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Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, House of Representatives

May 1993

AIR FORCE ORGANIZATION

More Assessment Needed Before Implementing Force Projection Composite Wings



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United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

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May 5, 1993

The Honorable Earl Hutto Chairman, Subcommittee on Readiness Committee on Armed Services House of Representatives

Dear Mr. Chairman:

In response to your request, this report provides information on what we term the "force projection composite wings" the Air Force is establishing at Mountain Home Air Force Base, Idaho; Pope Air Force Base, North Carolina; and Moody Air Force Base, Georgia. Specifically, this report addresses whether these wings are likely to achieve the projected advantages and discusses potential adverse impacts. The report concludes that Congress may want to consider requiring the Secretary of Defense to direct the Secretary of the Air Force to conduct additional analysis prior to taking any further steps to establish these force projection composite wings.

We are also providing copies of this report to the Secretaries of Defense, the Air Force, and the Army, and will make copies available to others upon request.

Please contact me on (202) 512-2800 if you or your staff have questions concerning this report. This report was prepared under the direction of Nancy R. Kingsbury. Major contributors are listed in appendix II.

Sincerely yours,

Frank C. Conahan

Assistant Comptroller General

Fil C. Conchan

Executive Summary

Purpose

The Air Force is aggressively restructuring in response to a changed security environment, substantial reductions in defense spending, closures and realignments of bases, and significant downsizing of its forces. One restructuring initiative is the establishment of composite wings, which place all aircraft at an installation under the base commander. The Air Force's Air Combat Command recently created 30 composite wings, and it plans on having 19 after force downsizing. These composite wings were created by reorganizing existing base operations and command responsibilities. In addition, the Air Combat Command is building three composite wings from the ground up by assembling a specific variety of aircraft to project force in contingency situations. This report refers to those three wings as "force projection composite wings."

In response to a request from the Chairman, Subcommittee on Readiness, House Committee on Armed Services, GAO evaluated the basis for the decision to implement the three force projection composite wings. GAO also evaluated whether these wings can achieve expected advantages, and whether these wings create any adverse effects.

Background

Force projection composite wings are a significant change from the Air Force's traditional peacetime basing and wartime employment of aircraft. Traditionally, the Air Force has based one type of aircraft in a wing to achieve economies of specialization. In wartime, the Air Force assembled the needed mix of aircraft as a composite force package en route to a target. By permanently collocating different types of aircraft under one commander, the Air Force intends that the force projection composite wings can deploy rapidly and fight autonomously, if necessary.

Proponents of the force projection composite wing concept believe that advantages will result from three distinguishing characteristics: peacetime collocation of a mix of aircraft, continual composite force training, and an enhanced wing command and planning element. Anticipated operational advantages include (1) less preconflict assembling of aircraft, reducing airlift needs at critical times; (2) continual composite force training that will reduce wartime mission planning and execution errors and increase military effectiveness; and (3) increasing the wing commander's capacity for independent action.

A number of temporary composite forces have been employed since the 1920s, and Air Force officials cited five analogies to illustrate the advantages of force projection wings. These analogies are the Navy's

carrier air wings, the provisional composite wings that operated during the Gulf War and are currently conducting operations over Iraq, the Composite Air Strike Force that operated from 1955 to 1973, and the various composite force training exercises.

The Air Force is building three force projection composite wings: an air intervention composite wing at Mountain Home Air Force Base (AFB), Idaho, intended to rapidly deploy and plan and execute autonomous air operations; and air/land composite wings at Pope AFB, North Carolina, and Moody AFB, Georgia, with the additional mission of supporting the Army's rapid deployment forces.

Results in Brief

The Air Force did not conduct sufficient analysis before deciding to build force projection composite wings in the United States. A nondeployed wing of this type has not operated in peacetime and, therefore, evidence does not exist that these wings will achieve advantages. Consequently, the Air Force has relied on analogies as justification for these wings. However, these analogies do not support the utility of establishing the wings as permanent peacetime organizations. They do support the wings' benefits in combat, the value of existing levels of composite force training, and the benefits of a deployable, enhanced wing operations center.

The Air Force believes that the wings will test the validity of the organizational concept and that the initial results will be used to guide further implementation and improvement of the concept. However, the Air Force has not established clear criteria for the concept of force projection composite wings or for judging the validity of the concept. The Air Force has not determined all costs associated with these wings but has estimated the construction costs would be approximately \$200 million.

Force projection composite wings will have significant limitations as they must be augmented by aircraft from other bases in order to perform their peacetime and wartime taskings. Limited opportunities currently exist for these new wings to train as large-scale composite forces. In addition to the potential scheduling problems connected with assembling aircraft not belonging to the composite wing for composite force training, the currently available ranges at Mountain Home and Pope AFBS are too small to support force-level training.

The Air Force had done no analysis of alternate bases before determining the locations for the air/land wings, and the Army was not consulted

before the sites were selected. Putting wings at these sites may degrade combat capabilities and readiness. For example, the Army is concerned that the Pope AFB wing will degrade the training and rapid deployment of the XVIII Airborne Corps headquartered at Fort Bragg, which adjoins Pope AFB. Similarly, the U.S. Special Operations Command is concerned that the removal of aircrews and specially equipped aircraft from Pope AFB to accommodate the air/land wing will adversely affect the training and deployment of special operations units based at Fort Bragg.

Principal Findings

Analogies Do Not Support the Need for Force Projection Composite Wings The Navy's carrier air wings were cited as illustrating the advantages of collocating mission assets under one commander and of continually training in composite force procedures. However, all mission assets will not be under the composite wing commander. Moreover, the carrier wings are composite forces for only about one-third of their training and deployment cycle—when they are deployed at sea and during 2 weeks of training prior to deployment.

Other analogies show that the advantages attributed to force projection composite wings can be achieved without permanent collocation of aircraft. The Composite Air Strike Force was created in 1955 to rapidly project a combat ready force capable of immediate operations when deployed. However, this force owned no aircraft, but consisted simply of a small, peacetime command element, the 19th Air Force, augmented for training or deployment by aircraft from other numbered Air Forces. Although the Composite Air Strike Force was successfully employed on a dozen or more occasions (e.g., during the 1958 Lebanon Crisis), it was discontinued in 1973 as a result of budget pressures, sustained resistance by other Air Force units, and competing priorities.

The majority of personnel and aircraft that formed the provisional composite wing at Incirlik Air Base, Turkey, during the Gulf War were in traditional basing structures throughout Europe until the last hours before the war started. Wing command personnel attributed its rapidly established combat capability to the composite force training aircrews routinely received and to the collocation of an enhanced command element with a wide variety of aircraft under a single commander.

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A second provisional composite wing is deployed and conducting operations over southern Iraq. This wing owns its aircraft only until the wing is disestablished, when the aircraft will return to the command of their home bases. While a variety of aircraft are collocated with the wing headquarters, the enhanced operations center is located elsewhere and some specialized aircraft are located at other bases. The noncollocation of assets has presented no significant problems, according to the wing's commander. The wing's operations illustrate the Air Force's ability to assemble mission packages from several locations.

The increase in proficiency and lessons learned during Air Force composite training exercises were also cited as evidence that advantages would result from continual composite force training. However, tactics and training officials in the Air Combat Command consider the current amount of this training to be sufficient and do not plan to increase its frequency.

Force Projection Wings Will Not Own All Needed Aircraft

The force projection composite wings will own certain aircraft but will train and deploy with specialized aircraft gained from different bases and commanders, which could be diverted from the wings' activities to alternate taskings by their commanders. These gained aircraft played key roles in such operations as El Dorado Canyon against Libya in 1986, Just Cause against Panama in 1989, and Desert Storm in 1991. The Air Force does not plan to develop formal agreements that will commit gained aircraft to routinely train with or deploy with the composite wings. However, without advance commitments that make gained aircraft routinely available for composite force training, the composite wings will have to rely on higher headquarters to make the aircraft available. Historically, these organizations have not always been able to provide requested aircraft for training because of other commitments. Table 1 contrasts capabilities in the new force projection wings and those of deployed composite forces with similar missions.

Table 1: Comparison of Composite Force Capabilities

Capabilities	Air intervention	n forces	Air/land forces		
	Mountain Home AFB	7440th CW(P) ^a	Pope and Moody AFBs	Operation Just Cause	
Air to ground	X	X	X	X	
Air to air	X	X	X	Х	
Bombers	X	Х		X	
Tankers	Х	X		X	
Jammers		X		X	
Reconnaissance		X		X	
AWACS ^b		Х		X	
Suppression of enemy air defense		X		×	
Search and rescue		X			
Transports			X	X	
Airborne command and control				×	

a7440th Composite Wing (Provisional), Incirlik.

Training Opportunities for Composite Wings Could Be Limited

Opportunities for composite training by force projection wings could be limited by competing priorities and range restrictions. The Air Force acknowledges that the Mountain Home AFB training range is incapable of supporting large-scale composite force training. Larger ranges are available in Utah and Nevada that can accommodate these exercises; however, using these ranges would require additional flying time and fuel. According to wing officials, competition with other users of these ranges would be the limiting factor on the wing's large-scale training opportunities. The Governor of Idaho has proposed an alternate, a larger training range; however, access to the proposed range is pending the results of an environmental impact assessment scheduled for completion in October 1993. Similarly, large-scale, joint training exercises cannot be performed at Pope AFB and will require deployment by the wing and the 82nd Airborne Division to other ranges.

Composite Wings May Have Adverse Impacts

Permanently basing fighter aircraft at Pope AFB could adversely affect the Army's training and no-notice deployment capability at Fort Bragg because fighters would displace half of the transport aircraft currently based there. An exercise to test joint deployment is not planned until early calendar

bAirborne Warning and Control System.

year 1994. The U.S. Special Operations Command has expressed concerns that the Pope AFB air/land wing will degrade the training of special operations units at Fort Bragg. The Air Force does not plan to retain at Pope AFB either the specially equipped transport aircraft or the crews currently used to train these special operations units, and it acknowledges that training shortfalls may occur until fiscal year 1996 when this training will be assumed by another base.

Prior to the Gulf War and to the decision to establish a force projection composite wing at Mountain Home AFB, the Air Force decided to relocate the EF-111s to Cannon AFB, New Mexico. But Gulf War operations demonstrated the importance of having EF-111s routinely train in composite force procedures because they were primarily used during the war as integral parts of strike packages, as opposed to standoff jammers. The Air Force is not reconsidering this decision in forming the Mountain Home AFB composite wing.

Implementation of Concept Preceded Resolution of Key Issues

The Air Force began construction and aircraft relocation for the force projection composite wings without assessing alternative locations and before resolving several key issues. For example, environmental assessments have not been completed that may affect potential training capabilities and the mix of aircraft.

The Department of Defense has characterized these wings as a top-down initiative; Air Force officials have not been authorized to explore alternatives. The Air Force might have avoided some of the implementation difficulties with the air/land wing at Pope AFB had it evaluated other locations or basing structures. For example, the Air Force could locate the air/land wing's fighter aircraft and command element at either Seymour Johnson AFB, North Carolina, or Shaw AFB, South Carolina, and leave transport aircraft at Pope AFB. This basing structure would allow Pope AFB to remain dedicated to its mission of supporting Army training and rapid deployment.

Agency Comments

In a draft of this report provided to the Department of Defense for comment, GAO made several recommendations to the Secretary of Defense. GAO's primary recommendation was that the Secretary take no further steps to implement the force projection composite wings until additional analysis had been conducted. The Department generally did not concur with the report's recommendations. The Department believes that the

three force projection composite wings represent a significant enhancement over current deployment capabilities, responsiveness, and military effectiveness. Although these wings do not include all the capabilities in currently deployed composite forces or in forces used to address prior contingencies, the Department believes their assets will represent useful core capabilities for a broad range of scenarios. The Department recognizes the limitations of the training ranges but maintains that composite wing training will occur because (1) the force projection composite wings will command sufficiently high training priority, (2) competition for the large training ranges will decrease as the military downsizes, and (3) larger areas than ranges can be used for training if ordnance is not released. Accordingly, the Department believes that it is unnecessary to formally commit nonwing aircraft for training.

The Department maintains that military judgment and the operations of analogous composite forces are a sufficient basis for implementing the composite wing concept. Consequently, the Department believes it is unnecessary to evaluate alternate means of achieving the benefits of the force projection composite wings and alternate locations for the wings. According to the Department, the air/land wing at Pope AFB will facilitate habitual training and working relationships through daily interaction with the Army, and the Air Force and the Army are working together to alleviate the Army's concerns about the wing's effects on training and deployment. The Department stated that a delay in building these wings would deprive the Air Force and Congress of the opportunity to evaluate the cost-effectiveness of the wings.

GAO remains concerned about (1) the lack of analysis supporting the decision to build peacetime force projection composite wings, (2) the relative utility of the mix of aircraft in these wings, and (3) the number of unresolved implementation issues. Successful Air Force experiences with other composite forces are not good analogies in that they all represent deployed forces with significantly more capability than the wings' mix of core aircraft. Also, the operations of the Combined Air Strike Force demonstrate that it is possible to achieve a rapid response to a contingency without collocation of assets.

The Air Force has not provided evidence that the force projection composite wings will have any priority when competing with other potential users for gained assets for training or deployment, if required. In addition, although the downsizing of the Air Force may result in fewer competitors for time on large training ranges, the risk is increased that

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these wings will not be able to train as they will fight because the wings do not have formal commitments for routine training with required forces that do not belong to them. GAO believes that the inability of the Air Force to commit or dedicate scarce and critical assets to the force projection composite wings highlights an inherent limitation on implementing the composite wing concept.

Without any exploration of alternate means of achieving the attributed advantages, there is no basis for determining that the force projection composite wings are the optimal means of gaining these benefits. Given the decline in the Department of Defense's resources, it is essential that decisions of this magnitude represent the best and most effective investment of available funds. GAO does not find the evidence provided by the Department or the Air Force to be convincing or adequate justification for the significant investment involved in the three force projection composite wings.

Matters for Congressional Consideration

The Department of Defense did not concur with GAO's recommendations and provided extensive comments to support their point of view. However, GAO did not find these comments to be a sufficient basis for altering its conclusions and continues to believe that additional analysis is necessary before further steps are taken to implement the force projection composite wings and additional funds are committed. Accordingly, Congress may wish to consider requiring the Secretary of Defense to direct the Secretary of the Air Force to take no further steps to implement the force projection composite wings until the benefits of the wings have been analyzed and the disruptive consequences have been resolved. Congress may also wish to consider requiring that the results of the analysis be provided to it for consideration during debate on any future budget requests or reprogramming actions related to these three composite wings. GAO includes specific suggestions concerning the contents of any additional analysis and subsequent steps to build these wings in chapter 5.

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Abbreviations

AB	Air Base
AFB	Air Force Base
AWACS	Airborne Warning and Control System
CASF	Composite Air Strike Force
CENTAF	U.S. Air Force, Central Command
GAO	General Accounting Office
SEAD	suppression of enemy air defense

Introduction

Current U.S. threat assessments project the need to respond to small, short-notice, regional conflicts rather than a large-scale war associated with the traditional Soviet threat. Due in part to the changed threat assessment, the Department of Defense is contending with substantial reductions in military spending, domestic and overseas base closures and realignments, and significant downsizing of its forces.

The Air Force is striving to sustain combat capability during these changes through several initiatives that include adapting its basic doctrine to reflect revised threat projections, reorganizing its wings and its major commands, and restructuring operations to increase efficiency and operational effectiveness. One of these initiatives is to establish force projection composite wings at Mountain Home Air Force Base (AFB), Idaho; Pope AFB, North Carolina; and Moody AFB, Georgia. The Air Force refers to these wings as composite wings because they contain a variety of aircraft types and capabilities at one base under one commander. To distinguish these three wings in this report, we refer to them as "force projection composite wings" because they are intended to be a rapid-response, mission capable force that can deploy to bare bases (those without existing support facilities) and be self-sufficient for 7 days, if required.

Force Projection Composite Wing Basing

The Air Force doctrine of Global Reach-Global Power recognizes that there will be fewer U.S. bases overseas and that the Air Force must be capable of rapidly projecting mission capable force packages worldwide that are prepared to respond to various contingencies on arrival. The Air Force believes that force projection composite wings will be the spearhead of that capability.

Force projection composite wings represent a significant change from traditional peacetime basing and wartime employment of aircraft. The Air Force historically based aircraft in wings comprised of three squadrons equipped with identical aircraft to achieve economies of specialization in areas such as training and logistics. When a force package was employed to support national military objectives, groups of dissimilar aircraft with the differing capabilities required to handle the contingency were assembled as a composite force package in the air en route to the target.

In force projection composite wings, the Air Force will, for the first time, permanently collocate in the continental United States a specifically chosen variety of aircraft and capabilities under one commander. These

capabilities are intended to allow the wing to either rapidly deploy as a whole or to be tailored to address a variety of contingencies. Even though these wings will be capable of autonomous operations after deployment, in certain scenarios they can also be employed as subordinate units to a higher authority in theater.

As currently planned, some of the force projection composite wing capabilities will be provided by wing aircraft in geographically separated units. In addition, critical capabilities necessary to enable the wings to accomplish their peacetime and wartime tasks will have to be provided by aircraft owned by and located at other bases. The wings will have to request use of these aircraft through higher headquarters.

The Air Force considers the force projection composite wing concept to be experimental and acknowledges that the ability to achieve advantages can be demonstrated only when they are employed in pursuit of national military objectives. Further, the Air Force has stated that the force projection composite wings will test the validity of the concept and that the initial results will be used to guide further implementation and improvement of the concept.

The Air Force has not yet established the measures of merit for the force projection composite wings or the criteria to use in judging the validity of the concept. However, an Air Combat Command Special Studies Group was tasked in mid-November 1992 to conduct a study to establish measures of effectiveness. This study is expected to be completed in April 1993, with measures of effectiveness focused on how long it will take the wings to perform various events involved with deployment.

These composite wing experiments are costly. For example, the Air Force has estimated that establishing the air intervention composite wing at Mountain Home AFB, Idaho, will cost at least \$35 million in military construction and operation and maintenance funding for minor construction, a figure which does not include an additional \$45 million for bedding down B-1B bombers and other construction desired by the wing. In addition, the Air Force has estimated that it will cost at least \$41 million in military construction and operations and maintenance funding for the air/land wing at Pope AFB, North Carolina, and an additional \$46 million for costs associated with relocating aircraft from that base to make room for the composite wing. The Air Force's preliminary estimate to establish the composite wing at Moody AFB, Georgia, is \$34 million.

The Air Combat Command has recently created 30 other composite wings by reorganizing base operations and command responsibilities so that all aircraft at the base are under one wing commander or by relocating aircraft from one base to another as a result of a base closing or realignment. After force downsizing, the Air Combat Command plans on having 19 composite wings. Unlike the three force projection composite wings, those wings that were created solely by command reorganizations and by base closures and realignments are not intended to project rapid-response force packages capable of self-sufficient operations.

Missions of Force Projection Composite Wings

The Air Force is building a force projection composite wing at Mountain Home AFB capable of what it terms "air intervention." It is also building wings capable of air/land force projection at Pope and Moody AFBs. The aircraft formerly based at Homestead AFB, Florida, which was damaged by Hurricane Andrew in July 1992, have been moved to Moody AFB, and the Air Force has temporarily delayed the implementation of the air/land wing at that base.

According to draft concepts of operations, the missions of the force projection wings are to rapidly deploy a highly trained composite force and successfully plan and execute air operations in any theater, region, or contingency area in support of U.S. and allied military objectives. The air/land wings will also support the Army's rapid deployment forces.

Specific taskings of the force projection wings include offensive and defensive counter air, air interdiction, intelligence and weather information gathering, and warning, command, control, and communications. The air intervention wing is also tasked with suppression of enemy air defense, aerial refueling, and electronic combat. The air/land wings are also tasked with close air support, air base ground defense, strategic attack, aerospace surveillance and reconnaissance, airlift, and airdrop.

Advantages Attributed to Force Projection Composite Wings

The Air Force believes that these wings will provide advantages over the way in which it historically deployed and operated rapid-reaction force packages. The Air Force expects that these advantages will result from organizing and training the wings during peacetime as they will fight during war. Three characteristics essentially distinguish them from traditionally based wings: the permanent collocation of a variety of aircraft and capabilities under one commander; the opportunity for aircrews and

command personnel to continually practice, test, and evaluate composite force procedures; and the incorporation of an enhanced, deployable operations center and planning element in the wing.

Air Force personnel responsible for implementing the force projection composite wing concept cited five analogies as support for one or more of the advantages attributed to the wings. These analogies are the Navy's carrier air wings; the 7440th Provisional Composite Wing,¹ which operated from Incirlik Air Base, Turkey, during Operation Desert Storm and is currently involved in Operation Provide Comfort in Iraq; the 4404th Provisional Composite Wing currently participating in Operation Southern Watch over Iraq; the Composite Air Strike Force, which operated from 1955 to 1973; and current composite force training exercises.

According to the Air Force, the permanent collocation of mission capable aircraft under one commander will require less preconflict unit shuffling and result in reduced overall intra-theater airlift needs at critical times. In theory, because a variety of aircraft and capabilities would already be collocated in composite wings, some of the airlift required to assemble the mission package before employment would be eliminated. Also, proponents believe that there would be enough commonality of parts and maintenance and support equipment to achieve some reduction in deployment airlift. In addition, proponents believe that including scarce and critical aircraft, such as the Airborne Warning and Control System (AWACS), in these wings will reduce their vulnerability to enemy attack that currently exists due to concentrating them at a single location. Proponents also believe that the opportunity for collocated aircraft to routinely practice realistic composite force procedures during peacetime will result in the deployed wings making fewer and smaller wartime mission planning and execution errors. Similarly, esprit, communication, and unit cohesion are expected to be enhanced and combat effectiveness increased because personnel in force projection composite wings will know and associate with each other.

Finally, proponents believe that the incorporation of an enhanced operations center in the wing will result in the commander's increased capacity for independent action after deployment if contact with higher headquarters is lost. The enhanced operations center would include such

¹A provisional unit is a temporary unit (or establishment) organized by a major command or separate operating agency to perform a specific task, usually for a short period (e.g., Operation Desert Storm). The term composite refers to a force that integrates the use of multiple disciplines of one service and also to teams with many types of complex weapons (e.g., the combination of attack, fighter-escort, and electronic warfare aircraft) needed to conduct a mission.

capabilities as battle management and mission planning, target analysis, intelligence gathering and analysis, and battle damage assessment. Typically, these capabilities are provided to a deployed wing by a Tactical Air Control System resident in higher headquarters. Because the wing's operations center would be enhanced with these capabilities, the daily tasking orders transmitted to the composite wing commander from higher headquarters could be much shorter, resulting in less demand on limited and vulnerable communication lines.

Objectives, Scope, and Methodology

In response to a request from the Chairman, Subcommittee on Readiness, House Committee on Armed Services, we evaluated the basis for the Air Force's decision to implement the three force projection composite wings. We also evaluated whether these wings can achieve expected advantages, and whether these wings create adverse effects. Our review focused on the three distinguishing characteristics of such wings. We did not review advantages such as camaraderie and reduced mission planning and execution errors because the wings are not in place.

We concentrated our work on the wings being implemented at Mountain Home and Pope AFBs. The plans for the air/land wing at Moody AFB were less developed and have been temporarily suspended. That wing was not projected to be operational for several years, and implementation of the wing has been further delayed by the need to base Homestead AFB aircraft there. We are examining in more detail the costs of these three composite wings in a separate review.

To determine the validity of the defining characteristics of force projection composite wings, we analyzed concept studies, briefings, and other documents related to the wings and interviewed personnel involved in their development. We also evaluated information on the organization and operations of several analogies to the wings cited by Air Force personnel, including Navy carrier air wings, the Composite Air Strike Force, and current Air Force composite force training exercises. The information evaluated included command and unit histories, mission reports, final reports of composite force exercises, and force structure statements.

To determine whether the force projection composite wings could achieve the cited advantages as well as any adverse impacts, we interviewed personnel and analyzed draft concepts of operations for the wings, draft designated operational capability statements, site activation task force

reports, program change requests, proposed force structures, wing training plans, environmental impact assessments, and other documents.

We conducted our review at the Office of the Secretary of the Air Force, Washington, D.C.; the Air Combat Command, Langley Afb, Hampton, Virginia; the Air Mobility Command, Scott Afb, Illinois; Air University Center for Aerospace Doctrine, Research, and Education, Maxwell Afb, Alabama; and the Rand Corporation, Santa Monica, California. We also visited Mountain Home Afb; Pope Afb; Moody Afb; Shaw Afb, South Carolina; U.S. Special Operations Command, MacDill Afb, Florida; U.S. Army Forces Command, Fort McPherson, Georgia; U.S. Army Training and Doctrine Command, Fort Monroe, Virginia; Oceana Naval Air Station, Virginia Beach, Virginia; U.S. Air Forces in Europe at Ramstein Air Base (AB), Spangdahlem, AB, and Munchengladbach, Germany; U.S. Air Force Tactical Fighter Weapons Center, Nellis Afb, Nevada; Pacific Air Forces, Hickam Afb, Hawaii; Kadena AB, Okinawa; Misawa AB, Japan; Osan AB, Republic of Korea; and Elmendorf Afb, Eielson Afb, and Fort Wainwright, Alaska.

To evaluate the advantages of deployed composite forces, we observed the current operations of the 7440th Composite Wing (Provisional), Incirlik AB, Turkey, and the 4404th Composite Wing (Provisional), Dhahran AB, Saudi Arabia.

We discussed the information provided in this report with Air Force general officers and officials responsible for implementing the composite wing concept and obtained official agency comments. (See app. I.) We have incorporated these comments where appropriate.

A glossary of operational terms and concepts is at the end of this report. We performed our review from July 1991 to March 1993 in accordance with generally accepted government auditing standards.

The Air Force has not provided any analysis or evidence that the force projection composite wings will achieve operational benefits, that the wings' capabilities will be enhanced, or that these wings are the optimal means of achieving benefits. Rather, the Air Force has relied on analogies to previously deployed composite forces to demonstrate the benefits attributed to the wings. Several of the analogies cited by the Air Force support the value of the current composite force training, and others indicate the benefits that may arise from a deployable, enhanced wing operations center. However, these analogies do not support the need for peacetime collocation of aircraft or the necessity for continually practicing, testing, and evaluating composite force procedures.

Navy Carrier Air Wing Analogy

The operations and makeup of the Navy's carrier air wings were cited as examples of the advantages from (1) collocating the mix of aircraft needed for force projection, (2) placing the aircraft under one commander at all times, and (3) training continuously in composite force procedures. Significant differences exist between the Air Force's force projection composite wings and the Navy's carrier air wings. At sea, the carrier air wings are analogous to a deployed composite wing, but, once ashore, they are not analogous.

The Navy's carrier air wings are composite forces for only about one-third of their training and deployment cycles—when they are actually deployed at sea on a carrier and when they periodically assemble and train together in composite force procedures during the final quarter of their shore cycle. Embarking an air wing aboard a carrier is the culmination of a lengthy and extensive training cycle. The wing is aboard a carrier for approximately 6 months of its 20-month ship-to-shore cycle. While ashore, the Navy's aircraft squadrons are home based with other units of similar aircraft to achieve economies of specialization. However, the commander of a Navy carrier air wing has under his command at all times the capabilities that must augment the force projection composite wings.

The carrier air wings' training cycle ashore begins with individual aircrew training and competencies at home bases, progresses gradually to unit proficiency, and finishes with a final quarter devoted to integrated operations training both on and off the carrier. It is only during the final quarter that carrier air wings can be considered to practice composite force procedures, when they temporarily deploy for 3 weeks to the Navy's large training range at Fallon, Nevada, and when they participate in

periodic short-term sea exercises that focus on qualifying for carrier-based operations.

7440th Provisional Composite Wing Analogy

The 7440th Provisional Composite Wing¹ was cited as an example of how an increased capacity for independent action resulted from collocating the command element with a variety of aircraft capabilities under one commander. All of the 7440th's aircraft were from separate bases in Europe. The aircraft were assembled at Incirlik AB, Turkey, in the last hours before the Persian Gulf War when the wing began executing composite force missions against northern Iraq.

Some of the aircrews and the operations and command element of the 7440th Composite Wing took advantage of the several months before the war for composite force training and predeployment planning and coordination in their home theaters. In addition, the small, permanent, support group at Incirlik AB used this period to prepare the base for potential hostilities. These preparations included assessing logistical readiness and base infrastructure, developing personnel and equipment requirements, and creating a reception plan for the eventual arrival of additional aircraft.

The wing's enhanced command, control, communication, and mission planning element had all the capabilities required to create daily wing air tasking orders² from mission type orders³ issued by the U.S. Air Force, Central Command (CENTAF) in Riyadh, Saudi Arabia. Although the 7440th Composite Wing did not receive a true mission type order, its instructions

¹During the Gulf War, the missions of the 7440th Provisional Composite Wing were to attack targets in northern Iraq and deny a sanctuary for Iraqi air and ground forces. This wing was disestablished in March 1991. In April 1991, the wing was reestablished and began Operation Provide Comfort, a multinational effort to provide humanitarian aid to Kurdish refugees from Iraq. In June 1992, the Turkish parliament voted to allow extension of Operation Provide Comfort to allow fighter and tactical reconnaissance missions in response to the buildup of Iraqi troops in northern Iraq.

²The Air Force assigns roles to geographically separated force package components each day with a document known as an air tasking order, which provides detailed instructions to each unit being assembled. During the war, the daily order containing the missions of the scattered air components was often 600 pages and took several hours to transmit. The order answers the questions of who does what, where, and when and includes targets, times on target, ordnance loads, routes and procedures, identification friend or foe codes and frequencies, air refueling times, altitudes, contact points, and rules of engagement, as well as any special instructions.

³Mission type orders are issued by a higher headquarters and direct a unit to perform a mission without specifying how it is to be accomplished. The goal of a mission type order is to provide unit commanders with the "big picture" of the theater commander's priorities, objectives, and campaign plan. This order is designed to allow a commander to act without waiting for orders if action is necessary and even to justify his acting contrary to orders if the orders are inconsistent with the situation.

were to destroy the war-fighting capability of northern Iraq, with tasking from CENTAF as simple as "[d]estroy chemical warfare production facilities at Mosul."

The enhanced command element and the wide variety of aircraft gave the 7440th Composite Wing the flexibility to develop a campaign that would best attack those targets. The wing's aircraft included fighters, tankers, enemy air defense suppressors, jammers, reconnaissance, air surveillance and control and warning, and search and rescue.

Command personnel and aircrews attributed much of the rapidly established combat capability of the 7440th Composite Wing to the (1) collocation of the command element and participants in mission packages, (2) lessons learned during the periodic composite force training exercises in which the aircrews had participated, and (3) base preparation at Incirlik prior to their arrival. For example, they pointed out that the collocation of mission planners and participants enabled mass briefings before missions during which last minute changes could be communicated to the participants. In addition, mass debriefings after missions meant tactical lessons learned could be immediately discussed and communicated.

On the basis of the experiences of the 7440th Composite Wing during the Gulf War and currently in Operation Provide Comfort, logistical and maintenance personnel postulated several advantages that might accrue from deployment of a force projection composite wing. These possible advantages include simplified deployment planning, more efficient deployment airlift, enhanced control of deployment and reception of wing aircraft, and simplified supply of spare parts and coordination of aircraft maintenance.

The 7440th Composite Wing demonstrates the (1) effectiveness of a deployed force consisting of a wide variety of aircraft and an enhanced wing operations center at one location under one commander and (2) value of the periodic training in composite force procedures that Air Force personnel currently receive. The experiences of this wing also show the Air Force's capability of assembling an effective composite force from previously separated assets.

4404th Provisional Composite Wing Analogy

The 4404th Composite Wing, currently participating in Operation Southern Watch⁴ over Iraq, was cited as another example of the advantages of including a variety of aircraft and capabilities under one commander. However, the 4404th Composite Wing is not completely comparable to the force projection composite wings because the 4404th Composite Wing's aircraft are not all collocated with the command element and the command personnel and aircrews periodically rotate to their home bases. Nonetheless, the wing illustrates the Air Force's ability to operate and assemble mission packages from several locations and the benefits of allocating a variety of aircraft and capabilities to the deployed command element.

Unlike the assets of the force projection composite wings, the 4404th Composite Wing's aircraft are only a part of and under the command of the wing while it is deployed. When the 4404th is disestablished, its aircraft will permanently return to the command of their home bases. The 4404th Composite Wing consists of a central command element and aircraft representing a wide range of capabilities located at one base and is augmented by scarce and critical aircraft from other bases. The 4404th Composite Wing has capabilities such as airlift, enemy air defense suppression, jammers, reconnaissance, air surveillance and control and warning, refueling, and search and rescue. Key command personnel are rotated every 120 days, and pilots, crews, and maintenance personnel are rotated every 90 days. The scattered assets assemble and engage in composite force training once or twice a month. According to the wing commander and to a battle staff director at the Air Combat Command, the noncollocation of assets has presented no significant problems.

Composite Air Strike Force Analogy

The Composite Air Strike Force was identified as a forerunner of the force projection composite wings. The Composite Air Strike Force was designed to rapidly project a combat ready, flexible capability for immediate operations and to be deployed as a composite force under one commander. The Composite Air Strike Force was created in 1955 shortly after the Korean War when the United States defense policy was dramatically shifting from massive retaliation toward flexible response. However, the Strike Force owned no aircraft.

In 1955 the Tactical Air Command (now the Air Combat Command) activated the 19th Air Force as operational headquarters of the Composite

⁴Operation Southern Watch was established in August 1992 to patrol and enforce the United Nations established no-fly zone over southern Iraq.

Air Strike Force. The 19th Air Force was essentially a peacetime command element of fewer than 100 personnel with strike aircraft provided by the 9th and 12th Air Forces when required. The mission of the 19th Air Force was to plan for the deployment and employment of the aircraft, train the aircrews in deploying and fighting in any area of the world, and deploy itself and command the Strike Force. Upon arrival in a theater, operational control of the force was passed to the theater commander.

The 19th Air Force had no assigned units and assumed operational control of the Composite Air Strike Force only for specified periods of time, such as during maneuvers, exercises, and limited war deployments. Selected units were assigned to the force from which various mission components, tailored for individual contingencies, were drawn. Only operationally ready units were assigned to the Composite Air Strike Force. Once assigned, training for these units was largely limited to the force's specialized requirements. Annually, part of the force was deployed to Europe and part to the Far East to train in actual deployment and theater orientation.

The Air Force believed that this small, fast-acting tactical force provided an effective deterrent against "brushfire" conflicts of limited or local wars. Historical records show the Strike Force was deployed over a dozen times. For example, in 1958 it was deployed in response to the Chinese shelling of Quemoy and Matsu Islands and to the crisis in Lebanon. The Strike Force was capable of rapid deployment; for example, in one instance, the Strike Force deployed within 12 hours of notification.

In 1973, the Composite Air Strike Force was discontinued and the 19th Air Force was inactivated as a result of budget pressures and sustained internal resistance. Because the 19th Air Force existed only as a headquarters for planning and administrative functions, it had to rely on other Air Force units to provide the aircraft necessary for training and deployment. Assembling and training forces dedicated to the Strike Force were problematic in peacetime when different organizations had competing priorities, schedules, and agendas. As a result, the Tactical Air Command decided the 19th Air Force's tasks could be performed more efficiently and economically by its own staff and the other Air Force units.

The Composite Air Strike Force demonstrated the benefits of a peacetime command and control element augmented when necessary by assets that were geographically separated before training and deployment. However, the 19th Air Force encountered difficulties in assembling and training the

units that belonged to other numbered air forces during peacetime. Thus, the Strike Force also demonstrates the disadvantage of not formally committing the noncollocated aircraft to routinely train in large-scale composite force procedures and deploy with the force projection composite wings.

Training in Composite Force Procedures Analogy

The increase in proficiency and lessons learned during Air Force composite training exercises were cited as examples of the kinds of advantages that would result from continually training in composite force procedures. However, fighter aircraft crews already have extensive opportunities for training in these procedures. The Air Force currently holds at least 10 large-scale composite force exercises in the continental United States and Canada every year, routinely participates in composite force exercises with countries in other areas of the world, and stresses the value of exercising composite training procedures at the wing and squadron levels. Numerous commanders and aircrew members who participated in the Gulf War attributed the speed with which they were able to build and execute mission force packages to the lessons learned during previous such exercises.

According to training personnel, the Air Force currently aims to have aircrews in the United States attend large-scale composite force exercises about every 18 months. However, the aircrews of a fighter squadron we visited at Shaw AFB attended such exercises every 6 months. Units that operate scarce and critical aircraft (e.g., AWACS and EF-111s) participate in large-scale composite force exercises even more frequently. For example, between January 1991 and January 1992, aircrews of an AWACS squadron from Tinker AFB, Oklahoma, on average participated in large-scale composite exercises every 3 months. In addition, before the war the EF-111 aircrews based at Mountain Home AFB participated in large-scale exercises about every 4 months.

The Air Force offers a number of composite force training exercises under a variety of names, each focusing on specific aspects of practicing, testing, and evaluating composite force procedures. For example, the flag exercises held five times a year at Nellis AFB, Nevada, primarily focus on exposing aircrews to many different threat scenarios and provide experience in mission planning and tactics and operations. During each of the RED FLAG exercises, aircrews and aircraft representing a wide variety of capabilities assemble from geographically separated wings for 2-week periods. During this time, aircrews participate in planning and executing 8

to 10 composite force missions against "enemy forces" consisting of fighters and crews permanently based at Nellis AFB. GREEN FLAG exercises are similar but focus on integrating electronic combat capabilities into missions.

The Air Force also holds four BLUE FLAG exercises annually. The focus of BLUE FLAG exercises is to train tactical combat leaders and supporting battle staff personnel in command and control and intelligence procedures, without the actual deployment of aircraft. In addition, COPE THUNDER exercises, which are similar to the RED FLAG exercises, are conducted in the Pacific theater, and other composite force exercises are held in Europe and other parts of the world.

In addition to periodic deployments for large-scale composite force training, aircrews at bases with more than one type of fighter aircraft continuously practice dissimilar air combat training. The training plans for the aircrews in the force projection composite wings indicate they will spend more of their time practicing composite force procedures than aircrews in non-composite wings; the rest of the time they will be gaining individual competencies by performing dissimilar aircraft training.

Agency Comments and Our Evaluation

The Department of Defense did not agree with our assessment that the analogies, while demonstrating some of the benefits attributed to force projection composite wings, do not conclusively demonstrate the need to establish these wings in order to achieve the benefits or show that these wings are the optimal means of achieving these advantages. The Department said that the analogies were not intended to be definitive, but that the experience and operations of these analogies support the basic concept that composite basing will provide a quicker, more organized response to a contingency. Further, the Department said that the problems encountered by the Composite Air Strike Force in not owning any aircraft are what the Air Force is trying to avoid by providing force projection composite wing commanders with the organic command, control, communication, and intelligence support they need at the unit level.

Our assessment is unchanged. With the exception of the composite training exercises, all of the analogies cited were deployed forces. A Navy carrier air wing on board a carrier represents a composite force deployed, and the Composite Air Strike Force existed as a command structure in

⁶Dissimilar air combat consists of training in air combat procedures with another type of aircraft acting as an adversary. The training is focused on developing individual competencies in a particular aircraft.

peacetime and only became a composite force when deployed to address a contingency. Both of the currently operating provisional wings are composite forces only until they are disestablished, when their assets return to home bases. Accordingly, they demonstrate the advantages of deployed forces with a collocated command element and a wide variety of aircraft, supplemented by peacetime training in composite force procedures. The experience of the Composite Air Strike Force shows that a properly organized and trained—but noncollocated—force can respond quickly and effectively to a contingency.

The force projection composite wings, as currently planned, will not have many key capabilities typically included in deployed forces or included in large-scale composite force training. Consequently, these wings must be significantly augmented to accomplish many of their peacetime and wartime taskings. For example, the Air Force does not plan to include scarce and critical aircraft in the wings, but it does plan to provide these aircraft from other bases. Accordingly, the force projection composite wings will be deprived of the opportunity to routinely train with them. The Air Force also does not plan to formally commit these noncollocated aircraft to routinely train in large-scale composite force procedures during peacetime or deploy with the force projection wings. Thus, these aircraft can be diverted in time of crisis to alternate tasks by the National Command Authority and in peacetime to tasks by higher headquarters—a situation that created problems for the Composite Air Strike Force.

In addition to the constraints imposed by not collocating or formally committing all required capabilities, force projection wings will have limited potential for routinely practicing, testing, and evaluating composite force procedures because the currently available ranges at the bases are too small to accommodate force-level training.

Air Intervention Composite Wing

The air intervention composite wing will have considerably fewer capabilities than other deployed composite wings or the forces that participate in composite exercises. Accordingly, the composite wing will not be able to routinely train as it will fight or deploy without significant preconflict assembling of units.

Core Capabilities Are Limited

As currently planned, the air intervention wing at Mountain Home AFB will have collocated aircraft with the capabilities to carry out aerial refueling and fighters capable of air superiority and air-to-air and air-to-ground operations. Presently, the wing also includes a geographically separated unit of heavy bombers at Castle AFB, California. In addition, three AWACS aircraft and aircrews are scheduled to rotate for 3-month periods to the base to train with and support the air intervention wing.

The draft concept of operations also envisions that the wing's precision attack aircraft will assume additional roles. These roles will include offensive and defensive counter air for which the crews do not currently train. The Air Force also plans for these aircraft to perform suppression of enemy air defense (SEAD). However, when the aircraft is dedicated to the

SEAD role, its load capacity requires that it carry only SEAD munitions; in this role, it would not also carry weapons for offensive and defensive counter air. Additional capabilities will be provided to the wing by aircraft from other bases; however, these units will not belong to the wing.

Table 3.1 contrasts the capabilities of the air intervention wing with the capabilities of other composite forces. These other forces include typical composite force training participants, the 7440th Composite Wing, a Navy carrier air wing, and the Composite Air Strike Force.

Table 3.1: Comparison of Composite Force Capabilities

Capabilities	Mountain Home AFB	Composite exercises	7440th Composite Wing	Navy carrier	CASF*
Air to ground	X	X	X	X	X
Air to air	X	X	Х	Х	Х
Bombers	X	X	X	Х	X
Tankers	X	X	X		Х
Reconnaissance		Х	X	Х	Х
Electronic jammers		Х	X	Х	
AWACS		X	X	X	
Suppression of enemy air defense		x	Х	X	
Transports		Х			Х
Search and rescue			X	Х	
Antisubmarine warfare				Х	

^aComposite Air Strike Force.

Collocating Heavy
Bombers and Relocating
Jammer Aircraft May
Degrade Wing Core
Capabilities

Mountain Home AFB has insufficient space for both the EF-111 jammer aircraft currently based there and a unit of heavy bombers. However, the relative value of the bomber's contribution to the wing's mission is questionable, and relocating the jammers will prevent the force projection composite wing from routinely training the way it will fight. By collocating the bombers with the air intervention composite wing and relocating the jammer aircraft, the Air Force is removing a capability that will almost certainly deploy with any air intervention mission package and replacing it with a capability that is appropriate for a narrower range of missions. Ironically, like the rest of the force projection composite wing's aircraft, heavy bombers without stealth capability of their own will require jammers to support their attacks against defended targets.

Currently, a geographically separated unit of B-52Gs at Castle AFB provides the heavy conventional bomber capability for the Mountain Home AFB Composite Wing; however, the Air Force plans to retire all conventionally equipped B-52Gs by the end of 1994. The Air Force is considering substituting B-1B bombers configured to use conventional weapons for the B-52Gs and collocating the B-1Bs at Mountain Home AFB. The substitution decision will depend in part on how successfully the B-1B can be adapted to the conventional role.

Currently, the B-1B can drop only one conventional weapon—the 500-pound gravity bomb—and the bomber has not yet demonstrated the capability to deliver a variety of conventional munitions. We previously raised concerns about B-1B operational problems and questioned the costs and time involved to adapt the B-1B for additional conventional capabilities. ¹ The Air Force projects that B-1Bs will be capable of delivering additional conventional weapons in 2001.

As late as December 1990, the initial plan for the air intervention wing did not include heavy conventional bombers. However, the Air Force's reorganization of its major commands incorporated many of the roles and aircraft of the former Strategic Air Command, including the heavy bombers, into the new Air Combat Command. Wing officials told us that the Air Force wanted to develop new deployment and employment roles so these assets would continue to have value.

Only a limited number of air bases exist worldwide where it is physically possible to deploy heavy bombers as part of a composite force. For example, during Operation Desert Storm, lack of available bases in the theater caused three of the four bomber wings participating in attacks against Iraq to fly 14- to 16-hour missions routinely. Even if the heavy bombers were collocated in a force projection composite wing, they could still be required to deploy to a separate location. The draft concept of operations for the composite wing recognized that deployment to more than one base was an option but that multibase deployment was contrary to the basic philosophy of the employment concept of the wing and would require additional equipment, personnel, and airlift. In addition, multibase deployment would create the potential for logistics and communication difficulties during combat.

¹Strategic Bombers: Adding Conventional Capabilities Will Be Complex, Time-Consuming, and Costly (GAO/NSIAD-93-45, Feb. 5, 1993).

Prior to the Gulf War and the decision to establish a force projection composite wing at Mountain Home AFB, the Air Force decided to relocate EF-111s from Mountain Home AFB to Cannon AFB, New Mexico, to achieve economies from collocating all F-111 airframes at one location. According to senior EF-111 squadron personnel, the Gulf War showed the increasing importance of the EF-111s routinely training as an integral part of a mission. In the past, the EF-111 was typically employed as a standoff jammer operating independently of the intricate choreography of a strike package and the aircrews may have needed little training beforehand with the other elements of the package. During the war, however, the EF-111 was employed independently on only 20 percent of its missions. The greatest percentage of missions were those in which the aircraft provided direct support to a specific package against a specific target and accompanied the package as close to the target as necessary to accomplish the mission. The relocation of the jammer aircraft not only removes a critical capability from the air intervention composite wing but also deprives the wing of routinely training with this asset. Nevertheless, the Air Force does not plan to reconsider this decision.

Mountain Home Range Limits Potential Composite Force Training

The Air Force acknowledges that the Mountain Home training range is incapable of supporting large-scale composite force training. The range will accommodate much of the day-to-day training focused on dissimilar air combat training and development of individual aircrew competencies. However, the range cannot accommodate the number of aircraft needed for realistic composite force training exercises; only one flight of four aircraft can train on the range at one time. In addition, the training range currently used has limited airspace for maneuvers because access to the range is restricted to one direction, precluding training with forces from opposing directions. As a result, aircrews can only attack the same targets, in the same location, from the same direction, and in the same ways—a situation unlike a real combat environment.

Larger training ranges are available to the wing, such as the Navy's range at Fallon, Nevada, the Utah Test and Training Range, and the Air Force's range at Nellis AFB. However, aircraft would need to be refueled to reach the ranges, conduct training, and return to Mountain Home. The time spent en route to these ranges would be included in the wing's monthly flying hour quota and would consume additional fuel, which would result in fewer training flights. In addition, according to wing officials, competition with other users of these ranges could limit the wing's large-scale training opportunities.

The Governor of Idaho has proposed an alternate site to the currently inadequate training range, but the use of this site is contingent on the results of an ongoing environmental impact study. The Governor has imposed restrictions on the site, such as no live ordnance and no supersonic flights under 10,000 feet, and constraints on dropping chaff and flares. The Air Force's use of the proposed range has raised some environmental concerns, including impacts on and changes in management of vegetation and wildlife, recreation, Native American culture, wilderness values, and special land use designations. While the Air Force does not expect any significant restrictions, the environmental study may result in the range either not being available or being available with so many restrictions that it does not provide the capacity for realistic large-scale composite force training. The study is scheduled for completion in October 1993, and earliest access to the range would be at least 3 to 4 years after that.

Scheduling Training With Noncollocated Aircraft

In addition to the physical limitations of the current training range and the environmental concerns with the use of the proposed range, potential difficulties exist in scheduling routine large-scale composite force training with critical aircraft not belonging to the wing. The Air Force does not plan to execute formal training agreements that will commit aircraft with these critical capabilities to routine, large-scale composite force exercises with the wing. Rather, higher headquarters organizations will decide whether to make the aircraft available for training. Historically, these organizations have not always been able to provide requested aircraft for training because of conflicting priorities.

Without formal training agreements covering noncollocated aircraft, there is a greater risk that these aircraft may not be available when requested. The Air Force intends for the EF-111 electronic jammer aircraft relocated to Cannon AFB to practice with the air intervention wing. To do this, the EF-111s would need to fly approximately 6 hours (2 hours to reach Mountain Home AFB, 2 hours of training with the wing, and 2 hours for the return flight to Cannon AFB). Without a commitment between the wing and these critical assets, because the wing must make the optimal use of the flying hours it is allocated each year for training, the 4 transit hours may impact the availability of the EF-111s for training with the wing.

The Air Force plans for the air intervention wing to train with suppression of enemy air defense aircraft flown by the Air National Guard at Gowen Field, Boise, Idaho. However, no formal training commitment by the Air

National Guard existed and no scheduled training support for the wing was planned through fiscal year 1993.

Air/Land Composite Wings

The Air Force is building two air/land force projection composite wings. The 23rd Wing at Pope AFB will work closely with the Army's XVIII Airborne Corps headquartered at Fort Bragg and its Army divisions; the 347th Wing at Moody AFB will work closely with the Army's 24th Infantry Division (Mechanized) at Fort Stewart, Georgia.

The air/land force projection composite wings, as currently configured, will have transport aircraft with the capabilities to carry out airlift and airdrop tasks, collocated with fighter aircraft capable of air-to-air and air-to-ground operations. As with the air intervention composite wing, the Air Force plans to provide additional capabilities through noncollocated aircraft, which the air/land wings will not command and can be diverted to other tasks.

Table 3.2 contrasts the capabilities owned by the air/land force projection wings and the capabilities of other composite forces with similar missions. These other composite forces include the capabilities deployed for Operation Just Cause in Panama in 1989; the U.S. Marine Corps' Marine Air Group 11, which operated from Shaikh Isa, Bahrain, during the Gulf War; and the capabilities currently represented in Operation Provide Comfort in Southwest Asia.

Table 3.2: Comparison of Air/Land Composite Force Capabilities

Capabilities	Pope	Moody	Just Cause	USMC MAG 11°	Provide Comfort
Air to ground	X	Χ	Χ	Х	Χ
Air to air	X	X	Х	X	X
Transports	X	X	Х		
Electronic jammers			Х	Х	X
Bombers			Х	Х	Х
Suppression of enemy air defense			х	Х	X
Tankers			Х	Х	X
AWACS			X		X
Command and Control			Х		
Reconnaissance			Х		X
Search and rescue					X

^aU.S. Marine Corps' Marine Air Group 11.

The table shows that, as with the air intervention wing, the air/land wings will have aircraft with considerably fewer capabilities than other composite forces and will not be able to routinely train as they will fight or deploy without significant preconflict movement of units.

At Pope AFB, the basing of multirole fighter aircraft is contingent on the release of a Record of Decision on the environmental impact assessment study scheduled for completion in March 1993.

Current Ranges at Pope AFB Preclude Large-Scale Joint Training

No potential currently exists at Fort Bragg for routine, large-scale, joint training exercises by the Pope AFB force projection composite wing and the XVIII Airborne Corps. Several sizeable ranges exist in North Carolina, South Carolina, and Georgia that the aircraft of the air/land wing could use for practicing, testing, and evaluating composite force procedures. However, in addition to the time and fuel used en route to access them, the air/land wing would also compete for time on the ranges with other users.

Air Force officials maintain that Army light forces, such as the XVIII Airborne Corps, tend to conduct the majority of their training in small unit exercises and that the air/land wing can provide elements of the Corps with the opportunity to practice joint training within existing range and airspace limitations. However, because of the limited air and range space at Fort Bragg, large-scale joint training will require deployment to Fort Irwin, California, approximately 2,200 miles away. Fort Irwin is unique in the United States in that it can accommodate brigade-sized exercises and has the ability to provide sensor feedback on activities to land forces. There are other training ranges closer to Pope and Fort Bragg at Fort Campbell, Kentucky; Fort Stewart, Georgia; and Fort Drum, New York. However, they are not sensored and do not accommodate brigade-sized forces.

Implementation of Moody AFB Composite Wing Delayed

The Moody AFB composite wing was originally not planned to be operationally capable for several years, and the implementation of the wing has been further delayed recently. The Air Force has suspended the development of this wing because it located at that base the aircraft formerly housed at Homestead AFB in facilities damaged by Hurricane Andrew in July 1992. Any decision on the Moody AFB wing and the future of Homestead AFB will depend on the results of the 1993 Base Realignment and Closure Commission process.

Agency Comments and Our Evaluation

The Department of Defense did not agree with our conclusions related to the mix of aircraft in core force projection composite wings, the need to augment their capabilities, or their limited opportunities to train as they will fight. The Department stated that these wings are the Air Force's premier power projection forces and have sufficient core capabilities that will not require augmentation for initial deployment, although subsequent augmentation may be required for certain scenarios. Also, the force projection composite wing commander has a wider range of core assets under his control than noncomposite wing commanders, which decreases the amount of support that the commander must coordinate when deployed. Further, the Department stated that tying scarce and critical assets to these wings for training and deployment would conflict with the reality that (1) these assets can be required for higher priority national taskings and (2) insufficient numbers of these assets exist to cover all real-world contingencies plus training. The Department of Defense also stated that the force projection composite wings have the full support of the Air Force Chief of Staff, and the composite wing priority for range time ensures that they will receive adequate training with all the listed supporting assets. In addition, competition for the large training ranges will decrease as the military downsizes and larger areas than ranges can be used for training if ordnance is not released. Peacetime training for the wings will focus on scenarios for which the wings are being built and on the core missions that do not require augmentation.

We believe that without augmentation by scarce and critical assets, the wings will be limited in their utility to perform as an autonomous force the taskings outlined in the draft concepts of operations. While the wings' core capabilities can be deployed and their assets subsumed into a larger deployed force, this role does not seem to justify either the cost of establishing these wings or the characterization of these wings as the Air Force's premier power projection forces.

The availability of the scarce and critical assets for training with the composite wings will depend on their use in national taskings. However, the risk that these wings will not be able to train as they will fight is increased because of their limited core capabilities and the lack of plans and formal commitment for routine training with required capabilities not belonging to them. Further, aside from a statement concerning the sponsorship of the current Air Force Chief of Staff, the Air Force has not provided any evidence that the force projection composite wings have a particular priority in competing with other requestors for scarce and critical augmenting assets or access to training ranges. The inability of the

Air Force to commit or dedicate scarce and critical assets to the force projection composite wings highlights an inherent limitation on implementing the composite wing concept.

The air/land composite wing being developed at Pope AFB may adversely affect the current training and deployment capabilities of Army and U.S. Special Operations Command units. The Air Force Chief of Staff has characterized this wing as a top-down initiative. Army officials have said that they were not consulted prior to that decision. Air Combat Command personnel involved in the implementation of the concept have said that they have not been authorized to explore alternatives. By building this wing before all options were identified and analyzed, the Air Force runs the risks of unwisely spending public funds and foreclosing potential alternatives. An alternate location for the Pope air/land wing appears to achieve the same degree of advantage without adverse impacts and at less cost.

In a memorandum dated November 25, 1992, representatives of the Air Force and Army agreed to work together to reach accord on the level of training and deployment support the Pope AFB wing will provide the XVIII Airborne Corps at Fort Bragg. However, while negotiations continue, to date no solutions have been formalized, and an additional concern has arisen over the affects of noise from F-16 operations at Pope AFB on significant portions of housing and the hospital under construction at Fort Bragg.

Potential Adverse Impacts

The establishment of the air/land force projection composite wing at Pope AFB may have significant negative impacts on joint training and deployment of the Army's rapid response forces. If sufficient aircrews and specially equipped aircraft are not provided, the training of U.S. Special Operations Command units at Fort Bragg could also be affected.

Army Concerns

The Air Force unilaterally decided to establish an air/land wing at Pope AFB without requesting input from the Army or assessing alternatives. Previously, Pope AFB had been a Military Airlift Command¹ installation with a special mission for the Army—to provide peacetime airlift for the training of the rapid deployment forces at Fort Bragg. Before the decision to locate a force projection composite wing there, the Army had not expressed dissatisfaction with the amount, scheduling, quality, or coordination of the airlift training.

¹In June 1992, Pope AFB was transferred from the former Military Airlift Command to the Air Combat Command.

According to Air Force officials, the building of a force projection composite wing at Pope AFB will not affect the amount of joint training to be provided or the rapid deployment of the Army's forces. However, a recent Army analysis concluded that permanently basing F-16 aircraft at Pope AFB would result in a major degradation of the training capability at Fort Bragg because aircraft using the straight-in approach to the runway would take off and land across Army training ranges, thereby disrupting live-fire training exercises. The Air Force has proposed a solution whereby F-16s would use this approach only for emergency landings; however, the Army has not formally accepted this solution.

At Pope AFB, temporarily deployed and permanently based transport aircraft have historically fulfilled the Army's training requirement. To make room for the composite wing, the Air Force plans to permanently base only one-half the current number of transport aircraft at Pope AFB that routinely provide scheduled and nonscheduled training to the XVIII Airborne Corps. The Army has expressed concerns that the smaller number of permanent transport aircraft will degrade the level of scheduled joint training and decrease the opportunities for nonscheduled training. Nonscheduled training occurs when the Air Force adds loadmasters to an otherwise routine aircrew training flight so that Army personnel can also conduct practice jumps from the aircraft. The Army estimates that nonscheduled training equates to about 20 percent of the joint training involving forces at Pope AFB and Fort Bragg. The Air Force states that it has continued to support identified XVIII Airborne Corps requirements and is attempting to alleviate the Army's concerns.

Air Combat Command officials acknowledge that the amount of nonscheduled training may have been underestimated or overlooked when the Air Force agreed to maintain current levels of training provided to the Army. The Air Force has also acknowledged that nonscheduled training opportunities will continue with the air/land wing, but at a reduced level, and that the Army will have to do a better scheduling job to fully use the hours it receives to accomplish required joint training.

In addition, permanently basing fighter aircraft at Pope AFB may degrade the Army's "no-notice" deployment capability. A September 1991 Tactical Air Command (now the Air Combat Command) briefing questioned the possibility of simultaneously deploying the Army forces and the air/land wing from Pope AFB for certain scenarios. This briefing stated that the wing's fighter aircraft would either need to deploy first or temporarily evacuate the base to make room for incoming airlift aircraft needed for

deployment. The Army is concerned that an unplanned event, such as foreign object damage to an aircraft, may delay the composite wing's deployment or evacuation.

A recent joint Army and Air Force analysis indicated that simultaneous deployment may be possible, given sufficient ground support assets and airlift. The analysis was modeled on Operation Just Cause, thereby eliminating some unknowns, and assumed that the 82nd Airborne Corps had deployment priority for airlift over all other potential users and that the Pope AFB Airlift Support Squadron would be given all assets necessary to load the Army within the time expected. However, while recognizing the possibility of simultaneous deployment of the air/land wing and the XVIII Airborne Corps from Pope AFB, the analysis pointed out that the Air Mobility Command may not have sufficient airlift resources to commit to such a deployment if other national priorities exist. The analysis also indicated that meeting the Army's rapid deployment requirement meant the Air Force would need to increase the currently planned ground deployment support assets at Pope AFB. The Air Force has not resolved the Army's concerns about the need for additional ground support, and an exercise to test joint deployment is not scheduled until early calendar year 1994.

Since our draft report was provided to the Department of Defense for comment, a new issue has arisen related to the effect of the air/land composite wing. The October 1992 draft environmental impact statement used computer generated noise impact contours based on generic operating characteristics for the mix of aircraft in the composite wing. On this basis, the Army expressed concerns over the impact of noise from F-16 operations at Pope AFB on a number of facilities at Fort Bragg, including the hospital currently under construction and existing family housing and dormitories. According to the statement, operating F-16s at Pope AFB would result in noise levels exceeding acceptable levels. Based on actual flights of an F-16 during February 1993, the Air Force believes it can eliminate the unacceptable noise impacts on Fort Bragg and the nearby civilian community by changing flight patterns to achieve noise abatement. The chief environmental engineer at Fort Bragg stated that it is critical for these changes to be incorporated into the agreements between the Army and the Air Force to ensure acceptable levels of noise. However, although the Army and the Air Force are working to resolve the issues related to the impact of noise from F-16 operations at Pope AFB, no agreement has been formalized.

U.S. Special Operations Command Concern

The U.S. Special Operations Command is concerned that the Pope AFB air/land composite wing will adversely affect the training of special operations units based at Fort Bragg. Because Pope AFB cannot accommodate the existing force of transport aircraft and the air/land composite wing, the Air Force does not plan to retain as part of the composite wing either the specially equipped transport aircraft or the crews for training special operations units currently located at Fort Bragg.

The Air Force plans for its Special Operations Command to use specifically equipped C-130 aircraft operating from Hurlburt Field, Florida, to assume the special operations low-level training mission from the Air Mobility Command. The Air Mobility Command currently supports this training with aircraft based at Pope AFB. The timing of the transfer of functions will depend on the availability and supportability of sufficient numbers of the specially equipped aircraft. The U.S. Special Operations Command has said that it is imperative that the Air Force provide uninterrupted support until the transfer of training occurs. However, the Air Force has acknowledged that there may be some joint Air Force and special operations forces training shortfalls until fiscal year 1996 when enough specially equipped C-130s will be available to support the training.

The Department of Defense stated that an equivalent level of training support for special operations units at Fort Bragg could be provided by a single MC-130 or a C-130 that is special operations capable being temporarily deployed to Pope AFB for 20 days each month. However, officials of the U.S. Special Operations Command, Air Mobility Command, and Air Force Special Operations Command could not provide support for this statement. Further, Air Force Special Operations Command officials believe the total training requirement for special operations forces at Fort Bragg exceeds what is described in the Department of Defense's estimate.

Potential Alternate Locations

The Air Force might have avoided some of the implementation difficulties from placing the air/land wing at Pope AFB if it had chosen another location for the wing's fighter aircraft and command element. Shaw AFB and Seymour Johnson AFB, North Carolina, are both within short distances and short flying times of Fort Bragg. Locating the air/land wing's fighter aircraft and command element at either of these bases would alleviate the Army's concerns over the effects of locating these assets at Pope AFB, allowing that base to remain dedicated to providing airlift training for rapid deployment forces at Fort Bragg.

The same fighter aircraft currently scheduled for the Pope AFB air/land wing are based at Shaw AFB, approximately 120 miles from Fort Bragg. An air/land force projection composite wing with its fighter aircraft and command element based at Shaw AFB could provide the Air Force with a similar capability and minimize Army concerns about degradation of current training levels and deployment capability at Pope AFB. According to command personnel at Shaw AFB, the base could accommodate the additional squadron needed to build the same fighter force currently planned for Pope AFB. They estimated that the total cost of the improvements necessary to base an additional squadron of fighter aircraft (i.e., hangar space, avionics, storage facilities) would be no more than \$15 million, about one-sixth of the funding related to the Pope AFB force projection composite wing.

In the past, Shaw AFB has provided close air support during joint training with Fort Bragg, and the 1991 Defense Base Closure and Realignment Commission reported that Shaw AFB provided the needed support to Army units in the area. Aircraft from Shaw AFB can routinely access several nearby training ranges that total approximately 25 times the size of the Fort Bragg training range. An air/land composite wing based at either Pope or Shaw AFB could train on these larger ranges; however, the ranges are closer to Shaw AFB and aircraft would spend less time en route to the ranges and would therefore consume less fuel and have more time available for training.

The 9th Air Force, which is also U.S. Central Air Force, the air component of U.S. Central Command, is located at Shaw AFB. Accordingly, locating the command element of the air/land force projection composite wing at Shaw AFB could result in additional opportunities for enhancing joint Army/Air Forces command, control, communication, and planning.

Seymour Johnson AFB, North Carolina, is another potential alternate location for the fighter aircraft and command element of the air/land composite wing. Seymour Johnson AFB does not offer all the advantages of Shaw AFB, such as that of collocation with the 9th Air Force, and it would require additional construction and force structure to accommodate the wing's aircraft. However, the base is only about 35 miles from Pope AFB and is already the home base of a composite wing with F-15E fighters and KC-10 tankers.

Agency Comments and Our Evaluation

The Department of Defense did not agree that the implementation difficulties and the potential adverse affects of building an air/land composite wing at Pope AFB warrant additional analysis or exploration of alternate bases or basing structures. It noted that the principal reason for stationing the air/land wing at Pope AFB is to facilitate habitual relationships through daily interaction with the Army. According to the Air Force, having the wing's command element located away from Fort Bragg would result in less than optimal interactive relationships with the Army and some organizational difficulties associated with commanding a wing with assets in two locations. The Department commented that there are "growing pains" associated with any new venture and that the Air Force and the Army are working to find mutually acceptable solutions.

We note that while the Air Force may find solutions to the Army's concerns, the Air Force has not conducted any analysis or provided evidence that collocation of close air support aircraft with troop airlift and insertion aircraft is either necessary or the optimal way to achieve enhanced interaction with the Army. Also, the draft concept of operations for the Pope AFB air/land wing is specific that the wing is not aligned or tied to either the XVIII Airborne Corps or the 82nd Airborne Division and may be deployed by itself to support other Army components or for other purposes. This concept of operations raises questions about the advisability of disrupting current support provided to the XVIII Airborne Corps, as the wing may not fight as it will train.

Our concerns about the Pope AFB air/land wing and suggestions about possible alternate locations and basing structures stem from the costs associated with implementing a concept based on little analysis and with the potential adverse impacts on the Army's training and deployment. The underlying question for the Air Force is whether it should disrupt currently successful relationships with the Army and pay significant beddown costs at Pope AFB, or should it accommodate the perceived less than optimal interactive relationships and some degree of organizational difficulty resulting from locating the fighter aircraft and command element elsewhere, for example, at Shaw AFB, 20 minutes away by air.

Conclusions, Agency Comments and Our Evaluation, and Matters for Congressional Consideration

Conclusions

The Air Force did not conduct sufficient analysis before deciding to implement the force projection composite wings. In addition, it did not determine whether these wings are the optimal means of using resources and achieving operational advantages and whether these wings can achieve the operational advantages attributed to this basing plan. It also did not determine the degree to which the wings being built can actually achieve benefits.

The analogies cited by the Air Force as evidence of the advantages of these wings demonstrate the wings' benefits in combat. However, these analogies do not support the advantages of permanently collocating composite force aircraft in peacetime or of continuously practicing, testing, and evaluating composite force procedures. Instead, the analogies support the advantages of (1) an enhanced, permanent command and planning element that can be augmented during peacetime for training and collocated with composite force aircraft under a single commander when deployed and (2) periodic training in composite force procedures.

The force projection wings are unlikely to fully achieve the advantages attributed to composite wings because of limitations on training and on the number and type of aircraft in the wings. In addition, the air/land wing at Pope AFB may degrade current training and deployment capabilities of Army and Special Operations Command units. This latter issue further illustrates the lack of analysis associated with the decision to build force projection composite wings, in that the intended beneficiary was not consulted beforehand and may actually loose combat capability. Although the Air Force may find solutions to the concerns expressed by the Army and the Special Operations Command, there is no evidence to support that placing the air/land wing at Pope AFB is the best use of resources.

Agency Comments and Our Evaluation

In a draft of this report provided to the Department of Defense for comment, we made several recommendations to the Secretary of Defense. Our primary recommendation was that the Secretary direct the Secretary of the Air Force to take no further steps to implement the force projection composite wings until additional analysis has been conducted. The Department did not concur with our recommendation and stated that the Air Force Chief of Staff has determined that recent operational experience of deployed composite forces and historic evidence validate the concept and warrant its implementation. Further, the Air Force and Congress will have an opportunity in the near future to evaluate the composite wing cost

and military effectiveness issues once fully functional, permanently established organizations are in place.

The Department of Defense did not concur with our recommendation to evaluate alternate means of achieving benefits. The Department's position is that composite force operations result from the integrated efforts of many components—aircrews, maintainers, supply personnel, and command elements—and the rationale behind the force projection composite wings is to provide the commanders with all the basic tools needed to train together in peacetime and carry out their wartime taskings.

The Department of Defense did not concur with our recommendation to formally commit capabilities not owned by the wings to the wings for routine training or deployment. The Department states that the force projection composite wings have the core capabilities to execute their missions and that the scarce and critical aircraft, while a valuable adjunct to the wings, do not provide required capabilities. Further, these scarce and critical assets must be available to support all potential users, and formally aligning these aircraft to the wings would not reduce their availability to the National Command Authority for higher priority missions.

The Department of Defense also did not concur with our recommendation that the Air Force reconsider the decision to relocate the EF-111 aircraft from Mountain Home AFB. According to the Department, the Air Force Chief of Staff has determined that the EF-111 aircraft are an essential adjunct to the force projection composite wing, as are the conventional heavy bombers. However, because the decision to relocate the EF-111s was made independent of the decision to collocate bombers at Mountain Home AFB, the Department stated that the Air Force is not engaged in a jammer versus bomber stationing controversy at Mountain Home AFB, and, accordingly, there is no need to reexamine stationing options.

Finally, the Department of Defense did not concur with our recommendation to assess other potential locations and basing structures for the Pope AFB air/land wing. The Department noted that the principal reason for placing the air/land wing at Pope AFB is to facilitate habitual training/working relationships through daily interaction with the Army. Further, the Air Force and the Army are working together to alleviate the Army's concerns about the wing's effects on training and rapid deployment.

The information provided in the Department of Defense's comments does not resolve the issues regarding the lack of analysis and evidence supporting the implementation of peacetime force projection composite wings, the relative usefulness of the mix of aircraft in those wings, and the number of unresolved implementation issues. While the Department of Defense objected to our recommendation to suspend the implementation of the force projection composite wings pending further analysis, the Department provided no specific adverse impacts that would result, characterizing our recommendation as "counter-productive." The Air Force has essentially relied on analogies to demonstrate one or more of the several benefits attributed to these wings, and it is only now performing some of the basic analyses that should have preceded the wing's implementation. Accordingly, the Department has been unable to demonstrate that anticipated benefits are achievable or that the Air Force needs to collocate the specific types of aircraft it believes are needed to achieve the anticipated benefits. In addition, the Air Force has not considered alternate locations for these wings, determined how the achievement of the benefits will be measured, or shown that it is necessary to continually train in composite force procedures to achieve these benefits.

We remain concerned about the mix of aircraft in the wings and the lack of priority or commitment for training or deploying the wings with other critical aircraft. Without the proper mix or priority or commitment, the wings will not be able to train in peacetime as they will fight—a basic premise of the force projection composite wings. In addition, without augmenting capabilities, the wings will be limited in their utility as an autonomous force. While the wings could be deployed without augmentation and subsumed like the assets of any other wing into a larger deployed force, this role would not appear to live up to the Air Force's characterization of the wings as its premier power projection force supporting the new national security strategy.

Finally, we remain concerned that the implementation of the force projection composite wings is proceeding even though there are many unresolved issues. At this point, the final environmental impact assessment has not been completed on the proposed training range at Mountain Home AFB and the formal decision has not been signed on the environmental assessment of the impact of basing F-16 fighter aircraft at Pope AFB. In addition, although progress is being made, some of the Army's concerns have not been resolved about the effect of the Pope AFB air/land composite wing on the Army units at Fort Bragg. Building the wings before

issues are resolved may result in degrading readiness, reducing training opportunities, and impeding deployment with a corresponding potential risk to national security and less than optimal use of scarce funds.

We acknowledge the Air Force's aims of enhancing the responsiveness, readiness, and operational effectiveness of its forces. However, given the absence of key aircraft in the force projection composite wings and the lack of commitment for them to train and deploy, we remain concerned whether the force projection composite wings will achieve the greatest benefit at the least cost. This factor will remain unknown as the Air Force has not considered or analyzed alternate means of achieving these benefits.

Matters for Congressional Consideration

We do not consider the arguments and information provided by the Department of Defense to be sufficient evidence for changing our conclusions and continue to believe that additional analyses of the force projection composite wings should be conducted. Accordingly, Congress may wish to consider directing the Secretary of Defense to direct the Secretary of the Air Force to take no further steps to implement the force projection composite wings until (1) the benefits of the wings planned for Mountain Home, Pope, and Moody AFBs have been analyzed and (2) the disruptive consequences have been resolved. Congress may also wish to require the Department to make the results of these analyses available to it for consideration during debate on any future budget requests or reprogramming actions related to the force projection composite wings. As part of this analysis, we believe the Air Force should

- establish criteria for assessing the operations of the force projection wings and for evaluating the validity of the composite wing concept and
- compare the costs and benefits that would be achieved by integrating an
 enhanced, deployable wing command element into existing composite
 training with the benefits to be achieved by the force projection composite
 wings.

On the basis of these analyses, the Department of Defense may determine that force projection composite wings should be implemented. If so, Congress may wish to consider directing the Secretary of Defense, before further action is taken to implement the wings, to direct the Secretary of the Air Force to

- formally commit aircraft with scarce and critical capabilities to the force projection wings to ensure that these capabilities are readily available to train and deploy, if required, with the wings;
- examine the feasibility of retaining jammer aircraft at Mountain Home AFB as part of the air intervention wing instead of eventually collocating heavy conventional bombers with the wing; and
- assess other potential locations for the Pope AFB air/land wing to determine if the same degree of advantage can be achieved and to ensure that the Army and U.S. Special Operations Command concerns related to the air/land composite wing at Pope AFB have been resolved.

Comments From the Department of Defense



PRINCIPAL DEPUTY UNDER SECRETARY OF DEFENSE WASHINGTON, DC 20301-2000

2 1 JAN 1993

Ms. Nancy R. Kingsbury
Director, Air Force Issues
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Ms. Kingsbury:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "AIR FORCE ORGANIZATION: More Assessment Needed Before Implementing Force Projection Composite Wings," dated December 14, 1992 (GAO Code 392643), OSD Case 9198. The DoD nonconcurs with much of the report and rejects its recommendations to halt or delay implementation.

In essence, the GAO has asserted that the Air Force has inadequately studied the composite wing concept before implementing organizational and basing changes affecting three specific wings. The DoD rejects the recommendations that would freeze or alter composite wing implementation efforts. Such delays to the on-going beddown efforts would serve no constructive purpose, and deprive the Air Force and the Congress of the opportunity to evaluate composite wing costs and expected improvements in military effectiveness. The Air Force is implementing a concept--to organize and train as they would fight. This effort is consistent with the Service function "to organize, train and equip aerospace forces," and with National Military Strategy for crisis response. The DoD has provided numerous historical examples of how the Air Force has fought in composite organizations, and numerous peacetime analogies to illustrate the elements of a new peacetime composite wing structure. Air Force leaders have determined that they cannot responsibly assume that future crises will permit the last minute formation of composite wings for combat, and that their effectiveness would be greatly enhanced by training for composite operations in peacetime--the DoD concurs with the Air Force leadership.

The composite wings were organized with core missions/capabilities in mind, so that they would not require augmentation for initial

See comment 1.

See comment 2.

See comment 3.

See comment 1.

deployment, although, depending on the scenario, augmentation may be desirable. Their peacetime mission is to prepare for war, specifically those scenarios for which the composite wings were organized. The wings will undoubtedly interact with other wings/organizations during peacetime--no one expects these wings to fight in a vacuum in either war or peace. However, their peacetime training, i.e., taskings, will undoubtedly focus on their core missions which do not require augmentation, such as absorption of aircraft from other wings.

Assessing the effectiveness of composite wings is a separate issue. As with any innovation, criteria must be developed to assess this newly formed entity to improve operations. The Air Force Air Combat Command Joint Studies Group is currently conducting a study to establish measures of effectiveness for composite wings. The DoD recognizes that there will be "growing pains" as the Air Force applies such criteria and the concept of composite wings matures. Recently concluded and ongoing initiatives highlight the Air Force commitment to both refine the concept and resolve any difficulties resulting from its implementation.

The inference that the "Mountain Home wing's precision bombers will assume additional roles for which they do not currently train, and which they cannot perform simultaneously" is factually incorrect. The F-15E aircrews train for Offensive Counter Air as well as Defensive Counter Air in their daily training missions. However, organic Suppression of Enemy Air Defense assets at Mountain Home is a difficult issue. Therefore, the DoD supports the Air Force decision to base the EF-111s at Cannon Air Force Base, New Mexico, as economies of scale are readily recognized by keeping such a limited asset collocated with like aircraft. Likewise, the life and usefulness of the F4G Wild Weasel is limited, and the Air Force has been developing follow-on capability for some time. Until organic Suppression of Enemy Air Defense capability is possessed at Mountain Home, the wing will be supported as necessary by off-station assets for large scale exercises and real-world deployments. In bringing new capabilities on line, aircrews will be properly trained to handle this additional Suppression of Enemy Air Defenses mission.

Training ranges for large-scale composite force procedures are limited. However, as the military down-sizes, there will be fewer users competing for these limited training opportunities. Nonetheless, Military Operating Areas currently can be used to marshall forces, practice ingress/egress to simulated targets, and newer aircraft with improved avionics can record and assess probable weapons effects and techniques without the release of actual or practice ordnance. The composite wings

See comment 4.

See comment 5.

See comment 6.

See comment 1.

See comment 1.

See comment 7.

See comment 1.

are the premier Air Force power projection force supporting the new national strategy, and as such, have the full support of the Air Force Chief of Staff. Given the training range situation, units will have to coordinate to establish priorities early. The composite wing's priority for competing resources is high enough to ensure supporting activities are scheduled in its favor.

Like any new venture, the composite air/land wing at Pope Air Force Base, North Carolina, will have growing pains and the potential for disruption and temporary degradations in effectiveness may cause new problems to surface. The DoD maintains that such problems are not unmanageable and supports the joint Air Force/Army venture. Both Services are committed to ensuring deployment capabilities are not downgraded. Recent conversations with the 18th Airborne Corps revealed a positive corps attitude that relationships with the composite wing were strengthening. Available ramp space at Pope should not be a problem during rapid deployment operations. The Air Mobility Command does not have enough airlift to move both the wing and the 18th Airborne Corps simultaneously in a national emergency. The two units would move in a coordinated manner from Pope to support any contingency.

The move of the 317 Airlift Wing from Pope Air Force Base will not have an adverse impact on training for the 18th Airborne Corps or special operations units. The Air Force has formally committed to providing the 18th Airborne Corps with requisite training support capabilities. The Air Force stationing of an increased number of Air Combat Command C-130s at Pope is part of the solution, plus the agreement that the Air Force will provide additional support, as required, to ensure the training support does not drop below the agreed upon baseline. The 624th Airlift Support Group, with its operational support, aerial port functions, transient maintenance capability, and combat control support, was established to handle the 18th Airborne Corps peacetime training and contingency deployment support requirements. The Air Force is also committed to provide as many training missions as possible to support Fort Bragg special operations forces training requirements. The equivalent level of support can be met by deploying a single MC-130 or Special Operations Force capable C-130 deployed to Pope for 20 days per month. It should be noted that, with the recent U.S. Special Operations Command and Headquarters, Air Mobility Command agreements to draw down C-130 Special Operations Low Level Two capability, and with the acquisition of the Air Force Special Operations Command MC-130 fleet, responsibility will shift for the Fort Bragg Special Operations Force airlift support. The Transportation Command is in the process of changing the airlift allocation process to

ensure an appropriate level of airlift is available for the training. However, the Fort Bragg Special Operations Forces' units will now have to build their training schedule around the availability of C-130 Special Operations Low Level Two and/or MC-130 missions.

The Air Force has thought through the issue of alternative basing sites for the air/land composite wings--in particular Shaw Air Force Base, South Carolina. The key issue is how to nourish habitual training/working relationships among geographically separated units. Shaw does not provide the literally "backdoor neighbor" proximity to the supported user that Pope does. Shaw lacks the existing airborne infrastructure to support extensive airland and airdrop operations by the Army. Shaw is physically separated from the nearest Army installation by a considerable distance. While there are ranges available at a reasonable distance, those ranges do not permit simultaneous play with the Army in the air and on the ground, literally at the end of the runway, as they do at Pope. Shaw sits closer to the coast and may be more susceptible to weather problems delaying support operations than Pope. If the weather lifts, it must do so at both Pope and Shaw if the Army at Fort Bragg were to be supported under the GAO concept. Under the current concept, the weather can be bad at Shaw while Pope operations could proceed unhampered. There is also the matter of the constant waste of fuel and aircraft/aircrew time flying back and forth between the bases. That, coupled with the inability of the ground forces at Fort Bragg to immediately debrief in person with aircrews that land at Shaw immediately after practice, takes away some of Shaw's appeal.

The detailed DoD comments on the draft report findings and recommendations are provided in the enclosure. Suggested technical changes were separately provided to the GAO staff. The DoD appreciates the opportunity to comment on the GAO draft report.

Dale A. Vesser, Acting

Enclosure

See comment 8.

See comment 9.

See comment 10.

GAO DRAFT REPORT - DATED DECEMBER 14, 1992 (GAO CODE 392643) OSD CASE 9198

"AIR FORCE ORGANIZATION: MORE ASSESSMENT NEEDED BEFORE IMPLEMENTING FORCE PROJECTION COMPOSITE WINGS"

DEPARTMENT OF DEFENSE COMMENTS

FINDINGS

FINDING A: Air Force Establishment of Force Projection Composite Wings. The GAO reported that, in response to the changed security environment and reductions in defense spending, the Air Force is aggressively restructuring and creating numerous composite wings consisting of a mixture of aircraft types at one base under a single commander. The GAO noted that traditionally, the Air Force had based one type of aircraft in a wing to achieve economies of specialization. The GAO observed that the Air Force is building three composite wings from the ground up (called force projection composite wings) by assembling a specific variety of aircraft to project force in contingency situations, with the intention that the capabilities of the mix of aircraft will be sufficient for the wing to deploy rapidly and fight autonomously. The GAO reported that the Air Force is building (1) one air intervention composite wing at Mountain Home Air Force Base, Idaho, to rapidly deploy and execute autonomous air operations in a contingency area, and (2) two air/land composite wings at Pope Air Force Base, North Carolina, and Moody Air Force Base, Georgia--with the additional mission of supporting Army rapid deployment forces. The GAO noted, however, that the Air Force suspended development of the composite wing at Moody, because aircraft from Homestead Air Force Base, Florida, had to be relocated to Moody after Hurricane Andrew.

The GAO concluded that the Air Force had not provided evidence that the force projection composite wings will achieve operational benefits nor to what extent the wing capabilities will be enhanced. The GAO noted that, although the composite wings are experimental, it is the Air Force view that the initial three force projection composite wings will test the validity of the concept--and the initial results will be used to further guide and improve the concept. The GAO asserted, however, that the Air Force had not established measures of merit for the wings or criteria to use in

Enclosure

Now on pp. 2-4 and 12-13,

See comment 2.

See comment 11.

See comment 12.

See comment 13.

See comment 4.

judging the validity of the concept. The GAO also observed that the Air Force estimated that the construction costs for the wings will be over \$150 million. (pp. 1-5, 17-21/GAO Draft Report)

DOD RESPONSE: Nonconcur. The DoD does not concur with the GAO assertion that not "enough evidence" was supplied to determine the benefits for continuing to explore/implement the composite wing concept. The Air Force provided the GAO with current (peacetime) analogies and historical (combat) examples to describe benefits (Reference Finding C) that would be realized with the implementation of the composite wing structure. The Air Force analogies are not meant to be absolutes, but do highlight positive attributes of the composite wing concept.

The Air Force Chief of Staff is convinced that sufficient evidence exists to support his decision to implement the concept. In accordance with his statutory function to "organize, train, and equip aerospace forces," he has directed that air combat forces will be organized and train "the way we fight." Further, the Air Force tested the validity of the composite wing concept in Operation Desert Shield/Storm. Following a visit to the provisional composite wings operating out of Incirlik Air Base, Turkey, and Dhahran, Saudi Arabia, the GAO auditors acknowledged that the regular training accomplished by the 4404th Composite Wing (Provisional) was instrumental in the DoD smooth transition to joint/combined (Southern Watch) operations. Further, the Air Force recommendation to the 1991 Defense Base Closure and Realignment Commission--that a composite wing be established at Mountain Home AFB, Idaho--was adopted by the Department of Defense and was approved by the President and the Congress.

The GAO asserts that the Air Force has not established measures of merit or criteria to use in judging the validity of the concept. The Air Force is in the process of finalizing its measures of effectiveness; however, recent and historic examples of the composite wing concept have already proven that organizing and training as you fight leads to an efficient and effective combat force.

FINDING B: Advantages Attributed to Force Projection Composite Wings. The GAO observed that the following three characteristics essentially distinguish the force projection composite wings from traditionally based wings:

 The permanent collocation of a variety of aircraft and capabilities under one commander;

- The opportunity for aircrews and command personnel to continually practice, test, and evaluate composite force procedures; and
- The incorporation of an enhanced, deployable operations center and planning element in the wing.

The GAO reported that Air Force officials believe the force projection composite wings will provide advantages over the way they historically have deployed and operated rapid-reaction force packages, and that the advantages will result from organizing and training the wings during peacetime as they will fight during war. For example, the GAO noted that the permanent collocation of the aircraft under one commander will require less pre-conflict unit shuffling and result in reduced overall intratheater airlift needs at critical times. The GAO also noted that proponents believe commonality of parts and maintenance and support equipment will contribute to reduced deployment airlift, and that including scarce and critical aircraft in the wings, such as the Airborne Warning and Control System, would reduce their vulnerability to enemy attack.

The GAO also observed that proponents believe the composite wings will enhance esprit de corps, communications, and unit cohesion, and result in increased combat effectiveness. Finally, the GAO indicated the proponents believe the enhanced, deployable operations center will increase the commander's capacity for independent action after deployment if contact with higher headquarters is lost. According to the GAO, the enhanced operations center would include such capabilities as battle management and mission planning, target analysis, intelligence gathering and analysis, and battle damage assessment, typically provided to a deployed wing by a Tactical Air Control System resident in a higher headquarters. (pp. 22-23/GAO Draft Report)

DOD RESPONSE: Concur. The DoD concurs with the overall GAO description of the advantages attributed to the force projection composite wings.

FINDING C: Analogies Do Not Support the Need for Permanent Collocation of Aircraft. The GAO reported that Air Force officials cited five analogies as support for one or more of the advantages attributed to the wings--(1) the Navy carrier air wings, (2) the 7440th Provisional Composite Wing that operated from Incirlik Air Base, Turkey, during Operation Desert Storm and which is currently involved in Operation Provide Comfort in Iraq, (3) the 4404th Provisional Composite

Now on pp. 14-16.

Wing currently participating in Operation Southern Watch over Iraq, (4) the Composite Air Strike Force, which operated from 1955 to 1973, and (5) current composite force training exercises. The GAO found, however, that significant differences exist between the Air Force force projection composite wings and the Navy carrier air wings. The GAO observed that the carrier air wings are analogous to a deployed composite wing at sea, because they do involve collocated aircraft and command and mission elements, but once ashore, the carrier air wings are not analogous to the peacetime collocation of aircraft in composite wings, and do not provide evidence of the advantages of continually practicing, testing, and evaluating composite force procedures.

The GAO agreed that the 7440th Provisional Composite Wing--cited as an example of how an increased capacity for independent action resulted from collocating the command element with a variety of aircraft capabilities under one commander--demonstrated the effectiveness of a deployed force consisting of a wide variety of aircraft and an enhanced wing operations center at one location under one commander. The GAO found, however, that the 4404th Composite Wing also is not completely comparable to the force projection composite wings, because the 4404th aircraft are not all collocated with the command element and the command personnel/aircrews periodically rotate to their home bases. Nonetheless, the GAO concluded that the 4404th Composite Wing illustrates the Air Force's ability to operate and assemble mission packages from several locations and the benefits of allocating a variety of aircraft and capabilities to the deployed command element.

The GAO observed that the Composite Air Strike Force, a forerunner of the force projection composite wings, was designed for rapid force projection and was deployed as a composite wing under one commander; however, the Strike Force owned no aircraft. The GAO concluded that the Strike Force demonstrated the benefits of a peacetime command and control element augmented by assets that were geographically separated before training and deployment. The GAO further concluded that the Strike Force also demonstrated the disadvantage of not formally committing the non-collocated aircraft to train routinely in large-scale composite force procedures and deploy with the force projection composite wings.

The GAO noted that several analogies support the value of the current composite force training, and others indicate the benefits that may arise from a deployable, enhanced wing operations center. The GAO nonetheless concluded that the analogies do not support the need for peacetime

Now on pp. 18-24.

See comment 2.

See comment 14.

collocation of aircraft nor the necessity for continually practicing, testing, and evaluating composite force procedures. The GAO observed that the Air Force (1) currently holds more than ten large-scale composite force exercises in the continental U.S. and Canada every year, (2) routinely participates in composite force exercises with countries in other areas of the world, and (3) stresses the value of exercising composite training procedures at the wing and squadron levels. The GAO did acknowledge that numerous commanders and aircrew members who participated in Operation Desert Storm attributed the speed with which they were able to build and execute mission force packages to the lessons learned during previous such exercises. (pp. 27-39/GAO Draft Report)

DOD RESPONSE: Nonconcur. The DoD does not concur with the GAO contention that the dissimilarities noted in the analogies disprove the validity and benefits associated with implementing composite wings. The Air Force did not intend for the analogies to be definitive. Each of the analogies has similarities that the Air Force would emulate under the composite wing concept, plus a few attributes that are not relevant.

The GAO noted portions of a Navy carrier air wing training cycle where they are not "composite," and concluded that Air Force wings also do not need to form permanent composite wings. However, that reasoning is invalid, because Navy wings are not required to be prepared for short-notice deployments when they are not on the carriers. The Air Force use of the Navy example highlights the unity of command, opportunities for composite unit training, and the positive synergy of employment they exhibit, particularly when deployed at sea. Since the Air Force wing remains ready the whole year, the composite concept remains valid the whole year. No claims have been made that the Navy provides a perfect model, or that the Air Force wishes to provide land-based carrier wings.

The GAO repeated its criticism of the Composite Air Strike Force analogy. The Air Force cites the employment advantages of the Composite Air Strike Force--not the command and control structure that may have contributed to its downfall. In fact, the focus on the control of all air assets at the numbered Air Force level by the Composite Air Strike Force is precisely the problem the Air Force is trying to avoid by providing modern day composite wing commanders the organic command, control, communication and intelligence support they need at the unit level.

The DoD also disputes the GAO claim that Proven Force at Incirlik Air Base is an invalid example of a composite wing. True, the force at Incirlik is composed of units from several different bases throughout Europe.

See comment 1.

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See comment 15.

However, the proximity of those bases in peacetime allowed a great deal of tactical interchange, composite employment, and Dissimilar Air Combat Training on a routine basis--a situation that is different in the continental United States due to the greater distances between bases. Therefore, the "live together--train together" similarity pertains to a true composite wing. Additionally, the United States Air Forces in Europe had several months to plan and perfect its unified effort during Desert Shield, an opportunity that also helped overcome any "disunity" caused by monolithic basing. The GAO highlighted this as a prime reason why composite basing is unnecessary. The DoD advocates that this is precisely the reason it is necessary--the United States cannot assume that adversaries will permit the National Command Authority months to refine its planning and coordination. To provide the National Command Authority with the most responsive forces, the wings must be trained to deploy and immediately employ without additional training workup or time-intensive planning.

The GAO discussion of the second provisional wing (4404th Composite Wing Provisional at Dhahran) cites its success without collocated assets. However, the composite wing concept offers some advantages over the 4404th Composite Wing Provisional. First, the composite wing can be moved and begin operations rapidly, instead of the slower buildup required of the 4404th Composite Wing Provisional. Second, the composite wing would be able to continue its operations and react quickly during hostilities with degraded communications abilities -- a non-collocated wing finds this difficult at best. Third, the (4404th) wing commander is cited as saying non-collocation of the second provisional wing assets has "posed no significant problems." It would be optimum to have all assets collocated at the 4404th, but political realities in-country prevented that from happening. That observation applies in the benign environment the 4404th operates within--the low level peacetime operations tempo will not tax the command, control, communication and intelligence system. Highintensity combat operations would and did during Desert Storm. A composite wing will do the mission with significantly fewer problems, especially in the first hours of hostilities when other wings would still be organizing. It is the DoD position that the composite wing concept is better than the current system.

FINDING D: Force Projection Wings Will Have Limited Capabilities and Will Not Routinely Train as They Intend to Fight. The GAO found that the force projection composite wings, as currently planned, will not have many key capabilities typically included in similarly tasked forces or in large-scale composite force training. The GAO concluded that, consequently, the wings must be significantly

augmented to accomplish many of their peacetime and wartime taskings. For example, the GAO observed that the Air Force does not plan to include scarce and critical aircraft in the wings, but it does plan to provide the aircraft and other capabilities through non-collocated aircraft. Accordingly, the GAO concluded the vulnerability that results from concentrating scarce assets at a limited number of bases will not be reduced, and the force projection composite wings will be deprived of the opportunity to train routinely with them.

The GAO also found that the Air Force does not plan to formally commit the non-collocated aircraft to routinely train in large-scale composite force procedures during peacetime or deploy with the force projection wings. Therefore, the GAO concluded that, because the aircraft will not belong to the composite wings, they can be diverted in time of crisis to alternate tasks by the National Command Authority and in peacetime to tasks by higher headquarters. The GAO cited the 366th Wing at Mountain Home Air Force Base, Idaho, as an example. The GAO also indicated that the Air Force currently combines the individual capabilities of non-collocated aircraft to create composite forces without developing formal agreements between the wings--and, although the wings are designed to provide unique capabilities tailored to a particular need, the current assets of the wings do not contain all the capabilities normally included in such a force. Finally, the GAO observed that, in addition to the constraints imposed by not collocating all required capabilities, force projection wings will have limited potential for routinely practicing, testing, and evaluating composite force procedures--because of the size and location of currently available ranges. (pp. 40-43/ GAO Draft Report)

<u>DOD RESPONSE</u>: Nonconcur. The DoD does not agree with the GAO arguments concerning the non-collocated scarce/critical aircraft, formal ties/agreements being required, or the inability to train together.

The composite wings were built with core missions/capabilities in mind so that they would not require augmentation for initial deployment; although, depending on the scenario, augmentation may be desirable. The composite wing day-to-day mission is to prepare for war, specifically those scenarios for which the composite wings were built (e.g., air intervention and air/land battle). The wings will undoubtedly interact with other wings/organizations during peacetime--no one expects these wings to fight in a vacuum in either war or peace. However, their peacetime training (e.g., taskings) will undoubtedly focus on their core missions which do not require augmentation (e.g., absorption of aircraft from other wings).

Now on pp. 26-27.

See comment 1.

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See comment 1.

See comment 1.

During peacetime, the primary reason for the historical unavailability of scarce resources is that they are required for higher priority national taskings or that insufficient numbers of these assets exist to simultaneously cover all real-world contingencies, plus all available training opportunities. Basing those assets differently does not change their scarcity nor liability for tasking by the National Command Authority. "Formal agreements" devoting the scarce or critical assets to composite wing training would conflict with the reality that they may frequently be required for higher priority tasking.

During wartime, each Joint Chiefs of Staff concept plan or operations plan lists the force structure required to execute that plan. During the planning and execution of those plans, the Services consult with the Joint Chiefs of Staff to ensure the proper match of tasking versus capabilities. It is inconceivable that the National Command Authority would task the Joint Chiefs of Staff to "strip away" critical assets that are needed to execute a particular mission, whether those assets were based in a composite or a monolithic wing. Formal agreements to cover that implausible case would serve no useful purpose. In addition, the composite wing commander has the core forces he/she already needs to accomplish his/her mission. If the composite wing commander needs a scarce resource, he/she would request it as do other commanders, and the theater commander apportions those resources based on priorities. The key difference is that the composite wing commander has more capability to accomplish broader goals than the current non-composite wing commander, and thus, decreases the amount of support the composite wing commander must coordinate.

A preponderance of air intervention composite wing training requires military operating areas (airspace), not ranges. Composite wings are the premier Air Force power projection force, supporting the strategic framework, "Global Reach-Global Power," and have the full support of the Air Force Chief of Staff. As such, the composite wing priority for range time ensures that it would receive adequate training with all the listed supporting forces.

FINDING E: Including Heavy Bombers in Air Intervention Wing Is of Ouestionable Value. The GAO reported that the Air Force plans eventually to collocate a squadron of heavy conventional bombers with the air intervention wing at Mountain Home Air Force Base, but that the bomber contribution to the wing missions is questionable. The GAO observed that, although a geographically separated unit of B-52Gs at Castle Air Force Base, California, currently provides this capability, the Air Force plans to retire all conventionally equipped B-52Gs by the end of

can be adapted to the conventional role. The GAO found that basing heavy bombers at Mountain Home Air Force Base requires relocating the aircraft with electronic jamming capability currently there to make ramp space available. The GAO explained that jammer aircraft are critical support assets for mission packages, because they electronically disrupt enemy air defense radars, making all the other aircraft in the force package stealthy. The GAO pointed out that not a single U.S. Central Command aircraft was lost to enemy radar directed fire while under the EF-111 protective umbrella during Operation Desert Storm. The GAO concluded that the relocation of the jammer aircraft not only removes a critical capability from the air intervention composite wing, but also deprives the wing of routinely training with that asset. (pp. 43-46/GAO Draft Report)

1994, and is considering substituting the B-lBs, depending on whether they

DOD RESPONSE: Nonconcur. The DoD does not agree with the GAO arguments that the heavy bomber contribution--in this instance, the B-lB-to the air intervention wing is questionable. The heavy bomber's inherent capabilities--massive firepower, global reach, and high accuracy with a wide variety of munitions--give the B-IB capability across the whole spectrum of conventional conflict. Not only does the B-lB act as a force multiplier for the composite wing, it will also give the theater commander a wide variety of additional employment options, such as striking timecritical targets early in a crisis, or striking targets out of range of fighters. The B-lB contribution to a composite force package--dropping greater payloads than achievable using fighterbombers--coupled with its speed and maneuverability--allowing it to fly with Air Force fighters as an integral member of a strike package--will increase the package's survivability and effectiveness. In short, adding those unique capabilities to an air interdiction composite wing is a logical decision based on the efficient allocation of limited resources.

The DoD also does not agree with arguments concerning retaining the electronic jammer aircraft at Mountain Home Air Force Base. The EF-111 electronic combat aircraft is a force enhancement platform. It would be a beneficial adjunct should any force be required to penetrate enemy defenses, but is not mandatory. All of the fighter aircraft assigned to the Mountain Home Composite Wing have onboard systems to aid in penetrating enemy defenses, and are capable of doing so, unescorted, should the National Command Authority deem it necessary. The EF-111 electronic combat aircraft is also a high value/scarce asset. The EF-111's capability may not be required by the air intervention wing during the earliest days of a conflict, where the focus would be on establishing defensive air superiority. The theater commander would use the EF-111s

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See comment 16.

See comment 17.

to meet the needs of other users. Once the Air Force has established defensive air superiority and the need and capability to penetrate enemy defenses with large packages of aircraft, then the EF-111 electronic combat aircraft will have tremendous value as a force multiplier.

The EF-111 move from Mountain Home to Cannon Air Force Base was not accomplished to make room for heavy conventional bombers. The move consolidated the maintenance intensive EF-111 airframes with the rest of the F-111 fleet to make the unit more logistically supportable. While it is important to occasionally train with all composite force assets together, it is more important that the primary strike package assets train together frequently. The physical ramp space at any Air Force base is limited. In this case, a conscious operational decision was made to place as much of the primary strike package fighting team together as possible, with the critical supporting assets, such as the electronic jammer aircraft (EF-111s) and suppression of enemy air defense aircraft (F4Gs) based elsewhere. Consistent with lessons learned in Operation Desert Storm, the presence of EF-111s can be critical to a mission's combat success, but these aircraft tend to be employed independently of the intricate choreography of the supported strike packages. On the other hand, the Airborne Warning and Control System is a critical and direct supporting asset in that "choreography," so living and training together has greater benefits to the primary strike package players.

FINDING F: Mountain Home Range Limits Potential Composite
Force Training. The GAO reported that the Air Force acknowledges the
Mountain Home training range is incapable of supporting large-scale
composite force training. The GAO found that the training range currently
used has limited airspace for maneuvers, and access to the range is
restricted to one direction--thereby, precluding training with forces from
opposing directions, which is unlike a real combat environment. The GAO
also observed that the range does not accommodate the number of aircraft
needed for realistic composite force training exercises. Further, the GAO
noted that, in addition to the physical limitations and the environmental
concerns with the proposed range, potential difficulties exist in scheduling
routine large-scale composite force training with critical aircraft not
belonging to the wing. The GAO concluded that, without formal training
agreements covering non-collocated aircraft, there is a greater risk that the
aircraft may not be available for training.

The GAO also found that the Air Force is relocating aircraft and beginning to construct the air intervention composite wing at Mountain Home before the study is completed that will determine the ability of the wing to

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See comment 1.

See comment 1.

conduct any but the most basic composite force training. The GAO observed that, although the Governor of Idaho has proposed an alternate site to the current inadequate training range, it is contingent on the results of an environmental impact assessment--which is not scheduled for completion until October 1993. (pp. 46-49/GAO Draft Report)

DOD RESPONSE: Nonconcur. The DoD does not agree with the GAO argument that the Mountain Home training range (Saylor Creek) is inadequate for composite force training. The Saylor Creek Training Range is capable of supporting much of the day-to-day training performed by composite wings. Most military training uses a building block approach, starting with individual proficiency training and working toward large-scale exercises. The GAO noted that only 20 percent of the Mountain Home composite wing training will be composite force training, which means 80 percent will be focused on individual proficiency.

In those instances that large-scale composite force exercises are required, the Air Force would use Military Operating Areas and larger ranges like the Utah Test and Training Range or Nellis range. An example of composite force training conducted entirely outside of range airspace is the Allied Air Forces Central Europe Tactical Leadership Program. That program takes limited numbers of aircraft, both air-to-air and air-to-ground, and combines them into packages that test the capabilities of the different aircraft (e.g., defensive combat patrols, close escort, friendly line of troop penetration, and target deconfliction/timing). The final task of putting ordnance on a specific target would require a larger range like the Utah Test and Training Range or Nellis range. The requirement is not necessarily a drawback. Accomplishing large-scale composite force training at a distant base (like Nellis Air Force Base) provides an opportunity to incorporate tanker support to the mission training and would add realism to that type of training.

The proposed alternate training site (Idaho Training Range) serves to improve the quality of the composite wing training already conducted at Mountain Home Air Force Base. The Idaho Training Range is intended as a complimentary training facility, not an alternate. The existing training areas will continue to be utilized. The implication that it is unusual to have environmental concerns and possible restrictions on the Idaho Training Range is misleading. By law, any federal action requires an environmental analysis. Those analyses can result in no significant impact, or require mitigation which could also impose some restrictions on ranges. Like all of the other ranges, the Idaho Training Range is expected to have some restrictions, none of which should create significant operational constraints.

FINDING G: The Air Force Is Building Two Air/Land Force Projection Composite Wings. The GAO reported that the 23rd Wing at Pope Air Force Base, North Carolina, will support the Army 18th Airborne Contingency Corps headquartered at Fort Bragg, North Carolina, and that the 347th Wing at Moody Air Force Base, Georgia, will support the Army 24th Infantry Division (Mechanized) at Fort Stewart, Georgia. The GAO observed that the air/land wings will have transport aircraft to carry out airlift and airdrop tasks, collocated with fighter aircraft capable of air-to-air and air-to-ground operations. In addition, the GAO observed that the 23rd Wing will also include a geographically separated airborne command and control capability at Keesler Air Force Base, Mississippi.

The GAO concluded that the current ranges at Pope Air Force Base preclude large-scale joint training exercises by the force projection composite wing and the 18th Airborne Contingency Corps. The GAO observed that, although there are several ranges in North Carolina, South Carolina, and Georgia that the aircraft could use, the air/land wing would have to compete with other users for time on the ranges, in addition to expending time and fuel traveling to and from the ranges. The GAO indicated that Air Force officials maintain that Army light forces, such as the 18th Corps, tend to conduct training in small unit exercises, and that the wing can provide elements of the Corps with the opportunity to practice joint training. The GAO found, however, that because of the limited air and range space at Fort Bragg, the main large-scale joint training will take place at Fort Irwin, California, 2,800 miles away--which will require temporary duty deployment.

The GAO also reiterated that the implementation of the Moody Air Force Base composite wing has been further delayed because the Air Force had to relocate the Homestead aircraft to Moody Air Force Base after the Homestead facilities were damaged by Hurricane Andrew in July 1992. (pp. 50-52/GAO Draft Report)

DOD RESPONSE: Nonconcur. The GAO states that the lack of sufficient airspace at Pope Air Force Base precludes large-scale exercises, but offers no evidence that the 18th Airborne Corps has the ground maneuver area in the Pope Air Force Base-Fort Bragg complex to support such exercises. The GAO also fails to define the scope of a "large-scale" exercise. Even if the GAO assertion were correct, it follows that unless additional range space is obtained, the 18th Airborne Corps (the primary user) will always have to meet its large-scale requirements with offstation deployments. Therefore, the 18th Airborne Corps will continue to incur those temporary

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duty deployment costs regardless of the presence--or lack of--a composite wing at Pope.

The majority of the training conducted by the 18th Airborne Corps at Fort Bragg is on the small unit scale. The positioning of the force projection composite wing at Pope Air Force Base provides the 18th Airborne Corps the opportunity to conduct composite/joint operations (including increased and readily available close air support training) tailored to the Pope Air Force Base-Fort Bragg airspace, range, and maneuver areas.

However, Fort Irwin is not the only potential location for elements of the 82nd Airborne Division and the 23rd Wing to engage in large-scale joint training. Should the Army desire, this team could participate with other forces in exercises at Fort Campbell, Kentucky; Fort Stewart, Georgia; or Fort Drum, New York; all of which are well within a one-day flight from Pope Air Force Base.

Finally, the GAO argument that the force projection composite wing would have to compete with other range users for large-scale training exercises, does not take into consideration that as the military downsizes, there will be fewer users competing for the limited training opportunities, or that the composite wing priority is sufficient to compete successfully for training time on the ranges.

FINDING H: The Pope Wing Could Adversely Affect Army and Special Operations Units. The GAO found that the establishment of the air/land composite wing at Pope Air Force Base may adversely affect the current training and deployment capabilities of Army rapid response forces and U.S. Special Operations Command units at Fort Bragg. According to the GAO, the Air Force unilaterally decided to establish an air/land force projection composite wing at Pope Air Force Base without requesting input from the Army or assessing alternatives. The GAO observed that Pope previously had been a Military Airlift Command installation with a special mission for the Army--to provide peacetime airlift for the training of the rapid deployment forces at Fort Bragg. The GAO noted that, although Air Force officials indicated the wing at Pope will not affect the amount of joint training provided or the rapid deployment of the Army forces, a recent Army analysis has concluded that permanently basing F-16 aircraft at Pope will result in major degradation of the training capability at Fort Bragg--because the aircraft would take off and land across Army training ranges, thereby disrupting live-fire training exercises. The GAO also observed that permanently basing fighter aircraft at Pope may degrade the Army "no notice" deployment capability, because the fighter aircraft

See comment 1.

See comment 3.

need to halt range operations during aircraft emergencies. Such procedures can be incorporated into the memorandum of agreement covering fighter flight operations that is specified in the Commander-in-Chief, Forces Command, Commander-in-Chief, U.S. Transportation Command, and Commander, Air Combat Command, letter of agreement.

The GAO makes an unsubstantiated assertion that "optimistic assumptions" were used on the recently concluded joint Air Force-Army deployment study. The study was, in fact, based upon assumptions and parameters that were mutually developed and agreed to by both Army and Air Force representatives. The study results were briefed to the respective four star commanders, and did not include "optimistic assumptions" that put the 18th Airborne Corps' rapid deployment capability at risk. The briefing was received prior to the completion of the Commander-in-Chief, Forces Command, Commander-in-Chief, U.S. Transportation Command, and Commander, Air Combat Command, letter of agreement dealing with 18th Airborne Corps support. It would be reasonable to assume the Commander-in-Chief, Forces Command, would not have concurred with the agreement had significant doubts existed as to the study's reliability.

The previously mentioned letter of agreement reflects a mutually acceptable arrangement that assures continued levels of training and rapid deployment support for the 18th Airborne Corps with the formation of the Pope Air Force Base composite wing. In that agreement, the Air Force has formally committed to providing the 18th Airborne Corps with requisite training support capabilities. The stationing of an increased number of Air Combat Command C-130s at Pope is part of the solution, plus the agreement that the Air Force will provide additional support as required to ensure the training support does not drop below the agreed-upon baseline. The 624th Airlift Support Group, with its operational support, aerial port functions, transient maintenance capability, and combat control support, was established to handle the 18th Airborne Corps peacetime training and contingency deployment support requirements.

The Air Force is committed to provide as many training missions as possible to support Fort Bragg special operations forces' training requirements. The equivalent level of support can be met by deploying a single MC-130 or Special Operations Force capable C-130 deployed to Pope for 20 days per month. It should be noted that, with the recent United States Special Operations Command and Headquarters, Air Mobility Command agreements to draw down C-130 Special Operations Low Level Two capability, and with the acquisition of Air Force Special Operations Command's MC-130 fleet, responsibility will shift for the Fort Bragg Special

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See comment 1.

Operations Force's airlift support. There may be some degradation in joint Air Force-Army Special Operations Force training during this transition. The U.S. Transportation Command is in the process of changing the airlift allocation process to ensure that an appropriate level of airlift is available for the training. However, the Fort Bragg Special Operations Forces' units will now have to build their training schedule around the availability of C-130 Special Operations Low Level Two and/or MC-130 missions.

The GAO proposal of Shaw Air Force Base as an alternative basing option is not acceptable to the DoD. The principal reason for stationing the air/land composite wing at Pope is to facilitate habitual training/working relationships through daily interaction between Army and Air Force personnel--both fighter and transport aircrews. Such peacetime affiliation would foster an understanding of capabilities and limitations between air and ground units. Any other means of basing the forces to comply with the GAO logic (e.g., fighters at Shaw and C-130s at Pope) would mean splitting the composite wing into monolithic increments, thus cancelling out the expected benefits.

Relocation of the entire composite wing to Shaw Air Force Base--including the 23rd Wing's C-130s--would pose additional problems/disadvantages. First, it would represent a decrease in readily-available airlift support for the Army, which the Army would likely oppose. Shaw lacks the existing airborne infrastructure to support extensive Army airland/airdrop operations. Additionally, any Army airdrop outside of the Fort Bragg complex would require the Army to retrieve and return its personnel, thus impacting training schedules and costs. The nearby ranges cited by the GAO do not permit simultaneous air-ground training with the Army. Different weather patterns at Pope and Shaw could impact flight operations and exercise flow. It would be more difficult to accomplish face-to-face debriefs between aircrews and Army personnel, and would lengthen aircrew duty days.

RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to take no further steps to implement the force projection composite wings until the benefits of the wings planned for Mountain Home, Pope, and Moody Air Force Bases have been

See comment 8.

would either need to deploy first or temporarily evacuate the base to make room for incoming airlift aircraft needed for deployment. The GAO also noted that a recent Army and Air Force paper indicated joint deployment may be possible under optimistic assumptions, but that the capability has not been demonstrated.

The GAO also reported that, by building the wing before all options are identified and analyzed, the Air Force runs the risk of unwisely spending public funds and foreclosing potential alternatives. The GAO concluded that an air/land wing based at Shaw Air Force Base, South Carolina, would provide the Air Force with a similar capability and minimize Army concerns about degradation of current training levels and deployment capability at Pope Air Force Base. The GAO also concluded that the total cost of the improvements necessary to base an additional squadron of fighter aircraft at Shaw would be about \$10 or \$15 million, about one-fourth of the 1993 funding related to the Pope Air Force Base projection composite wing. (pp. 53-58/GAO Draft Report)

DOD RESPONSE: Nonconcur. There are "growing pains" associated with any new venture--the establishment of the Pope air/land composite wing is no different. Although the Air Force made a unilateral decision in the beginning, the Air Force and Army have been working to find mutually acceptable solutions, and the work is starting to yield results. The GAO was previously informed that joint efforts were underway; yet, the report downplays such activity and highlights only "potential" problems, identified early in the beddown process, that have since been resolved, or are on their way toward resolution.

The GAO assertion that placement of fighter aircraft at Pope occurred without prior knowledge or notification is misleading. The implementation planning for the move was considered during the internal DoD Base Closure process, in which all Services participated. The proposal to move A/OA-10s from Myrtle Beach Air Force Base, South Carolina, to Pope Air Force Base was also included in the 1991 Department of Defense Base Realignment and Closure recommendations that were publicly announced on April 12, 1991 and publicly reviewed over the next 5 months.

The GAO also implies that normal F-16 take-off and landing operations will shut down Army live-fire training. Only during aircraft in-flight emergencies, when weather conditions require aircraft to land on runway 05, will live-fire training be halted. This is an infrequent occurrence, not a standard operating condition. Efforts are underway to align the runway 05 instrument landing system to further minimize the

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Now on p. 44.

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analyzed relative to the associated costs and the disruptive consequences have been identified. (p. 60/GAO Draft Report)

DOD RESPONSE: Nonconcur. The Chief of Staff of the Air Force--under his charter to organize, train, and equip aerospace forces--determined that recent operational experience and historic evidence validate the composite wing concept and warrant its implementation in peacetime. During the 1991 base closure process, the recommendation to establish a composite wing at Mountain Home Air Force Base, Idaho, was adopted by the Department of Defense and the Defense Base Closure and Realignment Commission, and approved by the President and the Congress. As a consequence of the closure of Myrtle Beach Air Force Base, South Carolina, the Commission also endorsed a composite wing of C-130s and A/OA-10s at Pope Air Force Base, North Carolina. The Air Force is implementing those actions. The Mountain Home and Pope composite wing implementations are at a point where freezing further action would be counter-productive. In the near future, both the Air Force and the Congress will have the opportunity to evaluate the composite wing cost and military effectiveness issues once fully-functional, permanentlyestablished organizations are in place. Composite wing data, as with other Air Force activities, will be provided to the Congress through established reporting procedures.

RECOMMENDATION 2: The GAO recommended that the Secretary of the Air Force ensure that the results of the analysis are made available to the Congress for consideration during debate on any future budget requests or reprogramming actions related to the force projection composite wings. (p. 60/GAO Draft Report)

DOD RESPONSE: Partially concur. Per recommendation #1, the Air Force would provide composite wing data through normal reporting procedures. The Air Force provides justification books with its annual budget submission, which list composite wing military construction projects. Previous justification books have already contained narratives outlining the changes to the operations and maintenance due to composite wing activities. It is the DoD position that a special analysis by the Air Force is not necessary.

RECOMMENDATION 3: The GAO recommended that, as part of the analysis, the Secretary of the Air Force should establish criteria for assessing the operations of the composite wings at Mountain Home, Pope, and Moody Air Force Bases and for evaluating the validity of the composite wing concept. (p. 60/GAO Draft Report)

See comment 4.

Now on p. 44.

See comment 1.

Now on p. 44.

POD RESPONSE: Partially concur. The Air Force routinely develops evaluation criteria to assess the effectiveness of its various organizations and operations. Criteria for assessing the operations of the Air Force composite wings are being refined by the Joint Studies Group at the Air Combat Command. These measures will be implemented as part of a continuous commitment to improve the concept, based on actual experience. It is anticipated that the Air Combat Command Joint Studies Group will complete its proposed composite wing measures of effectiveness and evaluation criteria in April 1993. They will then be reviewed by the Commander of the Air Combat Command and approved by the Chief of Staff of the Air Force. An additional analysis is not necessary.

RECOMMENDATION 4: The GAO recommended that the Secretary of the Air Force compare the costs and benefits that would be achieved by integrating an enhanced, deployable wing command element into existing composite training against the benefits to be achieved by the force projection composite wings. (p. 60/GAO Draft Report)

DOD RESPONSE: Nonconcur. The DoD, including the Department of the Air Force, continually compares costs associated with any endeavor. The GAO recommendation correctly recognizes the importance of the command, control, communications, and intelligence element in composite force However, it misses the fact that composite force operations result from the integrated efforts of many agencies--aircrews, maintainers, supply personnel, etc. That is the rationale behind the current initiatives to give the Air Force warfighting wing commanders--whether composite or monolithic--all the basic tools needed to train together in peacetime and successfully carry out their wartime tasking. The composite wing concept emphasizes an immediately-available, packaged force capability that can rapidly deploy and employ aerospace power. Given sufficient time, a nonmissionized composite wing could be formed around a stand-alone, generically trained command, control, communication, and intelligence element; however, this is no substitute for the capabilities offered by the composite wing.

RECOMMENDATION 5: The GAO recommended that, if the Air Force determines that force projection composite wings should be implemented, before further action is taken to implement the wings, the Secretary of Defense direct the Secretary of the Air Force to commit formally aircraft with scarce and critical capabilities to the force projection wings to ensure that the capabilities train and deploy, if required, with the wings.

(p. 60/GAO Draft Report)

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See comment 22.

Now:on p. 45.

DOD RESPONSE: Nonconcur. Formal commitment of the resources are not necessary or required--the Air Force is committed to training and deploying required forces. The composite wings, under current plans, possess the core capabilities needed to execute their missions. Optimally, all aircraft assets required for a particular mission should be assigned to the wing--whether composite or monolithic. Those "scarce and critical" capabilities, while a valuable adjunct to the wings, are not a required core capability. The Air Force is currently undergoing significant force structure realignments that must account for the requirements of all users, including the missionized composite wings. In any case, the "formal" assignment of these assets to the composite wings will not reduce their liability for tasking by the National Command Authority to support higher priority missions.

RECOMMENDATION 6: The GAO recommended that, before further action is taken to implement the wings, the Secretary of Defense direct the Secretary of the Air Force to examine the feasibility of retaining jammer aircraft at Mountain Home Air Force Base as part of the air intervention wing, instead of eventually collocating heavy conventional bombers with the wing. (p. 61/GAO Draft Report)

DOD RESPONSE: Nonconcur. The Air Force Chief of Staff has determined that jammer (EF-Ill) aircraft are an essential adjunct to composite wings, as are conventional heavy bombers. It is not true that the Air Force has made a choice between either jammer aircraft or heavy bombers at Mountain Home Air Force Base. First, the jammer aircraft were not moved to make room for the heavy conventional bombers. Second, the Air Force is not engaged in a jammer versus heavy bomber stationing controversy at Mountain Home. Therefore, there is no need for the Secretary of the Air Force to re-examine jammer versus heavy bomber stationing options at Mountain Home. As mentioned in the DoD response to recommendation 5, the Air Force is engaged in a wide-ranging force restructuring effort. The needs of the composite wing will be addressed during the course of the restructuring process.

RECOMMENDATION 7: The GAO recommended that, before action is taken to implement the wings, the Secretary of Defense direct the Secretary of the Air Force to assess other potential locations for the Pope Air Force Base air/land wing to determine if the same degree of advantage can be achieved, and ensure that the Army and U.S. Special Operations Command concerns related to the air/land composite wing at Pope Air Force Base have been resolved. (p. 61/GAO Draft Report)

See comment 23.

DOD RESPONSE: Nonconcur. The principal reason for stationing the air/land composite wing at Pope Air Force Base is to facilitate habitual training/working relationships through daily interaction with the Army's premier rapid deployment force and the Air Force personnel who will support it. A joint Commander-in-Chief, Forces Command, Commander-in-Chief, U.S. Transportation Command, and Commander, Air Combat Command, letter of agreement, effective November 25, 1992, addresses Army readiness and rapid deployment concerns and their resolution. Responsibility will shift for the Fort Bragg Special Operations Forces airlift support as the result of a recent U.S. Special Operations Command-Headquarters, Air Mobility Command agreement to draw down C-130 Special Operations Low Level Two capability as the Air Force Special Operations Command fields its MC-130 fleet. There may be some degradation in joint Air Force-Army Special Operations Force training during this transition. The U.S. Transportation Command is in the process of changing the airlift allocation process to ensure that an appropriate level of airlift is available for this training. However, the Fort Bragg Special Operations Forces units will now have to build their training schedule around the availability of C-130 Special Operations Low Level Two and/or MC-130 missions.

GAO Comments

- 1. We have addressed this comment in the report text.
- 2. The examples and analogies demonstrated one or more of the benefits attributed to the force projection composite wings, but they do not demonstrate that the optimal way to achieve these benefits is through establishing the types of wings being established at Pope and Mountain Home Air Force Bases (AFBs).
- 3. We have addressed this comment in the report text.
- 4. We have revised the report language on the basis of this comment.
- 5. As of January 1993, F-15E pilots were focusing on air-to-ground training and receiving minimal training in air-to-air combat so that they can defend themselves against enemy fighter aircraft while they are performing their air-to-ground mission. This minimal training does not qualify F-15E aircrews for offensive counter air operations but does provide them self-protection capabilities.
- 6. Until January 1993, the Air Force planned for the F-15E aircraft to eventually perform the suppression of enemy air defense role; however, the decision on what aircraft will fulfill that role is currently being reevaluated. In the meantime, the Air Force plans to provide the suppression of enemy air defense capability to the wing by off-station assets such as the Air National Guard F-4Gs at Boise, Idaho, and the EF-111s to be based at Cannon AFB, New Mexico. The F-4Gs are not part of a formal training commitment, participation in the training is irregular, and frequently the same aircrews do not attend. There will be considerable expenditure of time and fuel for the EF-111s to routinely train with the wing if they are based at Cannon AFB.
- 7. The most recent available information indicates that the Army's concerns about the adverse effects on deployability have not been resolved. For example, a January 15, 1993, letter addressed to the Deputy Chief of Staff for Operations and Transportation, Air Mobility Command, from the Director of Operations, U.S. Army Forces Command, referred to the inordinate amount of time spent in reaching previous agreements and cited the lack of progress being made in coming to closure on the structure of the 624th Airlift Support Squadron.
- 8. Language in the draft report on an alternate location for the air/land composite wing was clarified to reflect our suggestion of locating the

wing's fighter aircraft and command element at Shaw AFB or Seymour Johnson AFB and the wing's transport aircraft at Pope AFB. As noted in the report text, there might be some operational difficulty in commanding a wing with assets in two locations, and the Air Force perceives that the optimal habitual interactive relations with the Army might not be attained. However, this alternate basing structure would allow Pope AFB to remain dedicated to providing training and deployment support to the Army.

- 9. The conditional nature of this assertion is surprising given the importance of weather to flight operations.
- 10. The Department of Defense has expressed concern about constantly wasting fuel and aircraft/aircrew time flying the wing's fighter aircraft 120 miles between Shaw AFB and Fort Bragg. However, this concern appears to be inconsistent with the Department's acceptance of the greater expenditure of fuel, aircraft/aircrew time, and other costs associated with flying all the gained scarce and critical aircraft to the bases for any training with the wings. For example, the EF-111s will be required to fly approximately 1,000 miles between Mountain Home AFB and Cannon AFB to train with the air intervention wing.
- 11. We have incorporated in the report text our concerns over the lack of sufficient analysis and evidence supporting the decision to build the force projection composite wings. Moreover, the Secretary of the Air Force, not the Air Force Chief of Staff, is statutorily authorized to organize, train, and equip the Department of the Air Force. The Air Staff, with the Air Force Chief of Staff as its senior member, is statutorily tasked to perform such duties under the authority, direction, and control of the Secretary.
- 12. No such acknowledgement was warranted or made; rather, we reported that the 4404th Composite Wing currently conducts composite force training once or twice a month and that the commander believed that the noncollocation of assets had presented no significant problems.
- 13. The Base Closure and Realignment Commission's approval of the composite wing at Mountain Home AFB did not indicate the Commission's evaluation and endorsement of enhanced operational effectiveness. At issue here is not the physical aspects of establishing force projection composite wings but rather their relative capability and value.
- 14. Navy carrier wings are characterized by more unity of command than the force projection composite wings. Unlike the commander of a

composite wing, the commander of the carrier air wing has under his command all the assets needed for planning and executing autonomous air operations, including the scarce assets that must augment the Air Force's composite wings (e.g., suppression of enemy air defense and airborne warning and control system aircraft). While a particular carrier wing is not constantly deployed, the Navy has carrier wings deployed at all times. Further, the Composite Air Strike Force and other analogies show that the Air Force can maintain a desired readiness and the capability to rapidly deploy composite forces without previously collocating assets.

- 15. In response to a request for support for this statement, the Department of Defense did not provide (1) any analysis or evidence that a composite wing would execute a mission with significantly fewer problems in the first hours of hostilities or (2) any comparison of force projection composite wing operations with wings under the former basing system.
- 16. The Department's comments provide no information beyond what is already incorporated in the report text concerning heavy conventional bombers.
- 17. While fighter aircraft have on-board jamming systems, we previously expressed concerns about their ability to penetrate enemy air defenses successfully if unescorted by jamming aircraft such as the EF-111. Our report entitled Electronic Warfare: Need to Strengthen Controls Over Air Force Jammer Programs (GAO/NSIAD-90-168, July 11, 1990) concluded that the Air Force had procured jammers prematurely without adequately testing their performance capability, resulting in the procurement of jammers with limited effectiveness. When the jammers were produced, none were capable of protecting aircraft as required.
- 18. The discussion of training range potential described the constraints on training at Pope AFB and illustrated that, for the purposes of conducting large-scale joint training, Pope AFB does not offer any advantage over Shaw AFB or Seymour Johnson AFB as the home of the air/land composite wing or the fighter aircraft and command element of that wing. Wherever the air/land wing is located, in order to participate in large-scale joint training, both the wing and the XVIII Airborne Corps will have to deploy to another location.
- 19. The Air Force Chief of Staff characterized the decision to locate an air/land composite wing at Pope AFB to support the Army as "top-down" and unilateral. Further, he stated that the Army should have been involved

in the decision much earlier. He also acknowledged that the Air Force is playing "catch-up" in trying to alleviate the Army's concerns related to the affects of the air/land wing on training and deployability of Army components based at Fort Bragg. As discussed in the report text, the unilateral nature of the basing decision is the reason for a number of the implementation problems at Pope AFB, and the composite wing is not being created in response to a direct need expressed by the Army.

- 20. We have clarified our report language to address this point. However, we also note that the basing of F-16 aircraft at Pope AFB was not included in the 1991 Department of Defense Base Realignment and Closure recommendations.
- 21. In the current climate of budgetary austerity, Congress must be able to ensure that the Department of Defense and the services are managing their funding to the greatest effect. Because the Department has not demonstrated the validity and attainability of the benefits attributed to the force projection composite wings, Congress needs information in addition to that traditionally furnished in budget justification books.
- 22. Significant construction costs would be associated with collocating heavy conventional bombers at Mountain Home AFB. Significant costs would result from maintaining logistical support for EF-111s at that base or from relocating the EF-111 aircraft and electronic range equipment to Cannon AFB. Because of the questions raised concerning the relative value of the capabilities these aircraft would bring to the composite wing, the Air Force should examine the feasibility of retaining EF-111 aircraft at Mountain Home AFB.
- 23. Our recommendation that alternate locations for the air/land composite wing be explored results from concern over the costs associated with establishing that wing and potential effects on the Army's training and deployment. At question is whether the Air Force should pay significant beddown costs to base the wing's fighter aircraft at Pope AFB, or should accommodate the perceived less than optimal interactive relationships and a degree of difficulty resulting from locating these aircraft at, for example, Shaw AFB, 20 minutes away by air.

Major Contributors to This Report

National Security and International Affairs Division Washington, D.C.	Brad H. Hathaway, Associate Director John K. Harper, Assistant Director W. Bennett Quade, Evaluator-in-Charge Jacqueline E. Snead, Evaluator
Far East Office Honolulu, Hawaii	Raymond M. Ridgeway, Evaluator-in-Charge Brian J. Lepore, Site Senior
Norfolk Regional Office	Richard G. Payne, Regional Management Representative Gaines R. Hensley, Technical Adviser Brenda M. Waterfield, Technical Adviser

Glossary

Aerial Refueling	The capability to refuel combat and combat support aircraft in flight, which extends presence, increases range, and allows air forces to bypass areas of potential trouble.					
Air Interdiction	Air operations conducted to destroy, neutralize, or delay the enemy's military potential before it can be used effectively against friendly forces at such distance from those forces that detailed integration of each air mission with the fire and movement of friendly troops is not required.					
Airlift	Operations conducted to transport and deliver forces and material in support of military objectives through air and space.					
Air Superiority	The degree of dominance in the air battle of one force over another, which permits the conduct of operations by the former and its related land, sea, and air forces at a given time and place without prohibitive interference by the opposing force.					
Air-to-Air Operations	Air assets employed against enemy air assets.					
Air-to-Ground Operations	Air assets employed against enemy ground based installations, munitions, and capabilities.					
Close Air Support	Air action against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces.					
Command and Control	The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.					
Composite	The integrated use of multiple disciplines of one service, such as teams with many types of complex weapons or the combination of attack,					

Glossary

	fighter-escort, and electronic warfare aircraft needed to conduct a mission.
Conventional	Military organizations, hostilities, and hardware that exclude nuclear, biological, or lethal chemical weapons.
Defensive Counter Air Operations	Operations mounted to protect assets from enemy air attack through both direct defense and destruction of the enemy's air attack capacity in the air
Dissimilar Air Combat Training	Training in air combat procedures with another type of aircraft acting as an adversary and focused on developing individual competencies in a particular aircraft.
Electronic Combat	Actions taken in support of military operations against the enemy's electromagnetic capabilities, which include electronic warfare; elements of command, control, and communication countermeasures; and suppression of enemy air defenses.
Offensive Counter Air Operations	Operations mounted to destroy, disrupt, or limit enemy air power as close to its source as possible.
Reconnaissance	A mission undertaken to obtain, by visual observation or other detection means, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.
Search and Rescue	The use of aircraft, surface craft, submarines, specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea.
Strategic Defense	Operations mounted to provide a timely, reliable, and unambiguous tactical warning, attack assessment, and ultimately, damage limitation; it is divided into the areas of atmospheric defense, ballistic missile warning, and space defense.

Glossary

Suppression of Enemy Air Defense

Activities that neutralize, destroy, or temporarily degrade enemy air defenses in a specific area by physical attack and/or electronic warfare.

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