

The Air Force is producing sufficient numbers, but gaps remain.

Capt. Matt Johnson prepares for a mission from Langley AFB, Va. In general, pilot shortages have eased, but key staff positions that require rated pilots are still undermanned.

USAF photo by TSgt. Ben Bloker

The Pilot Shortage Abruptly Ends

By Bruce D. Callander and Adam J. Hebert, Senior Editor

The Air Force's long-standing pilot shortage is over. More or less.

After years of shortfalls in the number of rated fliers needed to fill positions, the Air Force now has enough pilots to fill its cockpits and enough total pilots overall.

Technically speaking, there is no shortage, explained Lt. Col. Jefferson S. Dunn, chief of rated force policy on the Air Staff. Overall, the service has 13,652 pilots assigned against 13,465 authorizations. This is an unexpected development. In 1999, USAF projected it would be at least 2,000 pilots short of its needs from 2002 through 2007.

The issue remains complex, however, because shortages remain in some

key areas, such as fighter and special operations fixed-wing pilots. Key staff positions that require rated pilot expertise also remain undermanned. In fact, it is Air Force policy to ensure that cockpits remain filled, so the shortage plays itself out in staff, command, and those nonflying operational positions that require rated pilots.

Most of the specific area shortages include well-trained and high-experience year groups, however, so pilot levels are still something USAF continues to "watch very closely," Dunn said in an interview.

If the service is able to breathe easier about pilot manning, it is because the Air Force in recent years made

a conscious effort to improve both accessions and retention. Since 1999, USAF has produced new pilots at a rate of about 1,000 per year, double what was produced when pilot production bottomed out between 1994 and 1996.

Meanwhile, a number of factors such as healthy retention bonuses, more predictable deployments, and renewed patriotism and sense of purpose since 9/11 have kept greater numbers of pilots in uniform. (See "New Gains on the Pilot Retention Front," February 2003, p. 54.)

The net effect is that the pilot shortage, which was supposed to linger until at least 2011, had quietly disappeared

by 2004. It is not expected to return, but as recent history shows, the numbers can move in unexpected ways.

The service is currently studying whether a goal of 1,100 new pilots a year is the correct number, Gen. William R. Looney III, chief of Air Education and Training Command, told *Air Force Magazine* in April. The number may be revised either upward or downward, he said, and a decision will probably come by the end of 2006.

The requirement for pilots outside the cockpit is growing, Looney said, which makes planning complex. There is increased need for pilots as unmanned aerial vehicle operators and as experts staffing air operations centers, he noted.

Not All Roses

The higher training rate of recent years does not solve the challenge of younger pilots not being ready to take on the responsibilities of more experienced pilots, Dunn said. It is in the command and staff positions where shortages remain, brought on by slashed pilot production a decade ago.

The current situation had its roots in the post-Cold War drawdown when the Air Force was trimming its manpower and reinventing itself to tackle new missions. When it reduced the force, USAF discovered that it had more pilots than needed.

Rather than let go of the pilots already on board, the Air Force decided to slash new accessions from a 1991 high of about 1,500 new pilots a year to less than 500 per year in 1995.

That action proved to be a mistake.

Like a pig through a python, the shortage gradually will work its way through the system. True, the pilot inventory came down, but the unintended and long-term consequence was not



USAF photo by Maj. Pamela A.Q. Cook

Capt. D.J. Vollmer (left) and Capt. Jon Beatty exit their F-15E at Berlin-Schoenefeld Apt., Germany. USAF has many more applicants than it has cockpit seats.

having enough fliers in certain year groups. Ten years on, there is a shortage of senior captains and junior majors to fill supervisory positions.

In the late 1990s, the service was doing more with a smaller force, and that was being reflected in retention rates. Further compounding the problem, the airlines were doing well, and the lure of high-paying jobs with the carriers had a historic impact.

The surplus of older pilots began to dwindle, and this meant that those who remained were under greater pressure. They had to supervise the less experienced and carry more of the load until the junior members gained experience.

A classic Catch-22 was developing. Experienced pilots had to do more, making them increasingly overworked and driving more to leave.

The upshot was that the Air Force was short 1,355 pilots in 1999 and still 1,200 below requirements in September 2001.

At the same time, new pilots were able to fly less often, and were slower to gain experience, because of the shortage of

pilots qualified to serve as instructors and as mentors in the operational units.

New Solutions

Advanced simulators help with some of the initial training, Looney noted. For example, rookie C-17 pilots must perform 25 high-fidelity simulator sorties—but only four actual flying missions—during their qualification period.

As the Air Force emerged from a decade-long strength drawdown, it became apparent that manning was getting dangerously low in the service's most critical specialty.

Finding pilot candidates never was a problem. Being a pilot is prestigious, glamorous, and the route to top leadership for the vast majority of Air Force officers.

The service has had many more applicants for flight training than it has slots for them, so pilot candidate quality never suffered.

Looney said the demands of the war on terror have not had any significant impact on the types of pilots the Air Force needs—he has not seen major changes in requirements for new fighter pilots compared to airlift pilots, for example.

UAV operators remain an unanswered question, however. Air Force leaders agree that airmen flying UAVs—in particular armed ones such as the MQ-1 Predator—must understand the flying environment, rules of force, and culture, Looney explained.

An open issue, however, is whether UAV pilot-operators must continue to spend two tours and six years in a cockpit before becoming Predator operators.

During the shortage period, the

Shortages and Surpluses in the Pilot Force

The largest current gap is in the fighter pilot force. According to figures from October 2005, the most recent available, the Air Force needed 4,311 pilots but had only 4,028 assigned.

Air Force special operations forces also was short of pilots, with fixed-wing aircraft requiring 583 pilots and only 567 assigned. For SOF pilots overall, 1,410 were authorized and 1,380 assigned.

In most aircraft types, USAF has moderate surpluses in overall numbers. For bombers, the ratio was favorable. The Air Force had 817 authorized pilots and 947 assigned.

The situation with tankers and airlift personnel was similar. For tankers, there were 1,517 authorizations, with 2,231 assigned to those positions. In airlift, it was 3,434 authorizations with 4,025 assigned.

Finally, for battle management and intelligence-surveillance-reconnaissance aircraft, the mix was 732 authorized pilots with 943 assigned.

Air Force coped as best it could. The service recalled retired pilots to active duty to take staff jobs, freeing other pilots for essential flying assignments. The Air Force also used navigators in some slots previously held only by pilots.

The Air Force also has used Air National Guard and Reserve pilots to take over formerly active duty missions. Air Force Reserve Command established seven units to perform aircraft test support and functional check flights for Air Force Materiel Command, replacing active duty units in the positions. Two more Reserve units came on line to conduct functional check flight testing. At Edwards AFB, Calif., Reservists stood up an associate unit, to integrate with the Air Force Flight Test Center, in carrying out test support for developmental test and evaluation.

Another quick solution was to impose temporary Stop-Loss restrictions on pilots and members in other critical skills. There was some fear that, when the Stop-Loss restrictions were lifted, there would be a rush of members to separate. That did not happen.

The recall actions were short-lived, and some of the pilots brought back still are on board. In December 2000, for example, the service was given authority to recall 200 retired aviators to active duty. The original plan was to keep them on active duty for about three years, but the service of some has been extended. The Air Force no longer is recalling retirees.



USAF photo

The Air Force slashed the pilot accession rate from a 1991 high of 1,500 per year to fewer than 500 per year in 1995. Here, a pilot climbs into the cockpit of his aircraft during Operation Desert Shield in 1990.

A similar, more recent program was launched in 2004, when AFMC announced it would hire 20 civilians to serve as test pilots. Some of these were former Air Force pilots. Dunn said that civilians, along with active duty and reserve members, also are being used as instructors in undergraduate pilot training.

Again, the problem is not just one of finding pilots who are willing to do the work. The difficulty is getting pilots with the experience and background to be of use to the service. The lack of seasoned fliers remains a problem.

While the Air Force has no plans to use civilian contractors as it did in World War II and the postwar period to

give students their initial pilot training, Dunn said civilian schools do some initial flight screening.

The Air and Space Expeditionary Force construct, adopted to help schedule deployments more equitably and give airmen more notice of when they are likely to be tapped for overseas duty, may be playing a major role in solving the pilot shortage.

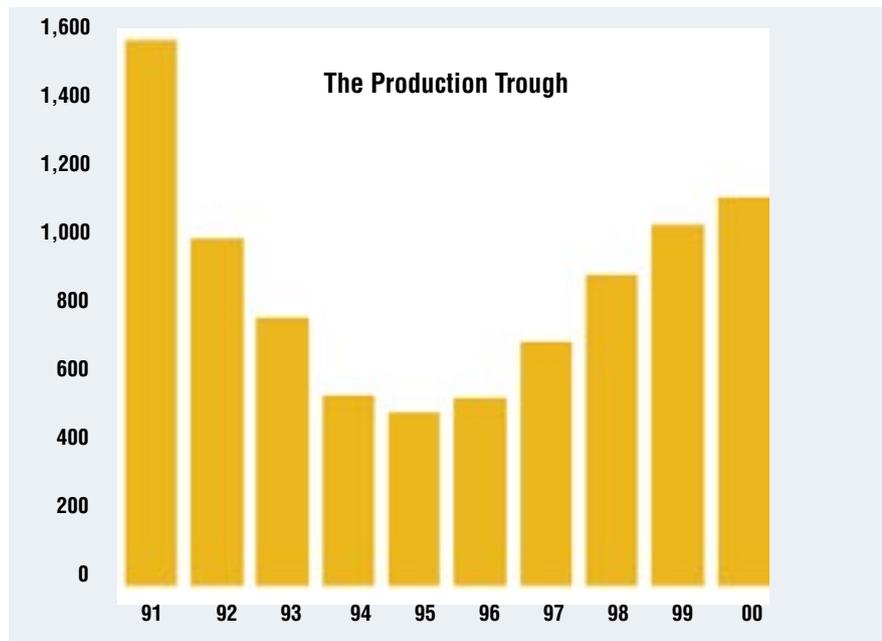
“I think that as the AEF concept has matured in the Air Force, it has helped to spread the work load across the Air Force to include the rated community,” Dunn said. “Retention in all the rated fields is up, and has been for several years, even though our opstempo remains high.”

Pilot retention has varied widely over recent years. Retention for pilots and navigators is measured by how many entering their sixth year of service will complete their 11th year of service. This figure is referred to as the cumulative continuation rate (CCR). In the mid-1990s, the Air Force counted on a healthy 75 to 80 percent rate. In the late 1990s and early 2000s, the rate slipped to less than 50 percent.

With the terrorist attacks of 9/11 and the war on terrorism, the heavy loss rates quickly and dramatically turned around. Pilot retention now is consistently back to approximately 70 percent. Officials credit the turnaround to patriotism, improved deployment levels, and better financial re-enlistment rewards.

The Airline Factor

One threat to Air Force pilot retention that is always looming is commercial airline hiring. Civilian



When the Cold War ended, USAF sharply cut pilot production. Since then, production has returned to a steady state of about 1,000 per year, but the shortages caused by the small-class years in the mid-1990s will affect the force for a long time.

airlines offer an attractive alternative to continued military service. Over the years, the commercial carriers have taken most of their new pilots directly from the military services.

The primary lure is high pay. Despite recent belt tightening, some airlines still offer attractive salaries and benefits. Labor Department figures show that in May 2004, the median annual earnings of airline pilots, copilots, and flight engineers was \$129,250.

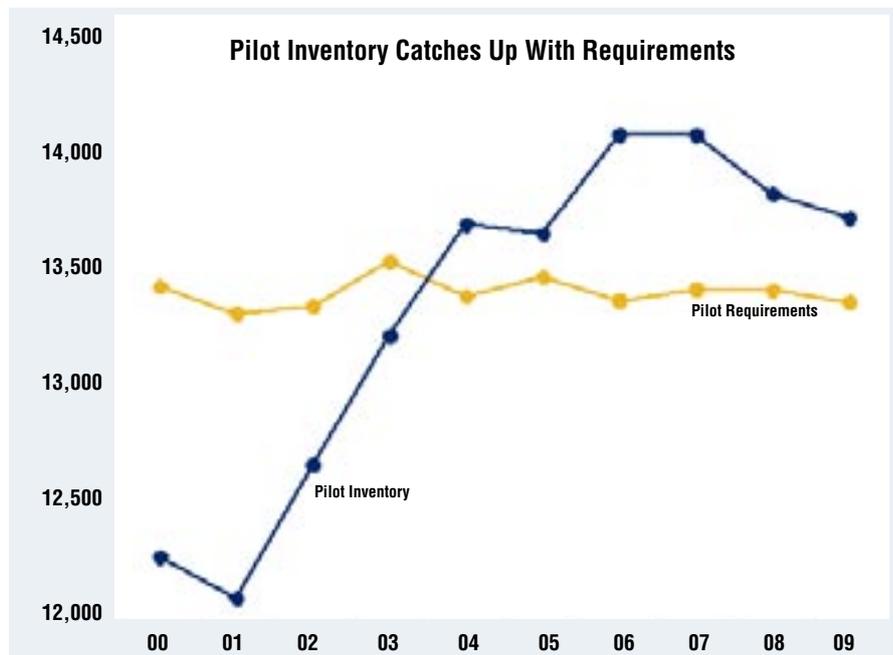
The airlines were also short of experienced pilots. In February 2001, *Airline Pilot* magazine said, "Not since the 1960s have so many 'Help Wanted' ads run in aviation magazines."

Then came the Sept. 11, 2001 terror attacks against the World Trade Center's twin towers and the Pentagon. Overnight, the hiring situation changed. The airlines experienced a significant drop in business. Carriers curtailed hiring and furloughed many of their experienced pilots. (See "Grim Days for the Airlines," February 2003, p. 76.)

During this period, the Air Force felt some easing of the "pull" on pilots to leave the service for airline jobs.

More recently, the airlines have shown signs of recovery. Having scaled back their operations, reduced the costs of providing in-flight meals and other amenities, and limited pilot salaries and benefits, they are in a better position to weather tough economic times. Some have recalled their furloughed pilots and expanded services to pre-9/11 levels.

If the commercial carriers are in better financial shape, they now are facing a



After years of shortfalls in the number of rated fliers needed to fill positions, USAF in mid-2003 gained the pilots to fill its cockpits.

pilot shortage problem similar to that of the Air Force. Many of the pilots they hired during the Vietnam era now are nearing mandatory retirement age and must be replaced.

Dunn said the Air Force again is watching the airline hiring situation closely for its potential impact on pilot retention. Airlines prefer those who have seasoned on the job, piled up flying hours, and gained experience—the very same pilots the Air Force is most interested in keeping.

Pilots choose to stay in the Air Force for basic reasons. "I go back to personnel surveys and I don't see anything that

suggests other than patriotism, quality of life—those types of things—as the reason pilots are staying," Dunn said. "It has never been my experience that that concern about money has been a problem."

For those pilots who choose to get out, the Air Force work load and optempo are cited as the primary reasons. A secondary reason appears to be frequency of moves. Dunn conceded that the stresses of Air Force life and the dangers of combat can be reduced only to a certain level, and that a certain percentage of pilots always will leave short of retirement. A natural attrition is expected and actually necessary. There always will be less of a need for senior commanders than for junior pilots.

Officials have previously said, however, that for the smallest of the mid-1990s pilot production classes, the Air Force would be happy with 100 percent retention rates.

"The bottom line is that they are here as an all-volunteer force," Dunn said, and airmen choose "to serve their country in time of war. I'm convinced that is why most stay." ■

Bruce D. Callander is a contributing editor of Air Force Magazine. He served tours of active duty during World War II and the Korean War and was editor of Air Force Times from 1972 to 1986. His most recent article for Air Force Magazine, "The 'Doctor' Is In," appeared in the March issue.



First Lt. Scot Zicarelli and Capt. Sang Kim lift off from Manas AB, Kyrgyzstan, in a C-17 loaded with cargo destined for Afghanistan. C-17 pilots in training must now perform 25 high fidelity simulator sorties and four actual flying missions.