



**The T-3A Firefly
is still grounded,
but the
Introductory
Flight Training
program
is in the air.**

The Pre-Pilots Fly Again

Civilian flying schools have contracts to conduct IFT, and some cadets are being scheduled for pre-pilot training at Air Force Flight Training Centers.

By Walter D. Miller

THE Air Force's new Introductory Flight Training program finally got fully up and running Feb. 1. On that date, the Air Force Academy's cadets once again began to undergo cadet pre-pilot training flying. USAF's commissioned officers destined for Specialized Undergraduate Pilot Training had begun to participate in the program a few months earlier.

IFT is the successor to the currently defunct pilot-screening program, which was suspended in summer 1997 after the crashes of three T-3A Firefly screening aircraft over the preceding three years of the flying program. These crashes resulted in the deaths of six Firefly crew members and touched off a political uproar.

The Firefly remains grounded for the moment. Now, the Air Force provides the IFT course entailing 40 hours of FAA-approved syllabus-prescribed flying time in light aircraft and completion of at least one solo flight. The syllabus generally follows the training required for a private pilot's license.

Civilian flying schools at more than 180 locations throughout the United States have been given contracts to conduct IFT for commissioned officers scheduled to enter SUPT.

An estimated 560 Air Force Academy cadets in the Class of 1999 were destined for SUPT. Because of IFT's late start, plans called for many of



Staff photo by Guy Aceto

The T-3A had been used to screen candidates before they entered undergraduate pilot school, but USAF suspended Firefly operations in July 1997 after a series of accidents that have been linked to the engine's fuel supply system.

those cadets to undergo introductory training after commissioning. Some others were scheduled to fly at local Air Force Flight Training Centers (formerly Aero Clubs) before leaving the Academy.

During the hiatus in operations, USAF lacked any type of pre-SUPT screening program. The service's inability to prequalify pilot candidates hampered efforts to lower training attrition, which has become a critical problem. Declining pilot retention and training system constraints have kept the Air Force from increasing pilot production.

Strict selection at the start of the process results in more success, especially in the Air Force's technically advanced systems.

Cost Cutter

Lower attrition translates directly into fewer entering trainees, fewer and smaller bases and training facilities, fewer instructors, smaller and less costly spare parts and materiel inventories, and lower utility bills, to name some of the more obvious benefits. In short, it saves money. The imposition of high entry standards helps the Air Force to limit the quantity of expensive flying hours and other scarce resources that it expends on candidates with little potential to actually become rated pilots.

There has been a sharp erosion in USAF's ability to train new pilots. Col. Fred K. Wall, chief of operational assignments at the Air Force Personnel Center in San Antonio, said it is a long-term problem. "Before the problem can be turned around in 2002," he said, there will be "a deficit of some 2,000 to 2,100 pilots."

Because of increased operational requirements, decreased retention, training base closures, and belt-tightening measures forced by budget cuts and other factors, pilot training resources are stretched to capacity.

Next year—and for the foreseeable future—pilots must be graduated at a rate equaling the maximum



USAF acquired the T-41 in the mid-1960s for preliminary flight screening, and the Air Force Academy used T-41Cs, based on the Cessna R172E. In April 1992, the T-3 was selected to replace the Mescalero.

capacity of USAF to train them, about 1,100 a year. There is no “slop” available—and the steady requirement for a pilot force of 14,000 is not expected to decrease in the foreseeable future.

For all these reasons, the quality-in philosophy is critical to selecting and screening potential Air Force pilots. Today’s smaller, near-capacity pilot training system can no longer absorb large numbers of entrants only to have many of them fail to complete the course before going on to advanced flying.

Careful introductory training, with the predictably lower attrition rates, is required to ensure an efficient and effective supply of pilots to the combat forces.

The Air Force expects that some 85 percent of those successfully completing the new introductory program will win their Air Force wings, according to Lt. Col. Dan Beatty, assistant to the chief of Air Education and Training Command’s flying training division at Randolph AFB, Texas. It’s the only way to do more with less and maintain a consistent SUPT output.

“We’re in such a deep hole, now, the only thing that will get us out is to keep pilot production high for a long time,” claimed Wall. IFT is one way to accomplish that.

Before IFT came into operation, USAF had sent some pilot trainees with no previous hands-on training or skills screening to SUPT. Predictably, elimination rates for those without screening or prior flying experience increased.

Four Times Better

During pilot training classes 99-1 through 99-9, 93 out of 589 active duty pilot candidates (15.8 percent) were eliminated. The success rate for those who had undergone the prescribed 20 to 25 hours of pilot screening was four times that of trainees who had not undergone any sort of screening.

This snapshot view of attrition is alarming. In terms of dollars and mission impact, each unsuccessful pilot trainee costs the Air Force about \$50,000 and deprives someone who



Staff photo by Guy Aceto

Without screening by the Firefly, pilot training attrition rates had been climbing, according to AETC. With a pre-pilot training program in place, USAF expects that about 85 percent of those who complete it will go on to earn pilot’s wings.

might otherwise have won his or her wings from entering pilot training, said Beatty.

The requirement for predictable SUPT production in the face of declining pilot retention demands a relatively inexpensive way to ensure that pilot training candidates are viable prospects for Air Force wings.

IFT’s civilian-contracted, per-student charge for a small aircraft such as the Cessna 172 or T-41 is \$4,000. This includes flying hour fuel costs for a minimum of 40 hours of flying time, ground school and instructor fees, aircraft maintenance, and all other factors associated with overhead, administration, and operation of the program.

Since suspension of the screening program in 1997, exhaustive studies of the Firefly problems have been conducted by USAF, AETC, and other field agencies. The Air Force announced in January that FAA supplemental-type certification has been obtained. Modifications to both the T-3A and the training syllabus have also been approved.

Pilot screening in the T-3A is expected to resume at the Air Force Academy and Hondo, Texas, when the program and aircraft changes are completed sometime after the

year 2000.

In the interim, each of the remaining 110 Fireflys are expected to undergo 10 separate aircraft systems modifications at an estimated total cost of \$6 million.

Compared with the cost of the T-41, which is a high-wing basic trainer, the T-3A is more expensive, but, unlike the T-41, it offers aerobatic maneuver capability and the ability to operate “in the vertical,” as many high performance Air Force combat aircraft are required to do. With such capability, prescreening before SUPT is expected to be more effective and attrition further reduced during jet training.

When contrasted with aircraft used in SUPT, however, the greatly reduced cost of light aircraft as introductory trainers is abundantly clear. Hourly cost for operating a T-41 or Cessna 172 IFT-type aircraft is approximately \$40 per flying hour. This compares with the beginning SUPT aircraft, the T-37, at \$251 an hour; advanced SUPT airplanes, T-38s, at \$618 per flying hour; and the T-1, used for those students destined to fly tanker and transport aircraft, \$164.

Once T-3As are returned to flight, AETC can begin another step on the road to returning to T-3 operations—the process of screening and training instructor pilots. AETC officials estimate a minimum of 18 months will pass before the T-3A is back in operation on a full-time basis. ■

Col. Walter D. Miller, USAF (Ret.), lives in Colorado Springs, Colo. His most recent article for Air Force Magazine was “Airmanship Spoken Here,” in the December 1995 issue.