AVIATION CAREERS SERIES

GOVERNMENT CAREERS

U.S. Department of Transportation
Federal Aviation Administration
Office of Public Affairs
Aviation Education Program

PA-127-91

Including:

Air Traffic Control Specialist (FAA)
Electronics Technician (FAA)
Aviation Safety Inspector (FAA)
Airspace System Inspection Pilot (FAA)
Flight Test Pilot (FAA)
Maintenance Mechanic (FAA)
Engineer
Engineering Aid and Engineering Technician
Aviation Jobs with the Military
Aviation Jobs with the National Transportation Safety Board
National Weather Service Meteorologist State Aviation Jobs

U.S. Department
of Transportation

**Federal Aviation
Administration**

INTRODUCTION

Aviation has progressed a long way since the 120-foot flight by Orville Wright on December 17, 1903, at Kitty Hawk, North Carolina, and since the first U.S. airline began operating between Tampa and St. Petersburg, Florida on January 1, 1914. Today supersonic aircraft fly routinely across the oceans, and more than two million people are employed in aviation, the aerospace and air transportation industries.

In response to its Congressional mandate, the Federal Aviation Administration, as part of its effort to plan for the future of air transportation, conducts an Aviation Education Program to inform students, teachers, and the public about the Nation's air transportation system.

Aviation offers many varied opportunities for exciting and rewarding careers. The purpose of this brochure, and others in the FAA Aviation Careers Series, is to provide information that will be useful in making career decisions. Publications in this series include:

1. ***Pilots & Flight Engineers***
2. ***Flight Attendants***
3. ***Airline Non-Flying Careers***
4. ***Aircraft Manufacturing***
5. ***Aviation Maintenance and Avionics***
6. ***Airport Careers***
7. ***Government***

There is also an introductory brochure entitled *"Your Career in Aviation: The Sky's the Limit,"* and a brochure entitled *"Women in Aviation."*

Free brochures may be obtained by sending a self-addressed mailing label with your request to: Superintendent of Documents, Retail Distribution Division, Consigned Branch, 8610 Cherry Lane, Laurel, MD 20707.

ACKNOWLEDGEMENTS

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Aviation Careers Series—Government Careers

GENERAL INFORMATION

Federal, state, and local government agencies are a major source of aviation jobs. If you are interested in public service and want good job security and a relatively predictable career path, you should consider a government career in aviation.

The Federal Aviation Administration of the U.S. Department of Transportation and a growing number of other Federal departments and agencies employ persons interested in civil aviation. All of these jobs come under the Federal Civil Service. Wage scales are determined by Congress, which periodically adjusts the pay levels to make them comparable to those in private business and industry.

The Federal Government is an Equal Employment Opportunity employer. It offers such benefits as Equal Pay for Equal Work, Upward Mobility, and Handicapped Employee Programs. Employees are covered by the Federal Employees' Benefits Program, which features liberal fringe benefits and salaries. Salaries for Federal Civil Service employees are established under two chief categories: General Schedule (for employees who perform administrative, technical, clerical, and professional jobs and who are paid on an annual basis) and the Federal Wage System (for employees who perform jobs associated with the trades and crafts and who are paid wages on an hourly basis). Supervisory and managerial positions, which are designated as GM, are covered by the Performance Management and Recognition System.

Most Federal Civil Service employees in aviation are covered by the General Schedule, and their salaries vary by grade level (GS-1 through GS-15). Within each of the grades in the General Schedule, periodic pay increases are based on performance.

A normal work week is 40 hours. Additional payment (called premium pay) is made for shift work involving duty between 6 PM and 6 AM and for work during Sundays and holidays. Merit promotions may be gained under provisions of agency-developed merit promotion plans.

The vacation and sick leave policy is generous: employees earn from 13 to 26 days of paid annual vacation, depending upon the length of service, and 13 days of paid sick leave each year. In addition, health insurance, low-cost group life insurance, credit union service, and compensation and medical care for injury on the job are offered. Most Federal employees under the Civil Service participate in a liberal retirement plan.

Except for the Department of Defense, the Federal Aviation Administration has the most aviation jobs in the Federal Government. The FAA is charged with the administration and enforcement of all Federal Aviation Regulations to ensure the safety of air transportation. The FAA also promotes, guides, and assists the development of a national system of civil airports. The FAA provides pilots with flight information and air traffic control services from flight planning to landing.

AIR TRAFFIC CONTROL SPECIALIST (FAA)

Requirements for the Job

Applicants must have general or specialized experience.

General experience is any progressively responsible work which demonstrates potential for learning and performing air traffic control work. The work can be administrative, technical, or other types of employment. Four years of college or any combination of education and experience equaling three years also are acceptable.

Specialized experience is military or civilian air traffic control work which demonstrates possession of the knowledge, skills, and abilities needed to perform air traffic control work.

Applicants who have passed the written test qualify for the experience requirements for GS-7 if they:

- *Hold or have held an appropriate facility rating and have actively controlled air traffic in civilian or military air traffic control terminals or centers;*
- *Hold or have held an FAA certificate as a dispatcher for an air carrier;*
- *Hold or have held an instrument pilot certificate;*

- *Hold or have held an FAA certificate as a navigator or have been fully qualified as a navigator/bombardier in the Armed Forces;*

- *Have 350 hours of flight time as a co-pilot or pilot and hold or have held a private pilot certificate or equivalent Armed Forces rating;*

- *Have served as a rated Aerospace Defense Command Intercept Director;*

- *Meet the general experience requirements and pass the written test with a high enough score to be considered for employment.*

Candidates must be able to pass a physical examination prior to appointment as an air traffic control specialist with the FAA. Thereafter, an annual physical examination is required. Employees are subject to random drug testing.

All applicants must pass a comprehensive written test and complete a personal interview during which their alertness, decisiveness, diction, poise, and conciseness of speech are evaluated. Because the unique skills necessary for success as a controller diminish with age, no one over the age of 31 is eligible to apply. For information on how to apply, contact the Aviation Careers Examining Division, Box 26650, Oklahoma City, Oklahoma 73126.

The FAA employs air traffic control specialists at air traffic control towers, at air route traffic control centers, and at flight service stations. Each of these jobs will be described in turn.

Controllers at FAA Airport Traffic Control Towers

Nature of the Work

Air traffic controllers have been described as "the guardians of the airways." It is their function to direct air traffic so it flows smoothly, efficiently, and above all safely. The tower controllers give pilots taxiing and takeoff instructions, air traffic clearances, and advice based on their own observations and on information from the National Weather Service, air route traffic control centers (ARTCCs), flight service stations, pilots, and other sources. They provide separation between landing and departing aircraft. They transfer control of aircraft to the ARTCC controller when the aircraft leaves their airspace, and they receive control of aircraft coming into their airspace from controllers at adjacent facilities. Air traffic controllers must be familiar with the aircraft identification and positions of the aircraft under their control, the aircraft types and speeds, and the location of navigational aids and landmarks in the area.

Working Conditions

Controllers normally work 40-hour-per-week shifts. They use radios, radar, electronic computers, telephones, traffic control lights, and other communication devices. Their responsibilities are divided into separate functions. A ground controller gives taxiing instructions and sometimes provides air traffic clearances to pilots who are on instrument flight plans or who will be flying through controlled airspace. At busy airports, these clearances are provided by a "clearance delivery" controller. Takeoff and landing instructions are issued by the tower controller. These duties are rotated among the staff about every two hours at busy locations.

Where the Jobs Are

FAA employs more than 12,000 controllers at approximately 400 towers. Some jobs are outside the contiguous United States in Alaska, Hawaii, Puerto Rico, the Virgin Islands, and American Samoa. A small number of controllers work for the Department of Defense and for the operators of non-FAA towers.

Wages

Trainees, or developmentals, are paid while learning their jobs. The starting grade is normally GS-7, for which the beginning salary is currently $21,906. The higher grades, ranging from GS-10 to GS-15, are for full-performance-level (FPL) positions located at the larger, more complex facilities, and the salaries at these grades range from $29,511 to $83,502. The GS-15 grade is limited to supervisors and managers in the largest facilities.

Opportunities for Advancement

Promotion from developmental to an FPL specialist depends upon satisfactory performance and progression in the training program. Increases in grade, with accompanying increases in salary for successful developmental, are fairly rapid.

Opportunities for Training

Trainees receive 9 weeks of initial screening and instruction at the FAA Academy in Oklahoma City, Oklahoma. If they successfully complete this training, they are assigned to a developmental position at a field location where they receive on-the-job training under close supervision. Those who successfully complete each phase of training progress to the next level until they become facility rated. Those who fail any phase of training are separated from the FAA or reassigned to a non-controller position. The nature of the work requires that controllers complete proficiency training programs on an on-going basis. Any controller who moves from one facility to another must again receive on-the-job training and be recertified in the new facility.

Outlook for the Future

Aviation is growing dramatically, and many new controllers are expected to be hired in the 1990s.

Controllers at FAA Air Route Traffic Control Centers

Nature of the Work

Air traffic control specialists at FAA air route traffic control centers (ARTCCs) give aircraft instructions, air traffic clearances, and advice regarding flight conditions during the en route portion of flights. They provide separation between aircraft flying along the Federal airways or operating into or out of airports not served by a terminal facility. Center controllers use radar, or, in some cases, manual procedures to track the progress of all instrument flights within the center's airspace. Where radar coverage is available and their workload permits, controllers will also provide radar service to pilots who are not on instrument flight plans, alerting them to potential traffic conflicts. The controllers transfer control of aircraft to the controllers in the adjacent center or to the approach control or terminal when the aircraft enters that facility's airspace.

Working Conditions

Center controllers are required to use computer equipment, radios, radar, telephones, and other electronic communication devices. Shift work is necessary. Radar equipment must be operated in semi-darkness. Unlike the controllers in airport traffic control towers, controllers in ARTCCs never see the aircraft they control except as "targets" on the radarscope.

Where the Jobs Are

The FAA employs about 10,000 controllers at 22 ARTCCs throughout the United States, Guam, and Puerto Rico.

Wages

The starting grade is normally GS-7 ($21,906). Trainees, or developmentals, are paid while learning their jobs. Grades range from GS-12 to GS-14 ($38,861 to a maximum of $70,987) for full-performance-level controllers. The grade is based on the complexity of the facility. Supervisors and managers in the more complex facilities can be graded as high as GS-15 (starting at $64,233 and reaching $83,502).

Opportunities for Advancement

Promotion to higher grades and to FPL controller positions depends upon performance and satisfactory achievement in the training program. Increases in grade are fairly rapid, with accompanying increases in salary for successful trainees.

Opportunities for Training

Trainees receive several weeks of initial screening and instruction at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of the training period, they are assigned to developmental positions for on-the-job training at one of the ARTCC locations. Like controllers at airport traffic control towers, ARTCC controllers, after they complete a particular phase of training, advance to the next phase or level until they are facility rated and become full-performance-level controllers. Those who fail to complete any phase of training are separated from the FAA or reassigned to non-controller positions.

Outlook for the Future

Consistent with predictions for continued growth of all sections of aviation, the need for center controllers will remain constant. In the 1990s, many controllers will be needed to replace those who retire or are promoted.

Controllers at FAA Flight Service Stations

Nature of the Work

The air traffic control specialists at the FAA's flight service stations (FSS) provide preflight, in-flight and emergency assistance to all pilots on request. They work with some pilots face-to-face at their facilities, and they also communicate with pilots by phone and radio. The specialists provide information about weather conditions for specific flights, receive and forward pilots' flight plans, relay air traffic control instructions, assist pilots in emergency situations, provide airport advisory service, and initiate searches for missing or overdue aircraft.

Working Conditions

Most flight service stations are located at airports, but because of advances in technology, this is not always necessary. The FSS system is being modernized. Existing flight service stations are being replaced eventually with fully automated facilities. FSS specialists are required to work shifts. They utilize telephones, radios, computers, weather radar, direction finding equipment, and other equipment in their work.

Where the Jobs Are

FAA flight service stations are at about 180 locations throughout the United States, Virgin Islands, and Puerto Rico. There are approximately 4,000 FSS specialists.

Wages

The starting grade is normally GS-7 ($21,906). Trainees, or developmentals, are paid while they learn. The full-performance-level grades range from GS-9 ($26,798) to GS-12 ($50,516). Supervisors and managers in the busier, more complex facilities are graded from GS-10 ($29,511) to GS-15 ($83,502).

Opportunities for Advancement

Specialists whose training progresses successfully attain higher grade levels as they gain experience and the complexity of their duties increase.

Opportunities for Training

Trainees receive 16 weeks of initial screening and instruction at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of the initial training, they are assigned to developmental positions for on-the-job training at their assigned facilities. Those who fail to certify on all required positions of operation are separated from the FAA or reassigned to other positions. Proficiency training is continuous, and specialists who move to a new facility must be recertified.

Outlook for the Future

Unlike air traffic control specialists at FAA towers and ARTCCs, specialists at flight service stations are not expected to increase in number. Automated Flight Service Stations in the future will serve larger areas. There will be a need, however, to hire replacements for the many flight service specialists who are expected to retire during this decade.

ELECTRONICS TECHNICIAN (FAA)

Nature of the Work

Electronics technicians install and maintain the electronic equipment required for air navigation, communications between aircraft and ground services, and control of aircraft movements to ensure safety in the air and smoothly flowing air traffic. Electronics technicians work with radar, radios, computers, wire communications systems, and other electronic devices at airports and along the network of Federal airways. Their work includes preventive maintenance (inspection of equipment, meter reading, replacement of deteriorating parts, adjustments) and corrective maintenance (trouble-shooting and repair and replacement of malfunctioning equipment). Electronics technicians may specialize in the design, development, and evaluation of new types of electronic equipment for the Federal airways.

Working Conditions

Technicians usually work in an Airway Facilities Sector Field Office at an airport. The equipment for which the office is responsible is within a 30- or 40-mile radius of the airport in control towers, air route traffic control

centers, or flight service stations. The equipment also can be in open fields and even on remote mountain tops. Some of the work is outdoors. A regular work week is 40 hours, with shift work and weekend work rotated.

Some FAA electronics technicians are appointed for airborne technical/electronics duty. They fly in government aircraft with airspace system inspection pilots during the flight inspection of navigational aids. Electronics technician applicants should indicate on their applications whether they are willing to fly in agency aircraft. The requirements and salary scales are basically the same as for other electronics technicians.

Requirements for the Job

Applicants must have general or specialized experience.

General experience consists of an aptitude for math and science and a willingness to train on sophisticated FAA equipment.

Specialized experience includes:

- *Work as a technician, instructor, inspector, or mechanic (civilian or military) which shows progression in theoretical and practical knowledge of electronic theory, and of characteristics, function, operation, and capabilities of a variety of types of electronic equipment. This experience must have included the use of schematic diagrams, a variety of test equipment, and the application of appropriate electronic formulas involved in such duties as testing, troubleshooting, modifying, designing, calibrating, installing, maintaining, repairing, constructing, developing, instructing on electronic equipment, or similar functions.*

- *Experience in developing policies, standards, and procedures for maintenance, installation, or similar functions provided the work clearly shows that the applicant applied a specialized knowledge of the theories and principles of a variety of electronic systems or equipment.*

- *Experience doing bench repair of television and radio receivers in a commercial shop in which the applicant did troubleshooting on a variety of equipment and used such special test equipment as sweep generators, marker generators, oscilloscopes, and others normally employed in such servicing will be acceptable as specialized experience at GS-6 and below, if applicable to the work of the position.*

Education may be substituted for experience as in the following:

- *GS-4: Successful completion of two years of study which include at least 12 semester hours in engineering, physical science, technology, or mathematics. At least 6 of the 12 semester hours must have been in electronics courses.*

- *GS-5: Successful completion of (a) all the requirements for the bachelor's degree in electrical engineering, electronics engineering or electronics technology; (b) three years of study in an accredited technical institute curriculum in electronics; or (c) a full 4-year course of study leading to a bachelor's degree which included major study or at least 24 semester hours in any combination of courses such as those listed for GS-4. At least 12 of the 24 semester hours must have been in electronics courses.*

Where the Jobs Are

The FAA employs more than 8,500 electronics technicians. Most of them work in field offices or "sectors" located all over the country. Some work at the FAA's Technical Center in Atlantic City, New Jersey. The Center is engaged in electronic research and development projects. They also work at the Aeronautical Center in Oklahoma City.

Wages

FAA electronics technicians normally start at GS-5 or GS-7 ($17,686 to $21,906), with advances to GS-11 ($32,423 to $42,152) and possibly higher.

Opportunities for Advancement

Employees can advance to higher grade levels depending upon the complexity of their duties, their knowledge and skills, and the degree of supervision received or exercised. Supervisory positions are available at field offices and regional offices.

AVIATION SAFETY INSPECTOR (FAA)

Aviation safety inspectors develop, administer, and enforce regulations and standards concerning civil aviation safety. They assess (1) the airworthiness of aircraft and aircraft systems, (2) the competence of pilots, mechanics, and other personnel, and (3) safety aspects of aviation facilities, equipment, and procedures. These positions require knowledge and skill in the operation, maintenance, or manufacture of aircraft and aircraft systems.

Requirements to Enter These Jobs

All candidates for entry-level aviation safety inspector positions must meet the following minimum qualification requirements:

- *Not more than two separate incidents involving Federal Aviation Regulations violations in the last 5 years.*
- *Valid State driver's license.*
- *Fluency in the English language.*
- *No chemical dependencies or drug abuse which could interfere with job performance.*
- *High school graduate or equivalent.*

Specific requirements for the various types of safety inspector positions include:

Air Carrier Avionics Inspectors

Specialized Experience—all of the following:

- *Aircraft electronics work experience.*
- *Experience involving the maintenance and repair of avionics systems in large aircraft over 12,500 pounds gross takeoff weight.*
- *Aircraft avionics experience in a repair station, air carrier repair facility, or military repair facility.*
- *Three years supervisory experience in* aircraft *avionics as a lead mechanic or repairman who supervises others.*

General Aviation Avionics Inspectors

Specialized Experience—all of the following:

- *Work experience involving the maintenance and repair of aircraft avionics systems.*
- *Aircraft avionics experience with aircraft under 12,500 pounds gross takeoff weight.*
- *Avionics experience in a repair station, airline repair facility, or military repair facility.*
- *Three years supervisory experience in aircraft avionics as a lead mechanic or repairman who supervises others.*

Recency of Specialized Experience: Some aircraft avionics work experience within the last three years.

Air Carrier Maintenance Inspectors

Specialized Experience—all of the following:

- *Aviation maintenance work experience.*
- *Experience involving the maintenance and repair of airframes, powerplants, and systems of large aircraft over 12,500 pounds gross takeoff weight maintained under an airworthiness maintenance and inspection program.*
- *Aircraft maintenance experience in a repair station, air carrier repair facility, or military repair facility.*
- *Three years supervisory experience in aviation maintenance as lead mechanic or repairman who supervises others.*

Recency of Specialized Experience: Some aviation maintenance work experience within the last three years.

Certificates and Ratings: FAA Mechanic Certificate with airframe and powerplant ratings.

General Aviation Maintenance Inspectors

Specialized Experience—all of the following:

- *Aviation maintenance work experience.*
- *Experience involving the maintenance and repair of airframes, powerplants, and aircraft systems with responsibility for certifying airworthiness.*
- *Maintenance experience with aircraft under 12,500 pounds gross takeoff weight.*
- *Maintenance experience in a repair station, airline repair facility, or military repair facility.*
- *Three years supervisory experience in aviation maintenance as a lead mechanic or repairman who supervises others.*

Recency of Specialized Experience: Some aviation maintenance work experience within the last three years.

Certificates and Ratings: FAA Mechanic Certificate with airframe and powerplant ratings.

Air Carrier Operations Inspectors

Specialized Experience

- *Pilot experience in large multi-engine aircraft over 12,500 pounds gross takeoff weight.*
- *Minimum 1,500 total flight hours.*

Recency of Specialized Experience—all of the following:

- *Pilot-in-command in large aircraft (over 12,500 pounds gross takeoff weight) within the last three years.*
- *Minimum 100 flight hours in the last three years.*
- *Minimum 1,000 flight hours in the last five years.*

Certificates and Ratings: Airline Transport Pilot Certificate or Commercial Pilot Certificate with instrument airplane rating.

Other Requirements

- *Professional flying skill as demonstrated by successful completion of turbojet evaluation.*
- *Not more than two flying accidents in the last five years.*

General Aviation Operations Inspectors

Specialized Experience

- *Pilot experience which provided a comprehensive knowledge of operations requirements, facilities, practices, procedures, and flight activities of aircraft.*
- *Minimum 1,500 total flight hours.*

Recency of Specialized Experience—all of the following:

- *Some aviation work experience within the last 10 years.*
- *Minimum 300 flight hours in the last three years.*
- *Minimum 1,000 flight hours in the last five years.*

Certificates and Rating—all of the following:

- *Airline Transport Pilot Certificate or Commercial Pilot Certificate with instrument airplane rating.*
- *Single and multiengine land airplane ratings.*
- *Valid Flight Instructor Certificate with single and multiengine airplane and instrument airplane ratings.*

Other Requirements

- *Professional flying skill as demonstrated in a flight check to Commercial Pilot Certificate with an Instrument Rating standard.*
- *Not more than two flying accidents in the last five years.*

Manufacturing Inspectors

Specialized Experience

- *Experience in the area of quality control/quality assurance systems, methods and techniques in the manufacture of aircraft, aircraft engines, propellers, or Class II products which demonstrates the ability to determine that aircraft and related products meet the approved design criteria or the design criteria on which approval is being sought and are in condition for safe operation.*

- *Experience involving either the actual issuance of or having responsibility for managing programs leading to the issuance of original airworthiness certificates or original export airworthiness approvals for aircraft, aircraft engines, propellers, or Class II products.*

- *Experience involving a combination of the above.*

Working Conditions

Considerable travel is required since inspections, consultations, and investigations must be made at various facilities and locations or at the scenes of accidents. Forty hours constitute a normal work week. Change of assignment from one duty station to another is required as staffing demands.

Where the Jobs Are

Inspectors operate out of nationwide Air Carrier District Offices, General Aviation District Offices, and Flight Standards District Offices. Five International Field Offices have the same functions as the Flight Standards District Offices.

Wages

Salaries range from GS-9 ($26,798 to $34,835) to GS-15 ($64,233 to $83,502).

Opportunities for Advancement

Outstanding inspectors may be promoted to the next higher level with increased responsibilities and salary. Inspectors who demonstrate managerial ability may become a section or branch manager or an instructor at the FAA Academy in Oklahoma City.

Outlook for the Future

Since economic deregulation of the airlines in the 1970s, Congress has stressed the need for more aviation safety inspectors. For more information on how to apply for safety inspector positions, contact the Aviation Careers Examining Division, Box 26650, Oklahoma City, Oklahoma 73126.

AIRSPACE SYSTEM INSPECTION PILOT (FAA)

Nature of the Work

Airspace system inspection pilots conduct in-flight inspection of ground-based air navigational facilities to determine if they are operating correctly. They fly multi-engine, high-performance jets with ultra-sophisticated, computerized, and automated electronic equipment. These "flying electronic laboratories" record and analyze facility performance, and they report potential hazards to air navigation for correction. The flights are made during the day and night, and under visual and instrument flight rules. Pilots assist in accident investigations by making special flight tests of any FAA navigational aids involved. Although most of their work is with the FAA employees who maintain the "navaids," airspace system inspection pilots also are in touch with other aviation interests regarding the installation, operation, and use of their navigational facilities.

Working Conditions

The job requires considerable travel. The flights cover navigational aids supporting Federal airways and civil and military airports throughout the United States. The basic work week is 40 hours.

Requirements for the Job

Experience as a pilot in general aviation or air carrier or military aviation is required. Experience requirements are specified in terms of flying time, certificates and ratings, rather than in number of years of experience. All applicants must hold a valid commercial pilot certificate with a multi-engine rating and instrument ratings.

	Total Time	Pilot-In Command	Multi-Engine	Instrument/ Night	Last 12 Months
GS-9	1200	250	100	100	100
GS-11	1500	250	500	150	100

Flying time in any category may be as pilot or co-pilot, except for the pilot-in-command hours specifically required. The instrument/night requirement must include at least 40 hours of actual instrument weather time. Experience as an air traffic controller, chief test pilot, chief pilot of an FAA-certificated flight school, or designated pilot examiner may be substituted for not more than 50 hours of the flying time required for the last 12 months. The pilot must have a first-class FAA medical certificate and periodically be re-examined to maintain employment in this job.

Where the Jobs Are

Pilots work out of one of the seven Flight Inspection Field Offices in the contiguous 48 states. Upon reaching the journeyman level of proficiency, pilots can bid on jobs in Alaska, Hawaii, Tokyo, or Germany.

Wages

Salaries range from GS-9 ($26,798 to $34,835) to GS-12 ($38,861 to $50,516).

Opportunities for Advancement

A trainee can advance to the job of second-pilot on an in-flight inspection of air navigation facilities. The next step is to become a supervisory airplane pilot who oversees the flight inspection crew and evaluates the report findings on navigation systems. If assigned to a Flight Inspection Field Office, the employee can advance from the position of second-pilot to airspace and procedures specialist responsible for developing instrument approaches and terminal and enroute air traffic procedures. Or the pilot may move up to become a senior flight inspector and aircraft commander, supervising flight crews and results of inspection missions. Managers of the field offices hold the top jobs.

Opportunities for Training

Flight instruction may be obtained from private or university-operated flight schools or from the military services. For more information on applying to become an airspace system inspection pilot, contact the Aviation Careers Examining Division, Box 26650, Oklahoma City, Oklahoma 73126.

FLIGHT TEST PILOT (FAA)

Nature of the Work

FAA flight test pilots check the airworthiness of aircraft through inspection and flight testing. They evaluate flight performance, engine operation, and flight characteristics of either prototype aircraft or modifications of production aircraft and aircraft components that are presented for FAA certification. Flight test pilots supervise FAA-designated flight-test representatives and participate in investigations of accidents and violations of the Federal Aviation Regulations.

Working Conditions

Flight test pilots fly new aircraft under all kinds of conditions to test their performance. Considerable travel is necessary, and duty stations may be changed from time to time as circumstances require.

Requirements for the Job

Three years of general experience as a pilot or co-pilot in any civilian or military major aircraft operation is required. Also required is one to three years of special experience in the aircraft manufacturing industry or in the military or civil service of the Federal Government as a flight test pilot, aeronautical engineer, or flight test engineer. The special experience must include engineering flight testing of experimental types of aircraft or solving technical engineering problems at a professional level. The pilot must have experience in obtaining and evaluating data related to flight performance, flight characteristics, engine operation, and other performance details of the prototype or modifications of production aircraft.

The higher entry grades require completion of a flight test pilot course, such as a military flight test school or the FAA flight test pilot course. College study in engineering (aeronautical, electrical, electronic, or mechanical), mathematics, or physics may be substituted for some of the general experience requirements. Also required are a first-class FAA medical certificate plus 1,500 to 2,000 hours of flight time, a commercial pilot certificate, and single engine, multi-engine, and instrument ratings. Test pilots must pass physical exams at regular intervals to keep their jobs.

Where the Jobs Are

The jobs are where there are aircraft manufacturing plants (chiefly California, Washington, Missouri, Maryland, Texas, Kansas, Florida, and New York).

Wages

The entry-level grade usually is GS-9. The starting salary will depend on the degree of the applicant's experience and training.

Opportunities for Advancement

A flight test pilot may be promoted to a branch manager position in the engineering or manufacturing area. There also are opportunities for advancement to administrative posts at FAA Headquarters or at FAA Technical Center (the research and development arm of the Federal Aviation Administration).

Opportunities for Training

Advanced flight training at a military flight test school may be obtained in the military service. Flight training through commercial pilot certificate with appropriate ratings may be obtained from private or school-connected flying schools and institutes. Candidates with flight training and a college degree in aeronautical engineering are preferred.

MAINTENANCE MECHANIC (FAA)

Nature of the Work

FAA maintenance mechanics maintain aids to navigation such as the approach-light systems serving airport runways. They also work on the structural, electrical, and mechanical devices that are major parts of other facilities. Their work includes maintenance and repair of heating, air conditioning, ventilating, electrical generating, and power distribution systems. They also maintain and repair the buildings and antenna structures that house a wide variety of FAA facilities. FAA maintenance mechanics are classified under the Federal Wage System schedule. They perform jobs associated with the trades and crafts and are paid on an hourly basis. The work can involve carpentry, painting, plumbing, and masonry construction, as well as repairing and maintaining electrical equipment.

Working Conditions

The work can be indoors or out. It may be on outdoor structures as high as 300 feet. The basic work week is 40 hours. The employee must be able to drive a truck to jobs in outlying areas.

Requirements for the Job

The applicant must have four years of progressively responsible experience in two or more of the following occupational groups: machinist, machine repairperson, automobile mechanic, carpenter, woodworker, electrician, electric motor repairperson, painter, air conditioning and refrigeration repairperson, heating equipment, and power generating repairperson. Training in a trade school may be substituted for some of the required experience. The candidate also must have a driver's license.

Where the Jobs Are

The jobs are in the United States, Puerto Rico, the Virgin Islands, and anywhere else that the FAA has air navigational aids and air traffic control towers and centers.

Wages

Hourly wages vary according to experience and the prevailing rates where the jobs are located.

Opportunities for Training

Training can be acquired in high school industrial arts classes and in vocational or technical schools.

ENGINEER

General Information

The FAA, the National Aeronautics and Space Administration (NASA), and the Department of Defense employ engineers of all specialties to work on research and development problems in aviation. These engineers work on V/STOL (vertical short takeoff and landing) aircraft, aircraft noise, the sonic boom, hypersonic aircraft, and new equipment and devices to increase aviation safety. Engineers also provide guidance in airport design, construction, operation, and maintenance.

Nature of the Work

The facilities, devices, and machines needed by the Federal Aviation Administration to carry on its work require the services of aeronautical, electrical, electronic, mechanical, and civil engineers.

Aerospace (Aeronautical) Engineers develop, interpret, and administer safety regulations relating to airworthiness of aircraft and their accessories. They analyze and evaluate manufacturers' designs, set up test procedures, observe tests, and then advise manufacturers. They deal with problems such as vibration, flutter, stability, control, weight and balance, and aerodynamic characteristics.

Electrical Engineers deal with power supply, distribution, and standby power generation required for the operation of air navigational aids. They also help design and evaluate airport and runway lighting and electrical equipment aboard aircraft.

Electronic Engineers design improved electronic navigational aid and communications systems. They may design, develop, modify, or oversee installation, calibration and maintenance of ground and airborne electronic equipment. They also recommend where these aids should be located.

Mechanical Engineers are concerned with the design of gasoline and diesel powerplants for standby power generation in case of emergencies. They are also concerned with heating, ventilating, and air conditioning equipment at FAA installations. Some mechanical engineers check out such things as the performance of new types of aircraft engines, fuel systems, and fire detection devices.

Civil Engineers in the FAA's airports program handle a broad range of airport design, construction, and maintenance matters. The FAA provides advice and guidance to developers of civil airports, particularly those developed with Federal grants-in-aid.

Working Conditions

Engineers work 40 hours a week at a desk in an engineering laboratory or outdoors where they conduct or observe tests of equipment. Travel may be required. Engineers consult with aircraft and engine manufacturers and with suppliers of all kinds of equipment related to the engineer's specialty. Engineers also may travel to consult with state and city officials who need Federal funds for building or improving airports and to military bases where equipment is tested.

Requirements for the Job

A Bachelor of Science degree in engineering is required, or four years of technical engineering experience and training that provide knowledge equal to that possessed by a graduate engineer. Up to eight additional years of experience are required, depending upon the grade level of the job.

Where the Jobs Are

Engineering jobs are located at FAA Headquarters and district and regional offices; NASA Headquarters and centers; and at certain military bases throughout the Nation.

Wages

GS-5 ($17,686) to GS-14 ($54,607) are beginning salaries, depending upon previous experience and educational background.

Opportunities for Advancement

Promotion is normally from within.

Opportunities for Training

Training may be obtained from colleges offering engineering courses. For information on applying for engineering positions, contact the Aviation Careers Examining Division, Box 26660, Oklahoma City, Oklahoma 73126.

ENGINEERING AID AND ENGINEERING TECHNICIAN

Nature of the Work

Depending upon the specialty, engineering aids and technicians assist engineers by drafting engineering plans, conducting efficiency and performance tests, making calculations, setting up laboratory equipment and instruments, and preparing technical reports, specifications, and estimates.

Working Conditions

The basic work week is 40 hours. Travel may be required. Engineering aids and technicians sometimes consult with aircraft and engine manufacturers and with state and city officials who need Federal funds for building or improving airports. They also may visit military bases where equipment is tested.

Requirements for the Job

Specialized Experience

Examples of occupations which may have provided qualifying specialized experience include draftsman, surveying technicians, construction estimator, physical science, and mathematics technician.

Experience in a trade or craft may be credited as specialized experience when the work provided intensive knowledge of engineering principles, techniques, methods, and precedents. Examples are trade positions with substantial developmental, test, or design responsibilities, such as: planner and estimator who analyzed designs for production purposes, or instrument-maker or model-maker who performed design or development work on devices fabricated.

Education may substitute for experience. At the GS-3 level, successful completion of one year of study which included at least six semester hours in any combination of courses such as engineering, engineering or industrial technology, construction, physics, drafting, surveying, physical science, or mathematics. At the GS-4 level, successful completion of two years of study which included at least 12 semester hours in any combination of courses such as those listed for the GS-3 level. At the GS-5 level, successful completion of a full four-year course of study leading to a bachelor's degree with (a) a major study in an appropriate field of engineering, construction, or industrial technology; or (b) which included at least 24 semester hours in any combination of courses such as those listed for the GS-3 level.

Where the Jobs Are

The jobs are located at FAA facilities and at FAA's Technical Center at Atlantic City, New Jersey, at NASA headquarters and centers, and at certain military bases throughout the nation.

Wages

The starting salaries for engineering aids are GS-1 ($11,478) to GS-3 ($14,082) and for engineering technicians GS-4 ($15,808) to GS-12 ($38,861), depending upon previous experience and educational background.

Opportunities for Training

The technician or aid may study a specialty at a vocational or technical school, junior or community college, or a four-year college.

OTHER FAA JOBS

The FAA employs not only engineers but many other professionals. These include airport safety specialists, urban planners, economists, mathematicians, statisticians, program officers, management analysts, budget analysts, and even physicians.

The FAA has a limited number of jobs for physicians who specialize in aviation medicine.

These physicians study the effects of flying on the human body, the effects of fatigue on a pilot's performance, the need for oxygen above certain altitudes, the tension and stress factors associated with the air traffic controller's job, and the standards of the various classes of medical examinations required for pilots and other flight crew members.

The FAA needs logistical support for all its programs, particularly in the establishment, operation, and maintenance of air navigation and air traffic control facilities. It employs logistics program planners and managers, real property specialists, inventory and supply managers, procurement analysts, contracting specialists, transportation officers, and purchasing clerks.

The FAA also employs lawyers to write Federal Aviation Regulations, to interpret them, and to represent the FAA in legal controversies. It also employs accountants, public information officers, librarians, photographers, and support personnel (such as receptionists, secretaries, typists, office machine operators, mail room clerks, and computer programmers and operators).

AVIATION JOBS WITH THE MILITARY

The U.S. military services employ numerous civilians for jobs in aviation, such as aircraft mechanics, engineers, technicians, and general office workers. These civilian jobs come under the Federal Civil Service. Employees do many of the same kinds of work and receive the same wages and benefits as their counterparts in the FAA or other Federal departments and agencies.

There are many aviation career opportunities for men and women in the military services as enlisted personnel and officers. The Air Force offers the greatest number of opportunities to fly as a pilot or to work as an aircraft mechanic, air traffic controller, electronic technician, flight nurse, meteorological technician, or in other posts. The Navy and Marine Corps have counterpart aviation jobs to those in the Air Force. The Army operates and maintains of helicopters and subsonic light planes. It requires flight crews, ground service people, and weather specialists to support its aerial operations.

Many of these military aviation jobs are excellent preparation for similar jobs in civilian life. For example, a high percentage of airline pilots received their principal training and experience in the military.

OTHER FEDERAL GOVERNMENT JOBS IN AVIATION

Many other Federal Government departments, bureaus, and agencies operate aircraft to carry on their work more effectively. For example, the Fish and Wildlife Service of the Department of the Interior uses aircraft for taking a census of wildlife. The U.S. Forest Service of the Department of Agriculture uses aircraft to check on aerial forest spraying contracted to commercial operators or to oversee forest firefighting procedures. The Immigration and Naturalization Service of the Department of Justice uses aircraft to detect people entering the United States illegally. And the U.S. Coast Guard operates aircraft for search and rescue purposes.

Although pilot and mechanic jobs in these agencies are comparatively few in number, they are mentioned to complete the full picture of aviation career opportunities within the Federal Civil Service. Pilots for these Federal agencies fly single-engine or multi-engine aircraft over all kinds of terrain in all kinds of weather. Pilots must have between 1,200 and 2,500 hours of flying experience, including extended cross- country flights over land and water during which they perform their own navigating. They must be able to pass a First Class or a Second Class FAA physical examination every 6 to 12 months, respectively.

Federal Government jobs in aviation are located throughout the country. The annual salary ranges from GS-9 to GS-12, depending upon experience and educational background.

AVIATION JOBS WITH THE NATIONAL TRANSPORTATION SAFETY BOARD

Accident investigators with the National Transportation Safety Board (NTSB) interview survivors and witnesses and examine aircraft parts, instruments, and engines. They also review maintenance and flight records to determine the probable cause of airplane accidents. Aviation-related engineering, medical, or operational experience is required for a variety of professional positions with this safety-related organization. Travel and field work typify the NTSB investigator's job. Salary and experience rankings resemble those of the Department of Transportation.

For further information on applying for positions with the National Transportation Safety Board, contact the Personnel and Training Division, NTSB, 800 Independence Avenue, S.W., Washington, DC 20594.

NATIONAL WEATHER SERVICE METEOROLOGIST AND METEOROLOGICAL TECHNICIAN

The aviation industry is one of the largest consumers of weather information. Flight and weather are so interrelated that many people view the meteorologist as a member of the aviation team. Thus, the meteorologist deserves mention in any discussion of jobs in aviation, even though what the meteorologist does is not, of course, entirely for the benefit of the aviation industry.

Nature of the Work

Meteorologists who work most closely with aviation are operational, or synoptic, meteorologists (as contrasted to meteorologists who work in theoretical or applies meteorological research). They are the forecasters who provide the day-to-day, hour-to-hour observations, analyses, forecasts, warnings, and advice to pilots, airport operators, and airlines. Meteorologists report

weather conditions expected at airports, current conditions, and they make enroute forecasts. One of their main tasks is to interpret the meteorological data provided by weather instruments.

At a small weather station, the meteorologist may be expected to make outside weather observations, read and record data from weather instruments, check weather data coming in via a machine, draw weather maps, plot the weather, provide forecasts, and advise pilots and other interested parties. At large stations, meteorologists may specialize in one or more of these duties, relying to some extent upon computerized data to produce a forecast. They send forecasts via teletype or telephone to FAA Flight Service Stations, airline dispatch offices, airports, and to other consumers of weather information. Meteorologists frequently advise pilots who are preparing flight plans.

Working Conditions

Meteorologists work indoors, sitting or standing at map tables while studying weather maps and charts. They read data from weather instruments such as anemometers, thermometers, barometers, theodolites, ceilometers, radiosondes, and weather balloons. They must be able to operate a teletypewriter.

To check weather instruments and make observations, meteorologists also must work outdoors for short periods. They may work alone at a small station or with other meteorologists and meteorological technicians at a large station.

The work week is usually 40 hours. Overtime is required when the weather deteriorates. At stations open 24 hours a day, shift work is required. Meteorologists may be required to relocate to fill staffing requirements at another station or to advance in GS grade.

Requirements for the Job

One of the following two is required:

(l) A full course of study, leading to a bachelor's degree at an accredited college or university, which has included or been supplemented by 20 semester hours in meteorology (including six semester hours in weather analysis and forecasting and six semester hours in dynamic meteorology). In addition, differential and integral calculus and six semester hours in college physics are required.

(2) At least 20 semester hours in meteorology at an accredited college or university that offers six semester hours in weather analysis and forecasting and six semester hours in dynamic meteorology. Also required are differential and integral calculus and six semester hours in college physics, plus additional appropriate education or technical experience which, when combined with the education prescribed above, will total four years of education or education and experience. This pre-professional background must be of such quality that it provides a body of knowledge and abilities comparable to that normally acquired through the successful completion of a full course of study described in paragraph (1).

Where the Jobs Are

The largest employer of Federal Government meteorologists is the National Weather Service. Several thousand Weather Service meteorologists work at approximately 300 stations throughout the 50 states, in Puerto Rico, in Arctic regions, and at Wake Island and other Pacific Ocean sites. National Weather Service Stations are located at airports or in large cities. A smaller number of Federal Government meteorologists work for the Air Force, Navy, Army, the FAA, NASA (the National Aeronautics and Space Administration), and the U.S. Forest Service.

To assist meteorologists, the Weather Service employs meteorological technicians. Most of the job vacancies for this position are filled by applicants who received their technical training during active duty in the Armed Forces. The meteorological technician performs semi-professional and scientific work, calibrating and using instruments for taking various kinds of measurements, observing, recording, computing, processing, classifying, and disseminating weather data.

Wages

The salary ranges GS-5 ($17,686) to GS-15 ($64,233). The starting salary and grade is determined by the applicant's education and experience.

Opportunities for Advancement

Promotion to higher grades depends upon education, ability, work performance, and job openings. In-grade pay increases are made on the basis of experience and performance. With an increase in grade comes increased responsibilities as assistant chief or chief of a weather station or region. A few high-level administrative jobs may become available as vacancies occur.

Opportunities for Training

More than 20 universities offer bachelor degrees in meteorology. Others offer a major in meteorology. Training as a meteorological technician can be obtained while on active duty with the Armed Services and at some junior or community colleges and institutions. The National Weather Service operates a Technical Training Center in Kansas City, Kansas for the purpose of upgrading the skills of meteorologists and meteorological technicians.

Outlook for the Future

The science of meteorology is expanding and so are occupational opportunities. The National Weather Service expects to hire annually at least 100 meteorologists with a Bachelor of Arts degree to fill new positions and vacancies. Opportunities for military careers in meteorology are excellent, and competent military meteorologist officers can receive advanced degrees at the government's expense. At present, the number of qualified students obtaining degrees in meteorology are fewer than the number needed to supply future expected demands. Although the demand is small, so few are entering the occupation that job opportunities are available for the qualified applicant.

STATE AVIATION JOBS

Almost every state has an aeronautics department or commission that consists of a small number of aviation-minded men and women, usually appointed by the Governor. These commissions make policies about aviation activities within the state. In some cases, persons appointed may not be considered employees and may be paid only expenses connected with their attendance at meetings. If the state's department or commission is well funded, it will address issues concerning flight safety and airport design and operation, as well as promotion of aviation activities in the state.

Frequently, employees have dual responsibilities, especially when the staff is small. Qualifications and requirements for these jobs are determined by state law; however, the top-level employees (safety officers, field service representatives, and engineers) must have experience and training in their specialty. Most employees in state civil service jobs receive retirement plans, social security, low-cost insurance, and medical services. Department employees usually work in the state capital office.

Following is a list of typical state aviation jobs. Not all states offer all of these jobs, and salaries vary from state to state. For specific information, contact the Aeronautics Department in the state where you would like to work.

STATE AVIATION JOBS

Nature of the Job	*Nature of the Work*
Director	Promotes aviation in the state; administers state aviation regulations; represents the state at regional meetings; and directs the staff of the Department of Aeronautics.
Deputy and Assistant Director	Assists the Director.
Administrative Assistant	Handles the detailed routine operation of the Director's office.
Pilot	Flies state-owned aircraft (for example, to take the Governor to meetings.) Departments that do not employ pilots may require the Director, his assistant, or some other staff member to assume pilot duties.
Field Service Representative	Maintains direct contact with aviation interests in the state. May be called upon to explain flying rules, to help with aircraft sound problems, and to assist with aviation education projects.
Accountants and Statisticians	Maintain financial records of the Department of Aeronautics and gather flight statistics about aircraft movements, registered pilot accidents, hours flown, etc.
Stenographers, Clerks, and Typists	Perform routine office duties.
Engineers	Plan airports and improvements to airports; install and supervise air navigational aids operated by the state.
Chief Planner	Prepares the state's airport system plan and is active in other planning activities.
Engineering Technicians and Aids	Assist engineers in their work (draftsperson, etc.)
Aeronautical Inspectors	Check compliance with state aviation regulations.
Aviation Education Officers	Carry out aviation education policies of the Department; cooperate with schools in aerospace education programs.
Publication Editors	Publish newsletters, releases, and other information of interest to pilots, airport operators, and fixed base operators in the state.
Safety Officers	Promote aviation safety by conducting weather seminars and other safety-related meetings for pilots.
Aircraft Mechanics	Service and maintain state-owned aircraft.
Surplus Property	Search out surplus Federal Government property that might be useful to state aviation.

OUTLOOK FOR AVIATION CAREER OPPORTUNITIES IN GOVERNMENT

The outlook for growth in aviation career opportunities with the Federal Government is mixed. Increased automation, along with concern about budget deficits, will tend to keep employment levels static.

It should be pointed out, though, that normal attrition from retirements, will allow hiring to continue at its present pace for the foreseeable future. Current emphasis on decreasing Federal participation in the economy will mean that Federal aviation employment will not expand as much as civil aviation employment.

The future of civilian aviation careers with the military services is uncertain because the demand is very responsive to world conditions. Predictions indicate at least a small increase in these military jobs over the next 10 years.

Employment in aviation at the state government level will likely show an upward trend as aviation activities within the state grow in proportion to decreases in Federal activity.

A Meteorologist Talks About His Job

Arthur Lasard works for the National Weather Service. He is the Area Manager for Southern California and the meteorologist in charge of the forecast office for Southern California.

"I've been interested in meteorology all my life. During the Korean War, when they began drafting people and putting them into specialties, I was placed into a weather specialty, and I've been there ever since."

"So, while it was essentially forced upon me, this occurrence was actually fortuitous, because I've always liked weather, and it was one of my choices even before going into the service. I'm no longer a field meteorologist working the desk; instead I serve as the overall supervisor of all weather service activities in Southern California, where I manage several weather offices."

"What meteorologists do is gather information and analyze it to project the weather forecast for one to five days, or five to 10 days ahead of time. Information comes from aircraft who do position reports; winds; and from ships traveling the sea lanes."

"We also receive reports from stationary observers in many locations in the continental United States as well as worldwide. We also get information from aircraft, satellites, and from automatic weather stations in wilderness areas."

"Forecasts are issued in three groups daily. Within that group are certain specified airports. For example, in this office, we forecast for Los Angeles International, San Diego, Palm Springs, and a dozen more airports. Flying crews coming in from all over the United States need current weather at all times. This information is relayed to pilots on at least an hourly basis, and forecasts are issued three times a day. This is a good, challenging job."

"Someone considering a similar career must realize that preparation begins as early as grade and junior high school. You need a Bachelor of Science degree in atmospherics, physics, or mathematics. These degrees demand a lot of work, so the earlier you get started, the better. In my many talks to various schools, I stress the importance of science and math at an early age as preparation for any university program."

INQUIRIES

Inquiries about FAA employment opportunities should be directed to the Employment Office serving the following geographical areas:

HEADQUARTERS:

Federal Aviation Administration (AHR-150)
800 Independence Avenue, SW
Washington, DC 20591
(202) 267-3870

ALASKAN REGION: *AK and Aleutian Islands*

Federal Aviation Administration (AAL-14)
222 West 17th Avenue, Box 14
Anchorage, AK 99513-7587
(907) 271-5749

EASTERN REGION: *DC, DE, MD, NJ, NY, PA, VA, WV*

Federal Aviation Administration (AEA-14)
JFK International Airport
Federal Building
Jamaica, NY 11430
(718) 917-1060

CENTRAL REGION: *IA, KS, MO, NE*

Federal Aviation Administration (ACE-14) Federal Building, Room 1545
601 East 12th Street
Kansas City, MO 64106
(816) 426-3304

GREAT LAKES REGION: *IL, IN, MI, MN, ND, OH, SD, WI*

Federal Aviation Administration (AGL-14)
O'Hare Lake Office Center
2300 East Devon Avenue
Des Plaines, IL 60018
(312) 694-7731

NEW ENGLAND REGION: *CT, MA, ME, NH, RI, VT*

Federal Aviation Administration (ANE-14)
12 New England Executive Park
Burlington, MA 01803
(617) 273-2431

NORTHWEST MOUNTAIN REGION: *CO, ID, MT, OR, UT, WA, WY*

Federal Aviation Administration (ANM-14)
1601 Lind Avenue, SW
Renton, WA 98055-4056
(206) 227-2014

SOUTHERN REGION: *AL, FL, GA, KY, MS, NC, PR, SC, TN, VI*

Federal Aviation Administration (AS0-14)
3400 Norman Berry Drive
East Point, GA 30344
(404) 763-7706

SOUTHWEST REGION: *AR, LA, NM, OK, TX*

Federal Aviation Administration (ASW-14)
4400 Blue Mound Road
Fort Worth, TX 76193-0000
(817) 624-5014

WESTERN-PACIFIC REGION: *AZ, CA, HI, NV*

Federal Aviation Administration (AWP-14)
P.O. Box 92007
World Postal Center
Los Angeles, CA 90009
(213) 297-1305

Other Major Field Offices:

Federal Aviation Administration
Technical Center
Atlantic City, NJ 08405
(609) 484-6621

Federal Aviation Administration
Aeronautical Center, AAC-14
6500 South MacArthur
P.O. Box 25082
Oklahoma City, OK 73125
(405) 680-4506

Aviation Education Officers

FAA Headquarters

Phillip S. Woodruff, APA-100
Director of Aviation Education

Aviation Education Officers
Ms. Valerie Collins
Ms. Mary Jo Byberg
Ms. Josie M. Clark
Ms. Latisha A. Ferguson
800 Independence Avenue, SW
Office of Public Affairs
Aviation Education Program
Washington, DC 20591
(202) 267-3471

Aeronautical Center

Mr. Robert Hoppers, AAC-5
Room 356, Headquarters Building
P.O. Box 25082
Oklahoma City, OK 73125
(405) 680-7500

Technical Center

Ms. Michele Pareene, ACM-100
Human Resource Management Division
Atlantic City International Airport
Atlantic City, NJ 08405
(609) 484-6681

Alaskan Region

Ms. Mary Lou Wojtalik, AAL-5B
222 West 7th Avenue, Box 14
Anchorage, AK 99513-7587
(907) 271-5293
STATE: Alaska

Central Region

Ms. Patrice Shalda, ACE-5
601 East 12th Street
Federal Building, Room 1501
Kansas City, MO 64106
(816) 426-5449
STATES: Iowa, Kansas, Missouri, and Nebraska

Eastern Region

Mr. Charles Pagnini, AEA-15C
JFK International Airport
Federal Building
Jamaica, NY 11430
(718) 553-1056
STATES: Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Virginia, and West Virginia

Great Lakes Region

Mr. Lee Carlson, AGL-5A
O'Hare Lake Office Center
2300 East Devon Avenue
Des Plaines, IL 60018
(312) 694-7042
STATES: Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, and Wisconsin

New England Region

Ms. Shelia Bauer, ANE-8
12 New England Executive Park
Burlington, MA 01803
(617) 273-7064
STATES: Connecticut, Maine, New Hampshire, Rhode Island, Vermont, and Massachusetts

Northwest Mountain Region

Ms. Shelly McGillivary, ANM-5E
1601 Lind Avenue, SW
Renton, WA 98055
(206) 227-2804
STATES: Colorado, Idaho, Montana, Oregon, Utah, Washington, and Wyoming

Southern Region

Ms. Kathleen Bergen, ASO-5
PO Box 20636
Atlanta, GA 30320
(404) 763-7201
STATES: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the Virgin Islands

Southwest Region

Ms. Debra Myers, ASW-5
4400 Blue Mound Road
Ft. Worth, TX 76193-0005
(817) 624-5804
STATES: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

Western-Pacific Region

Mr. Hank Verbais, AWP-5
PO Box 92007
Worldway Postal Center
Los Angeles, CA 90009
(213) 297-1431
STATES: Arizona, California, Nevada, and Hawaii

Aviation Education Resource Centers

Alabama

Alabama Aviation
Technical College
Ms. Megan Johnson, Director
Learning Resource Center
PO Box 1209
Ozark, AL 36361
(205) 774-5113

University of North Alabama
Ms. Michele R. Walker
Programming Coordinator
UNA Box 5145
Florence, AL 35632-0001
(205) 760-4623

University Aviation Association
Mr. Gary W. Kiteley
Executive Director
3410 Skyway Drive
Opelika, AL 36801
(205) 844-2434

Alaska

University of Alaska Fairbanks
Mr. Dennis Stephens
Collection Development Officer
Elmer E. Rasmuson Library
Fairbanks, AK 99775-1680
(907) 474-6695

Arizona

Embry-Riddle Aeronautical University
Ms. Karen Hudson
Educational Programs Coordinator
3200 N. Willow Creek Road
Prescott, AZ 86301
(602) 771–6673

California

National University
Mr. Ernest Wendt
Chair, Department of Applied Sciences
4141 Camino Del Rio South
San Diego, CA 92108
(619) 563-7122

San Jose State University
Dr. H. Gene Little
Chairman, Department of Aviation
1 Washington Square
San Jose, CA 95192-0081
(408) 924-6580

Museum of Flying
Mr. Harvey Ferer
2772 Donald Douglas Loop North
Santa Monica, CA 90405
(310) 392-8822

Colorado

U.S. Space Foundation
Dr. Jerry Brown
Educational Director
1525 Vapor Trail
Colorado Springs, CO 80916
(719) 550-1000

Metropolitan State College of Denver
Mr. Jonathan R. Burke
Assistant Professor
Aerospace Science Department
Campus Box 30, P.O. Box 173362
Denver, CO 80217–3362
(303) 556–2923

Connecticut

Connecticut Department of
Transportation
Bureau of Aeronautics
Ms. Tambri Graville
24 Wolcott Hill Road
PO Drawer A
Wethersfield, CT 06109
(203) 566-4417

Delaware

Delaware Teachers Center
Ms. Stephanie Wright
3401 Green Street
Claymont, DE 19703
(302) 792–3806

Florida

Embry-Riddle Aeronautical University
Ms. Patricia Fleener-Ryan
AvEd Teacher Resource Center
Daytona Beach, FL 32114
(904) 239-6499

Florida Institute of Technology
Dr. Ballard M. Barker
Head, Department of Aviation Studies
The School of Aeronautics
150 West University Boulevard
Melbourne, FL 32901-6988
(407) 768-8000, Ext. 8120

Florida Memorial College
Mr. Anthony J. Sharp, Director
Division of Airway Science
15800 Northwest 42 Avenue
Miami, FL 33054
(305) 623-1440

Georgia

Conyers Middle School
Ms. Viki Dennard
Assistant Principal
335 Sigman Road
Conyers, Georgia 30207–3699
(404) 483-3371

Hawaii

Mid-Pacific Institute
Dr. Phillip R. Brieske
Aviation/Space Science
2445 Kaala Street
Honolulu, HI 96822
(808) 973-5000

Idaho

Idaho State Bureau of Aeronautics
Mr. John Maakestad
Safety/Information Officer
Chief Pilot
3483 Rickenbacker Street
Boise, Idaho 83705-5018
(208) 334-8775

Illinois

Parks College of
St. Louis University
Dr. Peggy Baty
Assistant Vice President and Dean
500 Falling Springs Road
Cahokia, IL 62206
(618) 337-7500

Southern Illinois University
Dr. Elaine Vitello
College of Technical Careers
Room 222
Carbondale, IL 62901
(618) 453-8821

State of Illinois
Division of Aeronautics
Mr. Richard M. Ware
One Langhorne Bond Drive
Capital Airport
Springfield, IL 62707-8415
(217) 785-8516

Kansas

Kansas State University-Salina
Ms. Karlene Propst
Tullis Library
2408 Scanlan Avenue
Salina, KS 67401
(913) 825-0275

Louisiana

Louisiana State University
Dr. Marlon Abbas
Director of the Trans. Systems Group
Louisiana Trans. Resource Center
4101 Gourrier Avenue
Baton Rouge, LA 70808
(504) 767-9127

Maine

Kennebec Valley Technical College
Ms. Sue Doner
92 Western Avenue
Fairfield, ME 04937-0020
(207) 453-9762

Biddeford School Department
Ms. Sara Jane Poli
Maplewood Ave.
Biddeford, ME 04005
(207) 283-8280

Penobscot Nation Tribal Administration
Mr. Mark Sanborn
Assistant Director
Vocational Training and Education
6 River Road, Community Building
Indian Island, ME 04468
(207) 827–7776

Massachusetts

Bridgewater State College
Mr. Bill Annesley
Management. Science & Aviation
Science Dept.
Bridgewater, MA 02325
(508) 697-1395

North Shore Community College
Dr. Robert Finklestein
Beverly, MA 01915
(508) 922-6722

Museum of Science
Ms. Carolyn Kirdahy
Lyman Library
Science Park
Boston, MA 02114-1099
(617) 589-0266

Westfield State College
Ms. Maureen McCartney
Director of Career Services
Ely Campus Center
Western Avenue
Westfield, MA 01086
(413) 568-3311 ext. 206

Massachusetts Aeronautics Comm.
Transportation Library
Dr. Toby Penstlen
10 Park Plaza
Boston, MA 02116–3966
(617) 973–8000

Michigan

Oakland University
Ms. Karen Conrad, Interim Director
Aviation & Space Center
216 O'Dowd Hall
Room 216
Rochester, MI 48309-4401
(313) 370-2485

Project STARS
Ms. Barbara Koscak
Boc 450082, Building 814
Selfridge ANG Base, MI 48045-0082
(313) 466-4884

Minnesota

Minnesota Dept. of Transportation
Office of Aeronautics
Mr. Gordon Hoff
Director of Aviation Educ. Relations
644 Bayfield Street
St. Paul, MN 55107-1008
(612) 297-7652

Vermilion Communication College
Mr. Julius Salinas
1900 E. Camp Street
Ely, MN 55731
(218) 365-7200

Nebraska

University of Nebraska-Omaha
Mr. William S. Shea
Director, Aviation Institute
60th and Dodge
Omaha, NE 68182-0508
(402) 554-3424

Nebraska Department of Aeronautics
Mr. Val J. Hruska
Aviation Specialist
PO Box 82088
Lincoln, NE 68501-2088
(402) 471-2371

New Hampshire

New Hampshire Dept. of Transportation
Division of Aeronautics
Mr. Ronald Wanner
65 Airport Road
Concord Municipal Airport
Concord, NH 03301-5298
(603) 271-2551

New Mexico

University of New Mexico
Mr. Richard S. Sanchez
University College Room 11
Albuquerque, NM 87131–1456
(505) 277–3861

New York

Dowling College
Dr. Albert E. Donor
Provost, Executive Vice President
Oakdale, Long Island, NY 11769-1999
(516) 244-3200

North Dakota

University of North Dakota
Mr. Charles L. Robertson
Assistant Professor
Department of Aviation
Box 8216, University Station
Grand Forks, ND 58202-8216
(707) 777-2791

Oklahoma

University of Oklahoma
Dr. Lee Morris, Director
Education and Aviation/Aerospace
1700 Asp Avenue
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