

U.S. TACTICAL AIR FORCES
Overview and Alternative Forces
Fiscal Years 1976-81

Staff Working Paper

April 14, 1976



CBO-1105

CONGRESS OF THE UNITED STATES
Congressional Budget Office
Washington, D.C.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 14 APR 1976		2. REPORT TYPE		3. DATES COVERED 00-00-1976 to 00-00-1976	
4. TITLE AND SUBTITLE U.S. Tactical Air Forces Overview and Alternative Forces Fiscal Years 1976-81				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Congressional Budget Office, Ford House Office Building, 4th Floor, Second and D Streets, SW, Washington, DC, 20515-6925				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 44	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

PREFACE

As the Congress considers the first concurrent resolution targets for national defense, a set of issues with important long-term consequences centers around the future size and character of U.S. tactical air forces. Decisions about whether to expand these forces and at what rate to modernize them will have a significant impact on budgets for fiscal year 1977 and beyond.

These major budget issues are addressed in the national defense section of the CBO report, Budget Options for Fiscal Year 1977. This document explains in greater detail the tactical air forces and programs discussed in this report.

This paper was prepared by Nancy J. Bearg of the National Security and International Affairs Division of the Congressional Budget Office.

Alice M. Rivlin
Director

(III)

TABLES

Summary Table 1: Costs of Alternative Tactical Air Programs Relative to the President's Proposals	5
Table 1: U.S. Fighter/Attack Aircraft Capability	9
Table 2: U.S. Tactical Air Force, Fiscal Years 1964-77.	14
Table 3: Tactical Aircraft Procurement, Fiscal Years 1976 and 1977.	16
Table 4: New Tactical Aircraft Procurement, Fiscal Years 1972-76 and Fiscal Years 1977-81	17
Table 5: U.S. Tactical Aircraft Procurement by General Mission, Fiscal Years 1977-81	18
Table 6: Air Force Tactical Aircraft Procurement Fiscal Years 1977-81	20
Table 7: Active Air Force Tactical Air Forces Composition.	21
Table 8: Navy and Marine Corps Tactical Aircraft Procurement, Fiscal Years 1977-81	26
Table 9: Costs of Alternative Tactical Aircraft Programs Relative to the President's Proposals.	35

FIGURES

Summary Chart 1: U.S. Active Force/Fighter Squadrons by Mission, President's Budget and Alternatives, Fiscal Year 1981	6
Chart 1: Annual Tactical Aircraft Procurement Quantities.	15
Chart 2: U.S. Active Force/Fighter Squadrons by Mission, President's Budget and Alternatives, Fiscal Year 1981	36

CONTENTS

Preface.	iii
Summary.	1
Chapter I: Introduction and Background.	7
Missions.	7
Organization of Tactical Air Force.	10
Chapter II: Trends in the President's Fiscal Year 1977 Budget and Five-Year Program Costs.	13
Force Size.	13
Procurement Trends.	13
Chapter III: Air Force.	19
Procurement and Force Structure.	19
22-26 Wing Issue.	22
Chapter IV: Navy and Marine Corps.	25
Navy.	25
Marine Corps.	27
Chapter V: Army.	29
Procurement.	29
Use of Attack Helicopters.	29
Chapter VI: Budget Alternatives.	31
Alternative 1: Lighter Air Force.	31
Alternative 2: Modernization.	32
Alternative 3: Expansion and Modernization.	33
Base Force 1981.	33

SUMMARY

Tactical air power is a major element of the U.S. general purpose forces, which are designed and sized as a whole to deal with a diversity of contingencies, both local and worldwide. Mainly composed of fighter and attack aircraft, the tactical air forces are a flexible element of the general purpose forces; they can be brought to bear quickly against a wide variety of targets under a wide variety of circumstances.

Two important tactical air force budget issues involve determining the force levels to be supported over the next five years and deciding upon the most effective mix of mission capabilities within a given budget.

The missions of the tactical air forces are: air superiority, to prevent enemy aircraft from interfering with friendly forces; interdiction, to attack enemy facilities and aircraft on the ground in enemy territory; fleet air defense, primarily to protect carrier task forces at sea; anti-shipping, to attack enemy ships in sea battles; and close air support, to provide direct air-to-ground firepower support of friendly ground forces.

Department of Defense (DoD) Expansion and Modernization Plans

Because of the large size of Soviet ground forces, U.S. tactical air force planners are placing greater emphasis on the close air support mission, even though new air defense weaponry makes close air support an increasingly difficult task. Since aircraft specialized for this mission generally require less expensive avionics, they cost less than aircraft designed especially for air superiority, interdiction, and fleet air defense. The Air Force and Navy are also both developing multipurpose lightweight fighters that cost less than the highly specialized air superiority and interdiction aircraft, but more than the close air support aircraft. Over the next five years, the DoD procurement program includes \$4.4 billion in fiscal year 1977 dollars for new close air support aircraft, including attack helicopters. This compares to \$7.6 billion for air superiority and fleet air defense aircraft, \$7.0 billion for multipurpose aircraft (F-16 and F-18), and \$1.0 billion for anti-shipping aircraft.¹

The total cost of the DoD program for procurement of 2,200 new tactical aircraft in fiscal years 1977-81 is \$21.5 billion in fiscal year 1977 dollars. The Air Force program will cost \$13.8 billion for about 1,700 aircraft; the Navy and Marine Corps will buy about 500 aircraft for \$7.7 billion.

1. All budget figures refer to budget authority.

The Air Force dollars translate into force modernization and expansion--a 17 percent increase in active force aircraft. The Air Force now has 26 wing organizations but only enough aircraft to fill 22 wings; the DoD program calls for fully equipping the 26 wings. Because calculating the cost of the force growth to 26 fully-equipped wings depends upon assumptions about the composition of the four additional wings, the cost of the increase can range from \$850 million to \$6.0 billion, depending on whether one looks at the growth as resulting from retention of older aircraft or the purchase of new aircraft. For example, if one assumes that two additional F-15 wings and two additional A-10 wings make up the difference, the cost is \$4.4 billion² from fiscal years 1977 to 1981. This mix of A-10s and F-15s was chosen as a plausible illustration of the difference in cost and force composition between maintaining a 22-wing force or expanding to 26 wings. These aircraft represent the high and low end of the cost scale for fighter/attack aircraft entering the Air Force inventory; each is designed for a different mission.

The Navy and Marine Corps procurement dollars translate into force modernization, but no expansion. Navy carrier wings are programmed at 13 in fiscal year 1977 and 12 through fiscal year 1981; the Marine Corps plans no change from three wings/25 squadrons.

The fiscal year 1977 budget request for procurement of new fixed-wing tactical aircraft is \$4.3 billion, 23 percent higher than the fiscal year 1976 appropriation. The real growth from fiscal years 1976-77 implied in this request is 15 percent and forms part of the general purpose forces increase in the President's budget to be spent on modernization of the force.

Army attack helicopters are not technically classed as tactical aircraft. However, they definitely do bring firepower to bear in support of friendly forces in the land battle and thus may substitute for fixed-wing tactical aircraft. Attack helicopters perform a close air support mission for Army ground forces, as does the A-10, though attack helicopters are integral parts of Army divisions and thus are under Army divisional command whereas the A-10 will be under centralized theatre command. The A-10 will have more flexibility than attack helicopters to operate in a wide range over the battlefield and with more mission flexibility. Whether the A-10 and the attack helicopter provide redundant capabilities should be evaluated in light of the total amount of firepower the United States should buy and in what mix of capabilities.

Budget Alternatives

Three alternative tactical air budgets are suggested by the preceding discussion. Each of the alternatives is constructed in relation to the current DoD plan, with costs shown relative to the DoD plan. These are

2. Procurement and operations and maintenance, including manpower, in fiscal year 1977 dollars.

changes at the margin rather than major changes in mission and force size. They do not imply changed U.S. commitments.

Because of more modern armaments entering the force with the new aircraft, each of these alternative forces when produced would be more capable than the current force. For example, all-weather capability and accuracy will be improved. These alternative forces would be markedly more capable than the forces of five years ago.

Alternative 1: Lighter Forces. Alternative 1 would be a smaller force than that which DoD plans, with a slightly lower percentage of new, high-technology aircraft, but with precision-guided munitions and other technological improvements which would make the force highly capable. The Air Force would have 22 tactical air wings; the Navy, 10; and the Marine Corps, 3 wings/24 squadrons. The force would have fewer close air support aircraft than DoD plans. Emphasis is on aircraft capable of performing the air superiority mission.

In fiscal year 1977, this alternative would cost \$1.3 billion less than the President's budget. Over the five-year period, the saving would be \$8.5 billion in constant fiscal year 1977 dollars.

Alternative 2: Modernization. Alternative 2 would be about the same size as the current forces, allowing the full procurement of modern aircraft planned by DoD over the next five years, but no force growth. The Air Force would have 22 wings; the Navy, 12; and the Marine Corps, 3 wings/25 squadrons. Though smaller than the DoD plan because the Air Force would be held at 22 wings, the overall force would have a higher proportion of modern, high-performance/high-technology aircraft. It would retain the present mix of mission capabilities and priorities for the Navy and double Air Force close air support aircraft as a percentage of the force.

The savings associated with this force would be \$370 million in fiscal year 1977 and \$1.7 billion in constant fiscal year 1977 dollars over the five-year period.

Alternative 3: Modernization and Expansion. Alternative 3 would have a 26-wing Air Force as planned by DoD, a 13th Navy carrier air wing, and no change for the Marine Corps (3 wings/25 squadrons). The pace and extent of modernization would be the same as that programmed by DoD.

This force would have more staying power than Alternative 1 and 2 forces and could presumably fight a longer war, provide more firepower, and have a higher probability of achieving dominance of the air. The Air Force wings would have more emphasis on close air support; the Navy would maintain the present mix of mission capabilities and priorities in the future, but at higher force levels.

The cost increase associated with Alternative 3 would be \$33 million in fiscal year 1977 and \$1.3 billion in fiscal year 1977 dollars from fiscal years 1977 to 1981.

Summary Table 1 shows the costs of the three alternatives as they vary from the President's program.

Base Force 1981/Relationship to Congressional Decisions

Describing alternative tactical air forces does not imply building a force from the ground up. Such an enterprise is limited by the mission capability and type of aircraft already in the inventory, i.e., the base force which would exist in 1981 after attrition and retirement of aircraft if no new aircraft were procured after fiscal year 1976. For example, only about 24 percent of the active fighter/attack force in 1981, as programmed in the President's budget, would be aircraft procured as a result of Congressional decisions in fiscal year 1977 and beyond. The cross-hatched areas in Summary Chart 1 illustrate by primary mission the capabilities that would be acquired by fiscal year 1981 in the President's program and in each of the three alternatives as a result of Congressional procurement decisions beginning in fiscal year 1977.

SUMMARY TABLE 1
 COSTS OF ALTERNATIVE TACTICAL AIR PROGRAMS
 RELATIVE TO THE PRESIDENT'S PROPOSALS
 (Budget authority in millions of dollars, fiscal years)

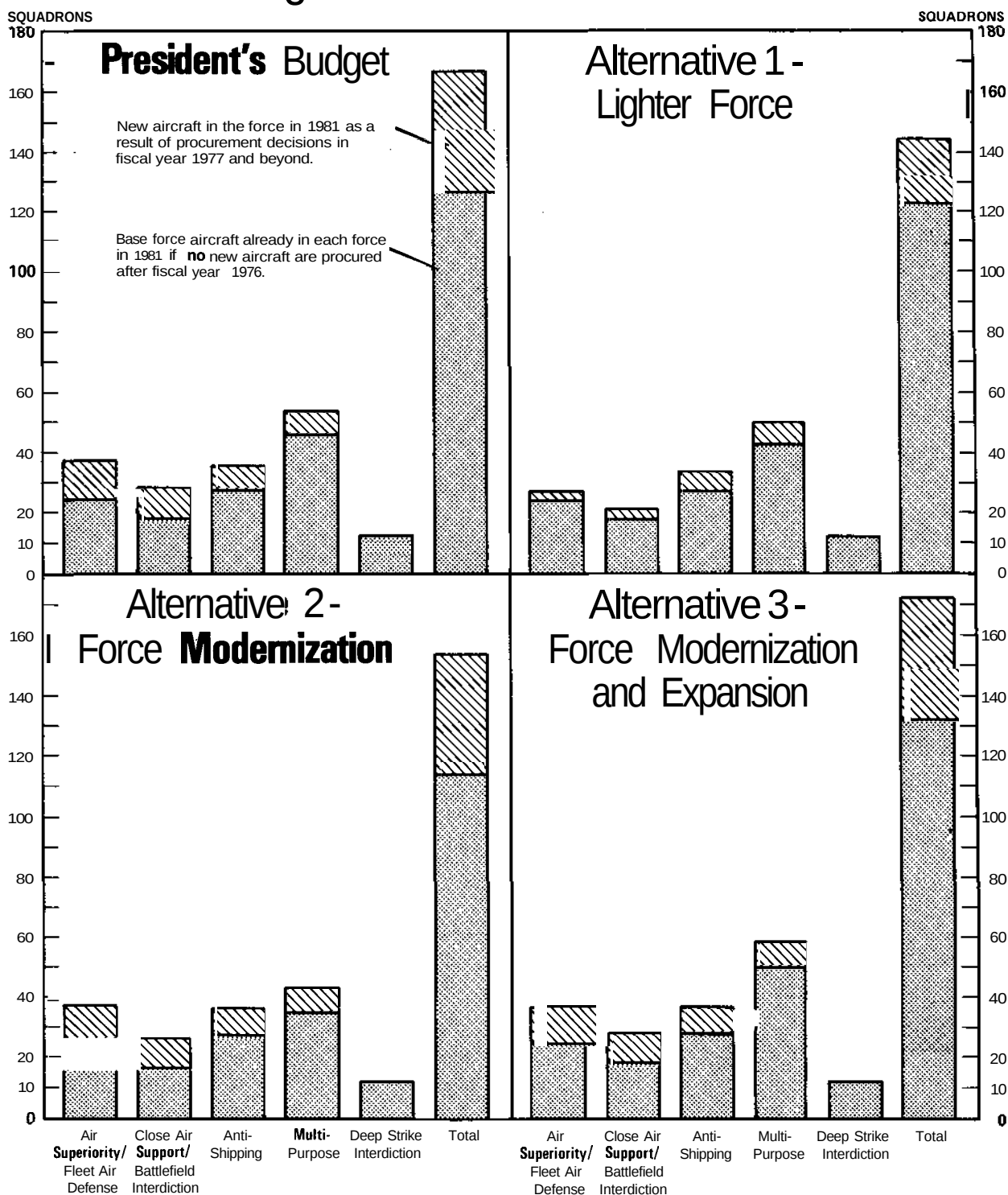
Alternative	1977		1978		1979		1980		1981		1977-81
	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Constant Dollars ^a
<u>Lighter Force</u>	-1,300	-1,300	-2,100	-2,003	-2,141	-1,954	-2,704	-2,373	-996	-835	-8,465
22 USAF wings											
10 Navy wings											
24 MC squadrons											
<u>Modernization</u>	-370	-370	-269	-255	-368	-335	-457	-399	-381	-317	-1,675
22 USAF wings											
12 Navy wings											
25 MC squadrons											
<u>Expansion & Modernization</u>	+33	+33	+100	+95	+313	+285	+483	+424	+493	+416	+1,253
26 USAF wings											
13 Navy wings											
25 MC squadrons											

a. Constant fiscal year 1977 dollars.

Summary Chart 1

U.S. Active Force Fighter/Attack Squadrons by Mission

President's Budget & Alternatives, Fiscal Year 1981



CHAPTER I

INTRODUCTION AND BACKGROUND

The Congress is called upon annually to approve appropriations for specific numbers of tactical aircraft to replace aging aircraft and/or to expand the force. Two important tactical air forces budget issues involve determining the force level to be supported over the next five years and deciding upon the most effective mix of mission capabilities within a given budget.

This paper addresses procurement plans, costs, and mix of aircraft over the five fiscal year period 1977-81, with attention to force structure questions, which are basic to decisions about the appropriate size of the defense budget and the capability it buys. The following questions relating to the U.S. tactical air forces will be discussed:

- What are these forces designed to do as part of total U.S. military capability?
- What is the baseline tactical air force for each service and how will this change over the five-year period according to the Department of Defense (DoD) plan? What are the associated costs?
- What are some alternatives to the Defense Department's tactical air plan? The size, composition, capability, and comparative cost of three alternative plans will be explored.

Missions

U.S. tactical air forces should be viewed not as a separate entity, but as part of the total U.S. general purpose forces. They are generally sized to fight in the same kinds of battles and wars as the land and naval forces might engage in, lending direct firepower support to those forces in some cases and supporting them indirectly by operating behind enemy lines in other cases.

In land battles, the major missions of the tactical air forces are:

- Air superiority--preventing hostile aircraft from interfering with friendly ground forces or friendly close air support forces; provided by fighter aircraft.
- Close air support--providing direct air-to-ground firepower support of friendly ground forces; provided by attack helicopters and fixed-wing aircraft, such as the A-10 and Harrier (AV-8A).

- Deep strike interdiction--attacking enemy facilities and aircraft on the ground in enemy territory; provided by F-111s and attack aircraft.
- Battlefield interdiction--attacking enemy ground forces and support at and just behind the battleline; provided by fighter and attack aircraft.

In naval battles, the specific missions of the tactical air forces are:

- Fleet air defense--protecting Navy ships, particularly carrier task forces, against attack; provided by fighter aircraft.
- » Anti-shipping--mounting air-to-ship attacks in sea battles; provided by attack aircraft.

These missions are not neatly divided up among the services, nor are most of the fighter/attack aircraft designed for just one mission, as illustrated in Table 1. The Air Force, Navy, and Marine Corps each have aircraft capable of performing the above missions, though the first priority of the Air Force and Marine Corps is the land battle and the first priority of the Navy is the sea battle.

The tactical air forces also include aircraft for suppression of enemy air defenses, for radar and communications jamming, reconnaissance, airborne early warning, and command and control.

U.S. military forces other than tactical air forces also contribute to tactical air missions. For example, Army surface-to-air missiles aid in the air superiority mission. The inventory of such missiles will increase substantially in number and capability over the next five years.

U.S. tactical air forces have in the past been designed mainly for deep interdiction, air superiority, fleet air defense, and anti-shipping missions. For the following reasons, the close air support mission is now receiving increased attention:

- The Soviet ground threat is increasing. Air power can provide rapid, flexible response, either massed or dispersed, in support of ground forces. It is argued that this can be crucial to the outcome of battles, particularly those in which friendly forces are outnumbered on the ground. A similar argument can be made for the air superiority mission. Clearing the air over the battlefield of hostile aircraft lessens the enemy threat to ground force operations and to the close air support forces.

TABLE 1
U.S. FIGHTER/ATTACK AIRCRAFT MISSION CAPABILITY

<u>Aircraft</u>	<u>Air Superiority</u>	<u>Close Air Support</u>	<u>Deep Strike Interdiction</u>	<u>Battlefield Interdiction</u>	<u>Fleet Air Defense</u>	<u>Anti-Shipping</u>
AIR FORCE						
A-7		X	X	X ^a		X
A-10		X ^a		X ^a		
F-4	X ^a	X	X	X		X
F-15	X ^a					
F-16	X ^a	X	X	X		X
F-111			X ^a	X		X
NAVY						
A-6		X	X	X		X ^a
A-7		X	X	X		X ^a
F-4	X	X	X	X	X ^a	X
F-14	X				X ^a	
F-18	X	X		X	X ^a	
MARINE CORPS						
A-4		X ^a	X	X		X
A-6		X ^a	X	X		X
AV-8A		X ^a		X	X	X
F-4	X ^a	X	X	X	X	X
F-18	X ^a	X		X	X	

a. Primary mission.

- Sophisticated and capable air defenses, to which the Soviets have devoted considerable effort, make the interdiction mission an unattractive way to use scarce air resources.
- Aircraft specialized for the close air support mission need not have the expensive avionics that all-weather fighters, for example, must have and are generally less expensive than aircraft designed especially for air superiority and interdiction. The F-15 unit cost, for example, is \$12.9 million, twice as much as the \$5.2 million for the A-10. The F-16, a multipurpose aircraft designed as a low-cost complement to the F-15, has a unit cost of \$8.3 million.³

But, the close air support mission is not without severe problems. Fixed-wing aircraft and attack helicopters that operate low over the battlefield are highly vulnerable to modern air defense systems such as those provided by the Soviets to Egypt and Syria; these severely inhibited operations by Israeli aircraft in the 1973 war. When stand-off missiles, such as the Maverick, are employed to allow aircraft to operate farther from enemy surface-to-air missiles and guns, the cost of the weaponry goes up. Buying TV-guided Mavericks to arm an A-10 for ten sorties, for example, costs \$1.3 million, compared to \$5.2 million for the aircraft.

A force capable of a variety of missions provides useful flexibility. However, this does not necessarily imply that a force must be divided equally among these missions, especially within constrained dollars. Therefore, this paper, in discussing the President's tactical air program and possible alternatives, includes mission considerations.

Organization of Tactical Air Forces

The three services organize their aircraft differently. Air Force tactical fighter wings consist of three squadrons of fighter or attack aircraft, generally one type of aircraft per wing. The other aircraft such as reconnaissance and the E-3A Airborne Warning and Control System (AWACS) are also organized into separate wings. A Navy carrier wing is a complete package of all types of tactical aircraft plus specialized anti-submarine warfare (ASW) types. A typical wing for a Nimitz-class carrier includes two squadrons of fighters; three squadrons of attack aircraft; 18 ASW aircraft and helicopters; three aircraft for reconnaissance; and four aircraft each for electronic warfare, airborne early warning, and refueling. The Navy wing numbers about 90 aircraft compared to 72 in an Air Force wing. Air Force fighter/attack squadrons generally number

3. Unit procurement cost, Selected Acquisition Reports, Department of Defense (Comptroller), December 31, 1975.

24 aircraft; Navy, 12. Marine Corps wings have about 140 fixed-wing aircraft, including fighter, attack, electronic countermeasures, reconnaissance, and refueling aircraft. Squadron size varies, with attack squadrons heavier (16-20 aircraft) than fighter squadrons (12 as in the Navy).

The numbers of aircraft discussed above are those needed to equip each unit, or unit equipment (UE). Each service also has aircraft for training and in the pipeline, i.e., being modified or overhauled. These aircraft (roughly 35-40 percent of UE) are added to UE aircraft to give the Authorized Active Inventory (AAI). Thus, for example, 22 Air Force wings would have 1,584 UE aircraft, but the active inventory would be about 2,178 aircraft. The Total Active Inventory (TAI) is the actual inventory of active aircraft which can include aircraft bought in advance for peacetime attrition, i.e., aircraft available to replace those lost from the active inventory for reasons other than retirement or combat.

CHAPTER II
TRENDS IN THE PRESIDENT'S FISCAL YEAR 1977 BUDGET
AND
FIVE-YEAR PROGRAM COSTS

Force Size

Table 2 shows the trends in the size of the U.S. tactical air forces from fiscal year 1964 to fiscal year 1977. Fiscal year 1977 marks the first year of increase in tactical aircraft numbers since the Vietnam war.

Fiscal year 1976 is used as the baseline force for comparisons in this paper.

Procurement Trends

If the Congress approves the DoD request, procurement of new tactical aircraft will grow in fiscal year 1977. One explanation for the relatively low procurement levels of the past five years is that the services were awaiting production of the new, high-technology aircraft now available. Chart 1 illustrates the trends since 1962. Table 4 has more historical data, comparing procurement over the last five years with that programmed over the next five years.

Fiscal Year 1977

As part of the general purpose forces increase in the President's budget request, budget authority for new tactical aircraft procurement increases 23 percent from fiscal year 1976 to fiscal year 1977, with concomitant growth in the numbers of aircraft procured (see Table 3). In 1977 dollars, the increase in procurement is 15 percent. The force structure in fiscal year 1977 will not change from fiscal year 1976.

Fiscal Years 1977-81

The DoD defense program over the next five years shows the tactical aircraft procurement budget rising because all the services are engaged in post-Vietnam modernization programs. The number of tactical aircraft (helicopters excluded) is scheduled to grow 7 percent between the end of fiscal year 1976 and the end of fiscal year 1981. The tactical air force structure will look much as it does now in number of wings,

TABLE 2

U.S. TACTICAL AIR FORCE
FISCAL YEARS 1964-77

	<u>1964</u>	<u>1968</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>Active Forces</u>						
Fighter/Attack Wings:						
Air Force ^a	24	25	22	22	22	22
Navy	15	15	14	14	13	13
Marine Corps	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Total	42	43	39	39	38	38
Fighter/Attack Squadrons:						
Air Force	86	103	75	71	74	74
Navy	85	80	70	70	63	65
Marine Corps	<u>26</u>	<u>27</u>	<u>26</u>	<u>25</u>	<u>25</u>	<u>25</u>
Total	197	210	171	166	162	164
Fighter/Attack Aircraft (AAI): ^b						
Air Force	2,322	2,771	2,259	2,278	2,348	2,368
Navy	1,907	1,730	1,418	1,326	1,170	1,192
Marine Corps	<u>601</u>	<u>579</u>	<u>464</u>	<u>489</u>	<u>473</u>	<u>475</u>
Total	4,830	5,080	4,141	4,093	3,991	4,035
Other Tactical Aircraft	<u>594</u>	<u>924</u>	<u>702</u>	<u>693</u>	<u>602</u>	<u>600</u>
Total Tactical Aircraft	5,424	6,004	4,843	4,786	4,593	4,635
<u>Reserves and Guard</u>						
Fighter/Attack Aircraft	932	699	1,128	1,169	1,169	1,187
Other Tactical Aircraft	<u>293</u>	<u>230</u>	<u>266</u>	<u>266</u>	<u>298</u>	<u>272</u>
Total	<u>1,225</u>	<u>929</u>	<u>1,394</u>	<u>1,435</u>	<u>1,467</u>	<u>1,459</u>
Grand Total Tactical Aircraft	<u>6,649</u>	<u>6,933</u>	<u>6,237</u>	<u>6,221</u>	<u>6,060</u>	<u>6,094</u>

Source: Department of Defense force tables.

a. Wing equivalents, 72 UE aircraft.

b. Includes active, training, pipeline, and support aircraft.

Chart 1

Annual Tactical Aircraft Procurement Quantities

NUMBER OF AIRCRAFT

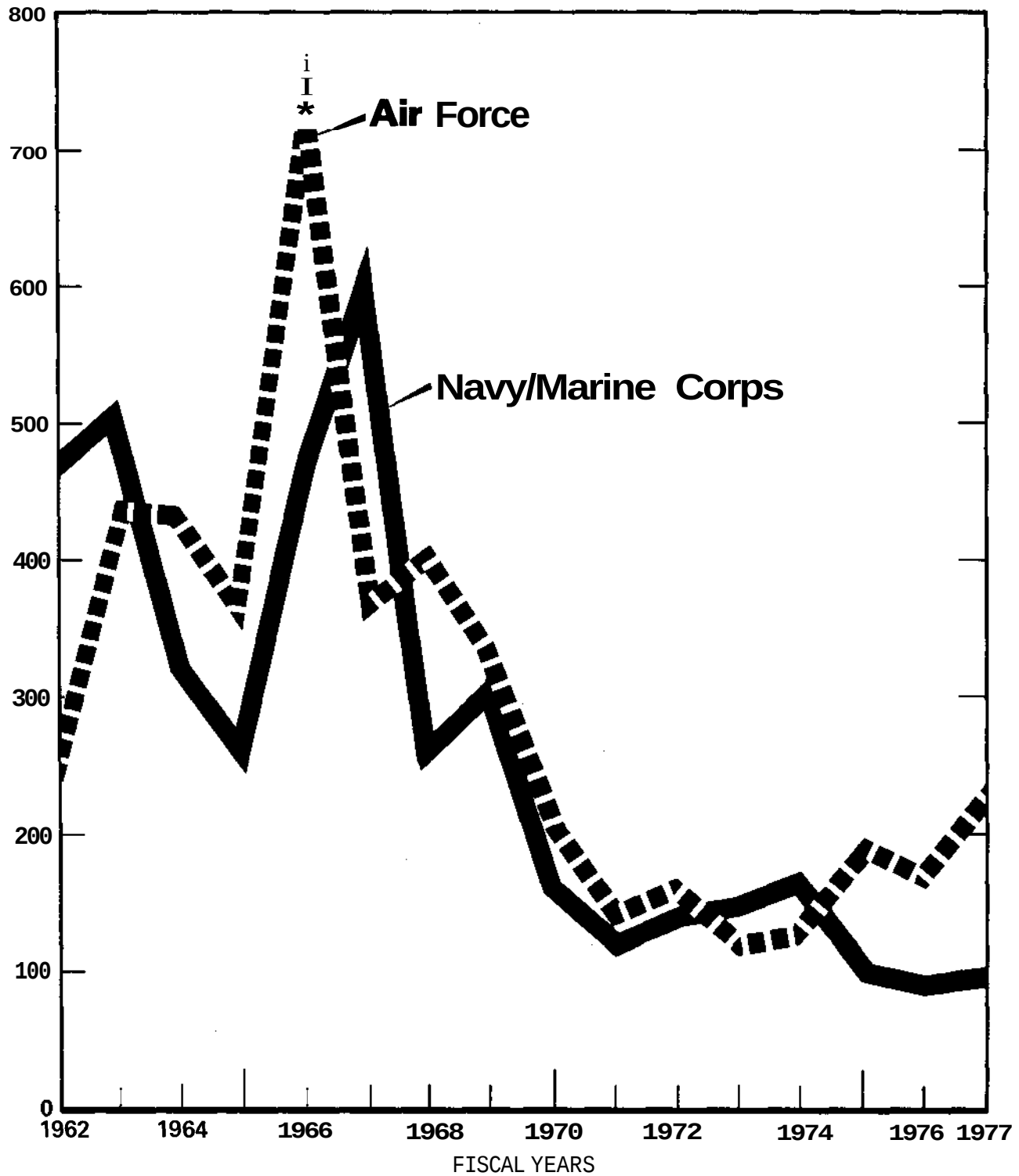


TABLE 3
TACTICAL AIRCRAFT PROCUREMENT
FISCAL YEARS 1976 AND 1977
(Budget authority in millions of dollars)

	1976			1977			Percentage Increase	Constant	
	Nos.	Current Dollars	Constant FY 77 Dollars	Nos.	Current Dollars	Constant FY 77 Dollars			
Air Force	165	\$2,249.4	\$2,401.7	230	\$2,929.6	\$2,929.6	+30%	+22%	
Navy/Marine Corps	<u>89</u>	1,232.6	1,316.0	99	1,355.1	1,355.1	+10%	+3%	
Total	254	\$3,482.0	\$3,717.7	329	\$4,284.7	\$4,284.7	+23%	+15%	

but in fiscal year 1981 the Air Force will have more aircraft; the Navy, fewer. Planned procurement of tactical aircraft over the next five years will cost \$21 billion in fiscal year 1977 dollars. Table 4 compares procurement budgets over the next five years with those of the previous five years in constant fiscal year 1977 dollars.

TABLE 4

NEW TACTICAL AIRCRAFT PROCUREMENT
FISCAL YEARS 1972-76 AND FISCAL YEARS 1977-81
(Budget authority in millions of fiscal year 1977 dollars)

	<u>1972-76</u>		<u>1977-81</u>	
	<u>Quantity</u>	<u>Cost</u>	<u>Quantity</u>	<u>Cost</u>
Air Force	753	\$ 8,337.0	1,697	\$13,778.7
Navy/Marine Corps	<u>638</u>	<u>8,716.0</u>	496	7,675.8
Total	1,391	\$17,053.0	2,193	\$21,454.5

In broad mission terms, DoD plans to buy new aircraft for the U.S. tactical air forces as shown in Table 5.

TABLE 5
 U.S. TACTICAL AIRCRAFT PROCUREMENT
 BY GENERAL MISSION
 FISCAL YEARS 1977-81
 (Budget authority in billions of fiscal year 1977 dollars)

<u>Mission</u>	<u>Aircraft</u>	<u>Cost</u>
Air superiority/fleet air defense	F-14, F-15	7.6
Close air support/battlefield interdiction	A-10, A-4M, AV-8B, attack helicopters	4.4
Anti-shipping	A-7E	1.0
Multipurpose	F-16, F-18	7.0
Electronic warfare	EA6B ^a	0.5
Airborne early warning	AWACS, E2C	2.0

a. Also F-4 Wild Weasel and EF-111, which are modifications rather than new procurement and are not included in the \$0.5 billion figure.

CHAPTER III

AIR FORCE

Procurement and Force Structure

Current Force

As of December 31, 1975, the Air Force had enough fighter/attack aircraft to fully equip 22 wings. These aircraft were organized into 26 active organizational wings, of which 10 were fully equipped, i.e., three squadrons with 24 aircraft each. Eight more wings had three squadrons each, but fell short in aircraft by as much as 25 percent of UE. Each of the other eight wings had one or two squadrons and fell short at a minimum by one-third of its authorized aircraft.

Fiscal Year 1977

The procurement budget for new tactical aircraft is \$2,929.6 million, 30 percent higher in current dollars than in fiscal year 1976, including \$1.5 billion for F-15s and \$360 million for the first F-16 buy. The increase is 22 percent in constant fiscal year 1977 dollars. It will be about two years until the aircraft procured with these funds enter the force. As a result of prior-year appropriations, numbers of tactical aircraft in the active force will increase during fiscal year 1977 with the first squadron of A-10s and four more F-15 squadrons coming into the force.

Fiscal Years 1977-81

By the end of fiscal year 1981, the Air Force plans to have its 26 active wings and 10 Guard and Reserve wings substantially modernized and at full strength. Almost 1,700 new aircraft will be procured for force modernization and expansion. The active fighter/attack aircraft inventory will increase by 17 percent, at a cost of about \$4.4 billion⁴ over the next five years in constant fiscal year 1977 dollars. The National Guard will receive relatively new A-7s from the active forces as the A-10s come in, plus a wing of its own new A-10s; the Reserves will also get a wing of new A-10s. The procurement cost of these two A-10 wings will be about \$1 billion.

The President's budget for new Air Force tactical aircraft procurement over the next five years is shown in Table 6. In fiscal year 1977 constant

4. Procurement and operations and maintenance (O&M), including manpower.

TABLE 6
 AIR FORCE TACTICAL AIRCRAFT PROCUREMENT
 FISCAL YEARS 1977-81
 (Quantity/budget authority in millions of current dollars)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>Quantity 1977-81</u>
A-10	100/ 604.9	173/ 903.6	180/ 838.2	185/ 760.5	5.0	638
F-15	108/1489.4	108/1357.4	108/1221.9	109/1167.4	3.9	433
F-16	16/ 360.6	89/1058.9	145/1193.8	175/1283.1	180/1173.4	605
AWACS (E-3A)	<u>6/ 474.7</u>	<u>6/ 376.2</u>	<u>6/ 404.8</u>	<u>3/164.6</u>	<u>2.2</u>	<u>21</u>
Total	230/2929.6	376/3696.1	439/3658.7	472/3375.6	180/1184.5	1,697

to
8

dollars, the total bill is \$13.8 billion, compared to \$8.3 billion in fiscal years 1972-76, before major modernization programs were fully underway.

1981 Force Composition by Mission

At the end of fiscal year 1981, the Air Force tactical air wings will be organized as shown in Table 7. The mission categories ascribed to each type of aircraft are not exclusive; however, the categories indicate a slight shift toward aircraft optimized for missions against enemy air and ground forces that directly threaten friendly ground forces, i.e., the close air support and air superiority missions.

TABLE 7

ACTIVE AIR FORCE TACTICAL AIR FORCES COMPOSITION BY MISSION (By wings, fiscal years)

<u>Mission</u>	<u>End 1976</u>	<u>End 1981</u>
<u>Close Air Support/ Battlefield Interdiction</u>		
A-7	3	1
A-10	<u>0</u>	<u>4</u>
	3	5
<u>Air Superiority</u>		
F-15	1	6
<u>Interdiction</u>		
F-111	4	4
F-105	<u>1</u>	<u>0</u>
	5	4
<u>Multipurpose</u>		
F-4	17	9
F-16	<u>0</u>	<u>2</u>
	17	11
 Total	 <u><u>26^a</u></u>	 <u><u>26</u></u>

a. Not all are fully equipped wings.

22-26 Wing IssueTerminology

The proposed increase in Air Force wings from 22 to 26 is likely to be an issue this year. It will be useful to understand some of the terminology.

Secretary of Defense Rumsfeld and others have testified that the Air Force has 26 wing organizations but only enough aircraft to fill 22 wings. Thus, the Air Force has 26 organizational wings and 22 wing equivalents in numbers of aircraft in the current inventory. The Department of Defense fiscal year 1977 force structure table shows 26 wings for fiscal years 1975 and 1976, though last year's force structure table showed 22 wings for the same years. It was common procedure then to report wing equivalents to give an indication of equivalent capability. For the purposes of this paper, wings will mean wing equivalents, unless "organizational wing" is specified.

Numbers of aircraft can be discussed in several ways. The Air Force talks about increasing its UE aircraft (aircraft in units) by 288 (4 wings x 72 aircraft). However, to calculate the cost of adding the equivalent of four wings of aircraft, one must look beyond UE to the Authorized Active Inventory (AAI), which includes the training and pipeline aircraft. The AAI generated by an Air Force wing of 72 UE aircraft averages 99 aircraft (not all of which are in the wing at any one time).

About 400 aircraft will have to be added to the active Air Force inventory through procurement over the next five years to achieve the Air Force's goal of 26 fully-equipped wings. This goal is met in the President's five-year defense program.

Another factor relevant to aircraft procurement numbers is peacetime attrition, which is aircraft lost from the active inventory for reasons other than retirement (mostly crashes). In procuring a force, aircraft must be bought either in advance ("advance attrition") or year by year to replace those lost through regular peacetime attrition. Wartime attrition is not included in programmed production.

In this paper, AAI factors plus advanced attrition are used to calculate Air Force costs, because the Air Force is buying its force that way, i.e., advance attrition aircraft are being procured with the initial buy over a relatively short period of time. The Navy, on the other hand, is planning to stretch out procurement of the F-14, buying attrition aircraft as needed in future years rather than with initial procurement. This method keeps the production line open longer, but can raise the unit cost of the aircraft.

-
5. The attrition rate varies by service and aircraft type.

Manpower

The Air Force testified last year that it could support a fully equipped 26-wing force within the 590,000 active duty manpower ceiling then in effect, although fleshing out the force would require 22,000 additional manpower spaces. The plan was to save 17,000 spaces by such changes as replacing older two-seat aircraft with one-seaters and phasing out some support aircraft. Also, the new aircraft were expected to require less maintenance manpower per flying hour than the F-4, thus saving dollars and manpower. However, hopes about the ease of maintaining the new aircraft have not yet been realized, as early experience with the F-15 has shown that it requires more maintenance than projected. If this rate cannot be brought down as the system matures, and if similar situations develop with the F-16 and A-10, the manpower savings are likely to be less than planned.

The other 5,000 spaces were to be saved through technology changes such as closure of some ground radars when the Joint Air Defense Surveillance System goes into operation.

However, the DoD plan for fiscal year 1977 now calls for an Air Force end strength of 571,000, 19,000 below 590,000. This means the Air Force has to find 22,000 manpower space savings out of an end strength of 19,000 fewer people than anticipated. Air Force civilian manpower is also being reduced by about 8,000, a cut which was not anticipated when the 26-wing plan was formulated.

Recently, General Jones, Chief of Staff of the Air Force, testified that 22,000 is the number of people required to man all of the new A-10, F-15, and F-16 units, some of which will replace older aircraft and some of which will expand the inventory. He stated that only 4,400 of the 22,000 manpower spaces accrue to the four wings that comprise the expansion from 22 to 26 wings.⁶ His number, which includes direct-hire civilians, is based on manpower requirements generated by number of aircraft (by type) in the force: 4,400 is the difference between the number of people needed as of the end of fiscal year 1977 and as of the end of fiscal year 1981. The comparable number for the entire five-year period, beginning with the end of fiscal year 1976, is 7,380.

To put the manpower requirements into the context of 22 or 26 wings, one must consider manpower spaces associated with wings of a specific type, i.e., those spaces that would be saved if the growth in aircraft numbers did not materialize. An A-10 wing, for example, requires about 1,870 military manpower spaces. Four wings would require 7,480 people. Manning

6. General David C. Jones, USAF, Statement before the House Budget Committee Task Force on National Security (February 25, 1976).

of an F-15 wing is somewhat higher; thus four wings of F-15s would number over 9,000 people. The number would be slightly higher for four wings of F-4Es. Two wings of A-10s and two of F-15s would require 8,250 military personnel.

In any case, aside from debate over the specific number of people associated with the four-wing increase, between fiscal years 1976 and 1981 the Air Force must still find a total of 22,000 manpower spaces within its end strength to man the A-10, F-15, and F-16 wings that will be in the force in 1981.

Cost

Evaluating the cost associated with the planned Air Force fighter/attack force expansion requires making assumptions about the composition of the four additional wings. If it is assumed that two additional F-15 wings and two additional A-10 wings make up the difference, the cost is \$4.4 billion over the fiscal year 1977-81 period.⁷ This mix of A-10s and F-15s was chosen as a plausible illustration of the difference in cost and force composition between maintaining a 22-wing force or expanding to 26 wings. These aircraft represent the high and low end of the cost scale for fighter/attack aircraft entering the Air Force inventory; each is designed for a different mission. However, depending on other assumptions, the range could be from \$850.0 million to \$6.0 billion. For example, if one assumes that all of the A-10s, F-15s, and F-16s are being procured to modernize the 22-wing force and that the growth is achieved by retaining older F-4s and A-7s, the fiscal years 1977-81 cost of expanding the force is \$850.0 million. At the other end of the spectrum, one might assume that the four additional wings are all F-15s, at an incremental cost of \$6.0 billion over the next five years.

7. Procurement and operations and maintenance, including manpower, in constant fiscal year 1977 dollars.

CHAPTER IV

NAVY AND MARINE CORPS

Navy

Fiscal Year 1977

The procurement budget for Navy and Marine Corps tactical aircraft is \$1,355.1 million, 10 percent higher than in fiscal year 1976, including \$708.2 million for continued procurement of F-14s. In constant fiscal year 1977 dollars, the increase is 3 percent. Numbers of tactical aircraft in the active inventory in fiscal year 1977 will increase slightly from fiscal year 1976, and numbers of squadrons will go from 63 to 65 with the advent of two more F-14 squadrons, but numbers of wings will remain at 13.

Fiscal Years 1977-81

Contrary to the plan last year for the Navy to reduce its wing numbers from 13 to 12 during fiscal year 1977, the Navy now plans to retain 13 carrier wings through fiscal year 1977. The 13th wing has not been funded in the budget beyond 1977. The fiscal year 1977 budget contains O&M funding for the wing, which will consist of aircraft that were scheduled to retire or go to the reserves. There are no fiscal year 1977 procurement dollars programmed to fill a 13th wing in future years. Decisions about the procurement required to maintain this 13th wing will have to be made in the Pentagon this spring and would be reflected in the fiscal year 1978 and fiscal year 1979 budgets.

Under the current program, Navy tactical aircraft numbers will decline by 9 percent over the next five years.

By mission orientation, the force will change little from the end of fiscal year 1976 to fiscal year 1981, with fighters for fleet air defense and air superiority comprising about 40 percent of the force and attack aircraft comprising the other 60 percent.

Procurement. Tactical aircraft procurement plans for both the Navy and Marine Corps are included in the Navy aircraft procurement budget, which is shown for the next five years in Table 8. In fiscal year 1977 constant dollars, the total bill is \$7.7 billion, compared to \$8.7 billion in fiscal years 1972-76, when 638 tactical aircraft were procured.

TABLE 8

NAVY AND MARINE CORPS TACTICAL AIRCRAFT PROCUREMENT
 FISCAL YEARS 1977-81
 (Quantity/budget authority in millions of current dollars)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>Quantity 1977-81</u>
F-14	36/708.2	33/728.0	24/569.0	18/465.0	13/432.6	124
F-18	—	11.0	15/634.4	30/821.9	72/1251.4	117
EA-6B	6/139.9	6/135.7	6/129.3	6/116.5	---	24
E-2C	6/170.9	6/170.8	6/154.4	6/143.8	---	24
A-7E	30/235.2	30/251.6	30/188.9	30/196.3	30/204.6	150
A-4M	21/ 99.4	12/ 63.3	—	—	---	33
AV-8B	—	—	—	8/194.0	16/209.0	24
A-6E	1.5	3.4	—	—	—	--
Total	<u>99/1355.1</u>	<u>87/1363.8</u>	<u>81/1676.0</u>	<u>98/1937.5</u>	<u>131/2097.6</u>	<u>496</u>

Cost of Navy Aircraft. Navy aircraft in procurement tend to have higher unit costs than the Air Force aircraft being procured. The Navy will be procuring only one-third as many aircraft as the Air Force in the next five years but at a total cost of half as much. The average cost of Navy tactical air aircraft procured during fiscal years 1977-81 will be \$17.0 million; of Air Force tactical air aircraft, \$8.7 million. In constant fiscal year 1977 dollars, the averages are \$15.5 million for Navy aircraft and \$8.1 million for Air Force aircraft. The Navy has chosen to buy fewer, high-technology aircraft rather than a mix with enough lower-priced aircraft to allow substantially larger numbers. The Navy is developing the F-18 as a lower cost complement to the F-14, but until the F-18 enters the Navy inventory in fiscal year 1983, the Navy will experience small shortfalls in its active inventory of fighter aircraft in fiscal years 1980 through 1982.

Force Size

The driving factor in the number and size of Navy tactical air wings is the number and size of carriers. If smaller carriers are built in the future, fewer aircraft will be required for those carriers and for the total Navy tactical air force. Since Navy tactical air is part of the total tactical air force, a change in carrier size if the number of carriers stay the same could prompt a shift to more land-based aircraft, depending on whether total force requirements remained the same.

Marine Corps

Fiscal Year 1977

The Marine Corps aircraft procurement budget is included in the Navy aircraft procurement account. In fiscal year 1977, the Marine Corps request is \$169.4 million, of which \$99.4 million is for 21 A-4Ms. A similar request for A-4Ms was denied by the Congress in fiscal year 1976 because the aircraft were intended to replace aircraft lost through future attrition and could be procured later. Foreign sales are keeping the production line open, allowing deferral of a procurement decision. The USMC force structure of 3 wings/25 squadrons and a number of aircraft will not change from fiscal year 1976 to fiscal year 1977.

Fiscal Years 1977-81

The Marine Corps is in a holding pattern until the F-18 and a new VSTOL aircraft (AV-8B) begin entering the force in 1982. The force structure consisting of 3 wings/25 squadrons will not change through fiscal year 1981. Of the squadrons, 12 are fighter; 13, attack (8 light attack

and 5 medium attack). The intent of the Marine Corps is eventually to have the entire light attack force be VSTOL, consisting of AV-8Bs. F-18s will replace F-4s, but not soon enough to prevent a shortfall in active force fighter aircraft of 12 in fiscal year 1980, 29 in fiscal year 1981, and 34 in fiscal year 1982, if F-4s are retired at the expected rate and if the current number of squadrons is maintained.

Of the total \$7.7 billion in the Navy tactical aircraft procurement program over the next five years, about \$2.0 billion is for Marine Corps aircraft, most of which would be procured beginning in fiscal year 1979. The Marines plan to buy A-4Ms, F-18s, and AV-8Bs, and EA-6Bs.

Force Size

If the size of the Marine Corps air element were sharply reduced or the mission changed, it would affect the total U.S. tactical aircraft requirement, as the Marine Corps represents 11 percent of the total U.S. tactical aircraft inventory in fiscal year 1976. Mission, force size and composition, and procurement would have to be reassessed for all the services, as the Marine Corps has missions and capabilities on land and sea in common with the Navy, Air Force, and Army.

CHAPTER V

ARMY

Army attack helicopters are not technically classed as tactical aircraft, which are generally fixed-wing aircraft; however, they definitely do bring firepower to bear in support of friendly forces in land battles. This firepower can be traded at the margin for firepower of fixed-wing aircraft, artillery, or other arms.

Procurement

Fiscal Year 1977

The Army requests a total of \$241.0 million in fiscal year 1977 for development and procurement of attack helicopters. This compares to \$115.1 million in fiscal year 1976.

Fiscal Years 1977-81

Over the five-year period, the Army program includes procurement of 239 Cobra helicopters with TOW missiles (AH-1S) and 100 Advanced Attack Helicopters (AAH). A production decision is due this fall on a total program of 472 AAHs. The Cobra/TOWs will cost \$345.4 million over the five-year period in fiscal year 1977 dollars; the AAH, \$984.3 million (R&D and procurement).

Use of Attack Helicopters

The Army's inventory of attack helicopters will increase by 33 percent between the end of fiscal year 1976 and the end of fiscal year 1981. These helicopters are used in the close air support mission much like the Air Force A-10, though the A-10 has more flexibility and can operate in a wider range across the battlefield. The Army justifies its attack helicopters as an airborne part of the division's firepower, citing the fact that air and ground forces use the same missile (TOW). The A-10 is considered to be a separate force that can be massed and concentrated, if required, and can operate in a wider area on a wider variety of targets. It is under centralized theatre command and control whereas the AAH is under the division or corps command.

Do attack helicopters and A-10s provide redundant capabilities? This is an important question, but its answer is dependent on a still more important question: How much firepower should the United States

buy to support ground force operations and in what mix of capabilities? Once the question of how much is enough can be answered or approximated, one can consider tradeoffs. Neither the data nor the analytical tools presently available permit well-defined trades between air and ground systems, or between fixed-wing and rotary-wing air systems. Future analytical work by DoD should be addressed to clarifying these questions as U.S. ground and tactical air forces and the resources devoted to them continue to be built up over the next several years.

CHAPTER VI

BUDGET ALTERNATIVES

Three alternative tactical air force budgets are suggested by the preceding discussion as an illustration of the relationship of force size, mission, and component to budgets. Each of the alternatives is constructed in relation to the current DoD plan, and the costs are shown relative to the DoD plan. The changes in these forces are changes at the margin, rather than major changes in mission and force size. They do not imply changed U.S. commitments.

Because of more modern armaments entering the force with the new aircraft being procured, each of these alternative forces would be more capable than the current tactical air force. For example, all-weather capability and accuracy would be higher in each alternative than in the current force.

Alternative 1: Lighter Force

Alternative 1 would be a smaller force than in the DoD program, with 22 Air Force wings, 10 Navy wings, and 24 Marine Corps squadrons. In terms of aircraft modernization, this force would have a slightly lower (by 6 percent) percentage of new high-technology aircraft than DoD plans, but precision-guided munitions and other technological improvements would make the force highly capable. The largest difference between this force and the DoD planned 1981 force in mission capability would be fewer close air support aircraft.

The Navy, with 10 carriers and accompanying wings, would have to maintain a lower profile than now in effect, perhaps cutting back in the Pacific.⁸

The Air Force, with 22 wings, would have about the same number of aircraft as in the fiscal year 1976 force. The emphasis would be on aircraft capable of performing the air superiority mission, a majority of which would be multipurpose (F-4s and F-16s) to increase flexibility. The force would have more close air support aircraft in 1981 than now, with more capability because of the large-scale introduction of A-10s. In fiscal year 1981, this force would have two fewer A-10 wings, two fewer F-15 wings, and four fewer F-4 squadrons than in the DoD planned force. A total of fifteen AWAC would be procured instead of the 34

8. Navy carrier air wings are closely linked to the number of aircraft carriers in commission. See the CBO staff working paper "U.S. Naval Force Alternatives" by Dr. Dov Zakheim (March 26, 1976).

desired by DoD; the number of F-16s DoD plans to buy would not be changed. The savings associated with this force would be \$1.3 billion in fiscal year 1977 and \$8.5 billion in constant fiscal year 1977 dollars over the five-year period (see Table 9).

The 10 Navy wings would differ from the DoD plan in fiscal year 1981 by two A-7 squadrons and four F-14 squadrons, meaning no further F-14s would be bought after fiscal year 1977 except for attrition aircraft. The F-18 would be procured in these years and would enter the force as now planned by DoD in FY 1983. Six fewer E-2Cs would be procured than now planned.

The Marine Corps in this alternative would have 24 squadrons rather than 25, with one less A-4 squadron than in the DoD plan. This alternative provides an illustration of savings associated with a relatively small (4 percent) reduction in force size. Part of the savings is in O&M (\$39.0 million in constant fiscal year 1977 dollars over the five-year period); part in procurement (\$116.0 million). A-4Ms would not be procured in fiscal years 1977 and 1978 as in the DoD plan because the reduction of one A-4 squadron would provide a pool of attrition aircraft until the AV-8B becomes available.

Alternative 2: Modernization

Alternative 2 would be about the same size as the current force with the full extent of modernization planned by DoD through fiscal year 1981 but no force growth. The force would be 22 Air Force fighter/attack wings, 12 Navy carrier wings, and 3 Marine Corps wings/25 squadrons. Procurement costs would be the same as in the DoD program (except for 12 fewer AWACS), but operations and maintenance, including personnel costs, would be lower overall because the Air Force would not expand above 22 wings. The savings associated with this force would be \$370 million in fiscal year 1977 and \$1.7 billion in constant fiscal year 1977 dollars over the five-year period.

Although smaller than the DoD plan, this force would have a higher percentage of modern, high-performance and high-technology aircraft. It would retain the present mix of mission capability and priorities for the Navy and double the Air Force close air support aircraft as a percentage of the force. This force would be stronger in specialized aircraft (A-10 and F-15) and all-weather capability than the lighter force, but at some expense to the air superiority mission and flexibility, as multipurpose F-4 squadrons in fiscal year 1981 would number 17, compared to 24 in the lighter force and 28 in the DoD force. The first F-16 squadrons would be formed in fiscal year 1980 as planned.

Alternative 3: Expansion and Modernization

Alternative 3 would have a 26-wing Air Force, a 17 percent increase in aircraft from the current active inventory; a 13th wing for the Navy; and no change for the Marine Corps. The pace and extent of modernization would be the same as programmed by DoD. This force would have more staying power than the Alternative 1 and 2 forces, so could presumably fight a longer war, provide more firepower, and have a higher probability of achieving dominance of the air.

The Air Force wings would have increased emphasis on close air support as DoD plans; the Navy would maintain the present mix of mission capabilities and priorities in the future but at higher force levels.

Alternative 3 would be the DoD plan for 26 fully fleshed out Air Force wings. The procurement cost would be the same as Alternative 2, but O&M would be more because the force would be larger in numbers of squadrons.

The Navy force would have 13 wings, representing one more wing than in the current DoD plan. In this illustrative force, the 13th wing would be achieved in fiscal years 1978-81 by retaining A-7s and F-4s in the active force longer than planned. However, this alternative would procure two more F-14 squadrons than now planned, with the two squadrons entering the force in fiscal year 1982.

As in Alternative 2, the Marine Corps force would not change from the DoD plan. The number of Marine Corps squadrons could have been increased for this alternative, but it is unlikely that the Marine Corps would procure more aircraft, other than A-4Ms, until the F-18 and AV-8B are in production.

The cost increase associated with Alternative 3 would be \$33 million in fiscal year 1977 and \$1.3 billion in fiscal year 1977 constant dollars over the five-year period.

Table 9 shows the incremental costs or savings associated with the three alternative forces relative to the President's budget.

Base Force 1981

Procurement decisions made between now and 1981 cannot dramatically change the shape of the tactical air forces because aircraft already in the inventory will comprise the majority of active tactical air force aircraft in 1981. This is the base force which would exist in 1981 after attrition and retirement of aircraft if no new aircraft were procured after fiscal year 1976. For example, only about 24 percent of the fighter/attack force in 1981, as programmed in the President's budget, would be aircraft procured as a result of Congressional decisions in fiscal year 1977 and beyond.

The cross-hatched areas in Chart 2 illustrate by primary mission the capabilities that would be acquired by fiscal year 1981 in the President's program and in each of the three alternatives as a result of Congressional procurement decisions beginning in fiscal year 1977.

TABLE 9

COSTS OF ALTERNATIVE TACTICAL AIR PROGRAMS
RELATIVE TO THE PRESIDENT'S PROPOSALS
(Budget authority in millions of dollars, fiscal years)

Alternative	1977		1978		1979		1980		1981		1977-81 Constant Dollars ^a
	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	Current Dollars	Constant Dollars ^a	
<u>Lighter Force</u>											
10 USAF wings	-931	-931	-1,241	-1,181	-1,486	-1,356	-2,081	-1,826	-445	-370	-5,665
10 Navy wings	-305	-305	-789	-755	-646	-590	-614	-539	-542	-457	-2,646
24 MC squadrons	-64	-64	-70	-67	-9	-8	-9	-8	-9	-7	-154
Total	-1,300	-1,300	-2,100	-2,003	-2,141	-1,954	-2,704	-2,373	-996	-835	-8,465
<u>Modernization</u>											
22 USAF wings	-337	-337	-269	-255	-368	-335	-457	-399	-381	-317	-1,682
12 Navy wings	-33	-33	—	—	—	—	—	—	—	—	—
25 MC squadrons	—	—	—	—	—	—	—	—	—	—	—
Total	-370	-370	-269	-255	-368	-335	-457	-399	-381	-317	-1,675
<u>Expansion & Modernization</u>											
26 USAF wings	—	—	—	—	—	—	—	—	—	—	—
13 Navy wings	+33	+33	+100	+95	+313	+285	+483	+424	+493	+416	+1,253
25 MC squadrons	—	—	—	—	—	—	—	—	—	—	—
Total	+33	+33	+100	+95	+313	+285	+483	+424	+493	+416	+1,253

a. Constant fiscal year 1977 dollars.

Chart 2

U.S. Active Force Fighter/Attack Squadrons by Mission

President's Budget & Alternatives, Fiscal Year 1981

