

**GAO**

**Testimony**

Before the Subcommittee on Military Personnel  
Committee on Armed Services, House of Representatives

---

For Release on Delivery  
10:00 a.m., EST  
Thursday,  
March 4, 1999

**MILITARY PILOTS**

**Observations on Current  
Issues**

Statement of Mark E. Gebicke, Director  
Military Operations and Capabilities Issues, National  
Security and International Affairs Division



---

---

---

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to be here today to discuss our preliminary findings and observations from work on pilot shortages, which we are doing at the request of this Subcommittee. Pilot shortages pose significant challenges because each pilot replacement, according to service data, costs the Department of Defense (DOD) up to \$6 million in training and requires years of investment in training time and experience.

Today, I will discuss (1) the validity of pilot requirements, (2) the extent of the reported shortages and where they exist, (3) the key factors contributing to pilot shortages, (4) the services' plans for correcting such shortfalls, and (5) other steps that could be taken to address the problem. My focus will be on pilots in the Air Force and the Navy, because these two services are reporting the most critical shortages. Let me emphasize that this information is preliminary in nature in that we are continuing to explore these issues.

---

## Summary

The extent of pilot shortages is unclear due to questions over the validity of pilot requirements and the availability of the data on which the shortages are based. Currently, the services are reporting that they are able to fill all of their operational flying positions but are unable to fill all of their nonflying staff positions that are designated for qualified pilots. The seriousness of these shortages is unclear because the services have not made comprehensive assessments of their nonflying positions to determine how many of these staff positions might not have to be filled by pilots. The services report that 20 to 40 percent of their pilot positions are designated as nonflying positions. Notwithstanding difficulties with the requirements, the Air Force projects that its greatest shortfall, particularly within its fighter community, will occur in fiscal year 2007 and then taper off. Navy data indicate that the Navy may have already experienced its greatest pilot shortfall, particularly within its helicopter community, in fiscal year 1998, and that its pilot shortage will gradually dissipate although not disappear.

Two key factors have contributed to the reported pilot shortfalls. First, during the drawdown in the 1990s, the services reduced their pilot accessions. This action has unintentionally resulted in insufficient numbers of pilots to support the current force and is driving the need to retain more pilots. Second, pilots are unhappy with a number of quality-of-life factors that are causing them to consider leaving.

---

The issue of pilot shortfalls is multi-faceted, and no single step will solve the problem. The services are taking steps to address the shortfalls. For example, all of the services are filling their flying positions first and then their nonflying positions on a priority basis. The Air Force is trying to encourage pilots to stay until retirement through a new initiative to ease the transition from military service to civilian employment. The Army has recently begun to offer a bonus to its Apache helicopter pilots. The services will need to continue to explore a variety of innovative approaches to alleviate any projected shortfalls. Among the possible solutions, the services may wish to review the aviator bonus system and pilot assignments. However, before the services take additional steps, they need to (1) reassess whether pilots are truly needed to fill all of the nonflying positions currently designated for pilots and (2) refine their data to ensure that they have a full understanding of the scope and nature of any identified pilot shortages.

Before I discuss each of these issues, let me first provide you with some additional background about military aviators and their career paths.

---

## Background

DOD's aviator community consists of pilots, who actually fly the aircraft, and navigators, whose responsibilities include tracking an aircraft's position along an intended flight path. (The Navy and the Marine Corps refer to their navigators as naval flight officers.) At the beginning of fiscal year 1999, DOD had about 28,000 active duty commissioned and warrant officer pilots.<sup>1</sup> These include approximately 13,300 pilots in the Air Force, 6,600 pilots in the Navy, 4,800 warrant officer pilots in the Army, and 3,400 pilots in the Marine Corps. The Army is the only service that uses warrant officers. In addition, there are approximately 5,000 navigators in the Air Force, 3,400 navigators in the Navy, and 300 navigators in the Marine Corps.

All pilot candidates must complete basic flight training to earn their initial qualifications, or wings. This course of instruction typically lasts 1 year, and upon graduation, each new pilot currently incurs a commitment to serve an additional 6 to 8 years of aviation service (the Air Force will raise the commitment to 10 years beginning in fiscal year 2000). Pilots can also incur other obligations to serve in the military at various points in their

---

<sup>1</sup>This figure does not include pilots beyond paygrade O-5. It also does not include student pilots who are in basic flight training and have not earned their wings.

---

military careers, usually for shorter periods of time, for such things as accepting orders to new assignments or attending particular schools.

Upon earning their wings, pilots begin to receive aviation career incentive pay, commonly referred to as flight pay, which was designed to attract and retain officers in a military aviation career. The amount of flight pay starts at \$125 a month and peaks at \$840 a month for a pilot with 14 to 22 years of aviation service. After 22 years, the amount gradually decreases to \$250 a month.

Once pilots complete their initial aviation commitment, the services are authorized to offer bonuses, called aviation continuation pay, to encourage them to continue in their military career beyond the initial aviation obligation. The services have offered this incentive even in those cases where pilots have already incurred an additional obligation to serve the military for a few more years.<sup>2</sup> Until September 30, 1999, current law authorizes the services to pay aviation continuation bonuses of up to \$25,000 to pilots for each year of additional commitment if they have completed between 6 and 13 years of active duty and agree to remain on active duty to complete 14 years of commissioned service. Currently, the Air Force offers \$22,000 per year to all pilots with the required years of aviation service who sign a commitment for 5 years and smaller dollar amounts to those who sign a commitment for 1, 2, or 3 years. The Marine Corps offers \$12,000 a year to pilots in targeted aircraft specialties. The Navy targeted its aviation continuation pay bonuses in the past but is now offering a flat 2-year bonus of \$12,000 per year to all eligible pilots. The Army began offering aviation continuation pay for the first time in fiscal year 1999. Currently, the Army is offering \$12,000 a year to Apache helicopter pilots.

The services take several factors into account when they determine their flying and nonflying pilot requirements. For example, Defense guidance defines the missions upon which the services are to establish their operational requirements. From this guidance, the services calculate the structure of their squadrons and the number of crews for each aircraft by considering such things as the frequency and duration of sorties, time to repair aircraft and conduct routine maintenance, and crew rest time. The

---

<sup>2</sup>We previously reported on the aviation continuation pay bonus in our report entitled Aviation Continuation Pay: Some Bonuses Are Inappropriate Because of Prior Service Obligations (GAO/NSIAD-95-30, Oct. 14, 1994).

---

services consider a number of other factors to determine their nonflying requirements. These factors include requirements to send pilots to joint duty assignments, assignments to the Office of the Secretary of Defense, staff positions for career enhancement, and pilot instructor positions. In addition, the services calculate that a certain percentage of their pilots will not be available for assignment at any given point in time due to factors such as education and training, medical conditions, and transfers between assignments.

Generally, DOD pilots follow career paths that require them to serve in both cockpit and staff positions. DOD's pilots, whether assigned to flying or nonflying positions, are eligible to receive both aviation career incentive pay and aviation continuation pay, provided they meet the other eligibility criteria.

---

## Pilot Requirements Have Not Been Fully Validated

Two factors must be kept in mind in considering the extent of the reported pilot shortages. First, the services have not fully validated their requirements, and second, service data to document the extent of the shortages is in many instances not readily available.

Pilot requirements, which include both flying and nonflying positions, may not be accurately stated. The services report that they can fill their flying positions and that, as a result, their shortages are occurring almost exclusively in their nonflying staff positions. However, the services have not comprehensively assessed all of these nonflying positions to determine whether they truly need to be filled with military pilots. Currently, the services report that about 20 to 40 percent of all pilots, depending on the service, serve in nonflying positions.<sup>3</sup> If some of these positions could be filled with other personnel such as retired military personnel, DOD civilians, and contractors with the required aviation expertise, the services' pilot requirements, and thus the shortages, could be reduced. It is also possible that aviation expertise, while desirable, might not be absolutely necessary for some positions. In such cases, other non-aviator military

---

<sup>3</sup>One of the reasons for the variance is that the services report their nonflying positions differently. According to Air Force data, the percentage of pilots in nonflying positions has been less than 22 percent for the past 7 years, and is projected to stay relatively constant at slightly more than 20 percent in the future. Navy data for fiscal year 1998 show that approximately 27 percent of its pilots and naval flight officers are serving in nonflying positions, both in shore billets and in ships. Although the Marine Corps has the smallest number of pilots, its data show that it has the highest ratio of pilots in nonflying positions, at 40 percent. Nonflying positions are not as great a factor for the Army because it relies heavily on warrant officer pilots who mostly serve in "fly-only" careers.

---

personnel could replace the pilots holding the positions. The Air Force, for example, told us that it currently prepares justifications to demonstrate why pilots should fill these positions. However, when pilots are in short supply, it might be more appropriate to justify why such positions cannot be filled by personnel other than pilots. In 1997, we recommended that the services review their requirements for pilots to serve in all of these nonflying positions.<sup>4</sup> During the course of our work, the Air Force told us that it has prioritized its staff positions and filled those with the highest priority. However, the remaining vacant positions are still included as pilot requirements. We have found no evidence that any of the services have reassessed their nonflying positions, as we previously recommended.

We are not implying that only flying positions should be considered in determining total pilot requirements. Nonflying positions serve several purposes. First, nonflying positions can serve to broaden aviators professionally and prepare them for leadership positions. Second, these positions can also serve to combat cyclical drops in retention. The Air Force, in particular, has used this pool of personnel to compensate for periods of reduced retention. Last, more military pilots increase the pool available to fly more missions and alleviate the operating tempo problems.

In addition to our concerns about pilot requirements, we are not sure that the services have based their reported shortages on reliable data. The Air Force has routinely provided us with data. However, officials in the Army and the Navy told us that they did not have readily available data on requirements and pilot inventory. For example, the Navy produced different sets of data showing fiscal year 1998 shortages ranging from 321 to 1,153 pilots. We are working closely with Navy officials to resolve these discrepancies. In this statement, we are relying on the most recent data provided. We will continue to work with the services to resolve our data concerns. Furthermore, with the exception of the Air Force, the services were unable to provide us with historical and projected data on flying and nonflying positions.

---

<sup>4</sup>DOD Aviator Positions: Training Requirements and Incentive Pay Could Be Reduced (GAO/NSIAD-97-60, Feb. 19, 1997).

---

---

## The Reported Shortages Are Most Critical in the Air Force and the Navy

Of all the services, the Air Force and the Navy are reporting the greatest shortages. Within these two services, the shortages are more apparent in some pilot specialties than in others.

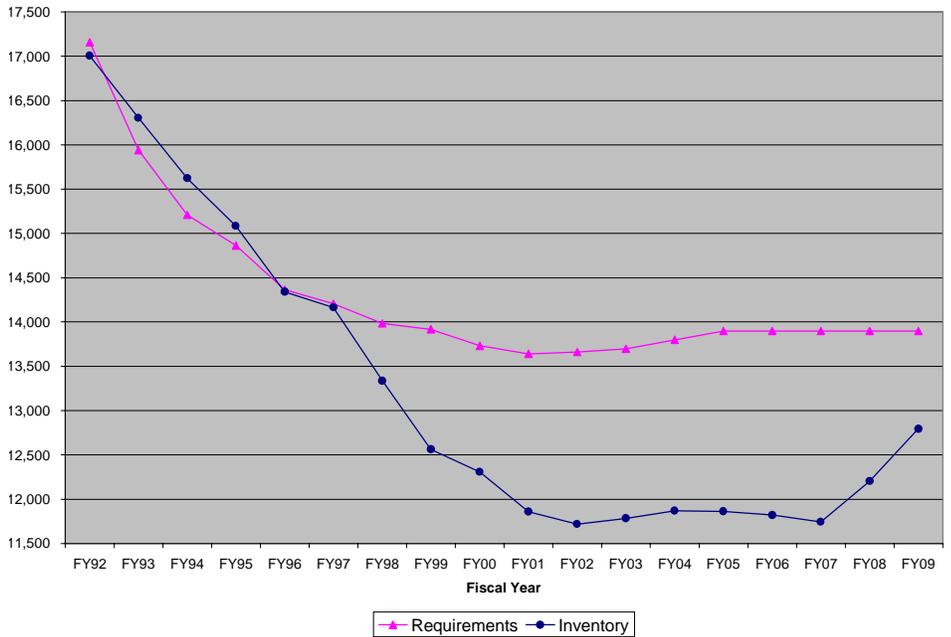
---

### Air Force Shortage

In fiscal year 1998, the Air Force reported that of a requirement for 13,986 pilots, it had a shortage of 648, or 5 percent. It anticipates that its most critical shortages will occur during fiscal years 2002-2007, when it projects shortages of between 1,900 and 2,155 pilots, or up to about 16 percent of its overall pilot requirements. The Air Force has recently implemented personnel actions that it believes will cause the pilot shortages to decline after 2007. For example, the Air Force is now bringing in larger classes of new pilots who will incur obligations that will take them through fiscal year 2007 or beyond. Although reporting that it is currently filling all of its cockpits, the Air Force will soon reevaluate whether it will be able to continue to do so in the fiscal year 2002-2007 time frame.

The Air Force projects that its greatest shortages in fiscal year 2007 will occur among its fighter, tactical airlift, and bomber pilots. Fighter pilot shortages are projected to reach 820 pilots, out of a requirement of 4,715 fighter pilots, or 17 percent of its fighter requirements. Tactical airlift pilot shortages are projected to reach 311 pilots, out of a requirement of 2,015 pilots, or 15 percent of the tactical airlift requirements. Likewise, in fiscal year 2007, the Air Force projects a shortage of 294 bomber pilots out of a requirement of 1,049 pilots, representing 28 percent of the bomber force requirements. Figure 1 displays the actual Air Force pilot requirements and inventory for fiscal years 1992-1998 and projected requirements and inventory for fiscal years 1999-2009.

**Figure 1: U.S. Air Force Pilot Requirements Versus Inventory (fiscal years 1992-2009)**



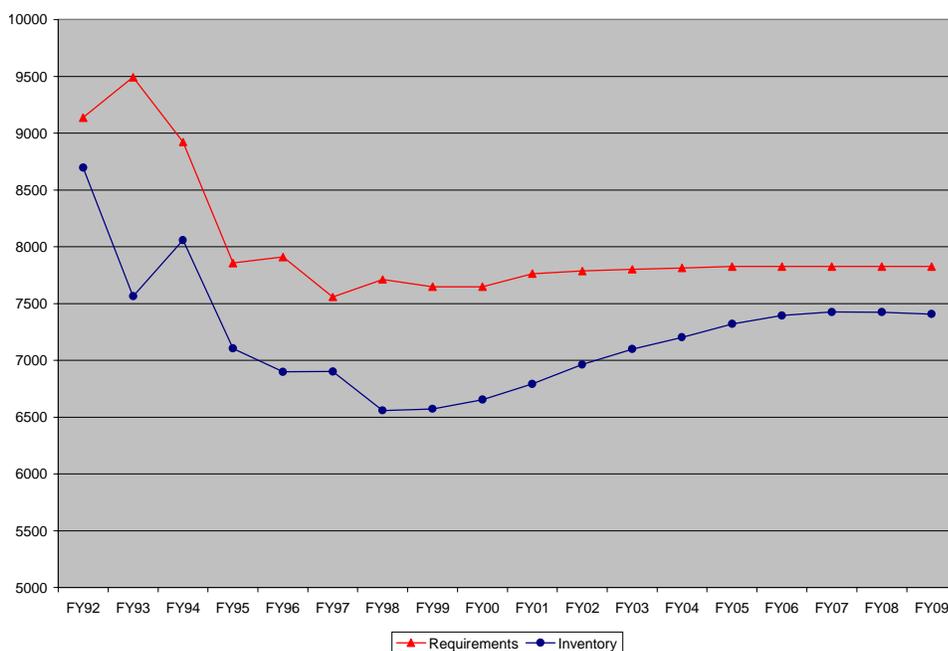
Note: Air Force data include both flying and nonflying positions.

## Navy Shortage

According to the most recent data provided to us, as of February 4, 1999, the Navy has already experienced its greatest shortage of pilots. These data indicate that the Navy, whose pilot population is about half that of the Air Force, experienced a shortage in fiscal year 1998 that was nearly two times greater than the Air Force shortage. Navy officials told us that they have filled all of their cockpits by extending sea tours. The Navy's shortage of 1,153 pilots, of a requirement of 7,712 pilots, represented about 15 percent of its pilot requirements. Navy data also show that the greatest shortages occurred among those pilots who fly helicopters, followed by those who fly propeller aircraft and jets. In fiscal year 1998, the Navy was short 536 helicopter pilots, or 17 percent of its helicopter requirements of 3,195 pilots. In the case of propeller aircraft, the Navy required 1,845 pilots, but was short 311, or 17 percent. In the jet community, the Navy had a requirement for 2,221 pilots and was short 216, representing about 10 percent of its jet pilot requirements. Over the next 5 years, the Navy projects that its aviator shortages will gradually dissipate, but not disappear. Figure 2 displays the Navy's pilot requirements and inventory

for fiscal years 1992-1998 and projected requirements and inventory for fiscal years 1999-2009.

**Figure 2: U.S. Navy Pilot Requirements Versus Inventory (fiscal years 1992-2009)**



Note: Navy data include both flying and nonflying positions.

## Army Shortage

According to Army data, in fiscal year 1998, the Army had an overall requirement of 4,745 warrant officer pilots and an inventory of 4,799, for a surplus of 54 warrant officer pilots, or 1 percent. As of February 1999, the Army reported that it had a shortage of 104 Apache helicopter pilots, out of a requirement of 1,059, or about 10 percent of its Apache pilot force. The Army plans to compensate for this shortfall by offering the continuation pay bonus, by allowing certain pilots who were not promoted to stay on active duty, and by allowing others who left the service to return to active duty.

---

---

## Marine Corps Shortage

The Marine Corps reported an overall shortage of 46 pilots in fiscal year 1998, representing a shortage of about 1 percent of its overall requirements of 3,435 pilots. According to the most recent data provided to us, the Marine Corps does project an increased shortfall beginning in fiscal year 2001. However, the projected overall shortage is 211 pilots, or about 6 percent of its requirement of 3,624 pilots.

---

## Two Key Factors Are Contributing to the Reported Shortfalls

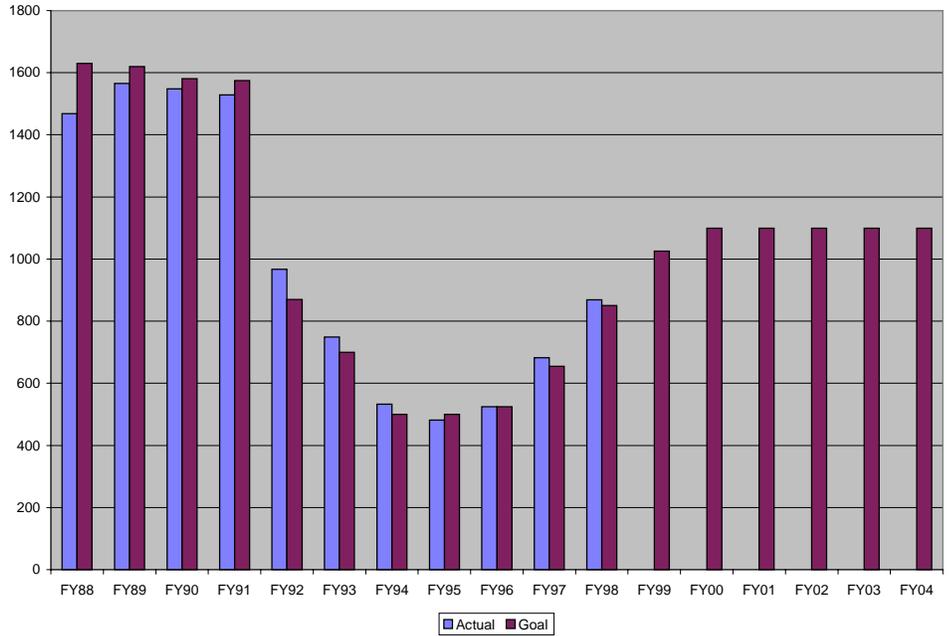
Two factors are contributing to the pilot shortfalls. First, the services reduced pilot accessions during the drawdown in the 1990s. This contributed to an insufficient number of pilots to fill the overall current pilot requirement. Consequently, certain year groups are atypically small, and current aviation personnel managers are challenged to find ways to fill requirements as this population matures through the workforce. Second, pilots report that they are unhappy with a number of quality-of-life factors that are causing them to consider leaving. Pilots state that at the same time certain factors are making a career within the military less attractive, other factors, such as a good job market, are making a career within private industry more attractive.

---

## Reduced Accessions During the Drawdown Are Creating Unintended Consequences

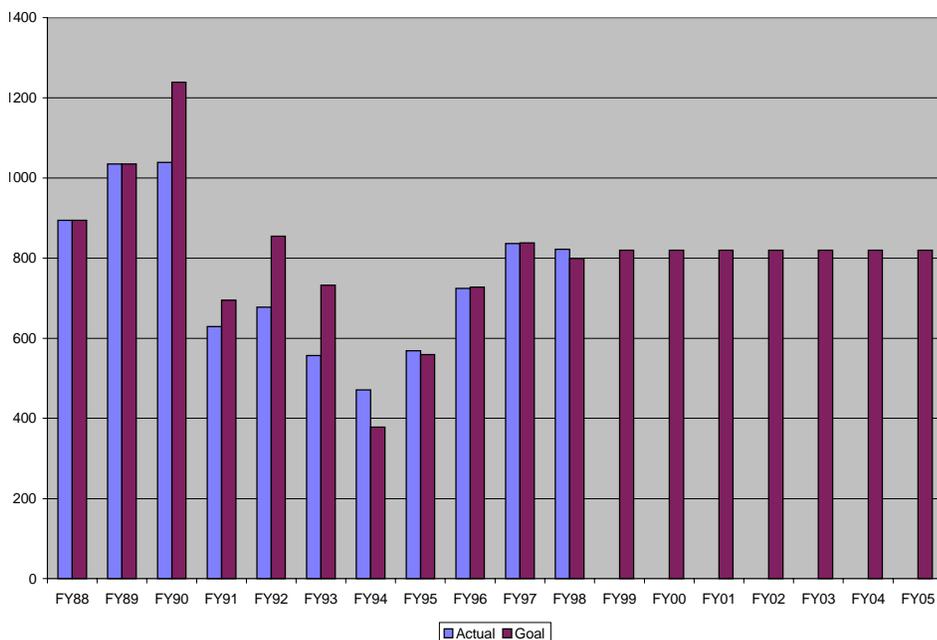
Air Force and Navy reductions in the number of new pilot accessions during the drawdown in the mid-1990s had the unintended result of leaving the services with an insufficient number of pilots to support the current force. The Air Force, for example, reduced active duty pilot accessions from more than 1,500 in fiscal year 1990 to approximately 500 annually during fiscal years 1994-96. Recognizing that it needed to increase accessions, the Air Force has steadily increased its pilot production since that time. The service accessed approximately 900 pilots in fiscal year 1998 and expects to meet its capacity of 1,100 pilot accessions by fiscal year 2000. The capacity to access pilots beyond 1,100 is limited by the current number of training facilities and training slots for new, inexperienced pilots. Figure 3 shows Air Force pilot actual accessions and goals for fiscal years 1988 through 1998 and projected goals for fiscal years 1999 through 2004.

**Figure 3: U.S. Air Force Pilot Accessions and Goals (fiscal years 1988 to 2004)**



The Navy experienced a similar pattern. In fiscal year 1990, the Navy accessed 1,039 pilots; in fiscal year 1994 the Navy accessed 471 pilots. In fiscal years 1999 through 2005, the Navy plans to access 820 pilots each year. Figure 4 shows Navy pilot actual accessions and goals for fiscal years 1988 through 1998 and projected goals for fiscal years 1999 through 2004.

**Figure 4: U.S. Navy Pilot Actual Accessions and Goals (fiscal years 1988 to 2004)**



## Aviators Are Leaving the Service for a Number of Reasons

During our work to date, we have reviewed a number of retention studies and surveys and administered our own questionnaire to more than 180 pilots and 50 navigators in the Air Force and the Navy. In addition, we conducted follow-up group discussions with more than 120 of the aviators who responded to our questionnaire. Although we cannot make projections from the limited number of questionnaires and interviews, their comments are instructive.

The aviators who responded to our questionnaire reported that the three most important reasons for wanting to stay in the military are their love of flying, the ability to serve their country, and the camaraderie they enjoy among their peers. The three most significant reasons for wanting to leave the military are better financial opportunities outside of the military, improved family life, and frustrations with leadership. When we asked aviators to provide us with the single change that would encourage them to stay in the military, Navy aviators requested funding for aircraft and parts and increased pay and benefits, and Air Force aviators requested a relaxation of their deployment schedules followed closely by better pay and more choice in assignments.

---

In addition to these responses to our questionnaire, we would like to elaborate on these and other themes we heard with some regularity during our group discussions.

Pilots expressed their frustrations with the current bonuses and stated that they are not working effectively, for a number of reasons. Of the 80 bonus takers we interviewed, only 32, or 40 percent, told us that they were very likely or definitely planning to stay in the military after they completed their current obligation. All others were undecided, somewhat likely, or very likely to leave the military. Some aviators complained about the perceived “cut in pay” that occurs when a pilot reaches 14 years of commissioned service and is no longer eligible to receive bonus money. Others complained that the services postponed or extended their flight training, which in turn reduced the number of years in which they can receive an aviation continuation bonus. The extent to which today’s pilots are motivated by dollars is up for debate. The pilots who responded to our written questionnaire said that they have the potential to pursue financially attractive careers with private industry. However, some pilots and officials we met said that the irritants within the military that are pushing them out are greater than the allure of potentially large salaries within private industry.

Low retention may also be related to current deployment schedules. Pilots identified the frequency and the length of deployments, and the lack of clear mission objectives as primary concerns.<sup>5</sup> Some pilots referred to their deployments as “non value-added deployments.” The Air Force pilots we met expressed their specific concerns about the frequency of deployments to Southwest Asia, the austere living conditions, and the inability to train during those deployments. They questioned the need for a sizeable, constant presence in that area, and suggested they would be better off training in U.S. air space and deploying on an as needed basis. The Air Force is reorganizing itself into an expeditionary force with the explicit intent of providing greater stability and predictability in deployments. However, pilots expressed their concerns that the length of the deployments will increase from 45 to 90 days under this concept. The Navy pilots we met understandably had a different expectation about the length of deployments since naval deployments are typically 6 months in

---

<sup>5</sup>Other work we are doing supports these concerns. For example, the Air Force reports that since about 1989, the average number of personnel deployed for operations other than war has more than quadrupled from about 3,400 personnel in 1989 to about 14,600 personnel in 1997.

---

length. However, Navy and Air Force pilots alike raised concerns about the pace of operations between deployments. Several naval pilots told us that the schedule between deployments is often more frustrating than the deployments themselves. One pilot said that he often gets more sleep and communicates with his wife more often via e-mail while on deployment than he does when he is working 10-12 hour days between deployments.

Aging fleets, a lack of spare parts, and increased demands on aircraft maintainers are also sources of concern. Pilots in both services told us that they only learn on a day-to-day basis whether or not they will be able to fly on training missions due to the limited number of operating aircraft in their squadrons. These pilots expressed concerns that they are not maintaining their requisite combat skills under these conditions. Our work has shown that the shortage of spare parts within the Air Force may be due to deficiencies in forecasting requirements, inventory management, and repair problems, as well as budgeting problems. Nevertheless, the perception of the pilots we interviewed, clearly, was that spare parts are not available to them and that aircraft mechanics spend an inordinate amount of time inefficiently removing working parts from one aircraft in order to repair another. The pilots also expressed their concerns for the enlisted mechanics, adding that it is difficult for them to motivate their enlisted personnel in such a difficult work environment.

Pilots told us they are also frustrated by the lack of opportunities for career development and promotions. These pilots have “grown up” in a military environment in which they have seen separation incentives, 15-year retirements, and forced early retirements after 20 years of service. They do not see the military as a guaranteed job. Air Force pilots, in particular, raised concerns that they are being sent back to junior flying positions and not getting assignments to the traditional military leadership positions. They believe that the personnel assignment and promotion systems are no longer synchronized. On the one hand, the Air Force is reassigning pilots to cockpit positions; on the other hand, the promotion boards still expect the pilots to gain staff and education experiences to be competitive for promotion. Some of the pilots we spoke with said that, in essence, the Air Force is creating a fly-only career path and suggested that the services do this formally.

Finally, pilots raised concerns about leadership above their immediate chain of command. They perceived a reluctance on the part of leadership to stand up and say no to expanded work under decreasing budgets and reduced manpower. They cited changes to the retirement system and

---

medical care, and stated that no one is willing to fight for the military member. They suggested that military leaders are holding pilots to new missions within old structures. The pilots said that DOD needs to be able to cut back on its commitments—to match the drawdown of the force. Finally, several pilots commented that they do not wish to stay in the military to rise to the senior positions themselves because they do not see their superior officers enjoying their jobs or being given the proper tools to do their jobs.

---

## The Services Are Taking Steps to Address the Shortfalls

The issue of pilot shortfalls is multi-faceted, and no single step will solve the problem. The services have implemented a number of changes to help address the situation.

All of the services told us they have made cockpit positions a staffing priority, making a concerted effort to fill these positions before filling nonflying positions. We concur that the services should fill their priority positions first. However, longer-term implications may be associated with this decision. For example, the Air Force and the Navy told us they are presently limiting the number of mid-grade pilots they would otherwise send to assignments such as staff positions and formal education programs and reassigning them in junior flying positions or extending them in their current assignments. While this practice helps to fill the cockpits, it also creates some unintended consequences and poses leadership implications. Air Force and Navy officials have raised concerns about the future, stating that some pilots who have missed some of these career-enhancing opportunities and leadership experiences may not be as qualified to be promoted to senior paygrades.

The Air Force is implementing a program called Phoenix Aviator 20. The purpose of this program is to make it more attractive for pilots to stay in the Air Force until they can retire at 20 years of service by creating a “seamless transition” between military service and civilian employment. Among the provisions, Air Force pilots who enroll in this program will be assigned to a tour of duty that guarantees them flying experience, to keep their flight credentials current, during their last 3 years of service. During this time period, the Air Force will provide financial assistance for the military pilot to obtain his or her civilian certifications. In addition, the military pilot will be guaranteed a job interview with private industry. The program is new, and few pilots have enrolled to date.

---

In an attempt to provide greater stability and predictability regarding overseas deployments, the Air Force is reorganizing itself into an expeditionary force. Under this reorganization, air crews and support teams will be assigned to 1 of 10 expeditionary forces, 2 of which would be on call for one 90-day deployment every 15 months. This reorganization is also still in development.

The Air Force will increase the period of obligated service for pilots after receiving their wings from 8 to 10 years beginning in fiscal year 2000. While this step will have a positive effect on shortages, the effect will not be realized for a decade.

The Army began offering the aviation continuation pay bonus to its Apache helicopter pilots in fiscal year 1999. In addition, the Army has allowed some pilots who left the service to return to active duty, and in other cases, has allowed pilots who were not promoted to remain on active duty.

Finally, the Air Force and the Navy have increased the number of new pilots they bring in each year. The Air Force is still increasing its pilot accessions until fiscal year 2000.

---

## Opportunities Exist to Implement New Solutions

You asked us to provide some options for the Subcommittee and the services to consider in addressing the pilot shortage issue. Indeed, our analysis of service data, interviews with service officials, and surveys with aviators have generated a number of ideas that merit further exploration. We have not yet evaluated the potential or limitation of these options. Before I mention these options, I will discuss two steps the services need to initiate now.

---

## Initial Steps to Be Taken

DOD must develop reliable and consistent data to identify, with precision, the year groups and aircraft types in which the shortages currently exist. DOD must also be able to measure the magnitude of the current problem and project with some accuracy and consistency into the future. For example, certain long-term corrective actions might be appropriate if DOD determines that the primary reason for the shortages is low retention among pilots who are eligible to leave the military. If, on the other hand, DOD determines that the primary reason for the shortages is due to personnel actions that were made in the past, other short-term corrective actions might be more in order.

---

The services should also reexamine their pilot requirements, from two perspectives, with the intent of reducing them. First, the services should scrutinize all non-cockpit positions, identify those that could be filled by other personnel, and convert the positions. Second, the services should study the current length and frequency of deployments, as well as the operational demands between deployments.

---

## Other Options to Explore

Options identified to us, that we will continue to explore during the course of our review, include the following:

- The services could review the aviator bonus system and specifically consider aviation continuation bonuses that do not terminate at 14 years of service but continue through 20 years and possibly beyond. Such a bonus system may encourage some pilots to remain in the service beyond 14 years.
- To the extent that the services are constrained by the number of new pilots they can train each year due to limited training capacity, DOD could explore additional opportunities to consolidate their pilot training programs and increase training flexibility among the services.
- To the extent that pilot shortages are not occurring uniformly throughout the services, DOD could consider cross-service assignments and assigning pilots in overstrength year groups in one service to staff positions in another service where shortages exist.

In summary, the services must first reevaluate their requirements and refine their data to better identify their problem areas. The services have begun to take steps to address their reported pilot shortages, and we believe that opportunities exist to explore additional solutions. We expect to complete our work on pilot shortages and issue a final report later this summer. We will continue to work with the services to explore solutions.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or the other Members of the Subcommittee may have.

---

---

### **Ordering Information**

**The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary, VISA and MasterCard credit cards are accepted, also.**

**Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.**

**Orders by mail:**

**U.S. General Accounting Office  
P.O. Box 37050  
Washington, DC 20013**

**or visit:**

**Room 1100  
700 4th St. NW (corner of 4th and G Sts. NW)  
U.S. General Accounting Office  
Washington, DC**

**Orders may also be placed by calling (202) 512-6000  
or by using fax number (202) 512-6061, or TDD (202) 512-2537.**

**Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.**

**For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:**

**[info@www.gao.gov](mailto:info@www.gao.gov)**

**or visit GAO's World Wide Web Home Page at:**

**<http://www.gao.gov>**

---

**United States  
General Accounting Office  
Washington, D.C. 20548-0001**

**Official Business  
Penalty for Private Use \$300**

**Address Correction Requested**

---

<p><b>Bulk Rate Postage &amp; Fees Paid GAO Permit No. GI00</b></p>
---------------------------------------------------------------------------------