

U.S. AIR FORCE TEST PILOT SCHOOL

The United States Air Force Test Pilot School (USAF TPS) is where the Air Force's top pilots, navigators and engineers learn how to conduct flight test and generate the data needed to carry out test missions. Human lives and millions of dollars depend upon how carefully a test mission is planned and flown. The comprehensive curriculum of Test Pilot School is fundamental to the success of flight test and evaluation. Upon graduating from TPS, graduates will have earned a Master of Science Degree in Flight Test Engineering. Explore the links below to find out more.

Information

Browse information by clicking on a specific topic below or view [all information](#) and scroll through alphabetically.

- [Accreditation](#)
- [Address Change](#)
- [Admission Results](#)
- [Admission Requirements](#)
- [Admission Calendar](#)
- [AFI 99-107](#)
- [AFIT-TPS Program](#)
- [Air University](#)
- [Alumni](#)
- [Altitude Chamber](#)
- [Ancillary Training](#)
- [Application Process](#)
- [Assignment – After Graduation](#)
- [Awards](#)
- [Catalog](#)
- [Centrifuge](#)
- [Contacts](#)
- [Continuing Education](#)
- [Course Level](#)
- [Credits](#)
- [Curriculum and Course Descriptions](#)
- [DAU Credit](#)
- [English Language Proficiency](#)
- [Enrollment Verification](#)
- [Flight Physicals](#)
- [Flying Resume](#)
- [Foreign Students](#)
- [Grades](#)

Photos



U.S. Air Force Test Pilot School patch

[Download HiRes](#)

- [GRE Scores](#)
- [History](#)
- [Housing](#)
- [International Students](#)
- [Library](#)
- [Local Area](#)
- [Name/Rank Changes](#)
- [Physicals](#)
- [Pre-requisites](#)
- [Public Affairs](#)
- [Relocating](#)
- [Reporting Instructions](#)
- [Short Courses](#)
- [T-38 Training](#)
- [Textbooks](#)
- [Transcripts](#)
- [Visitors](#)
- [Water Survival Training](#)
- [Welcome Packet](#)

TPS Information

Accreditation

The United States Air Force Test Pilot School (USAF TPS) program, not the school, has been accredited by the Southern Association of Schools and Colleges (SACS). Accreditation is under the auspices of the USAF Air University (AU), a fully accredited institution. The USAF TPS is the only affiliate school of Air University. Students graduated after April 2007 meet requirements for a SACS accredited Master of Science degree in Flight Test Engineering from Air University. The TPS curriculum was redesigned after 2006 to meet accreditation standards. There is currently no bridging program to allow graduates prior to April 2007 to earn the degree.

[Back to Top](#)

Address Change

To correct or update your address, email or phone number or other data, please contact TPSAdmissions@us.af.mil.

[Back to Top](#)

Admission Results

The results of the TPS Board are released by the Air Force Personnel Center (AFPC). The list of selects is available via your supervisor or your local military personnel office approximately the third week of December each year.

Selects should contact tpsadmissions@edwards.af.mil with the information requested in the PSDM (Personnel Services Delivery Message). Alternates should not provide information. Should an Alternate's status change to Select, individuals will be notified. Non-selects are not notified of their status. For those who would like to reapply, please check the latest TPS Board Announcement, update your application and follow PSDM procedures for reapplication. It is not unusual to be accepted upon second application. Students are selected from a highly qualified applicant pool. One year of additional education and experience may provide the additional qualifications needed for admission.

[Back to Top](#)

Admission Requirements

Admissions requirements and application materials are in [Air Force Instruction \(AFI\) 99-107](#). International applicants should discuss requirements with their military and embassy. A summary of minimum requirements is shown below. Some physical science degrees may be acceptable with additional coursework:

Course	Time in Service (at time of entry)	Education	Experience	Physical Qualification
Experimental Test Pilot	≤ 9 yrs. and 6 mo. (helicopter 10 yrs and 3 mo.)	BS in Engineering, Math or Physics (GPA > 3.0 on 4.0 scale)	12 mo. AC in MWS and 750 hr or IP (MWS) 1000 hr if dual IP Note: 250 hrs. of manned non-MWS time may be included.	Annual Flying Class II
Experimental Test RPA Pilot	≤ 9 yrs. and 6 mo	BS in Engineering, Math or Physics (GPA > 3.0)	IP in RPA MWS or at least 750 hr (250 hrs in a manned MWS may be included)	Annual Flying Class II
Experimental Combat Systems Officer (CSO including Navigator, WSO)	≤ 9 yrs. and 6 mo	BS in Engineering, Math or Physics (GPA > 3.0)	IP in CSO MWS or at least 500 hrs. in MWS, excludes student time	Annual Flying Class II
Experimental Flight Test Engineer	≤ 8 years Active: TAFCS Guard/Reserve: TFCSD	BS in Engineering, Math or Physics (GPA > 3.0). Technical master's degree highly desired	≥ 2 yr experience AFSCs: 13XX, 14NX, 21AX, 21CX, 21LX, 21MX, 33SX, 61SX, 62EX or 63AX	Annual Flying Class III

Please read the information found here on the USAF web site, AFI 99-107, and the TPS Board Announcement thoroughly. The annual TPS Board Announcement is distributed in

the Spring by AFPC via Personnel Services Delivery Message (PSDM) to provide any supplementary application instructions. Dates fluctuate, but TPS applications are typically due in June. The PSDM announcement is available via your military personnel office. If your personnel office has not yet received the announcement, please have them contact the Air Force Personnel Office (AFPC) to ask for the TPS Selection Board PSDM. If the current year PSDM is not available, last year's announcement may be available until the new announcement is posted. As soon as the Board Announcement is available, it will be posted to the USAF TPS web site. If you still have questions, please contact TPSAdmissions@us.af.mil.

[Back to Top](#)

Admissions Calendar

Spring (mid to late Mar)	TPS Board Announcement via AFPC PSDM
Summer (late May to early Jun)	TPS Applications Due
Summer (late Jun to Jul)	TPS Board meets
Fall (late Aug to Nov)	Pilot applicant flight evaluations by invitation
Winter (mid Dec to Feb)	TPS Board Results via supervisor or AFPC PSDM

[Back to Top](#)

AFI 99-107

[Air Force Instruction \(AFI\) 99-107](#) is the document that identifies application requirements and provides application materials. Applicants should plan to begin assessing application requirements as early as 18 months prior to application. The Air Force Personnel Center (AFPC) also publishes a TPS Board Announcement via Personnel Services Delivery Message (PSDM). The PSDM may contain supplemental application and requirements instructions so should be checked as soon as it is released in the Spring, at least 120 days prior to application due date. The PSDM is available from your military personnel office.

[Back to Top](#)

AFIT-TPS Program

The AFIT-TPS Program is a joint program between the Air Force Institute of Technology (AFIT) and the Test Pilot School (TPS). In this program students would attend AFIT for a traditional type graduate education, then attend TPS 15 months later where they complete the entire TPS program and their thesis for AFIT. They will end up earning two master's degrees, one in Flight Test Engineering for completing TPS and one in a different engineering specialty. Applying for the AFIT-TPS Program is as simple as checking a box on the TPS application, and providing Graduate Record Examinations (GRE) scores. Only about 3 students per year are selected for this special program. Checking the box does not exclude you from consideration for the regular TPS program.

[Back to Top](#)

Air University

Air University (AU) is the educational institution from which TPS graduates receive degrees. AU and the TPS Program are accredited by the Southern Association of Colleges and Schools (SACS). The TPS is AU's only affiliate school. There is no additional coursework required upon completion of the TPS to meet requirements for the Master of Science Degree in Flight Test Engineering. All students attending TPS since 2007 are enrolled in the MS Degree automatically.

[Back to Top](#)

Alumni

The USAF TPS has a long list of distinguished alumni. Graduates should continue to update their information with the school. We are soon hoping to connect you with an alumni association that can provide typical alumni events and services. Check back for periodic updates.

[Back to Top](#)

Altitude Chamber

All TPS applicants and admitted students must have current physiological (altitude chamber) training that will not expire prior to graduation from TPS. Your local flight surgeons office or base physiologist can answer questions about currency and aircrew requirements.

[Back to Top](#)

Ancillary Training

All TPS Selects will complete a list of required training prior to the start of TPS to meet Air Force and TPS requirements. That training must be completed in a specific window prior to the start of TPS and requirements are subject to change. Therefore training cannot be completed prior to when admitted students are provided information.

[Back to Top](#)

Application Process

The application process for admission to the USAF TPS is provided in [AFI 99-107](#). See the [admission requirements](#) section above.

[Back to Top](#)

Assignment - After Graduation

Assignment after graduation is worked by AFPC in coordination with the USAF TPS. Follow-on assignments may include Edwards Air Force Base (CA), Eglin Air Force Base (FL) and several other locations depending on the needs of the Air Force. Wherever there is flight test, there are TPS graduates.

[Back to Top](#)

Awards

A select few TPS graduates will be honored to receive one of several awards for their performance during the year.

Aaron C. "C-Dot" George Award - in memory of Major Aaron C. George of Class 99B who died in an aircraft accident. This award is voted on by the class to select the one student who best exemplified the warrior-focused attitude.

Onizuka Prop Wash Award - in memory of Lieutenant Colonel Ellison S. Onizuka, Class 74B who died in the Space Shuttle Challenger accident. This award is voted on by classmates to identify the one student who contributed most to class spirit and morale.

Raymond L. Jones Award - in honor of R.L. Jones and jointly established by the school and the Society of Flight Test Engineers. Identifies the top flight test engineer, navigator, weapons systems officer or combat systems officer.

Liethen-Tittle Award - in honor of Majors Frank Liethen and David Tittle who died in an aircraft accident. This award identifies the top pilot within each class.

Additionally, after 20 years in aerospace, some graduates may be awarded the Distinguished Alumnus Award. Each graduating class chooses a Distinguished Alumnus that has demonstrated significant achievement in the field of aerospace.

[Back to Top](#)

Catalog

The Air University [Catalog](#) describes the current TPS [curriculum](#) and degree program.

[Back to Top](#)

Centrifuge

Centrifuge training is no longer required for attendance at TPS.

[Back to Top](#)

Contacts

Contacts that may be useful:

TPSAdmissions@us.af.mil or Telephone (661) 277-9933

Admission, application, general TPS questions, visit requests, international application and visit questions.

Air Force, DoD, other government and private research institutions and corporations interested in collaborating with TPS on a research project.

[Back to Top](#)

Continuing Education

Currently there is no continuing education offered to TPS graduates. Short courses (days to weeks long) are sometimes offered for leadership desiring an introduction to flight test. Currently no short courses are anticipated for 2014. More information is available by contacting tpsadmissions@edwards.af.mil. Please ensure to include “**short courses**” in your subject line.

[Back to Top](#)

Cost

There is no tuition cost for USAF military students. USAF DoD civilian engineers are supported by their losing unit. Costs for international militaries is available through the inquiring country’s embassy. Students themselves pay no direct tuition, they are supported by their parent military.

[Back to Top](#)

Course Level

The USAF TPS course is a graduate level program that leads to a Master of Science Degree in Flight Test Engineering from Air University.

[Back to Top](#)

Credits

The USAF TPS program is 50 credit hours. The program does not operate on a straight quarter system, however credit is given in quarter units for the 48-week term. The TPS educational program is an intense academic and hands on experience that essentially teaches a two year Master's program in one year.

[Back to Top](#)

Curriculum

The current curriculum is viewable at www.au.af.mil/catalog. However, below is a sample program topics.

Fixed-Wing Aerodynamics
Performance Data Standardization
Unaugmented Airplane Motion
Flight Control Systems Testing
Stall, Departure, and Spin Failure State Test
Human Factors and Avionics
Airborne Sensors
Weapons and Integrated Systems Evaluations
Test Planning and Reporting
Test Management Project and Comprehensive Exams
Single-Look Qualitative Evaluation Program

[Back to Top](#)

DAU Credit

Prior to attending US military and civilian students will need to complete several Defense Acquisition University (DAU) courses. Combined with coursework taken while at the TPS, students will receive US acquisition Level 1 certification and will be well on their way to Level 2 certification.

[Back to Top](#)

English Language Proficiency

English language proficiency is required to attend the USAF TPS. For international students an Oral Proficiency Interview (OPI) score of 2+/2+ is required. This is higher than most other pilot programs since significant writing and graduate level work is required.

[Back to Top](#)

Enrollment Verification

Enrollment verification requests for graduates of the USAF TPS may be requested from: TPSAdmissions@us.af.mil .

[Back to Top](#)

Flight Physicals

Flying Class II physicals are required for all US pilot and combat systems officer crew types including navigator, weapons systems officers and remotely piloted aircraft pilot.

Flying Class III physicals are required for all US engineer applicants.

US applicants should consult their local Flight Medicine office for questions about qualification standards.

International military should consult with their training coordinator to determine US equivalent standards for applicants to pass a USAF Flying Class II or III physical. The physical standards are similar to other military aircrew physicals, but may have stricter requirements.

[Back to Top](#)

Flying Resume

Applicants will need to complete a resume of flying for application to TPS. A template is available in the application instruction, [AFI 99-107](#), or searchable by form number in the Air Force Forms and Publications site.

[Back to Top](#)

Foreign Students

Foreign military students are coordinated via US and foreign embassies with the USAF. Requirements for admission are the same as for US students. The TPS does not select which countries obtain seat allocations. However the TPS does approve or disapprove admission qualifications through official training coordination channels.

[Back to Top](#)

Grades

All courses are taken for a letter grade. Letter grades (A, B, C, D, or F) reflect your performance in a class as the result of grade points earned on events combined with instructor and peer evaluation scoring. On rare occasions an incomplete (I) may be recorded, indicating a student has the option to complete. Such a situation might occur in the event of an injury during the course.

A+, A, A- = Excellent 4.0, 4.0, 3.7
B+, B, B- = Good 3.3, 3.0, 2.7
C+, C, C- = Fair 2.3, 2.0, 1.7
D = Poor 1.0
F = Fail 0.0

Grades are reported on your official Air University (AU) transcript, available by filling out the AU [transcript request](#) and submitting to the address indicated on the form. It may take several weeks to obtain a transcript, so please submit requests as soon as possible.

[Back to Top](#)

GRE Scores

Graduate Record Examinations (GRE) Scores are not required for application to TPS, unless applying for the joint AFIT-TPS Program.

[Back to Top](#)

History

The school has been in existence since 1944 and has a long and distinguished history. Graduates have gone on to become generals, astronauts, first flight icons of aerospace, heroes of war and today's leaders in aerospace.

The Early Years

An airplane - any airplane - is absolutely useless unless its flying characteristics are known. What pilot would take a plane into the air without knowing its stalling speed, its good traits, its idiosyncrasies? Beyond this, its performance levels must be known before any profitable use can be made of the machine: how high and how fast can it fly, yes, but also its best climbing speed, its most useful altitude, its load-carrying ability, its dependability in flight.

As long as the United States has had military airplanes, it has needed skilled test pilots. In the very earliest days, the nation's entire air force consisted of two Wright biplanes and a handful of officers and men in the tiny Aviation Section of the U.S. Army Signal Corps. These stalwart airmen did their own testing and maintenance, and often taught each other how to fly. World War I, and the sudden realization that European nations were far ahead in aeronautics, speedily brought an end to this comfortable arrangement.

In 1914, the Army set up its first dedicated aeronautical research and development (R&D) establishment at North Island, in San Diego. Before World War I had ended, it transferred the function to McCook Field at Dayton, Ohio, and set up an impressive aviation engineering laboratory. There, working from McCook's infamously short 1,000-

foot grass runway, some 12 to 15 Army test pilots flew development and evaluation missions and conducted major research projects as well. Lieutenants Jimmy Doolittle, John Macready and Harold Harris were among these aviation pioneers - some of the very best pilots in the business.

Aviation's Golden Age

As American aviation began its great boom in the 1920s, the Army found itself increasingly hard-pressed to keep up with civilian developments. Private racing planes began to challenge Army pursuit ships, and much of the nation's best design and research work was being done in private companies.

McCook Field was becoming far too small for modern planes, and so the newly-formed Materiel Division developed another facility for aeronautical development, this one at nearby Wright Field. Although the new location had much more space for facilities and flight activities, the bulk of the nation's basic flight research was soon shifted to the civilian National Advisory Committee for Aeronautics (NACA). During the 1920s and early 1930s, numerous aviation companies sprouted up around the country and were encouraged to conduct the flight verification of their own products.

In 1934, the Baker Board ended the Army's practice of developing its own aircraft, and the Materiel Division reduced its own flight testing role to verifying the performance of planes from private manufacturers and to a limited amount of research flying. These activities came to be carried out by a small and hardy cadre of some five or six test pilots in the Flight Test Section, aided by a flight test engineer or two.

During the Depression-ridden 1930s, the Army Air Corps selected its test personnel from a variety of sources. Some of its brightest and most skilled pilots continued to volunteer for the exacting duty, attracted by the technical demands and the excitement of new frontiers. Others, usually instructor pilots, were simply assigned to the job. Occasionally a bewildered rookie, fresh out of flying school, found himself on the way to Dayton. One of these, Lt Donald Putt, later recalled that "...out of the blue, I got orders to report to Dayton...I had not shown any interest of wanting to be a test pilot." Nevertheless he became one, survived the experience, and went on to retire at three-star rank.

It was just as well that these men were skilled in the air. Although the testing of aircraft was rapidly evolving into a disciplined science during the interwar years, the training of test pilots was apt to be decidedly informal.

Incoming pilots were first shown the flight line and then told to get qualified on each aircraft type available - a matter of one hour of flying time and five landings. Once the neophyte had accomplished this task, a flight test engineer would explain the section's flying techniques and data-gathering methods, and the pilot would then begin regular flying duty. A formal engineering background was not particularly wanted, nor was the pilot expected to exercise much judgment - just to follow the instructions on the card and fly the airplane accordingly. Once back on the ground, the test pilot would write up his

own data and then discuss it with an engineer. For a year or two, the new pilot would serve an apprenticeship as a "functional" test pilot, performing routine tasks, until he gradually became acknowledged as a professional.

Again, War

This casual tempo lasted until the booming demands of another world war once more forced a move toward greater professionalism. Experienced test pilots and engineers began systematically tutoring the neophytes and setting them to the task of evaluating an aircraft whose performance levels were already well known. If the new pilot's report was acceptable, he was immediately set to work. Col Ernest K. Warburton, chief of the Flight Section at Wright Field, was determined to formalize the process even further. Inspired by the Royal Air Force, which under the press of war had just established its Empire Test Pilots' School at Boscombe Down, he was determined to follow suit. The need for standardization had become obvious to many in the flight test community, and the U. S. Air Force Air Technical Service Command set up its Flight Test Training Unit on Sept. 9, 1944. Maj Ralph C. Hoewing was the officer in charge and later served as its commandant.

The new school was staffed at first by only three or four instructors, who set up a formal three-month long curriculum stressing performance flight test theory and piloting techniques. A basic pattern soon developed which served for the next five decades: hours spent in the classroom alternated with time in the cockpit, applying the newly-presented lessons in a practical manner.

The first class used the reliable T-6 trainer. After a single class, the school was redesignated the Flight Performance School and took up quarters at nearby Vandalia Municipal Airport (now the Dayton International Airport). It remained there for a single year, adding P-51s, B-17s and B-25s to its roster.

In the meantime, Col. Albert Boyd had become Chief of the Flight Test Division. A vastly experienced test pilot in his own right, Col Boyd was known throughout the Army Air Corps for his exacting professional standards and for the type of disciplined military leadership which could transform the most exuberant young pilots into steady professionals. Later known as the "father of modern Air Force flight test," Colonel Boyd was exactly the right person to help the Army Air Forces cope with the enormous technological leaps which were coming thick and fast. He began by personally choosing his new pilots and then assigning them to his Flight Test Division's Accelerated Service Test Section. Those who survived his scrutiny and who continued to meet his exacting standards, then found themselves undergoing formal training in the classroom.

While Col. Boyd was coping with the surge of wartime work, teams of Wright Field pilots and engineers were shuttling out to Muroc Dry Lake in Southern California. There, in the clear and uncongested skies over the Mojave Desert, development work had begun on the nation's first two jet aircraft, first Bell's pioneering P-59 and then Lockheed's elegant new P-80. These planes, with their quantum advance in propulsion technology,

were already beginning to force a rapid evolution in the entire world of flight testing. More and more, pilots had to combine their flying skills with the knowledge of trained engineers - to have a workable technical knowledge of the phenomena they were encountering, and to translate that into the language of the designer and the engineer. The Flight Performance School developed a four-month stability and control course for its curriculum in 1946, and a P-80 Shooting Star was added to the school's fleet a year later.

The Move West

Throughout the war, the focus of the nation's progress in military aviation had gradually shifted westward, toward the great airplane companies along the West Coast. With Muroc Air Force Base providing an ideal flying environment, it was becoming increasingly obvious that Wright Field should move its entire flight test operations there - and its test pilot school as well. In September 1949, Col. Boyd had been selected for brigadier general and had assumed command of Muroc Air Force Base, and he began preparations to move the newly-renamed Air Materiel Command Experimental Test Pilot School westward. Two years later, the arrangements had been completed and the school was moved to the newly-renamed Edwards Air Force Base on Feb. 4, 1951. Two aircraft accompanied the transfer, and the training establishment took up residence in a wooden maintenance hangar located on what later came to be known as South Base. Two months later, the Air Force created the Air Research and Development Command (ARDC) and assigned all R&D activities to the new organization. The ARDC assumed administrative control over the base and the school's official designation likewise changed once more, to the ARDC Experimental Test Pilot School.

If the school's new home was made up of rickety wartime buildings located far from urban entertainment, at least its flying environment was superb. The immense 6-by-12 mile expanse of Edwards Dry Lake offered a comforting alternative to the base's runway and a new 15,000-foot concrete strip - the longest in the United States - was soon to be built.

The flying weather was likewise excellent; during its first seven months of operations, the school lost only two flying days because of bad weather conditions. Because the air is generally smoother in the morning hours, the daily schedule changed to mornings in the cockpit, followed by afternoons in the classroom. Student pilots soon discovered, however, that the delights of clear air and uncluttered airspace were counterbalanced to some degree by the drudgery of data reduction. After each test or training flight, the numerous data points recorded on film or oscillograph paper had to be laboriously transcribed and then reduced by hand into a coherent report - easily the least popular part of the curriculum.

Scarcely a year after the move to Edwards Air Force Base, the school's name changed once more, to the U.S. Air Force Experimental Flight Test Pilot School. This change was more significant than it might appear. Throughout its early years, the school had coexisted with the Flight Test Division, which supplied the bulk of its students. Even after the move to Edwards, many students were simply chosen from volunteers from the

local test support squadron. Now, however, the school began to draw on a much wider pool of candidates from across the entire Air Force spectrum. More importantly, entrance requirements were tightened and the selection process became intensely competitive, as it remains today. Candidates not only had to be outstanding pilots, but were expected to satisfy stringent academic requirements as well - it was becoming increasingly obvious that only the very best and the brightest need apply. Incoming students now found themselves confronting accelerated courses in subjects such as flight mechanics, differential calculus and supersonic aerodynamics. The tougher requirements soon paid off: the student dropout rate plummeted and the professionalism of the graduates increased even further. The Test Pilot School took its place in the front rank of the select few such institutions in the world.

Throughout the 1950s, the school continued to evolve in order to meet the requirements of a huge number of new airplanes coming into the service - the Golden Age of Edwards Air Force Base. Efforts to update the TPS fleet with high performance aircraft, however, were often frustrating, and aircraft acquisition came to be a perennial challenge to the ingenuity of school commandants. The venerable T-33 T-Birds graced its flight line for an entire generation, but its other trainers were often a motley collection of jet and piston aircraft. Its facilities improved greatly when the school, which had been renamed the U.S. Air Force Flight Test Pilot School on June 9, 1955, moved into its present facilities on the Main Base. On March 14, 1956, the TPS gladly exchanged its wooden hangar for a new purpose-built classroom and administration building, and its aircraft could now be serviced in one of the two huge World War II steel hangars which had also been moved from South Base as part of Edwards Air Force Base's giant modernization project.

Into Space

Once ensconced in its permanent quarters, the Test Pilot School continued to evolve its curriculum in order to satisfy rapidly-changing Air Force requirements. Even as Sputnik turned the world's eyes toward the heavens late in 1957, the Air Force was preparing for flight beyond the atmosphere: within two years of the first orbital flight, the X-15 was poised to fly at unprecedented heights for a winged airplane and the X-20 Dyna-Soar program began, aimed at manned orbital flight.

The Test Pilot School began to develop additional courses to help new test pilots cope with new responsibilities, and the school's six-month course was extended to eight. By the end of 1958, its academic curriculum was becoming widely regarded as equivalent to the final two years of college-level aeronautical engineering work. More was to come. As the Air Force gradually developed an aerospace doctrine during this period, a small cadre began to establish the criteria for additional course work aimed at qualifying TPS graduates for the tasks of an astronaut.

This movement came to full term on Oct. 12, 1961, when the Test Pilot School was redesignated the U.S. Air Force Aerospace Research Pilot School (ARPS). Now the curriculum expanded to a full year. U.S. military pilots who were admitted to the nation's first formal astronaut training course found that the school's traditional performance and

flying qualities curriculum was now only the prelude to a rigorous array of space-related courses, such as thermodynamics, bioastronautics, and Newtonian mechanics. New and up-to-date aircraft began to appear on the flight line, and advanced computer systems were acquired. The first-of-its-kind T-27 Spaceflight Simulator became the keystone of the new curriculum, replicating nearly all of the sights, sounds and sensations to be encountered in a variety of space missions and vehicles. To train the students in out-of-atmosphere maneuvering and reentry problems, three F-104 Starfighters were converted to NF-104s; a rocket engine in the tail permitted zoom climbs above 100,000 feet, an altitude where reaction control jets must be used instead of conventional control surfaces.

The new curriculum now required a full year: Phase I (Experimental Test Pilot Course) and Phase II (Aerospace Research Pilot Course) and the selection process became correspondingly more stringent. A bachelor's of science degree in engineering, physical science or mathematics was now a minimum requirement and even the school's preliminary "reviews" of various subjects came to be regarded as equal to a year's advanced study.

With upwards of 300 applications per year, there was no lack of qualified candidates; all had extensive flight experience and many had advanced degrees in hand. One student aptly described his hard-driving classmates as "hyperthyroid, superachieving first sons of superachievers." The hyperthyroidism paid off: 37 ARPS graduates were selected for the U.S. space program, and 26 of them earned their astronaut's wings in space. Currently, NASA has chosen more than 75 Air Force ARPS and TPS graduates for astronaut duties.

And Out Again

After the first moon landings, however, the national priorities gradually began to change once more. Political and public support for manned space programs began to diminish and the military lost its manned spaceflight mission. The highly advanced X-20 Dyna-Soar and Manned Orbiting Laboratory programs, centerpieces of the school's very reason for space training, were canceled. At the same time, the rise of the systems technology approach in the aerospace community had dramatically begun to reorient the traditional approach to the development and acquisition of modern aircraft. Clearly, it was necessary for the school to reorient itself. Gradually, the Aerospace Research Pilot School began to de-emphasize its spaceflight training mission. The T-27 simulator was sold to NASA and on July 1, 1972, the ARPS faded into history. The school then received its present designation, the U.S. Air Force Test Pilot School.

One Door Closes and Another Opens

The end of the space flight training mission was counterbalanced by the dramatically-increasing complexity of the new generation of aircraft. In earlier decades, it had been reasonable to consider an airplane's basic structure, its engine, sensors, flight instruments and controls, and weapons as separate entities. During the 1960s and 1970s, however, the airborne computer had rapidly come to be something more than an airborne convenience; the dramatic increase in computer capabilities, coupled with sophisticated avionics,

meant that it was now necessary to conceptualize a new aircraft by its functions and capabilities - the systems approach. Aircraft like the B-1 bomber soon forced yet another paradigm change, meshing all of a new aircraft's capabilities into a single working entity: systems integration. This required a paradigm change in testing philosophy, as well as additional skills for new test pilots. At the same time, the test pilots' managerial responsibilities had continued to increase. Therefore, as soon as the school had phased out its no-longer-needed ARPS curriculum, it replaced it with the academic structure which characterizes the school today.

[Back to Top](#)

Housing

Admitted students are required to live on base due to scheduling and safety precautions. The year is very demanding on time, so students will be happy to have a five minute drive to school. Base housing is set aside for students. After admission to TPS, you will receive a Housing application and contacts in your Welcome Packet. For general information, please see the Relocation section of this FAQ.

[Back to Top](#)

International Students

Foreign military students are coordinated via US and foreign embassies with the USAF. Requirements for admission are the same as for US students. The TPS does not select which countries obtain seat allocations. However the TPS does approve or disapprove admission qualifications through official training coordination channels.

[Back to Top](#)

Library

The USAF TPS students have access to a technical library and non-technical library on base, as well as a small technical library at the school.

[Back to Top](#)

Local Area

Local area information is available through the Edwards Air Force Base [Newcomer's Guide](#).

[Back to Top](#)

Name Change

Notify the [Chief of Student Services](#) if you will undergo a name change due to marriage, divorce or other circumstance including rank change.

[Back to Top](#)

Physicals

Application to the TPS Board requires a **new** flying class II or III physical depending on your crew type. Physicals must be completed prior to application to TPS. If you have pending waivers being adjudicated through the flight medicine system, you may still apply. Waiver approvals must be received prior to your selection to TPS. For pilots, you may not be able to complete necessary flight evaluations typically conducted in the Fall without a fully approved physical.

[Back to Top](#)

Pre-requisites

Upon admission to TPS it is very important admitted students read the Welcome Packet to ensure they meet all pre-requisites for beginning . Meeting pre-requisites ensures students can begin the course as planned. There may be serious negative consequences for not checking or completing requirements as directed.

[Back to Top](#)

Public Affairs

General public, news reporting and media institutions may contact the Air Force Test Center (AFTC) [Public Affairs Office](#) for working on projects or scheduling group tours. Staff, students and international counterparts should contact the [Chief of Student Services](#) who coordinates activities with TPS Command and AFTC Public Affairs.

[Back to Top](#)

Relocating

New students are required to live on base. Housing is reserved for students. Students will receive more information after admission to TPS. To obtain more information about the local area and base resources visit the Edwards Air Force Base [Newcomers Guide](#).

[Back to Top](#)

Reporting Instructions

New students should follow the instructions in the PSDM and wait to be contacted by TPS. Upon release of the PSDM data must be collected to ensure the classes are set

before anyone begins working towards fulfilling requirements to PCS. Some items have “no earlier than” timelines attached to them. Occasionally one or two students will be swapped and start either 6 months earlier or later than expected due to unique circumstances.

[Back to Top](#)

Short Courses

There are currently no short courses offered between now and October 2015. We will make an announcement here if that should change.

[Back to Top](#)

T-38 Training

USAF Multi-engine pilots and US Navy or Marine students selected for the USAF TPS may require T-38 (Jet-D) training prior to the start of TPS if they have not been previously qualified in the T-38 aircraft. Admitted students will receive additional information about that training in the Welcome Packet.

[Back to Top](#)

Textbooks

There is no advance material for the course.

[Back to Top](#)

Transcripts

Transcripts are not sent automatically. To request a transcript, fill out the Air University [transcript request](#) and mail to the address indicated on it. It may take several weeks to get a transcript so please request one as soon as possible.

[Back to Top](#)

Visitors

Unfortunately we are not able to support all individual visit requests to the TPS. Group visits must be coordinated via the Air Force Test Center [Public Affairs Office](#). Typically visits must be proposed at least 35 days in advance, with most coordinated at least 6 months in advance.

[Back to Top](#)

Water Survival Training

Students selected for the USAF TPS will take a refresher water survival training course during the first week of class to prepare for flight duty. This course cannot be completed in advance.

Students selected for the Naval Test Pilot School or foreign exchange school will take water survival training at those schools.

[Back to Top](#)

Welcome Packet

For admitted TPS students only:

The PSDM selection message that shows you selected for TPS will contain additional instructions about information reporting. Once your information has been reported, you will be contacted within 1-2 weeks with additional information and contacts.

[Back to Top](#)