, committees and staffs, and provided "a growing number of issues and legislative briefs, background reports and analyses."[15]

The CBO has likewise grown to provide Congress not only with an overall "budgetary perspective" but at the same time can present "analyses of policy options in terms of budgetary implications." However, these options presented are based on fiscal analysis and are not supposed to favor one system or alternative.[16] Yet they do influence members and in this manner affect policy. Lobby groups also can have a significant influence on how members vote on various issues.

Again, with the increasing size and scope of government, the mutual dependence of legislators and lobbyists has deepened.[17] Lobbyists turn to Congress for support of their causes and goals. Members depend on lobby groups not only for information on important issues, but grass root support for reelection, political and constituency information, and to "assist strategically in passing or blocking" legislation the member supports or opposes; a mutual dependence.[18]

With this complex combination of influence, politics, and constituency interest, the increasing oversight provided by Congress will have a definite impact on future weapon system programs. Still the question remains—does the declining number of veterans in Congress represent a major impediment to support for needed systems in the future? Is this decrease reflected in the principal defense oversight committees and if so, how are

the recommendations by these oversight committees viewed by the full Senate and House? Attempting to establish a possible correlation between prior military service and support for military programs is in itself a complex task. Establishing a methodology to examine congressional interaction with defense programs is a necessary step in understanding any possible link between the two.

**Notes**

[1] Roger H. Davidson and Walter J. Oleszek, *Congress and Its Members*, 5th edition, (Washington D.C.: Congressional Quarterly, Inc., 1996), 334.

[2] R. Douglas Arnold, *Congress and the Bureaucracy: A Theory of Influence*, (New Haven: 1979), 99-100.

[3] U.S. Government, *Federal Spending by Function, Subfunction, and Major Program, Analytical Perspectives, Budget of the U.S. Government*, FY 1997, Chapter 25.

[4] Compiled by The Legislative Research Division, Office of Legislative Liaison, Office of the Secretary of the Air Force, 18 January 1997.

[5] Norman J. Ornstein, "Congress in the Post-Cold War World," *Beyond the Beltway: Engaging the Public in U.S. Foreign Policy*, (W.W. Norton & Company, 1994), 126.

[6] Norman J. Ornstein, Thomas E. Mann, and Michael J. Malbin, *Vital Statistics on Congress, 1993-1994*, (Washington D.C.: Congressional Quarterly, Inc., 1994), 121.

[7] Barbara Hinckley, *Stability and Change in Congress*, 4th ed., (New York: Harper & Row, 1988), 88.

[8] Harrison W. Fox, Jr. and Susan Webb Hammond, *Congressional Staffs: The Invisible Force in American Lawmaking*, (New York: The Free Press, 1977), 1.

[9] Ibid., 2.

[10] Richard Haass, *Congressional Power: Implications for American Security Policy*, (London: The International Institute for Strategic Studies, 1979), 8

[11] Ibid., 56.

[12] Ibid., 178.

[13] Davidson and Oleszek, 220.

[14] Ornstein, Mann, and Malbin, 123.

[15] Richard Haass, 8.

[16] Ibid., 9.

[17] Davidson and Oleszek, 343.

[18] Ibid., 343.

# Chapter 2

## Methodology for Establishing A Possible Trend

In discovering possible trends in congressional support for major weapon system procurements, it was necessary to correlate the changing role of Congress since the end of World War II and increased congressional interest in DOD acquisition programs. By investigating four major weapon system procurement programs taken from four separate defense budgets, it may be possible to identify voting patterns linking congressional support with Congressional Members' military experience. The four weapon systems chosen reflect interwar years, when there were fiscal pressures to trim the defense budget while bringing on line costly new aircraft systems. Using the interwar periods was necessary to eliminate any "rally around the flag" effect of programs funded when America was engulfed in an armed struggle such as the Korean or Vietnam conflicts.

Although funding for major weapon systems may stretch for several years, the case studies attempt to isolate the first year of production funding. Up until this point, the weapon system is still experimental and its capabilities not fully known or validated. Immediately after World War II, several projects were undertaken by the research, test, and development communities in an attempt to take advantage of the leading position America had on technology. Several "concept demonstrators" were created and extensively tested but never placed into production. From the congressional point of

view, these systems were just a part of the Department of Defense's budget for research, development, test, and evaluation. And while congressional support was needed for passage of the overall defense budget, most of these "projects" were unknown to most members. It made sense then to concentrate on weapon systems which were successfully produced and deployed. Successful programs, defined as aircraft reaching full production status, were selected since unsuccessful programs are often terminated for a number and variety of reasons having nothing to do with Congress, the Department of Defense or the product concerned. Also, background material for deployed systems is more readily available in unclassified formats thus facilitating this comparative study.

In terms of Congress, this comparative study will concentrate on the oversight committees. While several committees exert influence over defense spending and policy, the dominant actors are the Armed Services Committees of the House and Senate and the Defense Subcommittees of the House and Senate Appropriations Committees.[1] The Budget Committee also influences the level of defense spending, but since they work closely with the Appropriations Committees, they will not be included in this comparison.

The four oversight committees also act as filters, addressing all issues of a military nature. They determine which bills will reach the floor of the Senate or House, or which merit serious consideration. These oversight committees investigate the details of military issues, hold hearings, and gather information from which a recommendation on a particular bill or issue is made. Since negative recommendations rarely are sent out of committee, many legislative initiatives never make it out of committee. For example, of the 16,982 bills introduced during the 94th Congress (1975-1976), only 985, or less than 6 percent were sent to the floor.[2] While recent criticism has been leveled at the micro

management of these oversight committees, this is where the real discussions and compromises take place.

For the most part, the full House and Senate have historically voted in line with what the oversight committee recommends, even though recent Congresses have attempted to amend the defense bill once on the Floor. Institutionally, committees are where policy making, oversight, and even public education occur. By dividing the Congress into a number of "mini-legislatures," Congress is able to review roughly 10,000 bills and nearly 100,000 nominations every two years.[3]

Although legislation is sometimes amended on the Floor, committees are the vehicle by which bills are generally introduced, debated, and prepared for review by the whole House and Senate. If a bill is likely to make it to the Floor for a vote, committee hearings are usually held to give Congress and the public an opportunity to hear arguments for and against the proposed legislation. In terms of the DOD budget, the House Committee on National Security (formally the House Armed Services Committee or HASC) and the National Security Subcommittee of the House Appropriations Committee (HAC(NS)) are responsible for receiving the Administration's budget proposal, transforming it into an authorization/appropriation bill (one of 13 appropriations bills dealing with discretionary spending). After passage in the House, the bill is sent to the Senate Armed Services Committee and Defense Subcommittee of the Senate Appropriations Committee. After the Senate version of the bill passes the full Senate, any remaining differences between the two versions of the bill are resolved in conference. The Conference Report is then considered by the full House and Senate. Once passed, the bill is then sent to the President for signature into law. A key step in the passing of a defense budget is the

conduct of congressional hearings into the rationale behind the requested funding. These hearings are commonly referred to as Posture Hearings and deal with the state of the military in general as well as defending Service programs and funding.

## Posture Hearings

Annually, these appropriating and authorizing committees of both the House and Senate conduct hearings on the DOD budget proposal, inviting the Secretary of Defense, Chairman, Joint Chiefs of Staff, Commanders-in-Chief of Unified Commands, Service Secretaries, and Service Chiefs to testify. These hearings present the DOD the opportunity to defend the President's defense request, while also emphasizing the importance of key items contained in the request. Recently, these oversight committees have even given witnesses the opportunity to pass along a list of unfunded requirements which the committee would use in case additional funding were available.

It is through these hearings and extensive "behind the scenes" work by staffs from both sides of the river that the administration's budget request is put into a bill format. What results is often a mix of DOD requirements and congressional inputs. This bill then proceeds to the Floor of the House where it is debated and eventually passed. From there, the bill is subjected to much the same scrutiny in the Senate.

Throughout this process, the Members and staff directly impact the DOD proposal, changing it to one degree or another based on a myriad of reasons. Again, historically once the bill "hits the floor" for general debate, it is passed (possibly with a few amendments) based on the recommendations of the defense oversight committees. For

this reason, this study will focus on the defense oversight committees in building the comparative cases.

The decades between the end of World War II and the present also reflects a variety of combinations of Republican and Democratic administrations and various combinations of majorities in the Congress. This time period also involves varying degrees of public support for the military and military procurements. By looking at four examples of major weapon system acquisition programs taken from different post-World War II periods, perhaps a relationship between congressional voting and previous military experience can be discerned.

**Notes**

[1] Thomas A. Twomey and Harold J. Johnson, *The Congress: Defense Policy in Theory and Practice*, (Washington D.C.: National Defense University, 1986), 14.

[2] William Keefe, *Congress and the American People*, (Englewood Cliffs, NJ: Prentice-Hall, 1980), 65.

[3] Roger H. Davidson and Walter J. Oleszek, *Congress and Its Members*, 5th edition, (Washington D.C.: Congressional Quarterly, Inc., 1996), 195.

# Chapter 3

# Case Study: B-52 Procurement

> *The Congress, in its desire to know everything about a weapon system in real time, has put itself in the position of a restaurant customer checking in with the chef every step of the way, sampling, tasting, directing, changing his mind, and making decisions long before the menu is defined.*
>
> —Walter Boyne, *Boeing B-52: A Documentary History*

Of the four case studies that will be evaluated in this paper, the B-52 is unique in that funding was primarily the responsibility of the House and Senate Appropriations Committees. Through the end of World War II most federal agencies and programs were permanently authorized and were reviewed annually by the House and Senate Appropriations Committees. In Fact, before 1959, defense spending was only scrutinized by the Defense Subcommittee of each chamber and not placed in "double jeopardy" as is the case today with the appropriations and authorization process.[1] The period 1952 to 1974 was characterized by a defense spending consensus where both Congress and the public had substantial agreement on maintaining a large defense establishment.[2] Since the 1970s, the trend has been toward short-term appropriations, giving the authorizing committees additional opportunities to control programs and operations.[3] Virtually all weapon systems, research and development, and military construction must be authorized by the House National Security Committee and the Senate Armed Services Committee then face the National Security and Defense Subcommittees of the House and Senate

Appropriations Committees respectively. Procurement of the B-52 was somewhat simplified by the fortune of having to undergo Congressional oversight only in the Appropriations Committees of the House and Senate.

## B-52 Background

Conceived in the 1940s, the initial production model of the B-52 was funded by the fiscal year (FY) 1956 budget. Fifty B-52B models were procured with this initial funding and Congress supported B-52 production through the early 1960s with the final "H" model delivery to the Air Force in October, 1962.[4] In all, 744 were built by the Boeing Company, production split between their Seattle plant and the plant in Wichita, Kansas.[5] The B-52 was designed to keep the United States at the forefront in terms of nuclear weapon delivery vehicles and ushered in an era of intercontinental jet bombers which still survives today in the B-52H and successor systems, the Rockwell B-1B and Northrop's stealthy B-2.[6] The extensive production of B-52s required Congressional support a number of times as the aircraft went through extensive modifications and design changes; however, this case study will focus only on the original procurement decision in the FY 1956 budget.

Congress had not yet "intruded so pervasively into the innermost details of aircraft procurement" and the public seemed to understand buying an aircraft which "promised a clear armed superiority over potential enemies."[7] The conditions were such that Boeing was given the requirement to design and produce a bomber with great range, speed and payload carrying capability. What they presented to the Air Force was an aircraft that not only met the stated requirements, but also had enormous growth potential—which has

enabled the B-52 to continue as a viable weapon system today.[8] During Desert Storm, as an example, B-52s delivered 40 percent of all the weapons dropped by coalition forces. Today, in a conventional conflict, the B-52 can perform air interdiction, offensive counter-air, and maritime operations. Effective in ocean surveillance missions, it can assist the Navy in anti-ship and mine-laying operations, monitoring 140,000 square miles of ocean surface.[9] As one historian, familiar with the changing procurement system, remarked:

> Sadly, almost none of these conditions exist today; it is a case of too many people becoming "expert" in the process of aircraft design, and too many "safeguards" being built into the procurement process. These safeguards are of excellent intent, but of crippling effect. There are other problems, also. The mechanism of developing weapon systems has spawned innumerable subsidiary offices, many of which tend to become advocacy hobby shops, where well intended but career oriented personnel, civil and military, lose sight of the ultimate objective of the weapon system in their desire to see their own ideas adopted. Thus it was that basically excellent designs like the Lockheed C-5A and General Dynamics F-111 were saddled with concepts that were not relevant to the essential mission, resulting in cost growth and delays which harmed the final product and gave the programmes odious reputations.[10]

## Congressional Debate

What is conspicuously absent in the debate by both the Houses and Senate Appropriations Committees pertaining to procurement of the B-52 is the questioning of the Administration's proposal as is common place today. In fact, the Secretary of Defense, Charles E. Wilson actually asked for an additional $356 million to speed up procurement. President Eisenhower, in his budget message to Congress stressed his administration's emphasis in national security would be placed "on the development and maintenance of effective nuclear-air retaliatory power of the Air Force and naval aviation

as the principal deterrent to military aggression."[11] The remarks recorded by Senator Stuart Symington, former Secretary of the Air Force during the Truman Administration, echoed a perceived need to maintain superiority over the Soviet Union:

> "The Soviets have in operational units more modern jet fighters...(and) light jet bombers than the United States and the entire free world combined possess. We have hundreds more medium size bombers than the Communist…The Communists have passed us in the production of modern long-range intercontinental bombers…The Communists are ahead in the missile field—well ahead with the intercontinental ballistic missile, the ultimate weapon…"[12]

With this sentiment running high in both Houses, Congress passed the FY 56 budget, including the additional $ 356 million to increase production of B-52 aircraft by Roll Call Vote, 384-0 in the House, and 80-0 in the Senate. The Conference Report was accepted by both Houses and approved by voice vote—with no debate in the Senate prior to passage.[13] Throughout the defense oversight committees veterans were well represented. The Senate Armed Services Committee had the least percentage of veterans—53 percent—while the Senate Appropriations Committee had the greatest at 74 percent. Veteran representation in the other oversight committees averaged 64 percent:

- Senate Appropriations Committee 17 of 23–74 percent
  Defense Subcommittee 11 of 18–61 percent
- Senate Armed Services Committee 8 of 15–53 percent
- House Appropriations Committee 32 of 50–64 percent
  Defense Subcommittee 10 of 15–67 percent
- House Armed Services Committee 24 of 37–65 percent[14]

**Table 2. Defense Program Spending, FY 1956 (in millions)**

| | Budget Request | Appropriated |
|---|---|---|
| **B-52 Planes** | $356.0 * | $356.0 |
| **Army - Total** | $7,573,980 | $7,329,953 |
| **Navy - Total** | $9,180,157 | $9,118,180 |
| **Air Force - Total** | $14,783,678 | $14,739,763 |
| **Total** | $32,232,815 | $31,882,816 |

* Added by request of Secretary of Defense Wilson

With the close of World War II only a decade earlier, the majority of Congress had prior service experience. In the House, this amounted to 261 of 435 (60 percent), evenly split between Democrats and Republicans. In the Senate, 62 of 100 were veterans, with a 32/30 split between Democrats and Republicans.

Both Houses passed their versions of the FY 56 Appropriations Bill on unanimous roll-call votes. In the ensuing Conference Report, after ironing out a few small differences, both Houses passed the Bill by voice vote—the Senate without debate. Some similarities can be drawn from this example and the Congressional support for the F-15.

**Notes**

[1] Richard Haass, Congressional Power: Implications for American Security Policy, (London: International Institute for Strategic Studies, 1979), 16.

[2] R. Douglas Arnold, *Congress and the Bureaucracy: A Theory of Influence*, (New Haven: 1979), 96.

[3] Davidson and Oleszek, 376.

[4] Walter J. Boyne, Boeing B-52: A Documentary History, (London: Jane's Publishing, Inc., 1982) 10.

[5] Boeing. B-52 Stratofortress, 1996, n.p., on-line, Internet, 2 January 1997, available from http://www.boeing.com/b52.html

[6] Bill Sweetman, Northrop B-2 Stealth Bomber: The Complete History, Technology, and Operational Development of the Stealth Bomber, (Osceola, WI: Motorbooks International Publishers, 1992), 7.

[7] Walter Boyne, 43.

[8] Ibid., 43.

## Notes

[9] *United States Air Force Fact Sheet 96-11, B-52 Stratofortress*, 1996, n.p., on-line, Internet, 16 December 1996, available from http://www.af.mil/news/factsheets/ B_52_ Stratofortress.html.

[10] Ibid., 43.

[11] *Congressional Quarterly Almanac*, (Washington D.C.:1955), 221

[12] Ibid., 226.

[13] Ibid., 226.

[14] Compiled from various sections in *Congressional Quarterly Almanac, Volume XI*, (Washington D.C.: Congressional Quarterly, 1955)

# Chapter 4

# F-15 Case Study—Post Vietnam

> *It was inevitable that the best fighter in the world would also be one of the most expensive, and in terms both of current capability and of potential for development, it would seem that the size of the bill is equaled by the stature of the product.*
>
> —Michael J. Gething, author:
> *Modern Fighting Aircraft: F-15 Eagle*

In the view of Congress, the B-52 procurement process and that of the F-15 were compared through the same lens - the Soviet threat. The new generation of Soviet fighter aircraft - most notably the MiG-23 Flogger and the MiG-25 Foxbat - had presented the United States Air Force with a major challenge in air superiority. Like the B-52, the F-15 (initially the "FX") program was designed to counter a specific Soviet threat or capability. In this case, Soviet fighters were increasingly more capable compared with U.S. front line fighters designed and built in the 1950s and 1960s. Secretary of Defense Melvin R. Laird characterized this increased threat in his FY 72 Report to Congress stating, "the Soviet buildup is showing even greater momentum than I projected in last year's Defense Report." Among the weapon systems he referred to was "development of new Soviet fighter aircraft characterized by the high-speed Foxbat which has been operating in the Middle East."[1] These modern aircraft were clearly superior to the aging F-4E. But getting support for a major weapon system would be somewhat more difficult in the early

1970s. The Congress had changed its procedures and now the Authorizing Committees also reviewed defense programs. This would make new programs more difficult to pass Congressional scrutiny without extensive effort by the Air Force and DOD.

The Authorizing Committees, previously limited to policy debates and strategies, now found themselves in heated debate over the procurement of requested weapons systems. Still, for the most part, the Committees supported the Administration's request - bowing to their "expertise" in military needs and requirements. However, unlike the B-52 case study, the votes were not unanimous. Although passage was fairly one-sided, 44 Representatives and 5 Senators voted to reject the Authorization Conference Report.[2] On passage of the Appropriations Bill for FY 73, 42 Representatives voted to reject the Conference Report; the Senate passed it on a voice vote. While the key issues of Vietnam and the Strategic Arms Limitation Treaty (SALT) talks garnered the headlines, the F-15 procurement went along almost unnoticed.

**Table 3. Defense Program Spending, FY 1973 (in millions)**

| | **Budget Request** | **Authorized (PL92-436)** | **Appropriated (Pl 92-570)** |
|---|---|---|---|
| **F-15 Planes** | Number/Amount<br>30 /$910.4 | Number/Amount<br>30 /$ 910.4 | Number/Amount<br>30 /$ 958.0 |
| **Operations and Maintenance** | $21,634,944 | Procurement Only | $21,110,624 |
| **Procurement** | $21,169,830 | $20,943,847 | $17,799,870 |
| **Total** | $79,594,184 | $20,943,847 | $74,372,976 |

## F-15 Background

Throughout the Vietnam conflict, the Air Force discovered that aircraft designed in the 1950s solely for nuclear war did not make the best fighters in a conventional war. Their high speed, high altitude design and limited weapons did not allow dominance in

the air-to-air arena. Since the end of World War II, Strategic Air Command had flourished as the United States' nuclear capability was leveraged to keep the peace. War plans centered on using "its big stick, and if the other guys developed long range bombers, we would knock them out of the sky with missile-carrying interceptors."[3] To improve the available hardware, attempts were made to apply modern technology to 1960s weapons systems. New aircraft designs had to cover the complete spectrum of missions, from conventional through nuclear. In addition, Secretary of Defense Robert McNamara required "commonality" between Navy and Air Force aircraft designs. Those advocates of a pure air superiority fighter were able to keep the concept alive only through research and development until McNamara left office. The Soviets added the element of urgency with the first public showing of the MiG-25 in July of 1967. The request for proposal for an air superiority fighter was released in September, 1968. "What the real life and death situation in Vietnam had not been able to do, the public relations coup at Domodedovo did."[4]

The Secretary of the Air Force, Robert C. Seamans, Jr., announced McDonnell Douglas as the winner of the F-15 contract in December 1969 and the first flight was successfully accomplished on July 27, 1972. The total F-15 procurement program was typified by on-time and on-cost production:

> But perhaps the most dramatic feature of the F-15 program was its adherence to projected costs. The two Air Force Generals responsible for this were Benjamin N. Bellis and Robert C. Mathis. They insisted upon complete documentation and definition of any changes, even down to accounting for who paid for joint Air Force/Contractor lunches! Mathis was particularly sensitive to the possibility of any charge of collusion, having had to clean up after the politically complicated F-111 program. The result was an F-15 program so clean that, even in the witchhunt 1970s, there were no blemishes on the F-15 program.[5]

As an interesting note, in July 1971, Secretary of Defense Melvin R. Laird asked the Navy to look into a possible naval version of the F-15. The Senate Armed Services Committee also raised the issue in hearings of the ad hoc Tactical Air Power Subcommittee.[6]

In all, a total of 443 F-15As and two-seat trainers (F-15Bs) were produced through mid 1979.[7] Funding for the first production aircraft came from the FY73 Defense Authorization Bill.

## Congressional Action

The Armed Services Committees in 1959 attached to their Military Construction Authorization Bill a rider which greatly expanded the Committee's role in overseeing military spending. The rider required the Armed Services Committees to authorize limits on appropriations used in procuring aircraft, missiles, and ships. In 1963, this was expanded to include all research, development, testing and evaluation (RDT&E) conducted by DOD. By the end of 1971, The Armed Services Committees were "originating legislation which authorized appropriations for all RDT&E, for the procurement of all weapons and weapon systems, tracked vehicles and torpedoes, for active duty personnel salaries and almost all construction."[8] Despite the additional scrutiny, the Armed Services Committees did not present a major road block to passage of the defense budget.

The House Armed Services Committee reported the Bill (H.R. 15495) out of committee by a vote of 37 to 4. Voting against the motion to report the Bill out of committee were Les Aspin (D-WI), Michael Harrington (D-MA), Lucien Nedzi (D-MI),

and Otis Price (D-NY). Of these four, Mr. Price and Mr. Nedzi were veterans. In the ensuing passage of the FY 73 Authorization Bill, these four again voted to reject it. The House passed H.R. 15495 by a 336-43 roll call vote.

The Senate version of the Bill, reported unanimously out of committee, included a recommendation to fully fund the requested $910.4 million for procurement of the initial 30 production F-15 aircraft.[9] The Bill eventually was approved by the full Senate on a 92 to 5 roll call vote. Of the five dissenting votes, only one came from a member of the Armed Services Committee; he was also a veteran. In a similar manner, the final House and Senate Appropriations Bill for FY 73 were passed by a one-sided margin of 316 to 42 in the House and by a voice vote in the Senate.

Of the 42 Representatives voting against the final FY 73 Appropriations bill, four were members of the Appropriations Committee. Three of these were veterans. An interesting note: Of the 44 Representatives voting against final passage of the *Authorization* Bill, four were members of the Appropriations Committee; three of these voted against both Appropriations and Authorizations Bills and two of the three were veterans. Likewise, two members of the Armed Services Committee voted against both Bills; one of these was a veteran.[10] Veteran representation in the oversight committees had shifted since the mid-1950s with a significant decrease in the Senate Appropriations Committee where only 46 percent of its members were veterans. Veteran representation in the Senate Armed Services Committee, however, was very high:

- Senate Appropriations Committee 11 of 24–46 percent
  Defense Subcommittee 4 of 13–31 percent
- Senate Armed Services Committee 13 of 16–81 percent
- House Appropriations Committee 36 of 55–65 percent
  Defense Subcommittee 7 of 11–64 percent
- House Armed Services Committee 25 of 40 - 63 percent[11]

In large part, the dissension with these bills centered on the Administration's policies concerning Vietnam and the recent signing of the Strategic Arms Limitation Treaty. Although not unanimous, the votes clearly show congressional support for the requested defense budget in general. From 1952 to 1974, "both in Congress and in society at large, there has been substantial agreement on the desirability of maintaining a large defense establishment." Exceptions have appeared (Vietnam, ABM,B-1) but generally most in Congress—reflecting their constituency—have not advocated deep cuts in defense spending. "Even the congressmen most antagonistic towards the defense establishment during the last days of the Vietnam War were advocating cuts of less than 10 percent."[12]

The limited debate on the F-15 itself showed Congress generally supported procurement for this specific aircraft. However, the Senate Armed Services Committee, in a four-page discussion of defense spending, forecasted a significant change in future support for weapons procurement: "While defense was taking a decreasing share of both the Federal Budget and gross national product, costs of manpower and weapon systems were growing at an alarming rate."[13] The increasing cost of weapon system acquisitions would also include closer scrutiny from Congress. The C-17 would prove to be an excellent example.

**Notes**

[1] The Congressional Quarterly Almanac, 1972, (Washington D.C.: 1972), 405.
[2] Ibid., 418.

## Notes

[3] Lou Drendel, Modern *Military Aircraft: Eagle*, (Carrollton, Texas: Squadron/Signal Publications, Inc., 1992), 3.

[4] Ibid., 4.

[5] Ibid., 6.

[6] Michael J. Gething, *Modern Fighting Aircraft: F-15 Eagle*, (New York: Arco Publishing, 1983), 7.

[7] Ibid., 7.

[8] *The Congressional Quarterly Almanac, 1972*, 405.

[9] Ibid., 412.

[10] Ibid., 48H-95H (rollcall votes)

[11] Charles B. Brownson, *1972 Congressional Staff Directory*, (Washington D.C.: Congressional Staff Directory, 1972), various pages.

[12] R. Douglas Arnold, *Congress and the Bureaucracy: A Theory of Influence*, (New Haven: Yale University Press, 1979), 96.

[13] *The Congressional Quarterly Almanac, 1972*, 411.

# Chapter 5

# C-17 Case Study—Intense Scrutiny

*It's a pretty good lesson of some of the difficulties we get into when we allow the purchase of systems to descend into raw politics!*

-Rep. Robert E. Badham (R-CA)
House Armed Services Committee Hearing, 15 June 1982

The stringent oversight of the C-17 program by Congress was an outgrowth of the developing mistrust between Congress and the Executive. In the 1980s, the Reagan Administration's attempt to increase defense spending while blocking tax increases began to run into renewed opposition by the Democratically-controlled legislature. The increase in numbers of new weapon systems facilitated by increased spending also saw significant increases in system failures and cost overruns. As Congress became increasingly aware of these problems, a bipartisan coalition of "procurement reformers" began to emerge. Procurement reform also provided members a way to appear "tough against President Reagan's unpopularly large defense budgets without seeming to be "soft" on defense.[1]

Procurement reform as an issue grew as more and more examples of alleged program mismanagement and wasteful spending surfaced. For the Air Force, the B-1 program became a major issue with the Congress as the details of its ill-fated defensive avionics became known. Several other committees with vague oversight roles jumped into procurement reform—traditionally Armed Services "territory." Several reform

amendments arose, most notably from the Energy Committee which led the Armed Services Committee to take a tough stance on the B-1 and other programs showing signs of management or fiscal troubles.[2] Though only one amendment survived intact, the C-17 became a "victim" of the attempt by the Armed Services Committee to regain lost oversight "turf." This included scrutiny at every step in the procurement process and more than a half-dozen congressional hearings on the C-17 program by 1993. Along with this increase in oversight came decreases in budget requests for the C-17. The crisis management style adopted by the DOD in reaction to these hearings and investigations strained the working relationship with the contractors and forced several program restructures.[3] Only the clearly-understood urgency of the new airlift aircraft and unwavering support by Air Force leaders allowed the program to continue.

## C-17 Background

The roots of the C-17 program stem from the late 1970s "C-X" program. The need for additional strategic airlift had increased in priority after the Soviet invasion of Afghanistan and the taking of hostages in Iran. While Congress was in no mood to undertake another expensive developmental program, having seen several recent program cancellations, the SecDef supported a dual-pronged approach to increasing available aircraft.[4] OSD announced in January 1982 that the Air Force would buy 50 C-5B aircraft from Lockheed's unsolicited proposal - to fill an immediate strategic airlift requirement while continuing to go ahead with the CX (now C-17) program.[5]

With the additional C-5B aircraft, airlift capability was increased from 28.7 million ton-miles per day (MTM/D) to 48.5 MTM/D building toward a requires 66 MTM/D

based on a 1981 mobility requirements study.[6] The deficit would be covered by the addition of 210 C-17 aircraft. The C-17 would allow the retirement of 54 C-141 transports and, since the C-17 could transport cargo directly to airfields near the battle zone, would also decrease the need for 180 of the oldest C-130 "intratheater" airlift aircraft.[7]

The C-17 was designed to provide a number of advantages over existing systems:

- The smaller size, compared with a C-5, would allow increased deliveries due to size and maneuverability improvements
- Less time on the ground loading or unloading cargo due to designed cargo handling improvements
- Reduced number in flight crew
- Better fuel efficiencies than existing airlifters
- Economy in maintenance and operations

Developmental costs were to be reduced by using available, demonstrated technology including engines (already in commercial use in the Boeing 757) and subsystems proven in the YC-15 prototype program of the late 1970s.[8]

The C-17 made its maiden flight on September 15, 1991.[9] However, the flight test program was delayed 13 months due to system failures and engineering problems.[10] Uncertainty in funding forced experienced engineers to move to other projects or be laid off, compounding development and engineering of the C-17. When Congress renewed its commitment to the C-17, McDonnell Douglas had to scramble to find experienced engineers for the C-17 project. The first airplane off the assembly line in 1992 had software problems, fuel leaks, and wings that broke during structural testing.[11] In 1993, after a change in leadership of the C-17 program, both by the contractor and the military, the C-17 program began a steady recovery which culminated in an excellent performance during a 1995 congressionally-mandated reliability, maintainability, and availability

evaluation and, in December 1995, the announcement of a congressionally approved multi-year procurement contract for a total of 120 C-17 aircraft.[12]

## Congressional Debate

Congressional support for the procurement of the C-17 was part of a larger debate involving the mix of airlift and sealift to support strategic lift requirements. Long-lead funding for the first C-17s was part of the FY 88 Defense Budget proposal.[13] Although subsequent years saw several C-17 specific hearings, investigations, and reports, the initial support was wide spread and bipartisan.

During the FY 88 Defense Authorization process a concerted effort to derail the C-17 was made by proponents of the C-5B, in particular from the Georgia Congressional Delegation where the C-5 aircraft was manufactured. The House rejected an amendment to eliminate funding for the C-17 by a 92 to 321 margin.[14] Requested funding was slightly trimmed by $24 million to $1.2 billion. The Conference Report was subsequently passed by the House (264-158) and Senate (86-9) on 8-9 November 1986.[15]

On the Appropriations side, the House recommended $1.1 billion of the requested $1.2 billion, including $618 million for initial production. The Senate, however, recommended only $880 million - $340 million less than the DOD request, including $589 million for initial production.[16] The resulting Conference approved $1.12 billion of the $1.21 billion request for the continued development of the C-17, including $589 million for initial production. So, despite tightening budgets, the C-17 program survived basically in tact.[17] The FY 88 Defense Appropriation Bill was subsequently included in a

Continuing Resolution covering the remainder of the fiscal year. The Senate approved it with a voice vote, the House by a roll call vote margin of 209-208.[18]

Of the 158 House Members voting against the FY 88 Defense Authorization Bill, 16 were on the HASC (52 total assigned to the HASC), of these 16, 6 were veterans. As for appropriators, of the 158 House Members voting against the FY 88 Defense Authorization Bill, 20 were members of the HAC (57 total), 11 were veterans.

On the Senate side, of the nine Senators voting against the Authorization Bill, only four were members of the SAC and only one member of the SASC voted against the Conference Report. Four of those five were veterans. The Continuing Resolution, which encompassed the FY 88 Defense Appropriations Bill was much closer in its final passage.

Veteran representation on the Senate oversight committees was consistently high. The Senate Appropriations Committee had a 66 percent veteran membership while the Defense Subcommittee had a 72 percent veteran representation. The Senate Armed Services Committee had 15 of 20 or 75 percent veteran membership. The House committees were lower in their veteran representation:

- Senate Appropriations Committee 19 of 29–66 percent
  Defense Subcommittee 13 of 18–72 percent
- Senate Armed Services Committee 15 of 20–75 percent
- House Appropriations Committee 34 of 57–60 percent
  Defense Subcommittee 7 of 13–54 percent
- House Armed Services Committee 31 of 52–60 percent[19]

Barely passing the House with a recorded vote of 209 for and 208 against, the Continuing Resolution included all 13 major appropriations. In this case, a vote against the Continuing Resolution did not necessarily reflect a vote against the defense appropriation portion of the Resolution or the C-17. Never the less, of the 208 House

Members voting against the Continuing Resolution, 18 were members of the HASC and 11 of the 18 were veterans. On the appropriations side, 13 voting "no" were HAC members and 9 of these were veterans. The final version of the Continuing Resolution reflected a "budget-summit agreement" between the Reagan Administration and the bipartisan leadership of the Congress.[20] Even though the final version trimmed defense spending by $ 13 billion, congressional conferees managed to avoid making significant changes to the Reagan defense program.[21] While Operations and Maintenance funding was cut 6.6 percent, procurement funding saw a modest increase (0.4 percent) thanks mostly to a congressional add of $ 5.7 billion for two new aircraft carriers.

**Table 4. Defense Program Spending, FY 1988 (in millions)**

| | **Budget Request** | **Authorized (PL100-180)** | **Appropriate (Pl 100-202)** |
|---|---|---|---|
| **C-17 Cargo Plane** | Number/Amount<br>2 /$618.0 | Number/Amount<br>2 /$618.0 | Number/Amount<br>2 /$589.0 |
| **Operations and Maintenance** | $86,064,694 | $84.8 | $80,337,490 |
| **Procurement** | $83,886,671 | $79.8 | $84,195,392 |
| **Total** | $293,887,908 | $296.0 | $278,982,848 |

While the main controversies centered on President Reagan's Strategic Defense Initiative, a ban on nuclear weapons testing, and SALT II limits, the C-17 was able to continue towards full scale production. It would be the subject of several investigations and hearings as production problems later surfaced. After significant corrective action by both the contractor and the DOD, the program eventually became a model of success. However, congressional intent to remain deeply involved with major weapon system programs was firmly established. This congressional intent was well played out in the procurement of the B-2.

## Notes

[1] *Congressional Quarterly Almanac, 1987*, (Washington D.C.: 1987), 234.

[2] Ibid., 234.

[3] David L. Mastin, *C-17: Issues and Concerns*, (Washington D.C.:Industrial College of the Armed Forces, 1993), 23.

[4] Charles L. Johnson, *Acquisition of the C-17 Aircraft: An Historical Account* (Maxwell AFB: Air Command and Staff College, 1986), 53

[5] Mastin, 3.

[6] United States Congress, Congressional Budget Office, *Improving Strategic Mobility: The C-17 Program and Alternatives*, (Washington D.C.:1986), ix.

[7] Ibid., x.

[8] Ibid., x-xii.

[9] *United States Air Force Fact Sheet 95-06, C-17 Globemaster III*, 1996, n.p., on-line, Internet, 16 December 1996, available from http://www.af.mil/news/factsheets/C_17_ Globemaster_III.html.

[10] Katherine McIntire Peters, It Flies*!*, *Government Executive*, June 1996, n.p., on-line, Internet, 2 January 1997, available from http://www.govexec.com.html.

[11] Ibid., n.p.

[12] Ibid., n.p.

[13] United States Congress, Congressional Budget Office, *Improving Strategic Mobility: The C-17 Program and Alternatives*, x.

[14] *Congressional Quarterly Almanac, 1987*, 237.

[15] Ibid., 250.

[16] Ibid., 418.

[17] Ibid., 414.

[18] Ibid., 156-157H.

[19] Charles B. Brownson, *1987 Congressional Staff Directory*, (Washington D.C.: Congressional Staff Directory, 1987),various pages.

[20] *Congressional Quarterly Almanac, 1987*, 419.

[21] Ibid., 409.

# Chapter 6

# The B-2 Case Study—Huge Capability, Huge Cost

## B-2 Background

The B-2 was designed during the latter stages of the Cold War and was created to replace the aging B-52 as the manned penetrating bomber of the nuclear triad. The B-2 conceptually married two very advanced technologies. The first was a very efficient aircraft design which would "hold as much weaponry as a B-52 and deliver it over an equal or greater distance."[1] The second was the technological breakthrough known as "stealth." The requirement for a new bomber was reinforced by the events of the day—the Iranian revolution and taking of the embassy workers as hostages, and the Soviet Union's invasion of Afghanistan. The prevailing view both within the DOD and Congress was that the world was still a dangerous place. Concurrently, the air defenses of the Soviet Union in particular were making radar jamming more difficult and taking away terrain-masking as a protective technique: the very tactics both the B-52 and B-1 used to successfully penetrate Soviet defenses.[2] While stealth represented only the "latest stage in the struggle between penetrating strike aircraft or bomber and the air defense system," Northrop's use of new software allowed company engineers to refine shaping techniques "to make stealth possible without faceting the surfaces." The resulting

reduction in drag allowed for an increase in range and payload. The prototype was first tested at the USAF's secret Groom Lake flight-test base in Nevada in 1981.[3] However, as with many weapon system procurement efforts, politics were not excluded even from secret programs such as stealth and the advanced tactical bomber (ATB).

The October 20, 1981 Presidential decision to produce 100 B-1Bs, coupled with Northrop's award of the $7,300 million contract to start development of the B-2 was arguably the most expensive way to acquire 240 new bombers. The dynamics of presidential politics had unintentionally created a dual bomber procurement program. While canceling the B-1A program, President Carter proposed an increase in funding for stealth aircraft development. Some of this increased funding was to be used for the B-2. In September 1980, the Air Force issued an RFP to both Lockheed and Northrop which described the development of an advanced strategic penetrator aircraft (ASPA) and production of 132 aircraft.[4] Candidate Ronald Reagan had severely criticized President Carter's decision to cancel the B-1A and had promised to reverse the decision, unaware of the still-secret B-2 program. The decision to develop two new bombers went forth despite their costs, based on Reagan's promise. Four years later, with the 1984 elections looming before them, the Republicans feared a possible recapture of the White House by Democrats which, as had happened twice in recent years, would spell doom for a new USAF bomber.[5]

To guarantee at least one survivor, B-1 production was started immediately and the program designed as a "fast-paced effort" to be completed with the last delivery in 1988.[6] But the B-2 was quite a different story. The difficulties with the revolutionary technology and design would require extensive testing and development. As far as program survival

went, the B-2, in the middle of a long development program, would be vulnerable to cancellation while the B-1 would be far enough along in the production process to make cancellation difficult. In Congress supporters and opponents of the B-2 both played one bomber program against the other.

Supporters of the B-2 in Congress attempted several times to delay major funding votes until Northrop could produce a prototype. The thinking seemed to be that a flying prototype would gain public support through demonstration of the advanced technology and be more difficult to cancel. Still, with bipartisan support, (Democrats using the B-2 as an alternative to resurrecting the B-1 program, and Republican support for President Reagan's strategic force modernization plan), the B-2 received congressional approval throughout the 1980s.[7] Northrop "rolled out" the B-2 for its first public viewing on November 22, 1988, with the first flight on July 17, 1989.[8] Almost from the start, however, the B-2 was a victim of the unfortunate history of the B-1.

## Program Difficulties

Despite the attempts by both the Air Force and Northrop to sell the production schedule (including concurrent development and production) to Congress, technical problems and delays soon combined with congressional objections to the pace of production effort. Technical problems and questions as to the "stealthiness" of the B-2 brought back memories of B-1B developmental problems and less than predicted performance. The initial "sticker shock" of the program added to cost overruns and allegations of contractor mismanagement also raised serious congressional doubts as to

whether the program should continue. How the B-2 fit into the "big picture" in terms of major acquisition programs also presented problems.

In a period of declining defense budgets, it was feared the peak production costs of $8 billion would crowd out other needed programs, such as the C-17.[9] Led by key Members such as Representative Les Aspin, Chairman of the House Armed Services Committee, the peak production rate was first reduced then the program restructured to adjust to the increased unit cost brought on mostly from direct congressional action or pressure.[10] World events also impacted support for the B-2. The 1989 collapse of the Warsaw Pact made the need for the B-2 less urgent and also led to further reductions in the Defense Budget.

> In 1989, however, the Soviet empire was crumbling; after two more years of political upheaval the Soviet state itself disintegrated. While these events did not point to a future without danger, they were devastating to the nuclear rationale for the B-2 program. In Congress, consistency in voting records is a quality most members try to maintain. The shift from a rationale emphasizing the B-2's nuclear capability to one highlighting its conventional potential, however valid, did not restore much of the support lost by the withering of the nuclear requirement.[11]

Those Congressmen who did not support the B-2 in a nuclear role were not going to reverse their vote based on the B-2 capability to counter regional conventional threats. The program was subsequently cut from 132 to 75 aircraft based on a major aircraft review linking the B-2 directly to the military capabilities and intentions of the Soviet Union.[12] Then, in January 1992, facing an election campaign focused on domestic issues, President Bush further reduced to 20 the final number of B-2 bombers to be produced.[13] No matter what the reason, the reduction to 20 production aircraft brought on a firestorm of controversy as the unit price for each aircraft now exceeded $500 million.

## Congressional Debate and Action

Despite the rising costs per B-2, the 1988-1989 time frame counted over 40,000 people employed by the B-2 program. To suspend or cancel the program would have significant political consequences as "workers would have been lost, together with their hard earned knowledge, and many subcontractors would have had to find other business."[14] States and districts impacted by this loss of jobs would find their Congressional Representatives also out of employment and, considering the large number of subcontractors from several states associated with the B-2 program, this was a growing concern. Yet congressional debate was subsequently shaped by a general sense that, with the decreased Soviet threat, decreasing defense budgets would very soon be a political reality. Many in Congress seized the opportunity presented by the post Cold War threat reduction to push for increased spending on domestic programs or reducing the federal budget deficit.[15] To counter this tremendous pressure to divert funds from defense programs, Northrop and the DOD initiated a "full-court press" to garner congressional and public support for the B-2.

A tremendous effort was advanced in terms of briefings, meetings, press coverage, and mobilizing grass-roots support for the B-2. Key to this sales pitch was highlighting why America needed the B-2. Packaging the bomber's capability to rapidly project power, secure long-term global "military preeminence," and save American lives, the effort focused attention on the cost-effectiveness of the stealthy bomber when compared with non-stealthy alternatives. Much emphasis was placed on an Air Force study, for example, which showed 2 B-2s having as much "combat power" as 75 non-stealthy aircraft against high valued targets.[16] Congress also commissioned studies and conducted

hearings to argue the merits of the B-2. Every aspect of the B-2 program came under extreme scrutiny.

Congressional reluctance to fund the B-2 program—even after several reviews and studies, was manifested in efforts made to find "technical fault with the basic design, execution of the construction of the aircraft and its subsystems, overall program cost control, and real and imputed changes in its primary mission."[17] The debate became one of cost, not of the need for a new long-range strategic bomber or of the specific capabilities of the B-2 bomber. Although congressional support had kept the program funded while the B-2 was highly classified, once the program became public knowledge, congressional critics added to the fervor of the debate, catching the DOD and Air Force off guard.

Air Force leaders countered the public criticism by highlighting program achievements: the significant technical achievements, the thousands of testing hours completed on the aircraft, improved risk reduction efforts, and the evaluation schedule which would provide hard data to Members of Congress before production went forward.[18] In an effort to somewhat counter the fiscal argument, supporters eagerly looked for good news. For example, following a very successful first flight, the Senate Armed Services Committee invited the test pilots who flew the first flight to testify before the SASC. In typical fashion, the hearing was a production worthy of Hollywood - bright lights, cameras, and constant confusion:

> The entire hearing smacked of a choreographed event for the television cameras, which Washington insiders said was Congress' normal way of doing business.…While the entire trip to Washington was a blatantly orchestrated effort by some congressmen and the Air Force to capitalize on the B-2's first flight, it possibly paid dividends. It might have helped drum

> up additional support for the program and it allayed a few nagging fears and suspicions about the aircraft itself. Some elected officials had expressed doubts about the bomber, based on dire predictions from several engineers concerning a flying wing's inherent stability and, of course, its heady cost.[19]

While this "media event" temporarily focused attention on the B-2, the major controversies of the FY 89 defense budget centered on the Intermediate-range Nuclear Force (INF) Treaty and anti-ballistic missile (ABM) defense. Budget levels had been set from the agreement reached between Congress and President Reagan during the November 1987 "Budget Summit."[20] But with the Congress intent on maintaining an active role in treaty negotiations, President Reagan vetoed the Authorization Bill stating that the bill would "tie his hands in arms control negotiations with Moscow, slow development of a mobile version of the MX intercontinental ballistic missile (ICBM) and eviscerate the Strategic Defense Initiative (SDI), his program for a nation-wide anti-missile defense."[21] The B-2 program, from both the Congress and the Administration point of view was not controversial.

In terms of B-2 funding, the HASC sliced $100 million off the still-classified total program request. Their action reflected a *lower* than anticipated contract cost. The SASC approved the Administration's request without change. After the Presidential veto of August 3, 1988, a compromise Authorization Bill, worked between congressional leaders and the Reagan Administration, resulted in a minor $50 million cut in B-2 funding. However, a provision was added requiring the Government Accounting Office (GAO) to review B-2 program costs.[22] Final passage of the Conference Report on House Resolution 4481 was adopted 369-48 in the House, 91-4 in the Senate. Veteran

representation in the Senate oversight committees remained high while in the House oversight committees veteran representation was lower:

- Senate Appropriations Committee 19 of 29–66 percent
  Defense Subcommittee 13 of 18–72 percent
- Senate Armed Services Committee 15 of 20–75 percent
- House Appropriations Committee 35 of 57–61 percent
  Defense Subcommittee 6 of 12–50 percent
- House Armed Services Committee 32 of 51–63 percent[23]

**Table 5. Defense Program Spending, FY 1989 (in millions)**

| | Budget Request | Authorized (PL100-456) | Appropriated (Pl 100-463) |
|---|---|---|---|
| **Operations and Maintenance** | $85,649.0 | $85,497.5 | $85,293.7 |
| **Procurement** | $80,009.9 | $79,717.4 | $79,762.6 |
| **Total** | $221,009.8 | $221,063.1 | $283,833.1* |

*Includes "revolving funds," transfers from prior budgets, and "other provisions"

There was no common thread in those who voted "no" for H.R. 4481. Of the 48 negative votes, 9 were from HASC Members; of these, 6 were veterans. As for the Senate, of the four "no" votes, none were SASC Members. Of note was the "clout enjoyed by the Armed Services Committee, and particularly by Chairman Nunn." During floor debate and subsequent votes, only twice did the full Senate overrule the majority of the SASC on issues pertaining to requiring the Pentagon to buy U.S. products.[24] As for the Appropriations Bill, the Conference Report passed the House with overwhelming support, 327-77 while the Senate passed it by voice vote. Again, no pattern in the voting emerged. Six of the 77 negative votes came from HAC Members, of which four were veterans.[25] Thirty nine Representatives voted "no" on both the Authorization and Appropriation Bills; of these, 17 were veterans (16 Democrats, 1 Republican).

## Notes

[1] Bill Sweetman, *Northrop B-2 Stealth Bomber: the complete History, Technology, and Operational Development of the Stealth Bomber*, (Osceola, WI: International Publishers & Wholesalers, 1992), 18.

[2] Ibid., 18.

[3] Ibid., 18.

[4] Ibid., 20.

[5] Ibid., 21.

[6] Ibid., 20.

[7] Keith B. Payne and John J. Kohout,III, eds. *The B-2 Bomber: Air Power for the 21st Century*, (New York: University Press of America, Inc., 1995), 106.

[8] *United States Air Force Fact Sheet 95-05, B-2 Spirit*, 1996, n.p., on-line, Internet, 16 December 1996, available from http://www.af.mil/news/factsheets/ B_2_Spirit.html

[9] Bill Sweetman, 89.

[10] Ibid., 91.

[11] Keith B. Payne, 105.

[12] Bill Sweetman, 91.

[13] Ibid., 94.

[14] Ibid., 89.

[15] Keith B. Payne, 105.

[16] *Why America Needs the B-2*, 1997, n.p., on-line, Internet, 16 March 1997, available from http://www.northgrum.com/masd/b2/htmls/

[17] Keith B. Payne, 105.

[18] Bill Scott, *Inside the Stealth Bomber: The B-2 Story*, (Blue Ridge Summit, PA: McGraw-Hill, Inc., 1991), 125-126.

[19] Ibid., 156-157.

[20] *Congressional Quarterly Almanac, Volume XLIV*, (Washington DC: 1989), 377.

[21] Ibid., 399.

[22] Ibid., 429.

[23] Charles B. Brownson, *1988 Congressional Staff Directory*, (Washington D.C.: Congressional Staff Directory, 1988), various pages.

[24] *Congressional Quarterly Almanac, Volume XLIV*, 420.

[25] Ibid., 114H-115H (roll call votes)

# Chapter 7

# Conclusions

*Friction is not restricted to combat—it is alive and well on the legislative battlefield.*

—James Jones
Former Senate liaison officer for the U.S. Marine Corps

After examining the preceding four case studies, the data seems to indicate a mixture of congressional voting rationale with no clearly-focused trend. What can be discerned is that congressional oversight of DOD programs will continue in the future. Also evident is that future members will be less likely to have had military experience. These factors, in and of themselves, do not present a precarious environment for future major weapon system programs. Congressional oversight of a declining defense budget will evolve as Congress views the post-Cold War world in a more global, strategic sense.

The end of the Cold War has created an opportunity for legislators to rethink U.S. military strategy—much like the Congress of the 1930s of whom Samuel P. Huntington argued that the debate over isolationism and interventionism drove a more active role in strategy-related issues.[1] However, this "rise of strategizing" on the Hill does not mean that individual programs will escape congressional scrutiny. "Dictating the details of the military budget still offers legislators the tightest, most direct control over defense

activities."[2] Beyond the issue of control, distrust of the administration also plays a significant role in how Congress interacts in the defense budgeting process.

While divided government—legislative branch controlled by one party with the executive controlled by the other—does not automatically lead to distrust and conflict, there are several recent examples of soured relations based on partisan politics. The dominance of the Democrats in Congress and the Republican control of the White House provide an good illustration:

> For Democrats, accustomed to holding majorities in Congress but increasingly removed from power (and responsibility) in the executive, efforts to weaken executive control over foreign policy and maintain more aggressive oversight of executive actions abroad, all within a climate of skepticism and distrust, became major focal points. For Republicans, facing more than three consecutive decades of minority status in the House of Representatives but blessed with a series of landslide victories for the White House, finding ways to hamstring Congress and reduce its power and prerogatives, or at least bypass it, became a basic driving goal.[3]

With the return of a divided government in 1993, congressional scrutiny of the Administration's budget proposals will continue. The past two budget cycles, for example, saw increases in requested funding based on congressional belief that the Administration's request jeopardized modernization and readiness.

The propensity for Congress to take the lead in defense policy matters is in part due to its mistrust of the executive, but also from a perceived void in the Administration's strategic vision. The current Administration not withstanding, a clear example of Congress stepping in to fill a perceived void was in the immediate aftermath of the dissolution of the former Soviet Union. Paul Stockton, in an article on congressional micromanagement, argues that the activism displayed by Congress after the end of the Cold War was directly the result of the Bush Administration's failure to redefine a post-

Soviet national strategy in a timely fashion. He points to Secretary of Defense Cheney's testimony on the FY91 defense budget request where the Secretary argued against changing defense strategy at that time. His public stance (DOD officials were secretly drafting a new strategy) "provoked furious criticism on Capitol Hill" helping to encourage congressional leaders to begin their own reassessment of U.S. policy.[4] Along with this continued active oversight in the defense budget process, fewer and fewer members will have prior military experience.

Although more of a prediction than a conclusion reached by examining past trends, Congress will, in matters of veteran representation, reflect society at large. Absent any major conflict or a return to the draft, military service will impact a decreasing number of young Americans. The most likely decrease in overall size of the military coupled with the voluntary nature of today's military service, will result in fewer members coming from the military ranks, figuratively speaking. As those members with military experience retire from Congress, veteran representation will decrease even more. What this means, in terms of support for future weapon system programs, is a decrease in common backgrounds between the DOD and congressional decisionmakers. Congressional "understanding" of the military will decrease requiring a more active "education" program by the military. Still, as the lack of trends in voting seems to indicate, congressional support is based on many competing variables.

## Competing Interests

Les Aspin, former Chairman of the House Armed Services Committee, has argued that the desire to get reelected causes members to vote the way they do and that for most

members defense jobs are of the highest concern.[5] Others point to the rationale that defense issues are but a subset of the "multitude of complex issues" addressed by Congress. "Because Congress usually has competent staffs experienced in the issues, they rarely seem to feel inadequate when speaking authoritatively on any military subject."[6] While external political and constituency concerns impact member voting, internal congressional politics also play a large role.

Coalition building within Congress is a powerful factor in how members vote. Congress is about the gaining and exercising of influence and power. Since committee memberships and chairmanships are viewed as ways to increase influence and power within Congress, junior and senior members both are very aware of things such as party loyalty and coalition building. Norman J. Ornstein paints this interesting picture stating, "Committees, subcommittees and assignments are currency for Congress—valuable commodities that translate into power, prestige, and political influence. Like other currencies, they face a constant underlying inflationary pressure; leaders hand out slots and chairs to members to provide favors and to gain support for other matters."[7] Constituency interests, coalition building within Congress, and the drive for reelection all provide ample motivation for how members vote on issues across the board, including weapon system programs. External events also influence the mindset and attitude of Congress and the public they represent.

World events have a significant effect on how Congress supports defense in general and weapon system programs as a spin-off of defense policy. Up to the late 1960s, defense policy was, for the most part, non controversial. "Congress showed its patriotism for a stronger national defense while distributing the concrete benefits of the defense

budget across a broad constituency base."[8] The recent end of the Cold War has focused congressional attention globally and has reopened the 1930s debate between U.S. isolationism and interventionism. Together with the new emphasis on "geoeconomics" and subsequent decline in "geopolitics" has increased pressure to reprioritize U.S. foreign policy and therefore impact defense spending.[9] Additionally, our historical relationships with allies and the public inclination to expect our traditional world partners to increase their support for *their* defense will color Congress' view on future U.S. foreign policy, of which defense policy is an integral part. The changes in the international strategic environment and the evolution of the domestic relationship of the Congress and the American people will likewise force an evolution in the relationship between Congress and the military, impacting future weapon system programs.

## Future Congressional—Military Relationships

In all probability Congress will continue to require DOD to provide background information and analysis anytime the military wishes to start a new weapon system program. Owing to the increasing expense of future programs and the financial impact they have on congressional districts, members will need accurate and *balanced* information to aid in decisionmaking. With continued micromanagement by oversight committees, individual programs will continue to be victims of political compromises and coalitions. The evolution of congressional involvement in the acquisition process, as shown by the four case studies, has enabled individual members to impact the success or failure of individual programs without concern over the impact on modernization, capabilities, or military strategy. Recent DOD efforts to diversify subcontractors to

present a broad geographic benefit has helped in some instances, such as the B-2. However, also in the case of the B-2, despite the support based gained by the constituency impacted by subcontractor jobs, congressional debate degenerated into an argument of costs, not capabilities or the need for a new bomber.

Future weapon systems will need to be defined against a clear threat or emerging adversarial capability. By developing programs in this manner, developing a positive and professional relationship with Congress, and growing a proactive mindset within the Air Force to "sell" these needed systems, the declining military experience of Congress will not adversely impact future weapon system programs.

**Notes**

[1] Samuel P. Huntington, *The Common Defense: Strategic Programs in National Politics*, (New York: Columbia University Press, 1961), 131.

[2] Paul Stockton, "Beyond Micromanagement: Congressional Budgeting for a Post-Cold War Military," *Political Science Quarterly, Vol. .l 110, no. 2,* 1995, 234.

[3] Norman J. Ornstein, 112.

[4] Paul Stockton, 239.

[5] Twomey and Johnson, 28.

[6] James Jones, "Principles and Pitfalls of Legislative Liaison," *Bureaucratic Politics and National Security: Theory and Practice,* David C. Kozak and James M. Keagle, eds., (Boulder: Rienner Publishers, 1988), 234.

[7] Norman J. Ornstein, 126.

[8] Barbara Hinckley, 294.

[9] Norman J. Ornstein, 124.

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