

**A BRIEF HISTORY OF THE CADET AIRMANSHIP PROGRAMS  
AT THE  
UNITED STATES AIR FORCE ACADEMY**



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## A Brief History of the Cadet Airmanship Programs

The airmanship programs at the United States Air Force Academy's (USAFA) have continuously evolved to suit the needs of the cadet wing since the establishment of the institution in 1955. Their foundation can be found in the flying training that West Point conducted during World War II. Over the succeeding decades, the airmanship programs underwent radical changes in style and implementation. Due to operational and maintenance issues that arose from financial and military troubles at the Academy, operational control of flight screening, soaring, and parachute training transferred in October 2004 to Air Education and Training Command (AETC). A look at the origins of the Academy's cadet airmanship programs and their subsequent history provides a glimpse into the motives for placing them under AETC control.

### Origins of the Academy

The foundation for the United States Air Force Academy dates back to 1919, when Lt Col Barton K. Yount, Division of Military Aeronautics in the Army Air Service, first submitted a proposal for a separate Air Service academy. The program included 14 months of training, with 11 months of ground school at the proposed Air Service academy; in the remaining three months students would take basic flying instruction at various airfields. By the end of 1919, however, it was apparent that a separate Air Service academy would not be achievable for any foreseeable time. Consequently, Army Air Service commanders adjusted their plans for basic flight training towards incorporating flying programs into the West Point curriculum. During the following decades, West Point slowly added flight training programs to the cadets' schedules. By 1936, interested cadets could get 25 hours of flying instruction at Mitchel Field in New York.<sup>1</sup>

With the outbreak of World War II, the Army Air Forces needed more pilots. The service authorized Basic-Advanced Flying training at West Point on 22 May 1942 to instruct cadets interested in flying. The United States Military Academy (USMA) Superintendent and the Army Air Forces Flying Training Command commanded by Yount, now a Major General, created and controlled a three-year program at West Point, which divided cadets into two categories: "air cadets" who wanted to fly and "ground cadets" who would serve in the infantry. Each cadet would spend three years with the traditional curriculum. During the fourth year, those interested in flying would enter basic flight training. On 25 August 1942, Stewart Field at West Point was officially dedicated, and 245 cadets from the Class of 1944 began flight training. Of that number, 170 graduated with pilot wings on 6 June 1944. West Point canceled the flight program on 31 October 1944, just months after the first class earned its wings, as the war turned in the favor of the Allies and the Army Air Forces did not need as many new pilots.

After the Air Force gained independent status on 18 September 1947, a fresh movement for a separate air academy began. Plans for the future United States Air Force Academy were structured so that the new academy would be "established and developed with the U.S. Military Academy as a principal model."<sup>2</sup> President Dwight D. Eisenhower created the Air Force

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<sup>1</sup> Hamlin M. Cannon, *Flying Training at West Point* (United States Air Force Academy: June 1970), p. 13

<sup>2</sup> *Ibid.*, p. 118

Academy by signing Public Law 325, 83<sup>rd</sup> Congress, 2<sup>nd</sup> Session on 1 April 1954.<sup>3</sup> Months later, Congress formed a Commission Board to determine the location of the future Air Force Academy.

The Commission Board debated fiercely over the Academy's location. Board members looked at many sites before finally settling on Colorado Springs. The location had been inspected multiple times, but due to an approving nod from Charles Lindbergh, the location was finalized. When Lindbergh inspected the Colorado Springs site, he flew from a small airfield. Lindbergh asked the manager of the airfield to rent an aircraft. Without looking up, the manager asked, "Do you know how to fly?" Whereupon Lindbergh responded, "I think I can fly." The manager asked if Lindbergh had a license, and Lindbergh proceeded to take out over a dozen licenses from around the world, each with his photograph. The manager's face turned red as he realized who was standing before him. He cried out, "My God!" and almost collapsed on the desk in embarrassment.<sup>4</sup>

While the Academy's location was determined, debate continued over whether cadets should have access to flying programs.

### **Light Aircraft Training**

Air Forces leaders discussed numerous plans for the curriculum at the Air Force Academy. In August 1948, Secretary of the Air Force Stuart Symington ordered a board of 15 members, led by General Muir S. Fairchild, to determine the structure of the Academy's education system. One of the first plans was a five-year program, with cadets spending two years at a civilian school paid for by the Air Force, then going to the Academy for three years. The other plan was for a traditional four-year program, all of which would be spent at the Academy. Neither plan provided flight training.<sup>5</sup>

By March 1950, there was a change in the direction for the future Academy. Though Representative Carl Vinson, Chairman of the House Committee on Armed Services, rejected the idea that cadets would not have a chance to fly, shortly afterwards, Secretary Symington stated that "the Air Force Academy curriculum should include appropriate phases of flying training."<sup>6</sup> General Hubert R. Harmon, the future first superintendent of the Air Force Academy, reviewed the information given to him and determined that three options were available: no flying training at all, a flying program similar to Air Force Reserve Officer Training Corps (AFROTC), or a full flying training program.

The advantages and disadvantages of each option were weighed, with General Harmon opting for a program similar to Air Force ROTC's. Each cadet would hypothetically receive 136

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<sup>3</sup> George V. Fagan, *The Air Force Academy: An Illustrated History* (New York: Johnson Books, 1988), p. 25

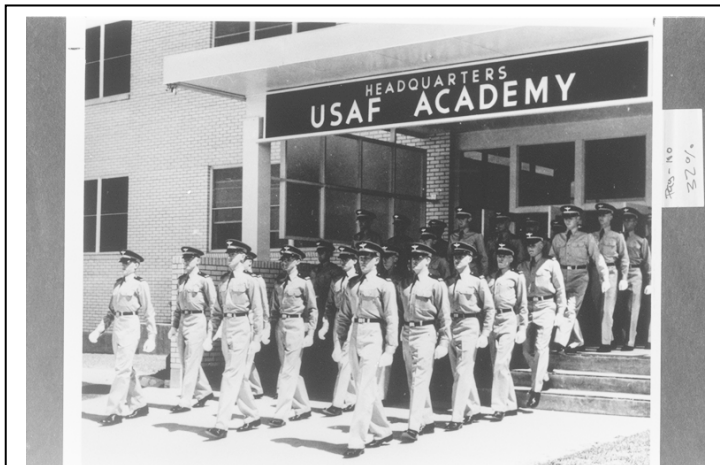
<sup>4</sup> Hist (FOUO/PV), USAFA, 27 Jul-54-12 Jun 56, vol. I, pp. 163-164, info used is not FOUO/PV.

<sup>5</sup> Fagan, *The Air Force Academy*, pp. 16-17

<sup>6</sup> *Ibid.*

training hours, with the bulk of the hours ground training; only 30 hours would be actual flight time.<sup>7</sup> Furthermore, in June 1954, plans were set to allow each cadet to graduate as an aircraft observer and navigator. Cadets would go to pilot training after graduation.

However, the actual programs offered at the Academy were far different from the original plans. Classes began for the first 306



**From 1954 to 1958, Lowry AFB, Colorado, served as the interim site of the Air Force Academy until the academy's permanent home was completed in Colorado Springs, Colorado.**

Classes began for the first 306 cadets on 11 July 1955 at the temporary location on Lowry AFB, Colorado, and continued there until the permanent site in Colorado Springs could be built. At this time, Air Training Command (ATC) started Pilot Indoctrination Training (PIT), later called the Pilot Indoctrination Program (PIP).<sup>8</sup> This program allowed cadets to travel to different Air Force bases (Bainbridge in Georgia, Graham in Florida, Moore in Texas, and Marana in Arizona) where contractors conducted primary flying training, comprising 10 flying hours (5 in a T-34 and 5 in a T-28), along with 30 hours of ground training. Most of the cadets completed this program

during the summer of their sophomore year.<sup>9</sup> Those interested in flying would go on to flight screening after graduating.

By 1 February 1957, there was an array of different flying activities at the Academy, including cadet incentive rides in T-33 jet trainers and later T-37s, the Air Force Academy Aero Club, a Falcon Soaring Club, and an Air Force Soaring Club. Cadets could also fly at local civilian airfields during their free time.<sup>10</sup> When the annual Board of Visitors met at the Academy in 1957, the group recommended a formal program for light plane pilot training at the Academy. Maj Gen James E. Briggs, the second superintendent, agreed with the Board of Visitors. To implement such a program, the Academy took several factors into consideration. For example, a flying program would not require extensive modification to the Academy's academic and military training programs. The Commandant's Operations and Training officer at the time declared that "requirements for granting of an accredited Bachelor's Degree take priority over requirements of a pilot training program."<sup>11</sup> Their point became moot when HQ USAF rejected

<sup>7</sup> *Ibid.*, p. 479.

<sup>8</sup> Ann Hussey, *Air Force Flight Screening: Evolutionary Changes, 1917-2003* (HQ AETC, Office of History and Research: Randolph AFB, December 2004), p. 26. ATC was redesignated Air Education and Training Command in 1993; henceforth, AETC will be used when referring to this command.

<sup>9</sup> Article, *Air Training Magazine* vol. 4, no. 8 (Mar 55), p. 6.

<sup>10</sup> Hist (FOUO/PV), USAFA, 13 Jun 56-9 Jun 57, p. 330, info used is not FOUO/PV.

<sup>11</sup> *Ibid.*, p. 331

the plans for a light plane training program because of funding issues.<sup>12</sup> Moreover, the Academy's move to its permanent location in Colorado Springs in 1959 killed the prospects of a flight training program because the planes needed for training were still at Lowry AFB, a two-hour drive each way. Finally, because of the hours required for an extensive flying training or flight screening program, none were established at the Academy for over a decade.

The year 1968 was pivotal for the powered flight programs at the Academy. On 8 January, a cadet first class stepped into the co-pilot seat of a T-41C, the new light aircraft available for Academy cadets. No longer were cadets forced to travel to distant bases to receive PIP instruction, but merely went to Peterson Field in Colorado Springs instead. The ability to fly locally changed the mindset of Academy leaders previously hesitant about having a flying program that



**The T-41C used by the Academy for Pilot Indoctrination Program until 1994**

would have severely taxed the cadet's time. A small number of cadets were able to train at the Academy's airfield, but due to limited facilities, not all could train there. According to the superintendent, the arrival of the T-41C for cadet use officially brought the "Air" into the Air Force Academy.<sup>13</sup> Control of PIP resided at ATC headquarters at Randolph AFB, Texas. On 1 October 1967, nearly a year prior to the arrival of T-41Cs at the Academy, the Air Force activated the 3253<sup>rd</sup> Pilot Training Squadron to provide the instruction for cadets. When the program began at USAFA, the 3253<sup>rd</sup> had 45 operational T-41Cs.<sup>14</sup>

Initially, the Pilot Indoctrination Program (Airmanship 440) suffered setbacks not uncommon when significant changes occur in a program. During the first year, only 223 cadets were able to complete PIP. After the first months, the program gained full steam, allowing over 700 cadets to go through PIP by 1972.<sup>15</sup> Each cadet received 36.5 hours of flying training, with 30 additional hours of academic training. The superintendent, Lt Gen Albert P. Clark, allowed PIP to be a flight screening program for the Academy. Cadets who qualified in the T-41C went on to different AETC bases after graduation to learn to fly Cessna T-37s and Northrop T-38s in the undergraduate pilot training (UPT) program.<sup>16</sup>

In 1974, as part of an Air Force program to renumber its units, the 3253<sup>rd</sup> was inactivated; in its stead, the 557<sup>th</sup> Flying Training Squadron (FTS) was activated on 31 July 1974 and

<sup>12</sup> Betsy Muenger, *A Chronology of Flying Training Issues at the U.S. Air Force Academy*, n.d.

<sup>13</sup> Hist (FOUO/PV), USAFA, 1 Jul 67-30 Jun 68, vol. I, p. 416, info used is not FOUO/PV.

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*, 417.

<sup>16</sup> *Ibid.*

assumed control over PIP. The 557<sup>th</sup> designation was chosen to carry on its illustrious legacy from World War II. The original squadron had been activated on 1 December 1942 as the 557<sup>th</sup> Bombardment Squadron, flew Martin B-26's in the European theater of operations, and led the air attack on Utah beach on D-Day. During the Vietnam War, the squadron was reactivated as the 557<sup>th</sup> Tactical Fighter Squadron (TFS) and flew the F-84F Thunderchief before upgrading to the F-4C Phantom II. The 557 TFS was inactivated on 31 March 1970 and remained inactive until ATC reactivated it to conduct flying training at the Academy.<sup>17</sup>

Like the 3253<sup>rd</sup>, the 557<sup>th</sup> remained at the United States Air Force Academy as a tenant unit reporting directly to HQ ATC.<sup>18</sup> The new 557 FTS's mission had three major facets. The first was to motivate all physically qualified cadets toward a rated career in the Air Force. The second was to identify those physically qualified cadets who possessed the basic aptitude to be Air Force pilots. The final goal was to minimize attrition of the United States Air Force Academy graduates in UPT.<sup>19</sup>

Control of the 557<sup>th</sup> Flying Training Squadron remained under AETC from 1974 to 1982. During this time, superintendents at the Academy increasingly pushed for control of the airmanship programs. The Academy found a friendly ear in General Thomas M. Ryan Jr., AETC commander, who wrote in 1982 that shifting command of the programs to USAFA would "simplify command and control by consolidating all Academy airfield activities – soaring, parachuting, aero club, and T-41 – under a single manager."<sup>20</sup> Furthermore, the expansion of the airfield at the Academy was completed in 1974, allowing all flying operations to move from Peterson Field to the Academy. On 1 October 1982, the United States Air Force Academy gained control of the powered flight programs (along with soaring and parachuting).<sup>21</sup> At the same time, the flight screening program would remain. General Ryan confirmed that "the Academy will, of course, continue to provide the UPT screening function."<sup>22</sup>

The Air Force Academy continued to control all of the flight programs throughout the remainder of the 1980s and the 1990s. In 1989, three Broad Area Review (BAR) meetings, with representatives from across the Air Force, met to discuss all aspects of training in the flying community. The BAR determined that while PIP was a good program, flying limitations of the Academy's aircraft hindered what could be accomplished. Members of the BAR agreed that increasing the number of flight hours in the T-41C would provide only a marginal benefit. At this time, AETC was promoting the new enhanced flight screening (EFS) program, which the command believed would lower attrition rates in undergraduate pilot training. To adopt such a

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<sup>17</sup> The Home of The 557<sup>th</sup> FTS, accessed at <http://atlas.usafa.af.mil/557/history.htm> on 26 May 2005.

<sup>18</sup> Hist (FOUO/PV), USAFA, 1 Jul 74-30 Jun 75, vol. VII, p. 3, info used is not FOUO/PV.

<sup>19</sup> Hist (FOUO/PV), USAFA, 1 Jul 74-30 Jun 75, vol. VII, p. 2, info used is not FOUO/PV.

<sup>20</sup> Hist (FOUO/PV), ATC, 1982, vol. VII, SD I-173, info used is not FOUO/PV.

<sup>21</sup> 557<sup>th</sup> Flying Training Squadron, Research Division of the Organizational History Branch, accessed at [http://afhra.maxwell.af.mil/wwwroot/rso/squadrons\\_flights\\_pages/0557fts.html](http://afhra.maxwell.af.mil/wwwroot/rso/squadrons_flights_pages/0557fts.html) on 25 May 05.

<sup>22</sup> Hist (FOUO/PV), ATC, 1982, vol. VII, SD I-173, info used is not FOUO/PV.

program, the Air Force needed a better aerobatic plane than the T-41C, and AETC began looking for a replacement.<sup>23</sup>

After much searching, on 29 April 1992 the Air Force decided that Slingsby Aviation Limited of Great Britain and Northrup Worldwide Aircraft Services, Inc., of Oklahoma would receive the contract to provide the needed replacement aircraft. The plane chosen was the Slingsby Firefly, whose military designation was the T-3A. It was a single-engine, piston-driven plane with side-by-side seating and dual-stick controls. Furthermore, the T-3A was commercially built and the Federal Aviation Administration (FAA) had certified it for aerobatics. The \$28 million contract included 56 aircraft for the Academy. Although the first planes would arrive in June 1993, cadets wouldn't begin training until January 1994. On 1 July



**The Slingsby Firefly, known as the T-3A, replaced the T-41C as the primary light plane trainer at the Academy.**

1993, the 557<sup>th</sup> returned to AETC's control coinciding with the arrival of the new T-3A, which would be used with the EFS programs at the Academy and also at Hondo, Texas.<sup>24</sup>

The new aircraft required testing prior to being allowed to fly at the Academy. During the five-month testing phase, conducted by 3d Flying Training Squadron at Hondo, a series of 12 engine failures occurred. After final modifications, the planes were considered adequate for training purposes. However, the new T-3A continued to have persistent problems with engine failures, and more modifications were

made to the plane. At the beginning phase of EFS at the Academy, the engine failures fortunately occurred while the planes were on the ground. However, on 22 February 1995, tragedy struck when an instructor pilot and a cadet flying a routine training mission went into an uncontrolled spin and crashed at the training area; both died.<sup>25</sup>

AETC immediately changed the T-3A program at the Academy to accommodate the elevation differences between Texas and Colorado. New air conditioners were installed, but wing bonding problems and engine failures persisted. Nothing seemed to help. By November 1995, at the two locations AETC flew T-3As, 34 engine failures occurred with 32 on the ground and two in the air.<sup>26</sup>

<sup>23</sup> Hussey, *Air Force Flight Screening*, p. 53.

<sup>24</sup> Timothy M. Brown, *Introduction of the Enhanced Flight Screener* (Office of History, 12<sup>th</sup> Flying Training Wing: Randolph AFB, Texas, July 1995), p. 3.

<sup>25</sup> *Ibid.*, p. 5.

<sup>26</sup> Hussey, *Air Force Flight Screening*, p. 58.

The contractor delivered the last T-3A on 9 January 1996 and with it came follow-on testing. By October 1996, the follow-on test and evaluation (FOT&E) determined that the T-3A was completing its mission of reducing the attrition rates in UPT, but the aircraft failed to meet three of the five measured criteria for maintenance. This meant that the aircraft were considered highly unlikely to meet the mandated 95 percent fully mission capable rate or the 98.5 percent mission completion success probability rate. While these rates were optimistic, the plane was not performing as well as expected.<sup>27</sup>

Fully aware of the maintenance issues, the program continued. On 30 September 1996, a second T-3A crashed at the Academy after the engine stalled. The IP was unable to recover the aircraft, and both the IP and the student died in the crash. Again, AETC made changes to the program, including having Oklahoma City Air Logistics Center's management come in to help with the maintenance problems. The problems were again thought to have been fixed; but on 26 June 1997, the Academy suffered its third fatal T-3A crash, which killed both the instructor and the cadet. On 25 July 1997, AETC commander, General Lloyd W. Newton, terminated all T-3A training in the EFS program.<sup>28</sup>

General Newton's order to stop flying the T-3A caused a major switch in the flight screening process. The end of T-3A flying operations concluded the enhanced flight screening program. For about a year and a half, there were no light plane flying programs at the Academy. Then, in October 1998 the Academy initiated an interim program known as Introductory Flight Training (IFT). The IFT program mirrored the Flight Instruction Program that AFROTC had used for many years. Small numbers of cadets initially flew Cessna 172s at the Academy. Cadets at first flew 40 hours, but later this increased to 50 hours, which allowed cadets to earn a Private Pilot's License (PPL).<sup>29</sup>

The next major overhaul for the 557<sup>th</sup> was in October 2000, when the squadron once again realigned from AETC to the Academy. Control of the squadron fell under the 34<sup>th</sup> Operations Group, 34<sup>th</sup> Training Wing. At this point, the IFT program was structured so that 300 cadets received their instruction at the Academy airfield. Because of insufficient capacity at the Academy airfield, another 200 went to local airfields to get their PPL. In 2002 the IFT program was contracted out to Embry-Riddle Aeronautical University. While the program was "meeting and exceeding expectations," according to Lt Gen John R. Dallager, Academy Superintendent, the program did not necessarily build the needed skills for Specialized UPT, AETC's new multi-track pilot training program, such as preflight stand-ups and bold-faced procedures. Changes would have to be made to IFT, but they would not take effect until AETC once again took over the 557<sup>th</sup> in 2004.<sup>30</sup> At that time, AETC also gained the Academy's soaring and parachute programs, which also dated back to the Academy's early years.

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<sup>27</sup> *Ibid.*

<sup>28</sup> *Ibid.*

<sup>29</sup> Hist (FOUO/PV), AETC, 1996-1999, vol. I, p. 185, info used is not FOUO/PV.

<sup>30</sup> Hist (FOUO/PV), AETC, 2002-2003, vol. I, p. 190, info used is not FOUO/PV.



## Navigation Indoctrination Program

The Navigation Indoctrination Program (NIP) was an integral and important component of the cadet training system. During the planning stages to establish the Academy, the primary decision was whether to give cadets pilot training or navigation training. At the time, the NIP was picked because it was easier to integrate the program into the academic curriculum and also because the Air Force thought such a program would provide necessary knowledge to both the aircraft operations and missile fields.<sup>31</sup> Furthermore, the training facilities at Lowry prohibited the development of a full-fledged pilot training program. The Navigation Indoctrination Program during the 1950s, in which cadets received 171 hours in the air, allowed cadets to graduate with navigator wings. Each fourth classman flew in the T-33 jet trainer, followed by time in the T-29 “flying classroom.”<sup>32</sup>

While the Academy was located at Lowry AFB, the navigation program ran smoothly because the cadets could use the existing facilities to fulfill the navigation curriculum. When the Academy moved to its permanent location in Colorado Springs, the 65-mile distance between the two bases put a strain on the program because cadets had to travel to Lowry AFB to complete their training. Due to financial constraints on NIP, the Academy Board met on 27 May 1959 to discuss how to phase out the navigation program. Over the next two years, the program was slowly phased out. The Class of 1961 was the last to graduate with navigator wings.<sup>33</sup>

## Soaring

The modern soaring program at the Academy began as a club. Even before the soaring club existed, Major William R. Fuchs of the Department of Mathematics pushed in December 1955 to integrate soaring into the cadet curriculum. The soaring club began in 1956, while the Academy was still located at Lowry AFB. Planes were purchased from donations and surplus funds for extracurricular activities. When the Academy moved to Colorado Springs, the soaring club faced a severe problem with the high winds. Extremely strong wind currents destroyed gliders, and, as a result, Academy officials temporarily disbanded the program in December 1958. Three years later the Academy reestablished the Soaring Club after new gliders were purchased. By 1964, soaring was an official part of the cadet curriculum. The Academy had four gliders in 1968, made by the Schweizer Aircraft Corporation of Elmira, New York. The two gliders used for training purposes were SGU 2-22 gliders that had tandem-seats and dual controls.<sup>34</sup>

By 1970, the soaring program had expanded greatly since its days as a club. At this time, the Academy created the Soar-For-All program that allowed all cadets to receive some time in a glider. The mission for the program was “to form the foundation of cadet exposure to aviation related activities, build character, and help motivate cadets toward a career in the United States Air Force.” Selected rated officers trained cadets to become instructor glider pilots. From this

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<sup>31</sup> Hist (FOUO/PV), USAFA, 12 Jun 58-30 Jun 59, vol. II, p. 388, info used is not FOUO/PV.

<sup>32</sup> Fagan, *The Air Force Academy*, p. 68.

<sup>33</sup> Hist (FOUO/PV), USAFA, 12 Jun 58-30 Jun 59, vol. II, p. 391, info used is not FOUO/PV.

<sup>34</sup> Hist (FOUO/PV), USAFA, 13 Jun 56-9 Jun 57, p. 331, info used is not FOUO/PV.

period on, cadets in the Soar-For-All program learned to fly from fellow cadets. A year after the USAF Academy took over control of the 557<sup>th</sup> from AETC in October 1983, the soaring program gained official designation as the 94<sup>th</sup> Airmanship Training Squadron.<sup>35</sup>



**These TG-10 gliders were similar to those flown at the Air Force Academy**

The squadron number was chosen for its rich heritage in World War II as the 94<sup>th</sup> Troop Carrier Squadron, which flew Waco CG-4A gliders during such airborne assaults as Normandy, Rome-Arno, Holland, Ardennes-Alsace, and Germany. After World War II, the 94<sup>th</sup> TCS was inactivated, only to be reactivated briefly as a reserve squadron in the late 1940s and again during the Korean War. After the Korean War, the 94<sup>th</sup> TCS squadron remained inactive until the USAF Academy picked up the designation in 1983.<sup>36</sup>

When reactivated, the 94<sup>th</sup> ATS encompassed both the soaring program and the parachuting program. The “Soaring” flight managed the Soar-For-All program throughout the decade and into the 1990s. USAFA leadership moved the parachuting program into the 98<sup>th</sup> Flying Training Squadron (FTS) in 1995, while the 94<sup>th</sup> changed from the an airmanship training squadron to a flying training squadron. During this time, the 94 FTS gained control of the USAFA Flying Team. The Flying Team flew T-41Ds and C-150s, and remained under the 94<sup>th</sup> until May 2003 when the reorganized 557<sup>th</sup> took control of the team in an effort to streamline operations at the airfield.<sup>37</sup>

After over 20 years of service, the aging TG-4 Schweizer fleet needed to be replaced. The Academy looked at many different companies to fill the void, eventually following the recommendation of the Academy’s rated instructor pilots by selecting the LETECKE ZAVODY Aircraft Corporation (LET) from the Czech Republic. The first shipment of the new LET TG-10B gliders arrived at the Academy in May 2002, and were used to train cadets enrolled in the Soar-for-All program. Also, the Academy bought the TG-10C cross-country gliding and the TG-10D for the aerobatic competition flying teams.<sup>38</sup>

<sup>35</sup> 94<sup>th</sup> FTS – USAF Academy Soaring, accessed at <http://atlas.usafa.as.mil/winf/34og/94fts/index.html> on 26 May 05, The lineage of the soaring program’s 94<sup>th</sup> should not be mistaken for the 94<sup>th</sup> Fighter Squadron which traces its roots to the days of Captain Eddie E. Rickenbacker in World War I.

<sup>36</sup> *Ibid.*

<sup>37</sup> *Ibid.*

<sup>38</sup> Disc, Shane Moran w/ Alan Becker, AETC/XPPB, 16 Jun 05.

## Parachuting

Cadets at the Air Force Academy had been parachuting in one manner or another for over 40 years. The first time cadets had the opportunity to jump was in the summer of 1962 at Fort Benning, Georgia. When first created, the program was completely voluntary, but by 1966, those cadets interested in earning their airborne wings had to give up their summer leave. By this time, over 400 cadets were enrolled in the program, showing the great interest the cadet wing had in parachuting. In 1964 a small club at the Academy was also created for parachuting.<sup>39</sup>

Changes in the spring of 1966 had a great impact on cadet parachuting. The parachuting club on Academy grounds, officially named the Cadet Parachute Team, was transformed into a military representative activity, which meant it was not eligible for federal funding. However, the Air Staff allowed the program to use World War II vintage C-47s.<sup>40</sup> Within two years, there were three full-fledged parachute programs available for cadets, which ranged from Basic Airborne Training, still at Fort Benning, for those cadets interested in Army paratrooping; Advanced Parachute Training, held at the Academy, for basic parachuting instruction for up to 150 cadets in a year; and the Academy's Precision Parachuting Training program to train the select few cadets chosen to compete in competitions across the country as members of the Cadet Parachuting Team.<sup>41</sup>

The Cadet Parachuting Team, known as the "Wings of Blue," quickly marked its place in the national parachuting community. By 1972, after only six years of existence, the USAF Academy's parachuting team was at the top of the pack. From 1968 to 1972, the team won the national title for parachuting. Air Force cadets placed ahead of West Point back to back in 1971 and 1972.

The parachuting programs became a flight under the 94<sup>th</sup> Airmanship Training Squadron, in 1982. The program steadily grew over the years, allowing more and more cadets the opportunity to jump. Ultimately, the program grew too large for the 94<sup>th</sup>, and in 1994 the 98<sup>th</sup> Flying Training Squadron was activated to accommodate the larger parachuting program. The 98<sup>th</sup> used two DeHavilland UV-18B Twin Otters still in use to conduct training at the Academy. Like the Soar-For-All program, cadet members of the "Wings of Blue" conducted the basic Jump



**The Academy's "Wings of Blue" team jumping in a competition.**

<sup>39</sup> Hist (FOUO/PV), USAFA, 1 Jul 68-30 Jun 69, vol. II, p. 37, info used is not FOUO/PV.

<sup>40</sup> Hist (FOUO/PV), USAFA, 1 Jul 67-30 Jun 68, vol. I, p. 99, info used is not FOUO/PV.

<sup>41</sup> Hist (FOUO/PV), USAFA, 1 Jul 68-30 Jun 69, vol. II, p. 39, info used is not FOUO/PV.

program for cadets. By 2004, instructors were able to train up to 1200 cadets per year, including many from ROTC.<sup>42</sup>

### **Flying Program Problems and Realignment**

In the first few years of the new millennium, several military training and airmanship issues began to plague the Academy. Among myriad difficulties were growing strains within the airmanship programs. By 2004, the Air Force Academy's leaders were looking for relief. AETC came to the Academy's aid, eventually regaining control of the cadet airmanship programs.<sup>43</sup>

The soaring program, in particular, was a source of problems for the Academy's administration. Shortly after the 94 FTS transitioned to new gliders, troubles began for the soaring program. The older Schweizer gliders were durable and dependable aircraft, able to endure the wear and tear common in training flights, but the Academy was no longer able to procure the required parts from the manufacturer. The new LET gliders the Academy purchased were more agile and effective to train in than the old trainers but were unfortunately more prone to breaking down due to the high sortie rate at the Academy's airfield. Numerous maintenance failures led the Academy to shut down the soaring program during the summer of 2003 and throughout much of the fall semester. Only after a complete overhaul of the maintenance program at the airfield was soaring reinstated.<sup>44</sup>

In addition to the problems with the soaring program, the Academy lacked a flight screening program. After cancellation of the EFS program in 1997, the stopgap IFT program allowed cadets to learn the basic operations of a single-engine aircraft, but it failed to adequately prepare cadets for SUPT. Instruction was not standardized, and weather and aircraft maintenance problems prevented many cadets from completing the program in the allotted time. In 2003, Lt Gen John R. Dallager, the Academy superintendent, officially addressed the problems with the IFT program. In a letter to General John P. Jumper, the Air Force Chief of Staff, he stated that:

As you know, Initial Flight Training has returned to the Academy. This program, contracted to Embry-Riddle Aeronautical University and under close Air Force supervision, is meeting and exceeding expectations and provides cadets with a private pilot certificate. However, we cannot provide all Academy pilot candidates with this training and are forced to train some off base. In addition, the Private Pilot's Certification (PPC) does not provide the skill set we desire for SUPT.<sup>45</sup>

General Dallager proposed replacing IFT with a flight screening program. The proposed Academy Flight Screening (AFS) program would reduce IFT's required 50 hours to a more manageable 25-hour curriculum. Under IFT, many students were unable to complete the

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<sup>42</sup> 98<sup>th</sup> Flying Training Squadron, accessed at <http://atlas.usafa.af.mil/wing/34og/> on 27 May 05.

<sup>43</sup> Brg, AETC/XP to AETC/CC, "IPT for 306<sup>th</sup> FTG Way Ahead," 11 Mar 05.

<sup>44</sup> Disc, Moran w/ Becker, 24 May 05.

<sup>45</sup> Ltr, Lt Gen John R. Dallager, Superintendent, USAFA, to General John P. Jumper, Chief of Staff of the Air Force, [Desire to Move to AFS from IFT], 10 Apr 03.

required 50 hours in one semester, creating a backlog of students in the program. All of the flight training would be conducted from the Academy's airfield and no longer dispersed to the surrounding civilian airfields. The average student would solo at 15 hours and get a final check ride at 25 hours. General Dallager pointed out also that the new plan would save the Air Force \$1.2 million annually. Yet, while these were enticing incentives, the adoption of the AFS program was pushed back. One factor in the delay was the sexual assault scandal in early 2003 at the Academy. The media painted the scandal across the national news for months, bringing great scrutiny upon the Academy. The following year, a cheating scandal with the Class of 2007 again brought the Academy into the media's limelight. Congress and Dr James Roche, Secretary of the Air Force, ordered the Agenda for Change, which completely altered the military training system for cadets by making the training system more like the active-duty Air Force.<sup>46</sup>

With the focus on the mounting military troubles at the Academy, flight operations continued to suffer. On 27 April 2004, Brig Gen Teresa Peterson, Deputy Chief of Staff for Air and Space Operations, recommended the transfer of flight operations at the Academy from the 34<sup>th</sup> Operations Group to AETC. The leadership at the Academy initially balked at the thought of giving up control of the 557<sup>th</sup>, which they had only recently gained from AETC. Nevertheless, General T. Michael Moseley, Vice Chief of Staff of the Air Force, signed the proposal, and a month later AETC sent a site survey team to the Academy to determine the best way to move flight operations to the command.<sup>47</sup>

The proposal for the transfer did not pass uncontested. In May 2004, a memorandum regarding the financial prospects of the endeavor was passed up the chain of command. Headquarters AETC's Directorate of Operations cautioned that the transfer could cost \$2 to \$3 million annually that would have to be sourced from other programs within AETC.<sup>48</sup> Despite these financial reservations, the site survey team determined that "for the past year aircraft, maintenance, and regulatory problems have reduced the 34 Operations Group's ability to accomplish its mission." The team then concluded that "moving the 34 Operations Group to AETC would enable USAFA to focus exclusively on military training and officership issues and enable AETC to apply flying training expertise to the Academy environment."<sup>49</sup>

At this point, AETC established a Site Activation Task Force (SATAF) to facilitate the transfer of the Academy's flying programs to AETC. One of the major areas of concern the SATAF addressed was the soaring program's degraded landing facilities. Academy personnel referred to the large grassy area west of the runways as the Sailplane Landing Area (SPLA). During the 30 years of soaring operations at the Academy, the SPLA was used as the primary landing location for the glider fleet, allowing for up to 300 glider sorties a day. However, for the past three years, a drought had withered the grass in the majority of the SPLA. The surviving

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<sup>46</sup> SSS, USAFA/CC to USAF/CC, "Academy Flight Screening (AFS) Proposal," 7 Apr 03.

<sup>47</sup> SSS, AF/XOOTT to AF/CV, "Pkg Green: Transfer of 34 OG at USAFA to AETC Command and Control," 27 Apr 04.

<sup>48</sup> Email, AETC/DOE to AETC/DSEA, "A - DO - Transfer of USAFA Flight Ops to AETC," 3 May 04.

<sup>49</sup> Rpt, HQ AETC/XPPB, "Site Survey Report of the USAF Academy for the Possible Transfer of the 34 Operations Group to AETC," 28 Jun 04.

grass grew in clumps that damaged the new TG-10 series glider tails on landing. The landing impact on the gliders forced operations to move primarily to the paved runway, reducing sorties to a maximum of 100 sorties a day.<sup>50</sup>

Another pertinent issue the SATAF raised was manpower. The SATAF noted “the biggest concern is sourcing the HQ AETC and Nineteenth Air Force oversight as well as remaining 34 OG manpower requirements.” Under the Academy’s control, the airmanship programs relied heavily on attached rated USAFA personnel to fill rated instructor slots. The Academy conducted a manpower study and determined that the airmanship program was at 60 percent of that required. The study recommended continuing to use attached personnel after the realignment to AETC, as well as adding additional permanent members at the airfield.<sup>51</sup>

Nonetheless, the benefits of AETC control outweighed the command’s fiscal concerns. Under AETC, the airmanship programs would be run by a seasoned organization where the primary mission for many years was training the future pilots of the Air Force. Beyond having expertise in flight training, AETC also had a well-oiled, formal process for acquiring the funds needed to run an air training program. On 4 October 2004, AETC officially took control of flight operations at the Academy, activating the 306<sup>th</sup> Flying Training Group (FTG), which comprised the 557 FTS’s IFT light plane programs, the 94 FTS’s soaring programs, and the 98 FTS’s jump curriculum. Ultimately, the transition allowed the Academy’s leadership to deal with their fundamental purpose of training young men and women to become future officers in the United States Air Force.<sup>52</sup>

After October 2004, with AETC firmly in control of the program, many needed changes came to the cadet flying programs. The insufficient manpower at the Academy forced the commanders of the airmanship programs to cut back flying days from six to five each week. Using a manpower and workload study the Academy conducted, AETC authorized an additional 65 positions to the 111 personnel who had already transitioned from the Academy to AETC, funding 51 of them in FY06. Such a dramatic increase in personnel allowed for a more stable program. The financial support of AETC was also very significant. AETC added \$7 million to the FY04 budget for airfield and operational expenses and then increased the annual budget to \$6.8 million in FY05.<sup>53</sup>

The additional funds for the parachute program were sorely needed. The program had been running well for years, winning 29 of the 37 National Championships since its inception. Yet, the plane used to transport cadets to the required altitude for jumping, the DeHavilland Twin Otter, needed new engines for efficiency, power, and noise reduction. Also, the avionics needed upgrades that pilots had regularly requested in the past. Furthermore, two-thirds of the parachutes used for the free fall jumping had exceeded their 10-year life cycle and needed to be replaced. Without new parachutes, operations at the 98<sup>th</sup> would have ceased. In the summer of

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<sup>50</sup> BBP, AETC/XPPB, “Answers to USAFA Glider and SPLA Questions,” 9 Nov 04.

<sup>51</sup> Rpt, HQ AETC/XPPB, “Transfer of the 34 Operations Group From the USAF Academy to HQ Air Education and Training Command SATAF I,” 30 Jul 04.

<sup>52</sup> Brfg, AETC/XP to AETC/CC, “IPT for 306<sup>th</sup> FTG Way Ahead,” 11 Mar 05.

<sup>53</sup> *Ibid.*

2005, AETC paid the \$1.7 million bill. For the future, AETC began working with the 98<sup>th</sup> and the Association of Graduates to build a \$6 million Vertical Wind Tunnel that would provide trainees the ability to practice freefall maneuvers.<sup>54</sup>

The Sailplane Landing Area was also in dire need of repair. After AETC took control of the 94 FTS, plans were set in motion to alleviate the SPLA problem. While AETC ran the flying programs, the Academy remained in control of the airfield real estate, and it had several plans to fix the problem. One was to place “Avturf” on the entire 500 foot by 4500 foot area of the SPLA, which essentially would provide artificial turf surface for soft sailplane landings. AETC rejected the plan as too expensive; instead, command officials opted for the more cost-effective grading and drill seeding of the SPLA with smooth brome grass. The durable grass grew well in the elevated Colorado environment and was rugged enough to endure the harsh treatment of glider landings. The estimated time for completion of the reseeded landing area was November 2006. Once completed, the average daily sortie count would increase to around 300, roughly three times as many flights as could be conducted on the dilapidated SPLA.

Following the AETC transfer, the Academy was able to begin the transition from IFT to AFS. In November 2002, the Academy managed the contract with Embry-Riddle Aeronautical University (ERAU) to conduct the IFT program, while AETC provided the funding. Six months prior to each semester, the 557 FTS commander submitted the expected number of cadets for IFT to Embry-Riddle. Embry-Riddle would then hire the required number of pilots to teach the cadets. Cadets could not always make it to the airfield due to schedule conflicts with military training, and by agreement the contract-



**The Diamond DA20-C1 trainer used for the IFT and AFS programs at the Academy**

ed pilots were paid whether or not they flew. The out-of-pocket expenses to reimburse Embry-Riddle were fairly significant. AETC managed the contract with EMAU after February 2005. In the adjusted contract, the Academy would pay for the unused hours when cadets could not make it to the airfield.<sup>55</sup>

The new Academy Flight Screening program dramatically shifted the purposes and methods of powered flight training at the Academy. The temporary IFT program was less than ideal in many respects for providing SUPT the best candidates. In IFT, the primary purpose was to allow cadets to fly for 50 hours to earn their PPL. Although the bulk of the program was contracted to Embry-Riddle for training at the Academy, many cadets had to go off base to other airfields for training. Consequently, no uniform method of training existed for the cadets, especially preparing them for the rigors of SUPT. A major benefit to AFS was that it all training

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<sup>54</sup> *Ibid.*

<sup>55</sup> Brfg, AETC/XP to AETC/CC, “IPT for 306<sup>th</sup> FTG Way Ahead,” 11 Mar 05.

would be conducted at the Academy for USAFA cadets. The contracted IPs from Embry-Riddle still instructed cadets with the same Diamond DA20-C1 aircraft, but military oversight increased. The AFS program brought a distinctly military-orientated approach to the powered flight training, which included pre-flight stand-ups, bold-faced memorizations, and a uniform method of instruction for the cadets that simulated the environment students experienced in SUPT. Cadets were given 25 hours in the trainer aircraft, of which 1.7 hours were solo. The reduced number of hours meant that cadets enrolled in the program would be able to fly all the required hours in one semester. The bottom line was to allow the Air Force to identify those cadets who would not make it in SUPT. The AFS program officially began at the Academy on 6 June 2005, hallmarking the latest evolution of the flying programs.<sup>56</sup>

## **Conclusion**

The cadet flying programs evolved greatly after their inception during the early years of the Academy. The foundations for the flying programs were based on similar programs established at West Point during the 1940's. From there, the official programs at the Academy began small and grew over time, eventually incorporating the small soaring and parachuting cadet clubs. While the flying squadrons at the Academy changed names and reported to different organizations throughout the years, a common thread bound all of them together -- the desire to provide cadets with the best flying environment that resources allowed. The most recent change occurred on 6 June 2005 when the first class at the Academy began the AFS program. Whether the Academy or other organizations like AETC controlled the airmanship programs, the flying programs would continue to evolve to provide the best possible airmanship training for cadets and to motivate them toward a rated career in the Air Force.

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<sup>56</sup> *Ibid.*