



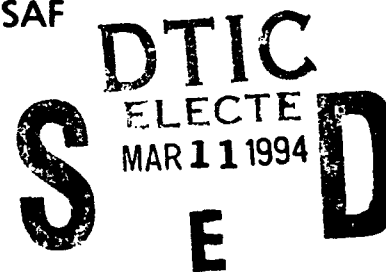
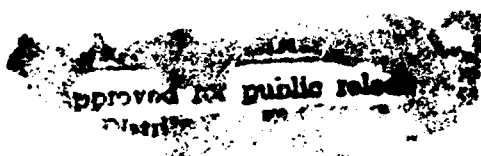
②

1993
Executive Research Project
S89

American Air Power: Multiple Services or Multiple Capabilities?

Lieutenant Colonel
Steven E. Barach
U.S. Air Force

Faculty Research Advisor
Colonel Michael P. Smith, USAF



The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-6000

94 3 10 023

94-07997



3875

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY N/A			3. DISTRIBUTION/AVAILABILITY OF REPORT Distribution Statement A: Approved for public release; distribution is unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE N/A			5. MONITORING ORGANIZATION REPORT NUMBER(S) Same		
4. PERFORMING ORGANIZATION REPORT NUMBER(S) NDU-ICAF-93-289			7a. NAME OF MONITORING ORGANIZATION National Defense University		
6a. NAME OF PERFORMING ORGANIZATION Industrial College of the Armed Forces		6b. OFFICE SYMBOL (If applicable) ICAF-FAP	7b. ADDRESS (City, State, and ZIP Code) Fort Lesley J. McNair Washington, D.C. 20319-6000		
6c. ADDRESS (City, State, and ZIP Code) Fort Lesley J. McNair Washington, D.C. 20319-6000		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER			
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	10. SOURCE OF FUNDING NUMBERS		
8c. ADDRESS (City, State, and ZIP Code)			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
11. TITLE (Include Security Classification) <i>American Air Power: Multiple Services or Multiple Capabilities</i>					
12. PERSONAL AUTHOR(S) <i>Steven Barach</i>					
13a. TYPE OF REPORT Research		13b. TIME COVERED FROM <i>Aug 92</i> TO <i>Apr 93</i>		14. DATE OF REPORT (Year, Month, Day) April 1993	
				15. PAGE COUNT 42	
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) SEE ATTACHED					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS					
22a. NAME OF RESPONSIBLE INDIVIDUAL Judy Clark			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
			22b. TELEPHONE (Include Area Code) (202) 475-1889		22c. OFFICE SYMBOL ICAF-FAP

DTIC QUALITY INSPECTED 1

Abstract
of
American Air Power: Multiple Services or Multiple Capabilities?

by

Lieutenant Colonel Steven E. Barach, USAF

This paper addresses the national concern about the apparent duplication of tactical air power assets in each of the Nation's four services.

Included are discussions of airpower's recent contributions to national defense, descriptions of each of the service's aerial force projection components and employment philosophies, as well as an option for future air power organizational structures.

The major finding is that there is considerable redundancy in the tactical air force application units of the four services, and each of the services is moving towards a unified consolidation of its air assets. The primary recommendation is that the consolidation continue and that eventually, a single manager for the application of air power will organize, train, and equip air assets for eventual use by the warfighting CINCs.

**1993
Executive Research Project
S89**

**American Air Power:
Multiple Services or
Multiple Capabilities?**

**Lieutenant Colonel
Steven E. Barach
U.S. Air Force**

Faculty Research Advisor
Colonel Michael P. Smith, USAF



**The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-6000**

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

DISCLAIMER

This research report represents the views of the author and does not necessarily reflect the official opinion of the Industrial College of the Armed Forces, the National Defense University, or the Department of Defense.

This document is the property of the United States Government and is not to be reproduced in whole or in part for distribution outside the federal executive branch without permission of the Director of Research and Publications, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C. 20319-6000.

...preoccupation with trivia is preventing us from carrying out our basic responsibilities for broad oversight.

The current congressional review of the defense program would make a fitting version of the popular game- "Trivial Pursuit."

Senator Sam Nunn

Defense money provides freedom from aggression and freedom from fear. It is the essential underpinning of all other worthwhile human endeavor in the real world we live in.

General Larry Welch
Former AF Chief of Staff

In the final analysis, defense is in the will of the people.

INTRODUCTION

As the size of the Department of Defense (DOD) budget continues to spiral downward, it seems that at least four serious challenges face defense planners. Those challenges are to articulate the threat, to maintain a military force capable of enforcing national policy, to provide the Commander in Chief with military options, and to economize resources wherever possible. Maintenance of force preparedness and combat capability must be foremost concerns during the rush to diversify and get smaller faster. Former Air Force Secretary Donald B. Rice declared that, "the U.S. must be strong militarily before it can be strong in all other respects. He warned that excessive force cuts induced by false economies could cause a fatal 'free fall' of the nation's military strength." Historically, the individual services have addressed budget reductions simply by sharing the pain and

accepting roughly equal portions of the cut. Internacine warfare has broken out from time to time; however, the battles have been largely constrained to the budget margins.

In light of what appears to reflect a national desire to cash in on a "peace dividend" as well as a general uncertainty about the military threat to the United States, the Clinton administration's 1997 defense budget proposal will be about \$101 billion less than in 1987.² As one step towards a more cost-effective military, Georgia Senator Sam Nunn, Chairman of the Senate Armed Services Committee (SASC), has called for an overhaul of the roles and missions of the individual services.³ He has expressed particular concern over the apparent redundancy of force structure in America's air arms.⁴ This paper will address the Senator's concern about redundant areas of American air power and the high dollar cost that such excess capacity implies. Section I will present an overview of air power's recent contribution to national defense. Section II contains descriptions of each of the services' aerial force projection components and employment philosophies and Section III will conclude with a review of force redundancies and options for future air power structures.

SECTION I

IN-HOUSE FUNCTIONS REVIEW

General Colin Powell, Chairman of the Joint Chiefs of Staff (CJCS) has attempted to calm Senator Nunn's concern through the

triennial publication of a roles and missions review. The review is mandated by the Goldwater-Nichols Department of Defense Reorganization Act and was most recently published in February 1993. Although I will evaluate the report's specific recommendations later, suffice it to say that the report deals largely with the organization of air power and has not been well received on capitol hill. The inherent danger of a DOD-run roles and missions review, and indeed the source of much of its present criticism, is that it cannot be zero-based and is likely to be overly concerned with individual service interests and not the overall welfare of the nation (i.e. security, economic, and social welfare needs). As expected, no section of DOD received more attention from the roles and missions examination than the various aviation sections. As former Senator Barry Goldwater has frequently noted, "We are the only military in the world with four⁵ air forces." Annual budget messages from Congress have made it increasingly clear that America is reluctant to support four air arms. The issue of force organization becomes very important as size diminishes.

WHAT HAS AIR POWER DONE LATELY?

Air power has come of age. Land-based and sea-based air forces have become the heart of America's potential to project conventional force. Technology has "caught up" with the vision of aviation pioneers. Air power played, and continues to play, a dominant role in the Arabian Gulf; it has been essential to relief efforts in Somalia, Sarajevo, and hurricane-torn Florida; and it

promises to become a significant tool in the United Nations' recently announced effort to enforce a no-fly zone in Bosnia. The challenge for DOD is to find a way to maintain the Nation's security through the efficient, economic management of air power. The balance of this paper will focus on the organization of air power and explore a method of innovative change.

THE COMPELLING NEED FOR CHANGE

While observing a freedom demonstration in Alexanderplatz, East Berlin, just prior to Democracy's breach of the "great wall" of communism, I remember thinking that although some East Berliners were bravely performing for the news cameras, a far greater number were in a gala mood and appeared to be on very good terms with the East German police and military. It seemed to me that the impending fall of the communist monolith might not be as violent as many of my peers were predicting and that much of the American military stationed in Europe should prepare for a change of assignment back to the United States.

From the individual service's point of view, issues of declining force size and structure loomed paramount. Although few politicians or military leaders were willing to publicly forecast the fragmentation of the Soviet Union, it was clear to those of us⁶ stationed in Europe that the Warsaw Pact was changing quickly. Without a Warsaw Pact to oppose NATO, the need for large elements of American land and air forces in Europe was in grave doubt. Lengthy base negotiations with Spain had taught the U.S. that European nations were likely to tolerate American forces on their

soil only in the presence of a significant threat or through substantial economic inducement. German (then West German) Foreign Minister Gensher, as well as Chancellor Kohl made it reasonably clear that although American troops were always welcome in Germany for the economic boost they gave the local economies, the noisy jet aircraft and farmland-destroying armor could begin to go home anytime. It became very difficult for American planners to imagine how they might gainfully employ units that could be released from duty in Central Europe. Then, along came the Gulf War and for a short time, the compelling need for force reduction was nudged into the background.

THE GULF WAR, A MAP FOR TOMMOROW?

The Gulf War was a conflict almost tailor-made for the use of American air power. Improved weapons technologies and the lack of natural camouflage made target acquisition (except for SCUD missiles) manageable. By American standards, the grossly inferior Iraqi Air Force made the battle for air supremacy a short one. Stealth technologies denied the enemy the use of the one potential strength he had- a large surface-to-air defense system designed to protect the vital infrastructure and command/control targets in Baghdad. Space-based assets provided timely information of incredible detail and accuracy to American commanders while Iraq's leadership was comparatively blind. And finally, after the embarrassment of Vietnam, two decades of solid, thoughtful training had produced an air power team which was truly second to none.

There is considerable doubt that American forces will soon fight in a conflict much akin to the Gulf War. Operations like "Just Cause" in Panama or "Urgent Fury" in Grenada are more likely to be the norm. We may be confident that whatever conflict we do participate in, it will not unfold precisely as planned. Just as our preparation for a fight with the Warsaw Pact helped ready us for our eventual battle in the desert "through what at the time had been criticized as duplication and oversupply of forces,... aviation forces participating in the recent Gulf contingency were for the most part not the ones that were specified in pre-war [operations plans]."⁸ If potential American adversaries have learned anything about the U.S. military, it is that our air arm can be flexible, decisive, and long-reaching.

NON-COMBAT CONSTRAINTS

From the perspective of the service leadership, the Gulf War had to be fought with one eye looking over the shoulder. Although Iraq presented a serious challenge, the fact that the coalition⁹ would prevail, at least militarily, was never much in doubt. Like billiard players setting up a carom shot, DOD leaders had to deliver the resounding defeat of the Iraqi military as well as position the individual services and the Defense Department to address the deep budget cuts looming on the horizon.

With an offensive fighting strategy based largely on maneuver, synchronization, and concentration of firepower, the ground elements of America's defense team were certainly as¹⁰ capable as its air elements. Because issues of "dying for oil"

and "dying for the Kuwaiti Monarchy" had been popularized by the American press, an additional concern for battle commanders was the politically sensitive possibility of row upon row of body bags¹¹ returning to the U.S. from the Gulf. Keeping casualties to an absolute minimum became a major objective. The early and extensive use of air power promised to keep casualties lower than an immediate ground assault. At a Camp David meeting prior to the onset of the air campaign, General Merrill A. "Tony" McPeak endeared himself to the President by predicting that casualties would be far fewer than the Pentagon's official "best guess."

BACK TO THE "REAL" BUSINESS

The end of the Gulf War signaled Congress' return to the real business of reaping a "peace dividend." In response to cries for a smaller, less costly military, Chairman Powell proposed a

... much smaller, but still lethal military force... We call it the Base Force and if we're allowed to continue shaping it in the right way and at the right speed, we will have a smaller but even better force than we have today."... He emphasized that the Base Force will be, "first of all a joint force" composed of "the right combination of forces and capabilities no matter which service they belong to," for all missions. Each of the services must be permitted to retain its traditions and unique capabilities, including individual air components, and each must be prepared to team up with the others in times of crisis and war. 12

The 1994 budget proposal has put the "base force" and its complement of 1.6 million service members in jeopardy. Defense Secretary Aspin has already issued a call for a "bottom-up" review of his entire organization and a further reduction of almost 200,000 service members. The capstone of the review promises to be a restructure of American air power.

SECTION II

HISTORICAL FORCE REDUNDANCY

The National Security Act of 1947 parented the current American defense structure. Composed of the Army, Navy, Marine Corps, Air Force and in certain circumstances the Coast Guard; each of the services has found it necessary to employ aviation assets in order to perform roles assigned by the Key West Agreement of 1948.¹ The Air Force was conceived as a service that would support most of the nation's strategic (bomber and ICBM) and airlift needs, although the Navy reserved unto itself a portion of the nuclear and long-range strike missions. Tactical air responsibilities were to be shared by elements of the USAF and USN (including the Marine Corps). The army had some air assets for tactical reconnaissance but did not embrace the "air mobile" concept of battle until the war in Vietnam. Eventually, the Army equipped itself with helicopters in order to take advantage of battlefield mobility and to meet some of its own close air support (CAS) requirements.² The Army sees attack helicopters largely as "flying tanks" and tends to restrict their employment.

Air power's roles, missions, and doctrine have historically been determined by technology and the characteristics of available aircraft. One of the main ideas of this paper is that mission functions are no longer based predominantly on the technical capabilities of hardware. Bombers have traditionally been referred to as bombers because of their technical ability to fly

long distances while carrying large payloads. Fighters were small aircraft that were able to maneuver well but were generally unable to carry large payloads or fly long distances because of limitations imposed by materials and engine technology. In the years since the Vietnam War, aviation has enjoyed technical improvements that blur the differences between strategic and tactical aircraft. "Small" aircraft are now able to fly very long distances and carry greater weights because engines and structures materials have improved significantly. Through incredibly increased accuracy, precision guided munitions have reduced requirements for bulk payload capacity. Large aircraft have become "stealthy" and requirements for maneuverability in order to evade enemy air defenses have been relaxed. The words "strategic" and "tactical" are no longer accurate descriptors of aircraft types, but rather, reflect a view of a target's place in the scheme of the campaign.

TECHNOLOGICALLY-SEPARATE, DOCTRINALLY-THE SAME

Just as today's aircraft are able to perform an increasing number of missions, the individual services have grown the capacity to perform missions and tasks in increasingly overlapping areas (See Chart #1). Power projection, for example, is something every uniformed service has the means to perform. In light of this technological cornucopia, the question that leaps at aviation planners is at what level of need and at what expense is the U.S. prepared to participate?

Through the cold war years, the individual departments

justified not only separate air forces but also separate acquisition programs because requirements were so vast and disparate that each service needed an acquisition corps that understood its service-unique needs. Past technological limitations prohibited significant overlap of hardware. A relatively recent USAF/Navy attempt to jointly procure an effective fighter proved a memorable disaster. The result of which was that neither service got what it wanted or needed for an additional ten years. A brief overview of each of the services' past tactical air technology requirements and evolving doctrine will serve to further demonstrate the point.

NAVY

During the time between the invention of the airplane and the end of the Cold War, naval aviation evolved from fleet reconnaissance to power projection and fleet protection. The U.S. Navy has required that aircraft be small enough and sturdy enough to operate from the deck of an aircraft carrier and have sufficient range to perform attack missions in places like the Middle East. The aircraft must be small because of limited ship-board space and the physical limitations of jet engines and catapult launchers. Maneuverability requirements and structural limitations have also led to the development of small naval aircraft. Navy planes must be sturdy in order to withstand the stresses of carrier launches and recoveries. Besides successful operation from a carrier deck, Navy fighter/attack aircraft must also be capable of performing the traditional tactical missions of

counter-air, interdiction, reconnaissance and close air-support. Naval aircraft, although they often looked like those used by other services, were really much different. Even the McDonnell-Douglas F-4 Phantom, which was successfully cloned for use by the Navy and the Air Force, was produced in drastically different variants. The Air Force Phantoms were far heavier with much less robust undercarriages and could not have safely operated from a carrier deck.

Until the end of the Cold War, the primary role of naval aviation has been to support naval operations concerned with command of the seas. As the threat of global war has receded, the Navy has begun to shift its focus to operations over the littoral. The Navy is adopting an "expeditionary" point of view and indeed appears to have joined the Marine Corps as it structures itself to be part of the leveraged entry team. As former Navy Secretary Sean O'Keefe recently stated,

The shift in strategic landscape means that naval forces will concentrate on littoral warfare and maneuver from the sea. Maneuver from the sea, the tactical equivalent of maneuver warfare on land, provides a potent warfighting tool to the joint force commander-a tool that is literally the key to success in many likely contingency scenarios. 4

The Washington Post recently reported that elements of the US Marine Corps were embarked during a recent test of amphibious roles for nuclear carriers. The issue for naval air power in the test is that in order to accomodate the 644-man Marine contingent and their helicopters on the aircraft carrier, fully 50 percent of

5

the ship's long range fighters were left ashore.

Advances in technology and changes in the post-Cold War political environment will affect naval aviation to the same degree that they impinge on the rest of DOD. The drive will clearly be towards flexibility and consolidation of forces. None of the services will get one type of plane for air defense and another type for surface attack if the functions can be adequately performed by a single type of aircraft.

MARINE CORPS

The Marine Corps has traditionally flown whatever the Navy's tactical air arm offered up. The idea that the Marine Corps provided a total "forced entry" package has been instrumental in the service's ability to maintain it's own unique air force. The Corps' insistence that only a Marine pilot who had first been trained as a rifleman could provide the kind of close air support that a Marine combat unit required provided an additional argument for an autonomous air arm.

A slight departure from the Marine Corps' tradition of flying the Navy's standard equipment was the acquisition of the vertical/short take-off and landing (VSTOL) AV-8 Harrier. The Corps identified a requirement for a fighter that could take off vertically or from very short strips. Like Britain's Royal Navy, the U.S. Navy could have used an aircraft of similar capability to operate off of carrier decks but the Harrier does not have the range or payload capacity to satisfy the Navy's doctrinal needs.

The Marines consider the attack aircraft to be primarily a close air support weapons platform which operates as highly mobile light artillery. Recently, Marine doctrine has accorded the airplane the status of a "maneuver unit." That is, air power may be successfully used as the vertical element of a coordinated attack, battle, or campaign.

As both the Navy and the Marine Corps are reduced in size, and in light of the fact that Naval expeditionary forces now include Marines afloat on aircraft carriers, it is increasingly difficult to understand the need for two distinct air arms in one department.

AIR FORCE

The USAF has heretofore enjoyed requirements that were sufficiently different from the Navy's to justify the acquisition of completely different weapons systems. Air Force aircraft did not need to land on carrier decks, so many of the structural penalties inherent to naval aviation were converted to performance improvements on Air Force aircraft. Although requirements for maneuverability and speed compelled the acquisition of small fighter aircraft, range was also important and Air Force jets are generally larger than their Naval counterparts.

Stealthy airframe design and improved engine technologies have ushered in a new era of Air Force aircraft acquisition. Stealthiness, cost, and force projection capacity are the benchmarks for Air Force systems. The words "strategic" and

"tactical" are no longer used to describe aircraft types. Organizationally, the Air Force has combined its strategic and tactical conventional force projection commands into a single "Air Combat Command."

Doctrinally, the USAF now specifically precludes limiting roles and missions to aircraft types. "Roles and missions are...defined by objectives, not by the platform or weapon used. Most aerospace forces can perform multiple roles and missions, and some can perform multiple roles and missions in unique ways."⁷

Somewhat different than the Navy's expeditionary doctrine, the USAF view of its warfighting responsibilities resides in its philosophy of "Global Reach, Global Power"⁸ which capitalizes on "what airpower brings to the Nation's defense-speed, range, flexibility, precision, and lethality."⁹ Although the Air Force doctrine tends to agree with other service doctrines in placing considerable value on the concept of an overall joint commander, the air service very heavily weights the requirements and responsibilities of the air component commander. "Airmen are responsible for the effective employment of aerospace power....the air component commander should propose courses of action to the joint or combined commander, as well as to the land and naval commanders to ensure...the maximum benefit from available aerospace assets."¹⁰

ARMY

Finally, aside from non-piloted air defense, the Army's primary air power application interest remains rooted in the

protection of its ground troops from air attack. Helicopters are assigned to provide Army commanders at the division level, or below, with an organic means of effective air support albeit at ever increasing fiscal cost. Generally considered as air mobile artillery or vertical armor, the Army's tactical air assets have become far more capable than many would have imagined. Attack helicopters with increased speed, range, payload, and destructive capability are now able to jointly work with fixed-wing aircraft in the close air support role. Although not yet ready to take on the long range interdiction mission, helicopters are certainly capable of performing interdiction in excess of one hundred miles from the battlefield. Properly armed, attack helicopters are also capable of performing air defense missions.

For reasons similar to those that led to the establishment of an independent Air Force in 1947, Army aviation has been compelled to strive for greater autonomy. As events in North Africa demonstrated during WW II and have reaffirmed in Desert Storm, aviation assets are so flexible and so maneuverable that they are best distributed by a single manager for air power and not by
11
commanders of lesser units.

In summary, technology, doctrine, and cost are inexorably driving each of the service's air arms toward similar equipment. In an arena of Congressionally mandated joint employment, the only real issue that remains is associated with air power's organization. In the following section, I will discuss the current National Security Strategy and relate it to an organizational model of capability based air power.

SECTION III

As international and domestic politico-economic pressures continue to militate against a robust forward presence for United States' forces, adjustments are being made to American military capabilities and posture. Although at present the threat of global nuclear war has receded, opportunities for the U.S. military to act on behalf of American interests have not appreciably diminished. The ongoing Somalian deployment and the threat of increased involvement in Bosnia are two examples of current military concern. Regional difficulties in Southeast Asia, Northeast Asia, the Crimea, and the Middle East show unfortunate promise of ripening into intense diplomatic or military confrontations. With a diminishing budget and a correspondingly smaller force structure, defense planners are compelled to review the basic architecture of the entire defense organization. Any new structure will have to be compatible with America's rapid national priority shift in resource allocation (see Charts #2 and 3).

AIR POWER: INSTRUMENT OF FOREIGN POLICY

Whatever defense structure emerges from the present politico-economic cauldron, the value of American air power as an instrument of national policy will in large measure be determined by its flexibility. Simply put, in order to maintain a constant value as an instrument of national policy, numerically smaller air forces must have flexibility and capacity to be used effectively in an increasing number of situations. Exclusive of the

the acquisition of new aircraft, methods of improving flexibility may be achieved through: improved tactics and training; advanced weapons technologies; more efficient command, control, and intelligence schemes; more rational organization; and through international political arrangements more favorable to the flexible basing and overflight rights of air elements. In defense jargon, flexibility is a "combat multiplier" that may be used to offset reductions in force size.

THREAT vs CAPABILITY vs ECONOMY

Clearly, American conventional force posture is being economically driven and is presently highlighted by a decrease in size and a diminution of forward presence. Without the need to maintain Cold War-sized forces, and absent the requirement to base them in Central Europe, America's recent forward presence strategy seems extravagant to many in Congress. There remains a need for a modest American presence in Europe and the Pacific, but certainly not on the scale required by the Cold War. Aerospace presence can be relatively inexpensively projected from the shores of the United States.

Recent events in the Middle East and Africa give substance to the notion that U.S. forces need to be ready for regional contingency operations. As previously mentioned, the Chairman of the Joint Chiefs of Staff promotes the concept of a base force which would theoretically be a defense "floor." Manning and equipping forces below the prescribed base force levels would considerably increase risk. Although subject to constant

Congressional review, the base force envisioned by General Powell would provide the U.S. with an adequate capacity to respond simultaneously to a pair of Iraq-sized regional contingencies. Critical elements of the posture include transportability, flexibility, and a command structure amenable to action in coalition with the forces of other nations.

CAPABILITY-BASED DEFENSE

In light of the present difficulty in defining a credible military threat to the United States, it seems reasonable to first determine how much defense capability the nation can afford, then work out the most cost effective force structure mix. House Armed Services Committee Chairman Ron Dellums, not pleased with Chairman Powell's roles and missions review, has joined the clamor for a "bottom-up" review of America's defense organization. The services have been served notice that "overhead" in each of the organizations is in jeopardy. Since there is a need for American forces with global reach, but no obviously powerful military competitor, the U.S. ought to take advantage of the defense investments made during the last fifteen years and attend to other, more urgent domestic programs. Instead of straining imaginations to find a replacement for the threat from the former Soviet Union, Congressional and DOD planners should be building the best military possible for the resources the Nation can provide. General Powell, CJCS, stated flatly, "there are those who insist that we can have forces matched to a specific, identifiable threat. This is not only a mistaken concept, it is a

dangerous concept. We have regretted it in the past. I can assure you that...I and the Chiefs will resist it."

An early step in constructing a cost-effective defense system is to disregard the organizational structures of the past. Service-oriented, functional stovepipes are not conducive to the construction of a zero-based defense force. Every responsible military leader has espoused the concept of joint and combined force employment, yet no service seems inclined to sacrifice its own parochial interests. Chairman Powell has asserted that, "The airplane and helicopter capabilities of the Army, Navy, Air Force, and Marine Corps are unique, complementary and necessary." In spite of the Chairman's comments, it seems likely that coming budget constraints will compel deeper defense cuts than many are willing to admit. The question for DOD will be whether it makes its own structural decisions or defaults to Congress as it has done so often in the past. As Senator Nunn pointed out, DOD has at least 10 broad areas where there appears to be substantial duplication and potential for streamlining, and most of these are in contingency or expeditionary forces. The Senator then turned his attention to the duplication of air assets and eloquently continued,

...I am convinced it is time for General Powell to conduct a no-holds barred, everything-on-the-table review of the current assignments of roles and missions among the military services. Here is where I would suggest they start. The first area of potential streamlining is the projection of air power. Operations Desert Shield/Desert Storm provided compelling evidence of the critical role that air power plays on the modern battlefield...

But we spend tens of billions of dollars every year operating tactical aircraft squadrons in each of the four services. The services now have over \$350 billion worth of new combat aircraft on the drawing boards, with only limited efforts to achieve commonality.

We have two modes of air power - land based aviation and sea-based aviation... Both are unique capabilities and assets we require. From my point of view, the issue isn't whether we have one or the other. The issue instead is choice on the margin: as we invest scarce resources in the coming years, what is the most cost-effective mix of forces? 10

During the remainder of his speech, the Senator continuously exhorted the DOD and Congress to do what's best for America- not what's best for the services. The implication is that a capability-based force structure might not be perceived by the services as being in their best interest. Chairman Powell has essentially called for such a structure although without jeopardizing existing forces and command overhead.

COST-EFFECTIVE POWER PROJECTION UNITS

Cost has indeed become a critical part of the defense posture equation, and possibly the most cost-effective forces in the American air power inventory are its reserve components (ARC)(See Chart #4). Comprised of elements of the air national guard and air reserves- airlift, combat services, combat services support, and force application units cost far less to maintain than regular units and have consistently demonstrated combat power equal to their full-time counterparts.

11

Arguments that ARC forces have significant hidden costs and can remain viable only through constant injections of "regular"

personnel lose cogency in light of the current proposition to combine many DOD training functions under the auspices of a single manager. The Air Force and Navy are already in the process of consolidating their initial fixed-wing flying training programs. All rotary wing training is to be administered by the Army. It seems reasonable that once trained, the forces could then become based and structured in the same manner as those that we now refer to as "reserve". Just as the words "strategic" and "tactical" have lost their meaning as descriptors of hardware, the words "active" and "reserve" will become meaningless as the Department of Defense continues to move towards more cost effective structures. For example; research, test, development, and evaluation functions for the air forces would be performed by a small, core organization which would be augmented by appropriate sections of the defense acquisition corps.

RECONSTITUTION SCHEMES

Besides increased use of the ARC, two other schemes have surfaced which purport to save defense dollars and provide for the reconstitution of combat air forces in time of war (see Chart #5).

The 'teamed' squadron approach would store aircraft at the home base of an Air Guard or Reserve unit which would be manned at a higher level than usual to provide a cadre in the event of mobilization.

The 'stored' wing approach would go further; large numbers of aircraft would be maintained in an inactive status (mothballed)

in areas of favorable climactic conditions until needed. A slightly more expensive variation of his idea proposed by the Congressional Budget Office would be for pilots in the remaining wings to fly all of the aircraft, including the stored ones, in rotation as an aid to keeping the entire fleet in working order." ¹⁴ Savings would be realized in reduced manpower and operations and maintenance (O&M) costs. Teaming and storing also imply a kind of acquisition stasis in that although research, development and prototyping could continue, a new line of hardware need not be produced until the situation demanded.

Research, development, and prototyping would continue and new technology would be placed on the shelf until needed. Acquisition lead-time would be theoretically limited to that required to crank-up the production facilities and far less than the 10 year gap we now experience between a statement of requirement and initial deployment of the hardware.

COST-EFFECTIVE BASING

Intermediate and forward basing schemes are directly related to strategic reach and elemental to the concept of force posture. The high cost of maintaining overseas bases, politically reluctant host-nations, increased warning times, and the closure of a large number of stateside bases have influenced Congress to reduce the number of foreign installations. In order to optimize funds spent overseas, force application units should be home based in the U.S. and visit overseas bases only as part of a rotational training plan. Overhead costs, in the form of permanent facilities,

dependants support structures etc., would be reduced dramatically.

A SINGLE MANAGER FOR FORCE APPLICATION

The U.S. Air Force has already combined it's SAC and TAC force application units into a new organization called "Air Combat Command" (ACC). Although SAC and TAC were useful during the Cold War, they added little organizational value to a much smaller, globally oriented national air force of the '90's. By extending the line of thought that led to the denouement of SAC and TAC, it seems that additional intermediate organizational levels might be dispensed with.

An omnibus manager for air power's force application units could handle the individual service's management and training functions. In the fixed-wing arena, with a single manager providing the initial flying training, and a joint air component commander directing the fighting, the only task remaining to be accomplished by the individual services is intermediate training.

All aerial force application units could be organized, trained, and equipped under the same administrative roof and then chopped to the warfighting CINCS in time of increased tensions or conflict. The only valid reason for each service to maintain its own aerial force application section is for span-of-control considerations. Simply put, the required size of a command and support structure is directly related to the size of the unit being supervised. Drastic changes in basic force structure must and should lead to corresponding reductions in overhead. Although General Powell decrys this line of reasoning in his Roles and

Missions Report, Congressional and Administration response clearly indicates that consolidation is the coming reality for aerial force application units.

CONSOLIDATION: TIDE OF THE PRESENT, WAVE OF THE FUTURE

Of the twenty two issues and recommendations addressed in Chairman Powell's Roles and Missions report, fully sixteen of them deal directly with the structure of American air power. Despite the report's insistence on service-oriented aerial force application units, almost every recommendation leads to consolidation. As already mentioned, flying and technical training are being combined. The road to joint acquisition is clearly the path being chosen by DOD. Even in aircraft maintenance, intermediate levels of repair are being eliminated through improved resource management, transportation and maintenance practices. The net result of this organizational streamlining will be to reduce overhead and align the maintenance procedures of the various services. Joint power projection packages are the standard for use in national contingency planning. The idea of each service owning its own aerial force application assets has outlived its usefulness. It is expensive, redundant, inefficient, and inherently degrades the scope and flexibility of air power.

Senator Nunn is right. Secretary Aspin is right. Even Congressman Dellums is correct when he says the Department of Defense needs to undergo a bottom-up review of air power's roles and missions. The precise structure that will arise from such a

review is not yet clear. What is clear however, is that when every other air power trend is moving toward consolidation, the most efficient force alignment is not that air power units reside in each of the uniformed services. The Marine Corps should not have its own air force. The Navy should deal with sea power issues and use generic air power elements trained up to the standard required for shipboard operation. Air Force combat units should be part of the force application pool and be allocated to the war fighting CINCS as required. Other elements of the air power portion of the new defense structure should include, as already mentioned, cost effective reserve-like forces, drastically reduced permanent overseas bases, and stored equipment.

An omnibus organization should have the responsibility to organize, train and equip all of the Nation's air force application assets. It makes little strategic difference whether the requirement is for a force application unit to operate from the deck of an aircraft carrier or from a fixed base. The mission of force projection is common to both. We have already seen that technological improvements are rapidly increasing the capability of rotary-winged assets and fixed wing assets are becoming more and more similar. Smaller forces demand reduced overhead; any resource spent in maintaining unneeded command echelons will simply lessen our ability to apply force. Service traditions and sensitivities must and eventually will give way to the technological demands and fiscal constraints of tomorrow's national defense architecture.

Chart #1 Service Mission Mix- 1993

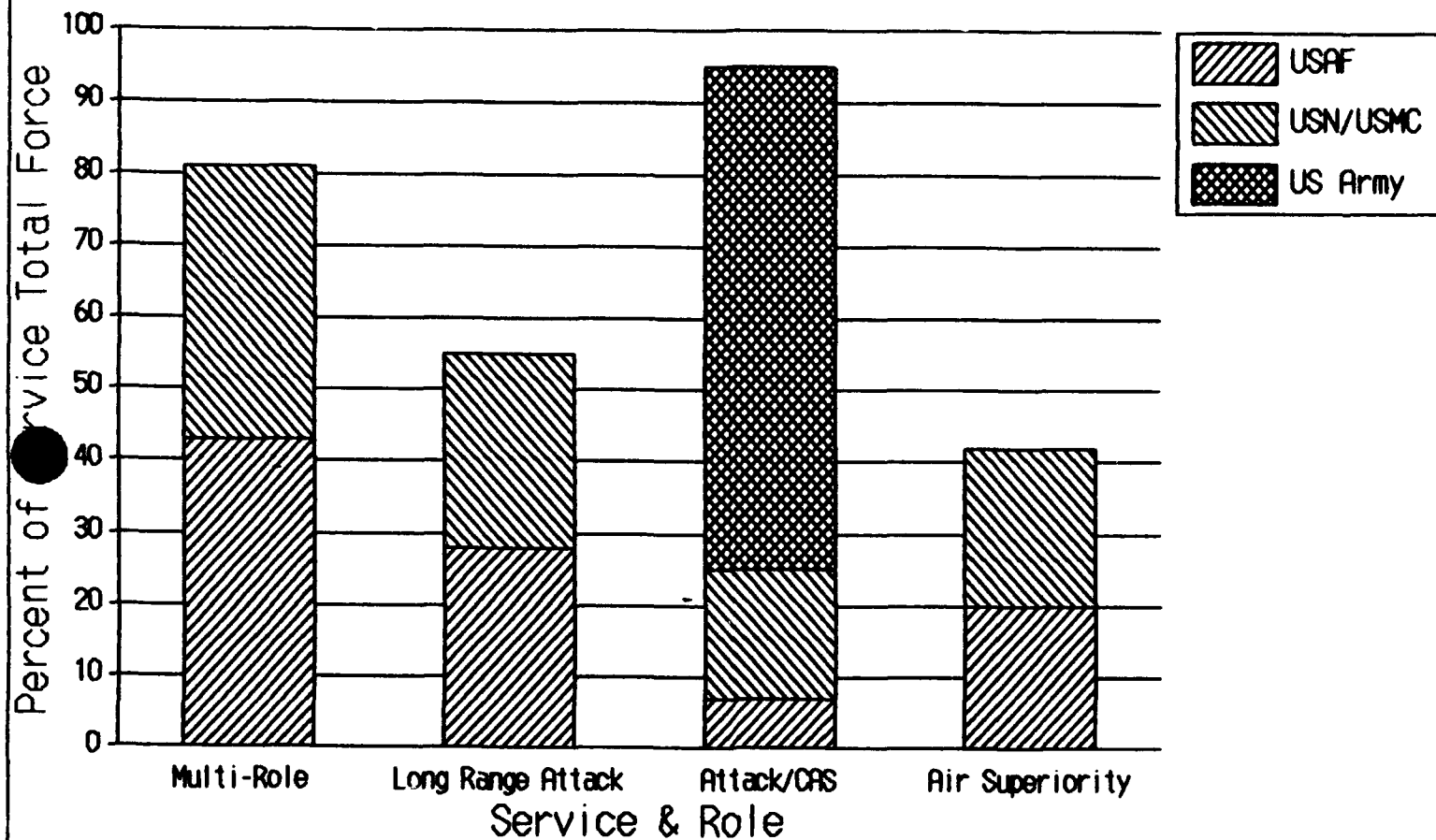


Chart #2: Percentage of the Federal Budget Spent on the Military

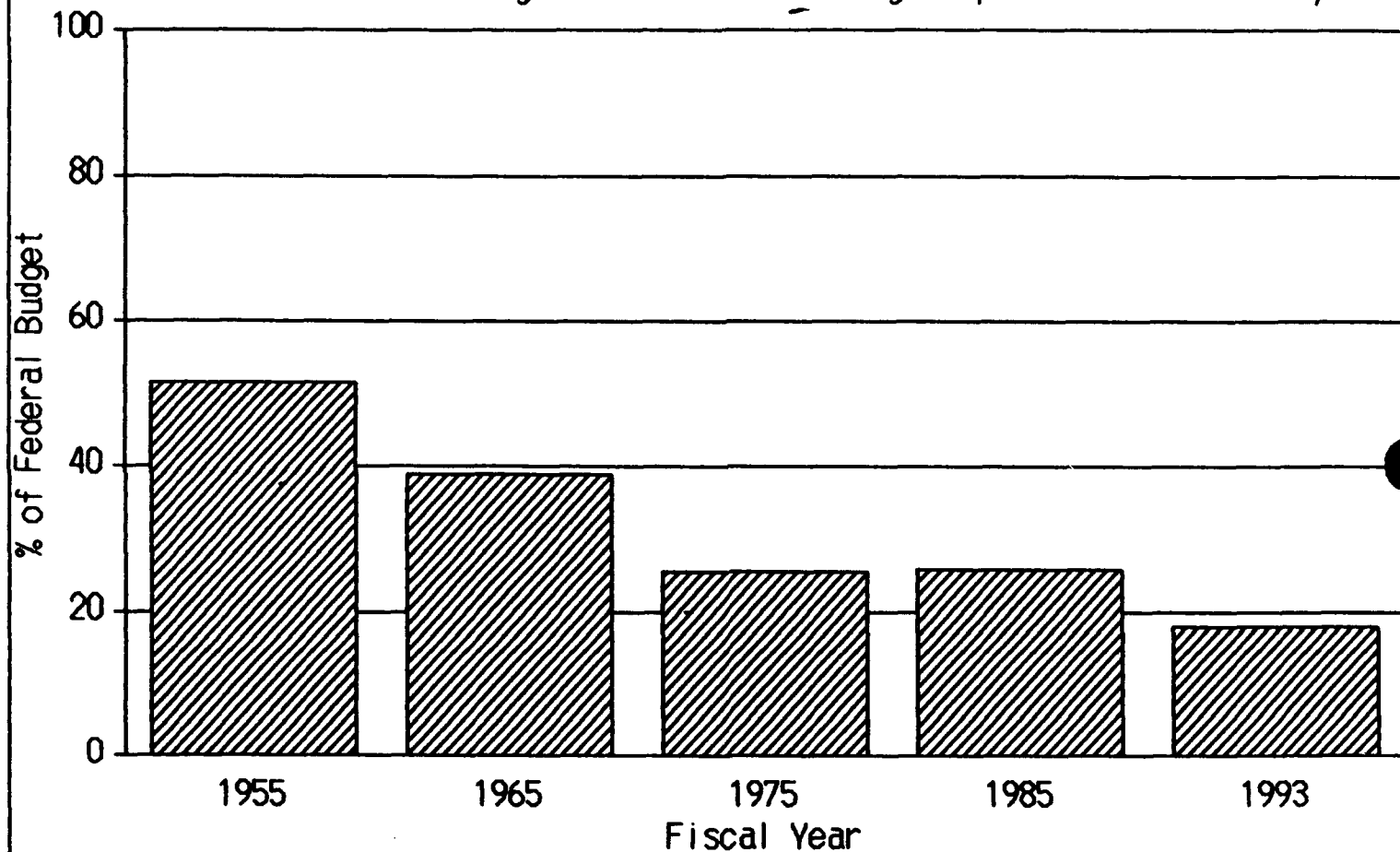


Chart #3: Who Gets Military Funds?

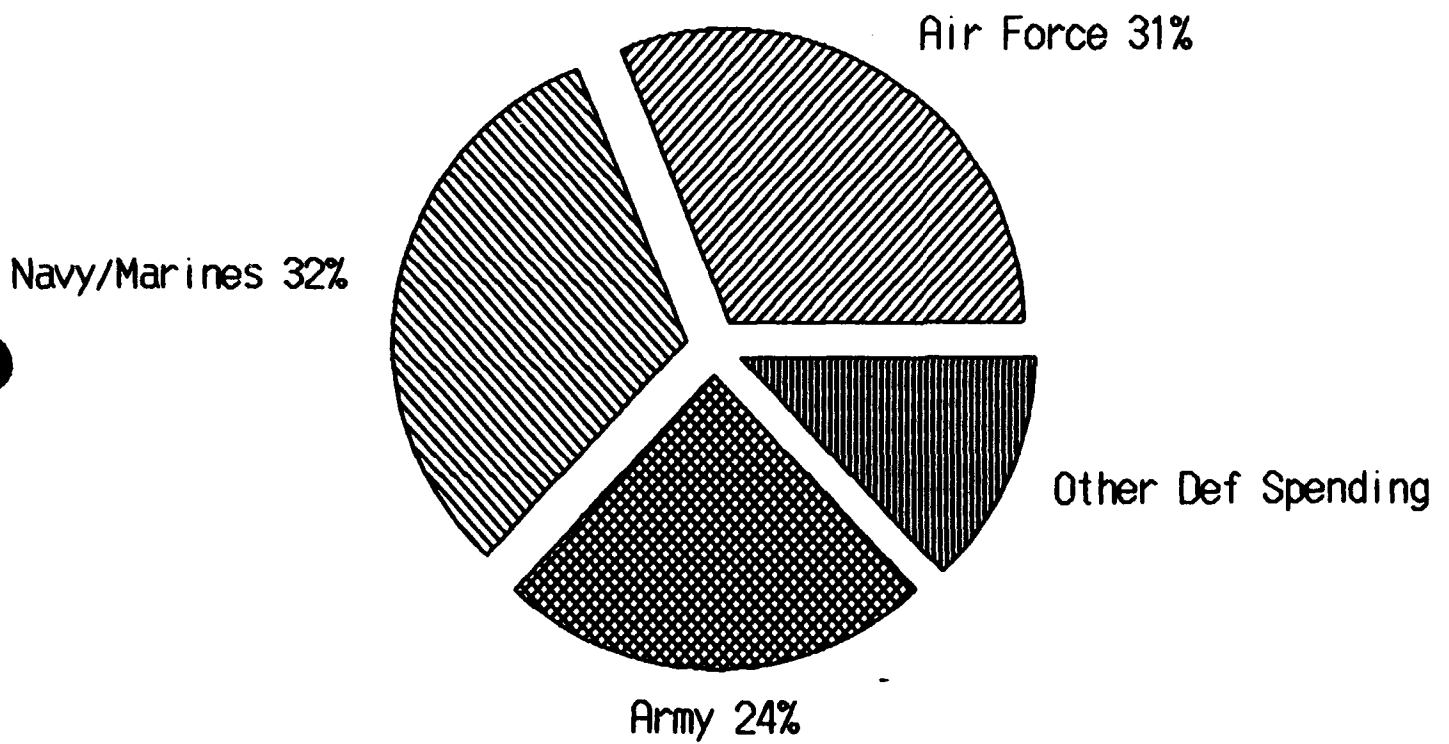


Chart #4: AF Reserve Unit Cost as % of a Regular AF Unit.
Percent

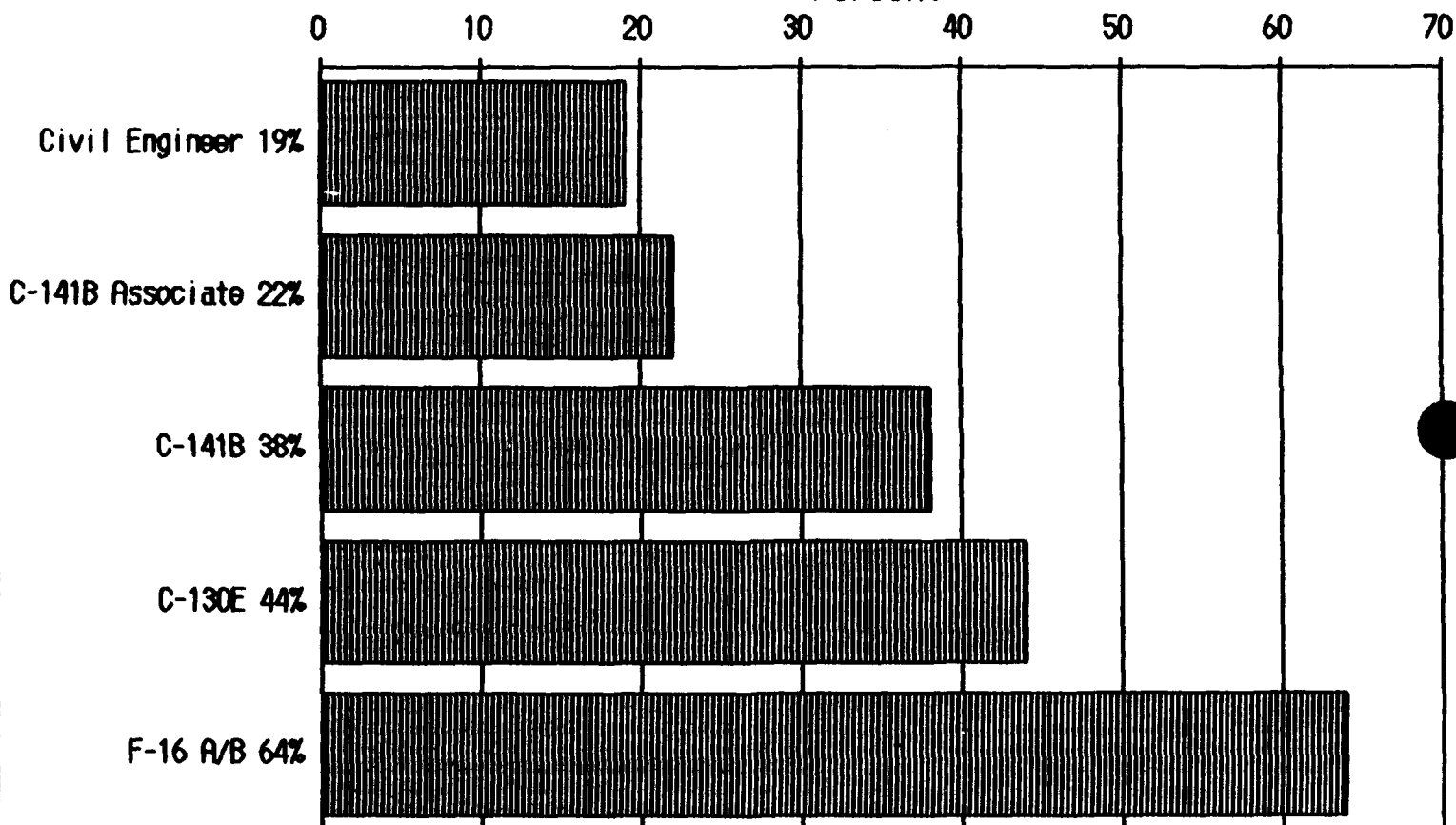
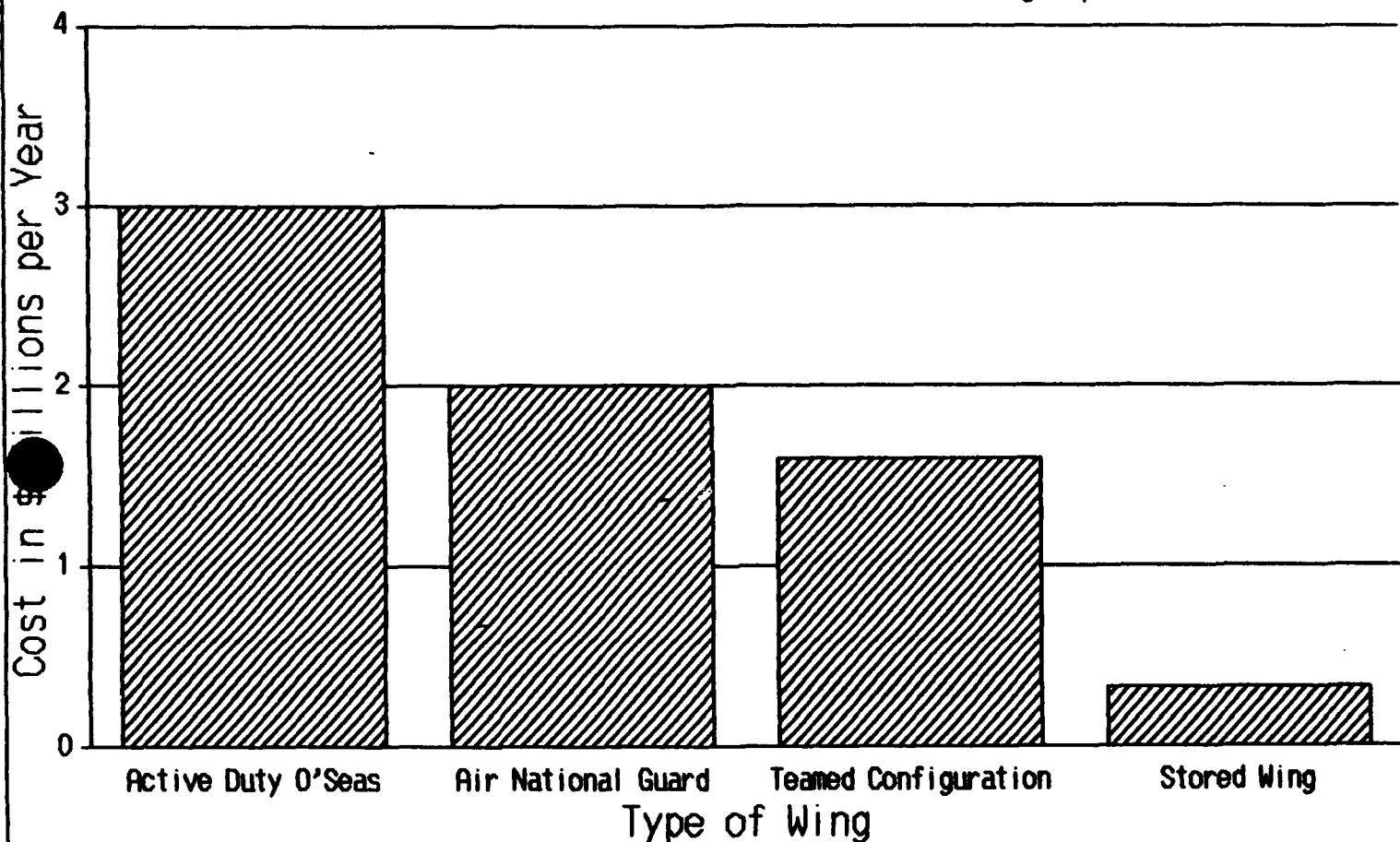


Chart #5: Cost of Various F-16 C/D Wings per Year



ENDNOTES

SECTION I

1. James W. Canan, "Force Leaders Look Ahead," Air Force Magazine, November 1992, p. 72.
2. Bruce Auster, "A Few Swords Along With the Plowshares," Air Force Magazine, March 1993, p. 65.
3. "Viewpoint," Aviation Week and Space Technology, July 20, 1992, p. 9.
4. Sam Nunn, "The Defense Department Must Thoroughly Overhaul the Services Roles and Missions," delivered to the United States Senate, Washington, D.C., July 2, 1992.
5. Ibid.
6. Discussions with Colonel Geoff Watson, traveling companion and leader of the Commander-in-Chief's (CINC's) Staff Group (an AF think-tank chartered to forecast and consider "strategic" issues of relevance to the U.S. Air Forces in Europe).

In the fall of 1989, I was in the middle of my third assignment to Europe. Working as aide-de-camp to the commander of Allied Air Forces Central Europe (AAFCE), who was dual-hatted as the Commander in Chief, U.S. Air Forces in Europe (USAFE); I had unusual access to politico-military people, places, and information.
7. Larry D. Welch, Washington Strategy Seminar Panel Remarks, Rayburn Building, Washington D.C., 13 March 1992. (General is a retired AF Chief of Staff and presently the president of the Institute for Defense Analyses.)
8. Kevin N. Lewis, "The Future of U.S. Tactical Airpower: Some Issues Related to Force Size, Cost and Mix," Washington Strategy Seminar, July 1992, p. 29.
9. Rick Atkinson, Washington Post, September 15, 1990, p. 1.
10. United States Army Training and Doctrine Command, Airland Battle Future, Ft. Monroe, Virginia, 1989

11. Bob Woodward, The Commanders, Simon and Schuster, 1991, p. 337.
12. Canan, Air Force Magazine, November 1992, pp. 72-73.

SECTION II

1. James W. Canan, "The Coming Flap on Roles and Missions," Air Force Magazine, October 1992, p. 10.

There are at least two different estimates of the value of the Key West Agreement. The most common one is that the agreement was the result of the Services' inability to grapple with the meaningful roles and missions issues of the day and amounted to a non-decision. Each service got elements of what it wanted and aerial hardware was correctly viewed as a means to an end rather than an end in itself. This view also maintains that the agreement at Key West merely tabled an issue that would have to be addressed later.

A rather unconventional view of the Key West Agreement is espoused by Chairman Powell in the 1993 Roles and Missions Review. He cites the "enduring wisdom" of the Key West Agreement in reference to its establishment of air arms in each of the four services.

2. There remains a strong perception in the U.S. Army that the USAF does not want to participate in the CAS mission. The feeling is that CAS is not "glamorous" enough for the Air Force. There are certainly reasons to justify the Army's feelings. The USAF has spent comparatively little on current CAS aircraft, and during an early round of DOD drawdowns was ready to retire them all. Only the Gulf War and Congress saved the A-10 Thunderbolt II (the "Tank Killer") from extinction.

3. In the mid 60's SECDEF McNamara directed that the USAF and Navy jointly develop a fighter. Technological limitations resulted in what can arguably be called the greatest acquisition fiasco in the history of the United States' military. The aircraft (F-111) was virtually worthless when it was first introduced. The Navy successfully backed out of the program by convincing Congress that the aircraft was entirely unsuitable for carrier operations and continued flying A-4 Skyhawks, A-6 Intruders, and F-4 Phantoms (it had to wait until the development of the F-18 before it got a new interdiction aircraft). The USAF assigned the F-111 to tactical and strategic bombing missions.

When the tactical version began flying in Vietnam, it was parodied by the press as being lethal because its component parts were more likely than its bombs to fall off and hit the enemy. In fact, F-111's fell out of the sky at an alarming rate. It is fortunate that early models of the strategic version were never called upon to perform their primary mission. It took many years and many millions of dollars to shape the aircraft into the effective bombing and electronic warfare platform it is today.

4. Sean C. O'Keefe, Frank B. Kelso and Carl E. Mundy, "From the Sea: A New Direction for the Naval Services," Marine Corps Gazette, November 1992, pp. 18-22.

5. Barton Gellman, "Mud Soldiers Take to the Sea," The Washington Post, April 4, 1993, p. 1.

6. O'Keefe, et al, Marine Corps Gazette, November 1992, p. 21.

7. Department of the Air Force, "Basic Aerospace Doctrine of the United States Air Force," Air Force Manual 1-1 Volume I, March 1992, p. 6.

8. Donald B. Rice, Global Reach, Global Power, Department of the Air Force, September 1990.

9. Buster C. Glosson, Air Force Issues Book, Department of the Air Force, 1992.

10. "Basic Aerospace Doctrine of the United States Air Force," p. 9.

11. During the WWII air campaign in North Africa, American air units were originally under the operational control of the various Army corps commanders. The unfortunate results included an inclination to hoard air assets against the time when they would "really" be needed by the individual corps. Lost was air power's ability to rapidly mass where and when needed, followed by the capacity to quickly disperse and reappear in another theater of combat.

12. U.S. Government Printing Office, National Security Strategy of the United States, January 1993, pp. 19-20.

SECTION III

1. National Security Strategy of the United States, U.S. Government Printing Office, January 1993, p. 13.
2. Barton Gellman, "Find \$10.8 Billion to Cut by Monday, Pentagon Told," The Washington Post, February 4, 1993, p. 1.
3. Melissa Healy, "Aspin Seeks to Cut Troops by 375,000," The Los Angeles Times, February 4, 1993, p. 1.
4. James W. Canan, "Force Leaders Look Ahead," Air Force Magazine, November 1992, p. 72.
5. Art Pine, "Powell Plan to Reorganize Military Called Inadequate," The Los Angeles Times, February 25, 1993, p. 14.
6. James W. Canan, "Force Leaders Look Ahead," Air Force Magazine, November 1992, p. 73.
7. Ibid.
8. Colin L. Powell, Chairman of the Joint Chiefs of Staff Report on the Roles, Missions, and Functions of the Armed Forces of the United States, The Pentagon, February, 1993, p. XV.
9. Sam Nunn, "The Defense Department Must Thoroughly Overhaul the Services Roles and Missions," a speech delivered to the United States Senate, Washington, D.C., July 2, 1992.
10. Ibid.
11. Reserve Officer Association, The Reserve and the Total Force: America's Future National Security, February 1993.
12. Bruce D. Callendar, "The Wall-To-Wall Training Review," Air Force Magazine, November 1992, p. 42.

13. In the classic military sense, reserves are units that a commander keeps to the rear of the fray and then commits to battle at the decisive time and place. In the case of Air Force Guard and Reserve forces, there is no way a force could even be modestly committed to combat without ARC support. The AF has only front line, integrated combat teams, of which the ARC is a part. There is no last line of defense, the service needs everything it has to get to war in the first place.

14. John T. Correll, "The Force Mix Fight Heats Up," Air Force Magazine, January 1993, p. 68.

15. Colin L. Powell, Report on the Roles, Missions, and Functions of the Armed Forces of the United States, p. xxiii.