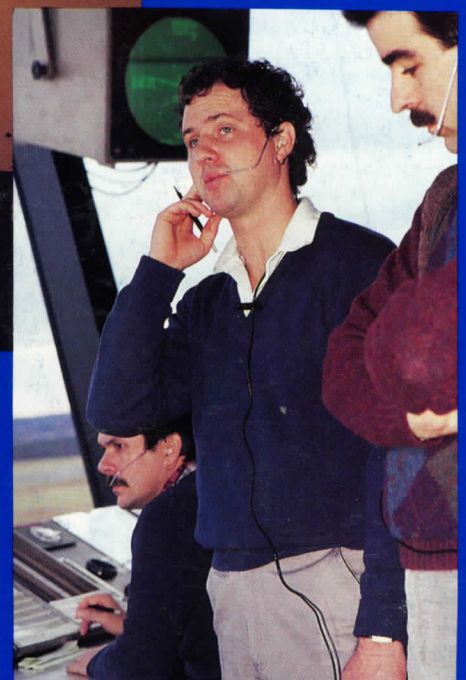


Air Traffic Control Specialist



By 1995, 1,700,000 people will board U.S. airlines every day. There will be 215,000 privately owned planes. There will be over 74 million flight operations at tower-equipped airports. What does this mean to the FAA? An increased demand for air traffic controllers.

"You have to be able to think abstractly, especially in the center."

"You have to do first things first, establish priorities."

"You have to have automatic recall."

"You have to look at errors objectively and reconstruct situations."

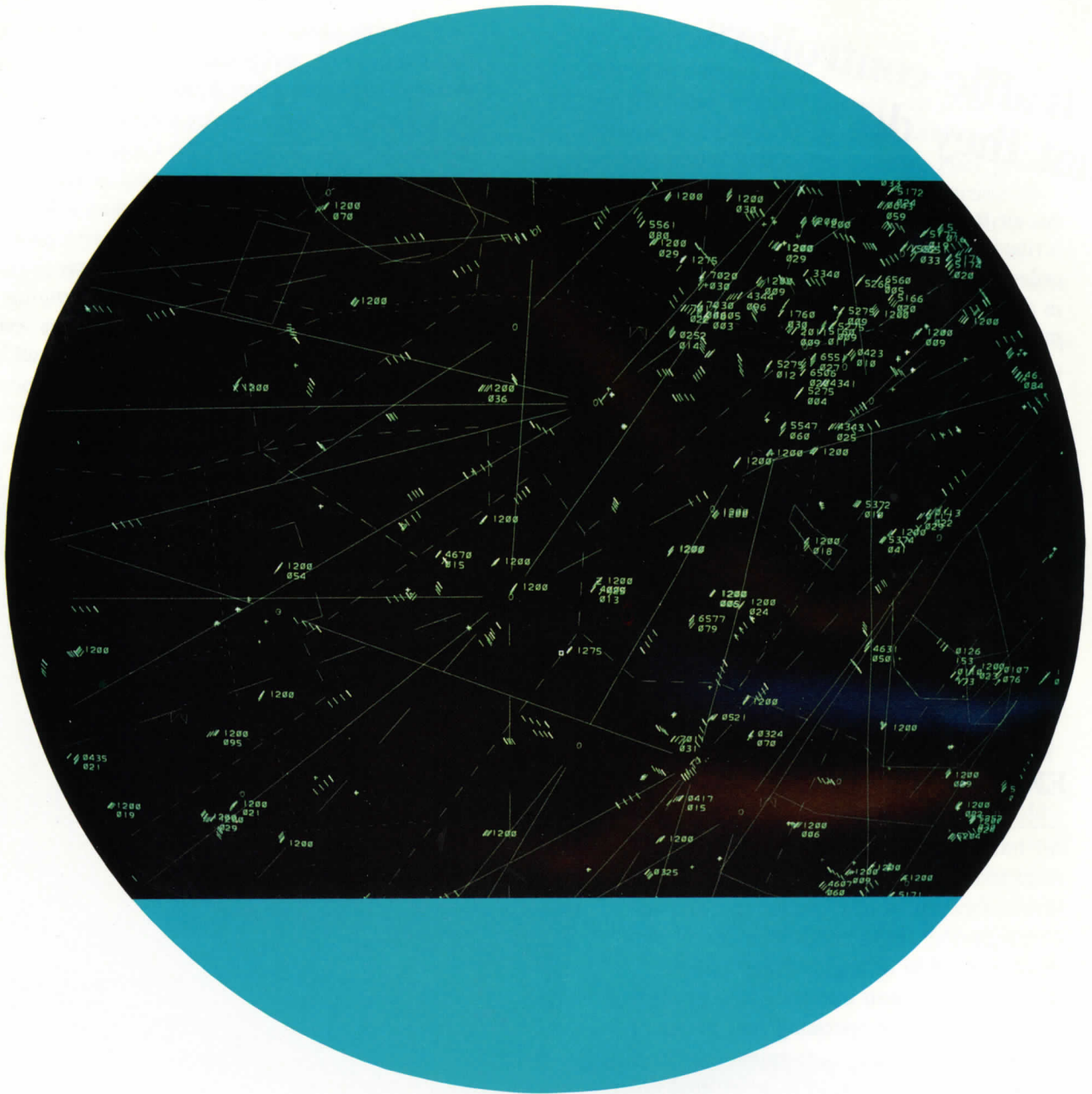
"You have to accept the responsibility of the job."

Air traffic control is without a doubt one of the most challenging occupations available today. There is much to be known and considered when undertaking this challenge. The information in this announcement will help you in deciding whether to apply for this exciting and rewarding career. Take the time to read everything carefully.

Most air traffic controller positions are with the Department of Transportation in the Federal Aviation Administration (FAA). There are some positions in the Department of Defense.

Applications to take the air traffic control written test will be accepted on a continuous basis by the Office of Personnel Management (OPM) until further notice.

All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, political affiliation, marital status, nondisqualifying handicap, sex, or age, except as described under "Age Limitation."



In the cool dark of the radar room,
a controller watches
as the radar beam swings its way around the radius of the screen's circle.
Within the circle, green blips—
some moving, some stationary; some single, some double; some important, some irrelevant—
compose a pale green galaxy.
This pattern, made up of light and the beam's regular rhythm,
could lull an unknowing eye to the restfulness of sleep.

But in the mind's eye of the controller,
the blips compose a constantly changing three-dimensional picture
of the planes moving through the area, at different altitudes, speeds and directions.
The ability to carry mental pictures
is vital to the work of an air traffic controller.

air traffic controllers . . . what they do

An air traffic control specialist (ATCS) is described often as one who provides for the safe, orderly, and expeditious flow of air traffic both in the air and on the ground. This definition may sound simple, but the job is a highly complicated and exacting one. It demands practical men and women with special characteristics:

Talking with controllers, you get the impression that these are a special breed—tough-minded, alert, not-quite-ordinary people. Which figures. It's not an ordinary job.

It might be the job for you.

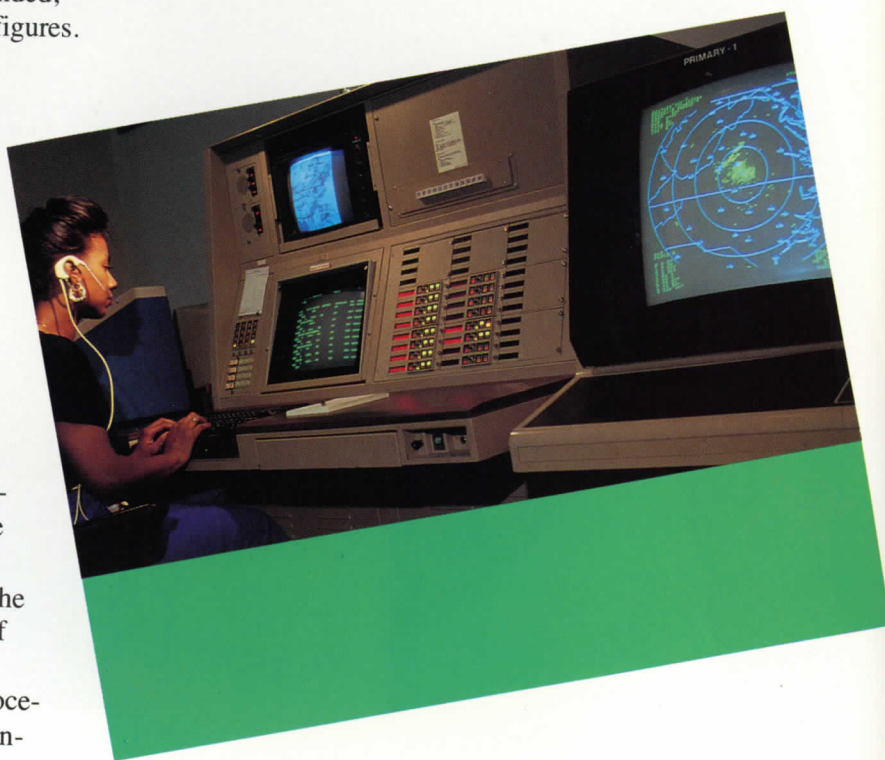
A controller's work is divided into three specializations:

EN ROUTE CENTERS

Air traffic control specialists at FAA air route traffic control centers give aircraft instructions, air traffic clearances, and advice regarding flight conditions during the en route portion of flights. They provide separations 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 manual procedures to keep track of the progress of all instrument flights within the center's airspace. 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. The typical center has responsibility for more than 100,000 square miles of airspace generally extending over a number of states. The controller staff can range from 300 to 700, with more than 150 on duty during peak periods at the busier facilities.

Controllers who work in centers control traffic operating along established airways across the country between jurisdictions. There are presently 24 such centers, where controllers maintain a progressive check on aircraft, issuing

instructions, clearances, and advice, as well as initiating search and rescue operations to locate overdue airplanes. Over 8,000 controllers work in centers. In Arthur Hailey's novel "Airport," the Washington Air Route Traffic Control Center at Leesburg, Virginia, was described as follows: "The entire control area—larger than a football field—was, as always, dimly lighted to allow proper view of several dozen radar screens, arranged in tiers and rows under overhanging canopies. . . . The machinery and human voices merged, producing a constant noise level which was all-pervading, yet strangely muted by acoustic, sound-absorbent walls and ceiling . . ."



FLIGHT SERVICE STATIONS

Approximately 275 flight service stations (FSS) are maintained by the FAA to provide assistance to the more than 700,000 licensed pilots who fly civilian aircraft in the United States, Virgin Islands, and Puerto Rico. These general aviation planes, as well as military flights, use flight service stations to obtain information on the station's particular area, including terrain, weather peculiarities, preflight and inflight weather information, suggested routes, altitudes, indications of turbulence, icing and any other information important to the safety of a flight.

Specialists in this area relay air traffic control instructions, assist pilots in emergency situations, provide airport advisory services, and initiate and participate in searches for missing or overdue aircraft. This is one air traffic control job where you meet pilots face to face. Approximately 4,000 controllers work in flight service stations. The number of employees in a facility ranges from 10 to 70.

Flight service stations are the direct descendants of the airways communications stations established in the 1920's to provide weather data and other assistance to the early mail pilots. Most FSS's are located at airports; however, because of advances in technology this is not always necessary. The FSS system is presently being modernized, and the existing FSS's will be replaced with fully automated flight service stations (AFSS). Completion of this project is expected during the 1990's. Flight service stations of the future will serve large areas by being upgraded with state-of-the-art data processing and communication equipment, including greater use of long-distance telephones and other automated and direct user devices.

TOWERS

The air traffic control specialists at FAA airport traffic control towers (terminals) direct air traffic so it flows smoothly and efficiently. The controllers give pilots taxiing and takeoff instructions,

air traffic clearances, and advice based on their own observations and information received from the National Weather Service, air route traffic control en route centers, flight service stations, aircraft pilots, and other sources. They provide separation between landing and departing aircraft, transfer control of aircraft on instrument flights to the en route controllers when the aircraft leave their airspace, and receive control of aircraft on instrument flights coming into their airspace from controllers at adjacent facilities. They must be able to recall quickly registration numbers of aircraft under their control, the aircraft types and speeds, positions in the air, and also the location of navigational aids in the area.

In 328 operating towers, air traffic controllers control flights within the three-to-thirty-mile radius each serves under visual flight rules (VFR) or instrument flight rules (IFR). Tower controllers may work either in the glass-walled room at the top of the tower, or in the radar room below it, but their jobs have the same aim . . . the safe separation and movement of departing, landing, and maneuvering aircraft. Tower assignments vary widely, as one could imagine when contrasting the activity at a small airport with that found at a major metropolitan complex such as Dallas-Fort Worth or Chicago O'Hare. Over 9,000 controllers work in towers, with the number of controllers in a facility varying from 10 to 150.



measuring yourself against the job

QUALIFICATION REQUIREMENTS

To qualify, you must meet the criteria listed under A, B, or C, below.

A. Pass the written test (score of 75.1 or above) PLUS 3 years of general experience, or 4 years of college, or any combination of education and experience equaling 3 years of general experience;
OR

B. Pass the written test (score of 70 or above) PLUS 4 years of college PLUS 1 year of graduate study OR Superior Academic Achievement (see EDUCATION);
OR

C. Pass the written test (score of 70 or above) PLUS one of the following: (1) civilian or military facility rating in ATC involving the active control of air traffic in a center or terminal, or (2) past or present FAA air carrier dispatcher certificate, or (3) past or present instrument flight rating, or (4) past or present FAA certificate as a navigator or armed forces navigator/bombardier, or (5) past or present pilot rating with 350 hours of flight time, or (6) past or present rating as an Aerospace Defense Command Intercept Director, or (7) specialized experience as described in the following information.



EXPERIENCE

General experience is any progressively responsible work which demonstrates your potential for learning and performing air traffic control work. The work can be administrative, technical, or other types of employment.

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.

EDUCATION

Qualifying education is successfully completed study in a college or university leading to a bachelor's or higher degree.

In combining education and experience, 1 year (30 semester or 45 quarter hours) of undergraduate study is equivalent to 9 months of general experience. Thus, if you had 60 semester hours (90 quarter hours) of college study, you could substitute it for 18 months of general experience, and you would need another 18 months of qualifying work experience to meet the 3-year requirement.

Students who will complete the amount of education needed to qualify within 9 months of the test date may apply and be selected, but they must complete the study before they can begin work.

Superior Academic Achievement. Applicants who have a bachelor's degree and score 70 through 75 on the written test may still qualify for GS-7 positions if they have attained a high academic standing. The agency will require proof of academic standing before appointing you. This does not apply to applicants with scores above 75.

AGE LIMITATION

In May 1972, the 92nd Congress of the United States of America passed Public Law 92-297, giving recognition to the unusually high standards required of FAA air traffic controllers. Consequently, you must be no older than age 30 when entering on duty as an air traffic control specialist in the tower or center option. This age

how do all these controllers work together?

Here is a typical flight.

A Boeing 757 jet, with 120 Chicago-bound passengers, is waiting on the holding apron at the end of Runway 18 at Washington National Airport, just across the Potomac River from the Nation's Capital. In a matter of moments it will be airborne, soaring across the Virginia countryside, on the start of a flight that will involve it in a unique partnership with the FAA.



The 757 Captain, who already has received a thorough briefing on weather conditions, preferential routings, and other factors that will affect the flight, rechecks the approved flight plan to Chicago's O'Hare International Airport and glances through the cockpit window to the control tower a half mile away. Then he nods to the co-pilot, who presses the microphone button and says, "Washington Tower, Trans Continental 483 is ready for takeoff Runway 18."

"Trans Continental 483, taxi into position and hold," is the reply from the FAA controller in the glass-walled tower cab across the field.

The two-engine jet turns onto the runway and then receives another

limitation does not apply in the flight service station option. On the basis of extensive studies and experience, it has been determined that those unique skills and abilities necessary for the control of air traffic begin to decline at a relatively early age.

CITIZENSHIP

You must be a U.S. citizen at the time you apply for an ATCS position.

WRITTEN APTITUDE TEST

All applicants must take a written aptitude test to measure their ability to learn and perform air traffic work. This test primarily measures your ability to think abstractly and spatially. Your knowledge of aviation and air traffic will also be measured; however, you can make the maximum



score on the test (100) with no knowledge of aviation at all. The test requires approximately 4 hours to take, plus additional time for forms completion. **Your written test score establishes your eligibility for employment referral for a period of 18 months. You may not retest during this period.**

APPLYING FOR THE TEST

Your first step is to complete the application form on page 23 of this announcement. (If the form is missing, contact a Federal Job Information/Testing Center for an OPM Form 5000 AB card to be used as a substitute.) Check the listing of OPM offices shown on page 24 and the inside back cover and mail the application form to the OPM office which is located closest to the city where you wish to be tested.

The OPM office will notify you when and where the test will be given. Tests are given at least once every 3 months. Additional forms will be mailed to you to complete and take to the test location.

In many metropolitan areas, the test is regularly administered without pre-scheduling. Call the OPM office in your area for a recorded message which will include information on walk-in testing, if available.

TEST SCORING

You will be tested, your score sheets will be computer scanned and graded, and a computer record will be established. Your records will then be referred to the Special Examining Unit (SEU) located at the Federal Aviation Administration's Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma. As soon as your computer record is established, you will receive a Notice of Results indicating your score. Scores range from 70 to 100 with up to 10 points added for individuals entitled to veterans preference.

Your application will be kept on file at the SEU. AS FAA regions have positions to fill, applications are requested from the SEU to review for employment consideration. The applications on file with the highest scores for that region will



be sent, usually three applications for each opening. **Normally, scores below 90 are not reached.**

APPLICATION FORMS

Your selection for the position will be determined by information on your application forms and the results of your interview. Make your application neat, legible, and complete. Before taking it to the test site, **MAKE A COPY FOR YOUR RECORDS.** You will be asked to complete other forms in the future, and it helps to have the copy for reference.

SF-171 APPLICATION FOR FEDERAL EMPLOYMENT

When completing the SF-171, be sure to read the cover sheet and all instructions. We realize this may appear to be a cumbersome form, but it is necessary to determine officially your basic experience and qualifications.

You should list and describe all work experience. To ensure full credit, please do not make judgments as to whether or not your experience meets the general experience requirements. Describe your work experience in detail. There is

transmission from the tower: *"Trans Continental 483, cleared for takeoff."*

The pilot advances the throttles and the aircraft begins rolling down the 6800-foot runway, gathering speed as it goes. About two-thirds of the way down, the pilot pulls back on the yoke and the aircraft breaks ground and begins climbing out over the waters of the Potomac.

"Trans Continental 483, contact departure control," the controller in the tower cab says. The co-pilot's hand moves to the dial that changes one of the cockpit radio frequencies to 118.1 MHz, and he says, *"Washington departure control, Trans Continental 483's with you."*

Following departure instructions, the pilot stays aligned with the runway until departure control issues a clearance 6 miles south of the airport: *"Trans Continental 483, turn right direct Casanova, climb and maintain flight level two three zero."* Then he banks the aircraft right toward the Casanova VORTAC, a radio navigation aid that provides pilots with precise position information.

Progress of the flight is closely monitored by the radar departure controller at National to ensure that the aircraft remains safely separated from all other air traffic within the terminal control area. Trans Continental (TCA) 483 stands out clearly on the radar scope because the aircraft carries automatic altitude and identity reporting equipment, and National is equipped with a computer-based system which takes this information and displays it on the controller's radar next to the appropriate aircraft target or "blip." The electronically generated data tag looks like this:

```
TCA 483
050 250
```

The "050" in the second line of the data tag indicates the actual altitude of 5,000 feet, and the "250" represents the ground speed. Con-



from consideration. Your answers will be reviewed by a specialist to determine if a serious problem exists requiring further investigation. **BE SURE TO SIGN THE FORM IN INK.**

**OPM FORM 1203-M,
OCCUPATIONAL
SUPPLEMENT FOR
AIR TRAFFIC
CONTROL
POSITIONS- 2152**

This form establishes your computer record. Be careful to complete it correctly, paying close attention to the instructions on the

form. An error in coding on this form can cause your application to be processed improperly by the computer. This form is not reviewed by the FAA or by OPM, so it is up to you to be sure it is correct. If

in doubt as to whether or not your experience meets the requirements, code the form as if it does.

On item 15, Specialized Work Experience, if you have ever been appointed by the FAA to a trainee air traffic control specialist position, even if you did not successfully complete training, you should blacken the first circle (01).

GEOGRAPHIC LOCATIONS

Positions are located in the contiguous United States, Alaska, Hawaii, and the Caribbean. Item 18 of OPM Form 1203-M asks you to designate one region as your choice. You are given the opportunity to choose up to two regions as additional geographic preferences. As long as there are adequate numbers of highly qualified eligibles available for a particular region, first choices will be honored. If there are not sufficient first choice eligibles in a given region, consideration may be extended to eligibles who selected that region as an additional choice.

Following successful completion of the FAA

no need to attach extra paper for more space, but do elaborate. For example, you might list your experience as "Worked in a service station." A better way to list it would be "Service station attendant—dispensed gasoline, operated cash register, performed minor repairs, assisted travelers."

You must have 3 years of general work experience or 4 years of college or a combination of the two equaling 3 years. College is credited as 30 semester hours or 45 quarter hours being equal to 9 months of work experience.

Part-time work is credited on the basis of a 40-hour week. Working 20 hours a week for 2 months would give you credit for 1 month of experience. If you went to college and worked also, you may get credit for both the education and work experience. If you worked two different jobs during the same time period, you may receive credit for both.

Answer all questions truthfully, and be sure to give the details requested. Usually a yes answer on page 4 of the SF-171 will not disqualify you

Academy training program, appointees will receive a permanent duty location. The employing region will consider the location preferences of its new appointees, but the final decision on the actual assignments will depend on the current needs of the employing regions and the appointees' performance at the Academy.

CONSIDERATION FOR EMPLOYMENT

Air traffic controller positions are filled from certificates (lists) of eligible candidates who have successfully competed in the written ATCS examination and have been referred in test score order to FAA regional offices for employment consideration. When a certificate is received in the regional personnel office, preemployment processing is initiated. This processing includes the completion of additional forms, a medical examination, an interview, and a suitability investigation. Preemployment processing normally takes from 4 to 6 months to complete. Once it is completed, you will be considered with other candidates for ATCS positions. You will be contacted by the regional personnel office as to whether or not you have been selected for a position.



trollers have the option of erasing all or part of this information when not required.

As the flight approaches the boundary of the National Airport control area (approximately 30 miles), the departure controller prepares to hand off control of the flight to the Washington Air Route Traffic Control Center. When the Center controller is ready to accept the handoff, he or she likewise makes a computer entry, and the data tag on the departure controller's radar scope begins to blink. The departure controller then tells the pilot: "*Trans Continental 483, contact Washington Center on 134.3 MHz.*" Once the pilot has done that, the transfer of control is complete.

At least two and as many as four controllers work at each radar sector in the en route centers. Each of these sectors represents a specific block of airspace over a particular geographic area. The voice the pilot hears belongs to the radar controller, who monitors the scope to keep traffic safely separated. Next to him sits the handoff controller, who handles the transfer of flights between sectors or between facilities. When it's heavy, additional assistant controllers may be added to handle the extra load.

The handoff of Trans Continental Flight 483 from Washington National departure control to the Washington Center requires a minimum of voice communication, since both facilities are equipped with computer-based systems for displaying aircraft identity and altitude. Still, the controller at the Washington Center will ask Flight 483 to "*Ident,*" or identify itself, using a piece of equipment known as a transponder. This device sends out a coded signal which causes the radar target to enlarge and brighten, thus permitting the controller to make a positive identification. This is generally acknowledged with a cryptic "*Radar contact.*" The automated equipment, now in operation in all 24 centers, also eliminates the need for routine position reports and other non-essential conversation between pilots and controllers.

INTERVIEW

Applicants will be asked to report for an interview at an air traffic facility near where they live. The interviewer will look for evidence that the applicant possesses the personal characteristics (such as motivation, practical intelligence, ability to speak distinctly and concisely) required of a controller.

MEDICAL EXAMINATION

Upon successful completion of your interview, you will be scheduled for a medical examination. The examination will include blood chemistries, an audiogram, and a psychological test.

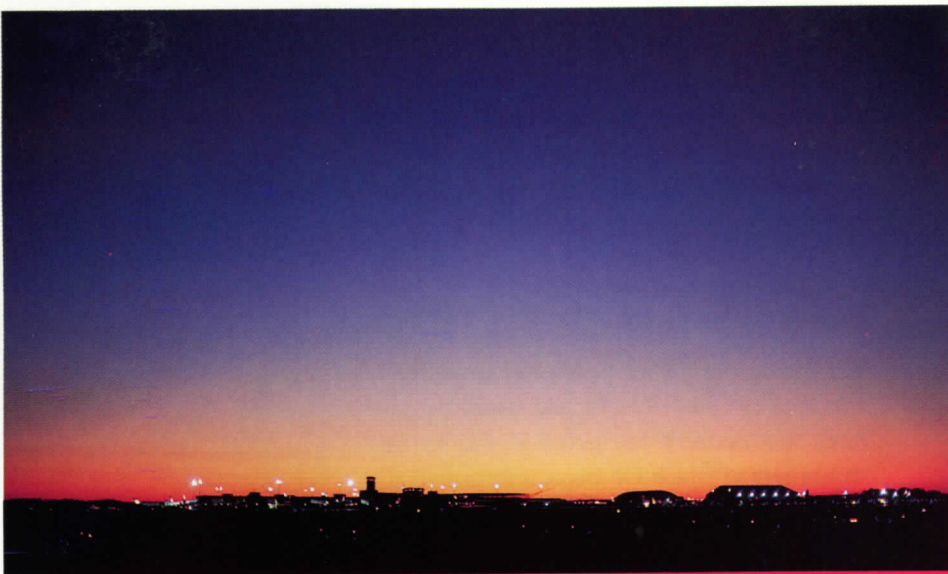
All applicants for controller positions are required to provide a urine sample during the medical examination which will be screened for the presence of drugs. The drug screening will be repeated during your career as a controller.

Some of the medical requirements established by the Office of Personnel Management which you must meet are listed here as examples:

Applicants for terminal and center specialist positions must demonstrate distant and near vision of $20/20$ or better in each eye separately. If glasses or contact lenses are required, refractive error in each eye separately which exceeds plus or minus 5.50 diopters of spherical equivalent or 3.00 diopters of cylinder is disqualifying.

Applicants for flight service station specialist positions must demonstrate distant and near vision of $20/20$ or better in at least one eye. If glasses or contact lenses are required, a refractive error which exceeds plus or minus 8.00 diopters of spherical equivalent will necessitate an ophthalmological consultation.

You must demonstrate normal color vision (without the use of x-chrome lenses).



You must not have established medical history or clinical diagnosis of any of the following:

1. Psychosis; neurosis.
2. Substance dependence, including alcohol, narcotics, and non-narcotic drugs.
3. Any other mental or personality disorder that the Federal Air Surgeon determined to constitute a hazard to safety in the air traffic control system.
4. Diabetes mellitus.
5. Other organic, functional, or structural disease, defect, or limitation found by the Federal Air Surgeon to constitute a hazard to safety in the air traffic control system.

The FAA regional flight surgeon will review the results of the examination and military records, if applicable, to determine if you meet the ATCS medical requirements. If you do not meet these requirements, you will be notified as to the reason(s). The examinations are paid for by the FAA, but travel costs incurred in reporting for the examinations must be paid for by you. If you have a problem which requires further evaluation to determine your eligibility, you will have to pay all associated costs. Once employed as an air traffic control specialist, you will be required to pass an annual medical examination which will be paid for by the agency.

SECURITY (SUITABILITY) INVESTIGATION

This investigation will include inquiries to former employers and/or educational institutions and a review of Federal Bureau of Investigation, military, and police files. If the investigation reveals any questionable information concerning your conduct, reliability, character, trustworthiness, or loyalty to the U.S. Government, you may be removed from consideration. Falsification of any information may remove you from consideration or, if discovered after appointment, may result in your separation from employment. We realize that it is sometimes difficult to answer certain questions (such as those concerning arrests), but this type of information may not be disqualifying, whereas intentionally failing to provide the information could be disqualifying.

LENGTH OF TIME

Generally, it takes anywhere from 45 to 180 days to process a medical examination and security clearance on an air traffic controller candidate. So don't quit your current job or be discouraged if you don't hear anything from the regional personnel office for a long time.



This leaves the radio channels for more urgent communications.

Ten miles west of the Casanova VORTAC, the co-pilot of Trans Continental 483 observes an ominous row of thunderheads some distance ahead. A brief discussion with the pilot follows: Can we steer around them? Is there turbulence inside the towering cumulus clouds? Does the small weather radar unit in the aircraft show a comfortable detour? The consensus is no, so the co-pilot calls the center:

"Washington center, Trans Continental 483."

"Trans Continental 483, go ahead."

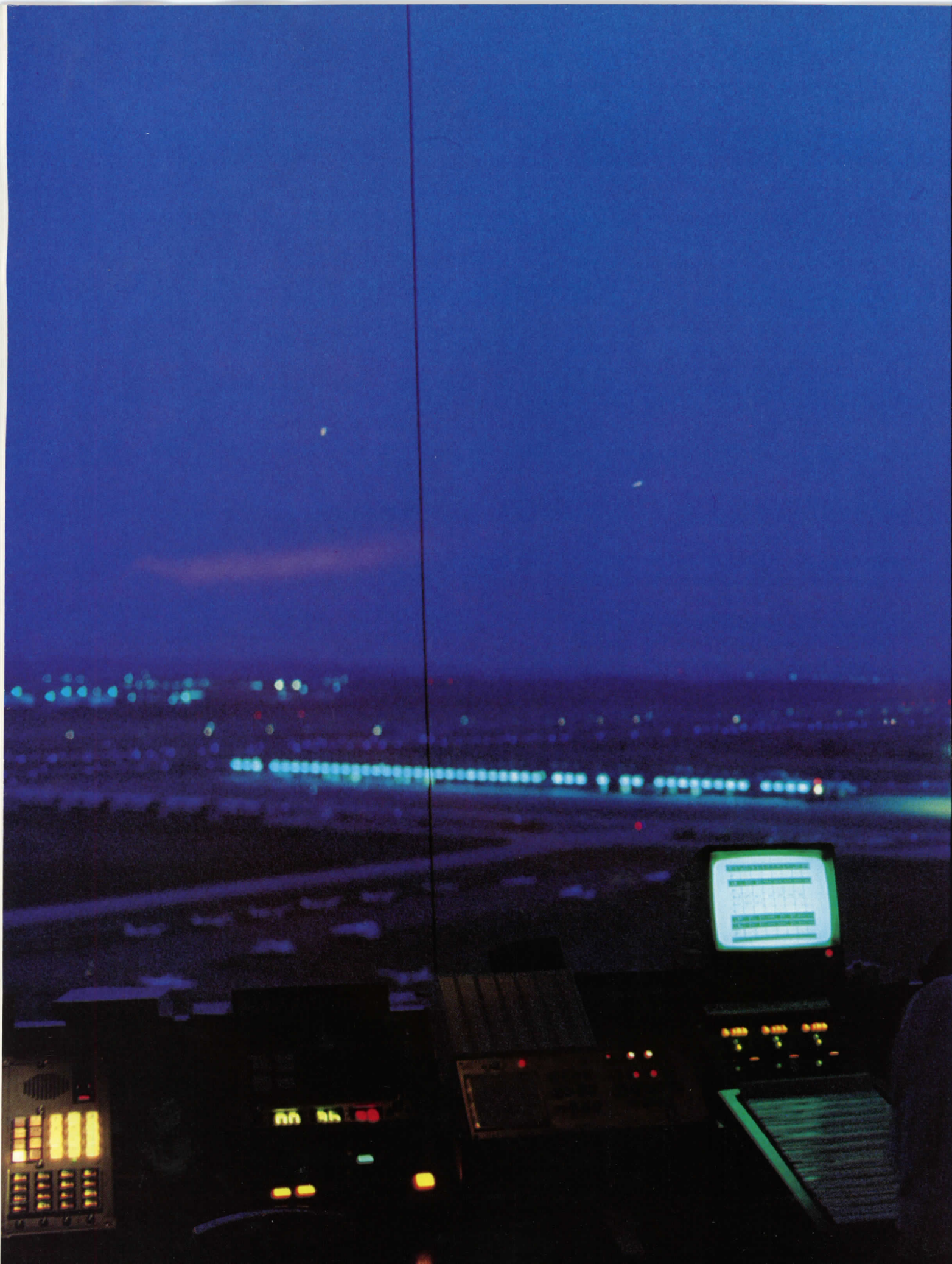
"We see some thunderheads up front. Request to detour south."

The controller scans the traffic situation south of Flight 483 and responds: *"Trans Continental 483, deviation approved. Report back on the airway."*

As Trans Continental turns south, its flight crew can rest assured that the aircraft is being watched on radar, and controllers will issue appropriate instructions should a possible traffic conflict arise. The detour takes 15 minutes and generates another radio transmission when completed. *"Trans Continental 483, turning back to J149,"* says the co-pilot using the shorthand for Jet Route 149. *"Roger,"* the center responds, *"Washington Center requests a PIREP."*

"Sure, Washington," says the co-pilot responding to the call for a pilot's in-flight report on weather conditions. *"We got some light rime ice and moderate turbulence inside the clouds, but we were in and out in 10 seconds. 483."*

PIREP's are an important adjunct to gathering aviation weather information. In this case, the data obtained from Flight 483 is forwarded by teletype to FAA flight service stations and other facilities coping with the line of thunderstorms for use in briefing other pilots operating in the area. Information on actual icing conditions is especially valuable.





Air Traffic Control Specialists

training

The FAA has developed and adopted a mandatory, centralized training program at the FAA Academy in Oklahoma City, Oklahoma. Under this program, all GS-7 employees must attend the FAA Academy for an 11- to 16-week screening and training program. As employment processing and employee orientation take place at the Academy, newly hired air traffic controllers report directly to Oklahoma City rather than to the regional facilities where they will be working.

IMPORTANT: Academy screening and training is conducted on a pass/fail basis.

Your satisfactory completion of the screening/training program is based on a composite score determined from appropriately weighted evaluation instruments administered during the program. A passing score of 70 is required.

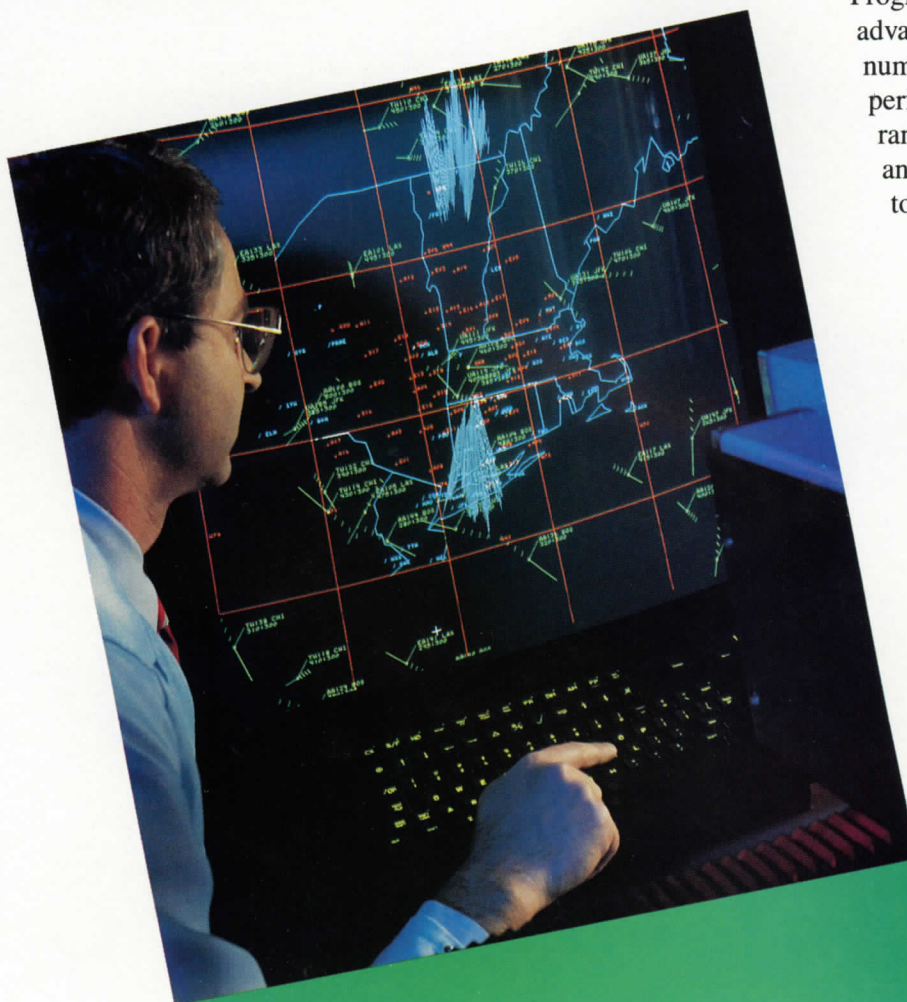
FAILURE TO COMPLETE THE PROGRAM

In the event that you do not successfully complete training, you may be reassigned, demoted, or in most cases, separated from employment. Those employees who have transferred from other agencies or who have been reassigned from within the Department of Transportation or the FAA do not have any legal entitlement to the positions which they vacated to accept positions as air traffic controllers.

PROGRESSION TO THE FULL-PERFORMANCE LEVEL

Up to the full-performance level, ATCS promotions are based upon satisfactory completion of training prerequisites and regulatory requirements and are made without competition. After reaching the full-performance level, any subsequent promotions will be based on overall performance, as compared to the performance of other employees. Progression may require competition under the Merit Promotion Program, and opportunities for advancement will depend on the number of vacancies available, performance and qualifications (as ranked against other competitors), and, in some cases, willingness to transfer to other locations.

If all this seems tough, it's because the job is tough. And human lives can depend on the controller's ability to come up with the right decisions quickly every day.



conditions of employment and benefits

PROBATIONARY PERIOD

The first year of permanent employment in the Federal civilian service, or after appointment from an Office of Personnel Management register, constitutes the probationary period. During the first year of your employment, your ability, attitude, and work habits are carefully observed. This is done to determine your suitability for retention in the Federal service. You may be separated at any time during your probationary or trial period if it appears that your retention as an employee would not be in the best interests of the FAA.

NEPOTISM

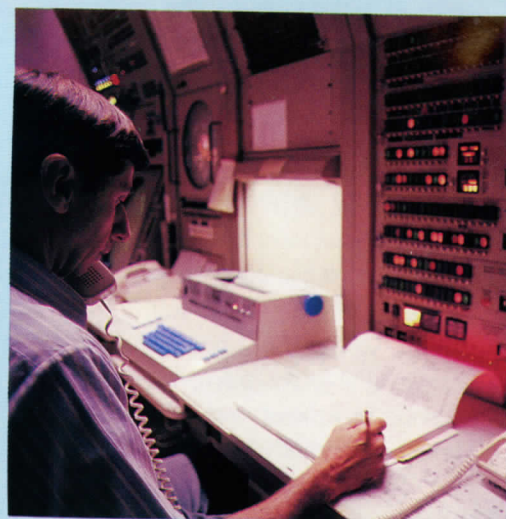
It is the policy of the FAA that close relatives may not be assigned to any positions in which one relative may directly or indirectly supervise, control, or influence the work or the employment status of the other relative.

FACILITY ASSIGNMENT/RELOCATION

Following successful completion of the Academy program, appointees will receive a permanent duty location. You will be responsible for paying your own way to your first duty station (permanent facility location). You must move your own household goods and family. Keep this in mind when you choose the geographic region(s) where you wish to work. Also, you should apply for an area where you want to live. Geographic moves are possible later in your career but are not assured. The preferences you indicate for work locations within a region are considered, but the final decision on your facility assignment will depend on the needs of the region that hires you.

SHIFT WORK

Virtually all controller jobs involve shift work, because most facilities operate on a 24-hour basis, 7 days a week. The exact rotation of the



From Washington Center, Trans Continental 483—now at flight level 350 (35,000 feet)—is handed off first to the Indianapolis Center, then to the Cleveland Center, and finally to the Chicago Center. In each case, the procedure is virtually identical to that employed in the original transfer of the flight from Washington National departure control to the Washington Center.

Like the airline aircraft, TCA 483 operates under instrument flight rules (IFR), meaning it must have an approved flight plan and follow instructions from FAA air traffic control facilities which assume responsibility for keeping all IFR aircraft separated from one another. Most general aviation (nonairline) and military aircraft also fly IFR, but many general aviation aircraft operate under visual flight rules (VFR) when weather conditions permit. VFR means the aircraft are essentially outside the air traffic control system except in terminal areas and depend upon their own capabilities to see and avoid other air traffic.

As Flight 483 nears Chicago O'Hare, the Captain tunes in the O'Hare Automatic Terminal Information Service (ATIS). ATIS provides the pilot with a continuous broadcast of recorded airport weather and landing information. The pilot received the following O'Hare weather—"O'Hare International Airport Information BRAVO, measured ceiling two thousand overcast, visibility three, blowing

shift is determined by the individual facility, with most shifts changing on a weekly or biweekly basis. Days off will not always fall on weekends. Facilities remain open on all holidays.

MILITARY RESERVE STATUS

As an air traffic control specialist at the GS-9 level and above, you will not be considered available for active military service in time of war or national emergency. An exception may be recommended if your absence for reserve training or mobilization will not jeopardize the mission of the FAA facility to which you are assigned.

LABOR ORGANIZATIONS

There are labor organizations within the FAA. As an employee, you have the right to join or refrain from joining.

VACATION AND SICK LEAVE

You will earn annual leave for vacation and other purposes which require time away from your job, according to the number of years (civilian plus creditable military service) you have been in the Federal service: 13 days a year for the first 3 years and 20 days a year for the next 12 years. After 15 years, you earn 26 days of annual leave each year. You may carry a maximum of 240 hours of unused annual leave over into a new leave year. Any annual leave in excess of 240 hours that is not used prior to the end of the leave year will be forfeited.

Sick leave is earned at the rate of 13 days a year. You can use this leave when incapacitated for duty because of illness, injury, pregnancy, and for appointments with doctors, dentists, or opticians. Sick leave that is not used will be saved for future use. It is one of the best forms of insurance you can have in case of extended periods of illness.

HOLIDAYS

In addition to your annual leave, you will be paid for each Federal holiday. Currently, there are ten paid holidays each year.



PAY

While attending the Academy program, you will be paid a GS-7 salary. Since there are 26 pay periods a year, you will receive your paycheck every 2 weeks. (You should receive your first check within 4 weeks after your appointment.) In addition to your base salary, you may receive additional compensation as follows:

Holiday and Sunday Pay. You will receive extra pay for required work performed on holidays and Sundays.

Night Pay. If your regular duty tour includes work between the hours of 6:00 P.M. and 6:00 A.M., you will receive extra pay, which is called night differential.

Overtime Pay. If you work in excess of 8 hours in a day or 40 hours in the administrative workweek, you are entitled to overtime pay.

Cost-of-Living Allowance. Cost-of-living allowances are provided for employees assigned to certain duty posts such as Alaska, Hawaii, or Puerto Rico.

Revitalization Pay (House Joint Resolution 599). You may be eligible for certain types of additional premium pay in connection with the performance of ATCS duties.

DEDUCTIONS THAT WILL AFFECT YOUR TAKE-HOME PAY

The FAA will automatically deduct Federal taxes (and State taxes if you work in a State that has an agreement with the U.S. Treasury Department for such withholdings). In addition, a percentage of your base pay is deducted and deposited to your account to provide you with an income upon retirement. A tax-deferred Thrift Savings Plan is available to supplement retirement. If you choose to join a union, your dues can be deducted—if you so authorize—from your salary. If you elect to be covered by a health plan and/or life insurance, these too will be deducted from your salary. Also, you may have allotments deducted for deposit in financial institutions, such as credit unions or banks. United States savings bonds may be purchased

snow. Temperature three zero. Wind three four zero degrees at two five. Altimeter two niner eight. ILS runway 32L approach in use. Advise you have BRAVO."

But despite the blowing snow, the ceiling and visibility at O'Hare are well within limits for an instrument approach on Runway 32L. Now the flight is handed off for the last time.

"Trans Continental 483," says the controller at the Chicago Center, "descend and maintain one thousand, report leaving one two thousand."

A crisp acknowledgement follows, and Flight 483 begins its descent. Although 483's data tag on both the center and approach control radar ticks off its altitude in one hundred foot increments like the odometer in an automobile, the co-pilot provides the backup communications designed to ensure flight safety.

In a matter of minutes, the aircraft is on the ground, having "coasted" down the radio beam of the instrument landing system (ILS) that defines the descent path to Runway 32L. Now the ground controller in the tower cab, which soars 200 feet above the world's busiest airport, takes command, guiding the aircraft along the taxiways to the terminal.

The flight has been deceptively routine, and most of the 120 passengers on board are unaware that they have been guided from boarding gate to boarding gate by a highly trained and skilled team of air traffic controllers. Had the Boeing 757 been a business jet, a private aircraft, or a military transport, it could have availed itself of the same services offered Trans Continental 483. The air traffic control system is a common system which can be used by everyone who flies.

voluntarily through the Payroll Savings Plan. This, too, becomes an automatic deduction—if authorized by you.

WITHIN-GRADE INCREASES

You may get an increase in salary without a change in position or grade. There are steps in the salary range of each grade to which you progress after periods of satisfactory service. Your supervisor must certify that you are performing the duties of your position successfully in order for you to get a within-grade increase.

LIFE INSURANCE

Unless you elect to decline the benefit, you will be covered by term life insurance without taking a physical examination. Two kinds of insurance are provided—life insurance and accidental death and dismemberment insurance—in amounts which usually are at least \$2,000 more than your annual base pay. The minimum amount of each kind of protection is \$10,000.

The Government pays one-third of the premium cost, and you pay the remainder.

If you enroll for the basic life insurance, you may purchase optional insurance for which you pay the full premiums, also through payroll deductions. You may elect coverage under one or more of the following options:

- Option A - an additional \$10,000;
- Option B - an amount equal to one, two, three, four, or five times your annual basic pay (rounded to the next \$1,000); or
- Option C - coverage for eligible family members (\$5,000 for your spouse and \$2,500 for each dependent child).

HEALTH INSURANCE

When you are appointed to a position in the FAA, you have the opportunity to enroll in a group health benefits plan, with better rates and protection than you normally can get with an individual plan. Ordinarily, you must enroll or change plans only during an “open season,” which usually is conducted once a year.

Through the health benefits program, you get guaranteed protection for yourself and your family which cannot be cancelled by the plan. There are no medical examinations, generally no waiting period, and no restrictions because of age or physical condition. The Government contributes toward the cost of your plan. You pay your share of the cost through regular payroll deductions. Protection continues after retirement (if you meet the stipulated requirements) at the same cost as for active employees.



RETIREMENT

General Overview:

New employees are covered by the Federal Employees' Retirement System (FERS). This system provides that, in addition to Social Security coverage, you will be covered by a guaranteed Basic Annuity and be eligible to participate in a Thrift Savings Plan. The Thrift Savings Plan is a tax- deferred savings plan similar to an Individual Retirement Account.



Retirement Eligibility

Type of Retirement	Minimum Age	Years of Service Required	Special Requirements
Optional	62	5	None
Optional	60	20	None
Optional	55	30	None
Optional for ATCS occupation subject to PL 92-297 and PL 99-335	50 Any age	20 25	Must have been actively engaged in, or the immediate supervisor of one who is engaged in, the separation and control of air traffic or the providing of pre-flight, inflight, or airport advisory service to aircraft operators for entire service period, all of which must have been civilian service.
Disability	Any age	CSRS-5 FERS-1½	Must be totally disabled to do your work or other work to which you may be assigned. A disability retirement application must be approved by the Office of Personnel Management on the basis of a medical examination.

Individuals who were civil service employees prior to January 1, 1984, may be covered under a different retirement plan (i.e. Civil Service Retirement System or CSRS). Check with the employment office considering you for employment to see which rules apply in your case.

sample questions for air traffic controller examination

The air traffic controller examination consists of three separate subtests. The first test is intended to assess air traffic controller aptitudes. The second test is intended to assess the ability to perceive spatial relationships. The third test is

intended to assess knowledges related to air traffic control work. (These knowledges are not required to take the examination nor to be selected into an air traffic controller position.)

The tests are scored by machine, and, therefore, you will receive a separate answer sheet (i.e., separate from the test booklet which contains the questions). On this answer sheet you should carefully mark your answers by darkening the bar which represents the correct alternative to each question. A sample answer sheet is shown on page 21 in the section which deals specifically with the second test.

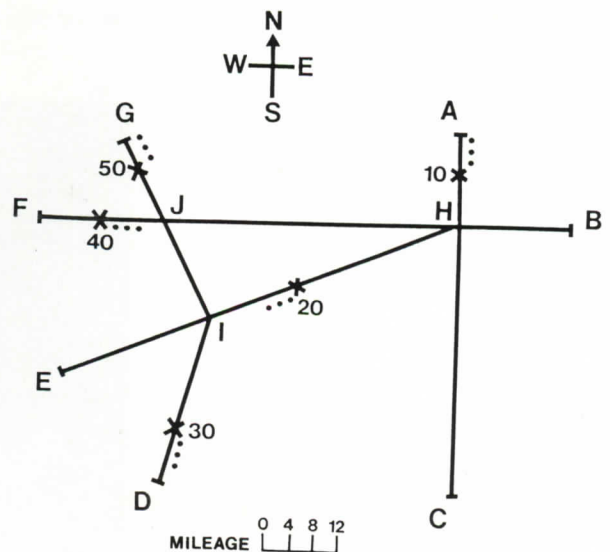
Test I

This test consists of drawings which simulate a radar scope depicting characteristic patterns of air traffic. Each problem contains a drawing of particular flight paths and aircraft flying on those routes. A table containing information about the altitude, speed, and route of each aircraft accompanies each drawing. Your task will be to answer questions which make use of this flight information. The questions ask for identification of potential midair collisions, differences in the routes of aircraft, distances between aircraft, compass headings of different aircraft, and changes in routes. Some preliminary instructions necessary to read correctly the information provided in the problems will be given to you at the test site before you actually start taking the test.

A typical example of the kind of information provided in the test problems is given on the right. The drawing shows the particular flight paths that aircraft must follow. Changes in routes can occur only at the intersection between two routes. Each x depicted on the routes represents an aircraft traveling in a particular direction indicated by the trailing dots.

A table containing critical flight information about each aircraft is provided. The number next to each x on the drawing allows the matching of the flight information to the correct aircraft. The flight information lists the altitude, speed in miles per hour, and route that each aircraft is flying.

An example of the simulated radar scope and table of flight information is given below.



Flight Information:

Aircraft	Altitude	Speed	Route
10	5000	300	AHC
20	5500	300	EIHB
30	5000	450	DIJF
40	6000	450	BHJF
50	6000	300	GJBH

Test II

In this test the questions deal with relationships among sets of figures and with relationships among sets of letters.

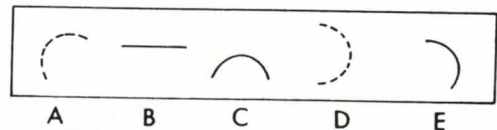
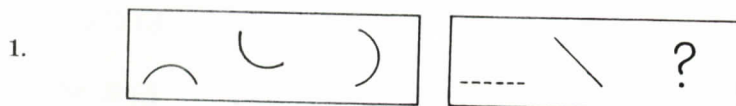
The sample questions shown below illustrate the types of relationships which you will be asked to discover. A sample answer sheet is provided to

the right of the sample questions. You should mark your answers to the sample questions on this sample answer sheet by darkening the bar corresponding to the letter of your answer for each question. The correct answers are given at the bottom of page 22.

SAMPLE QUESTIONS

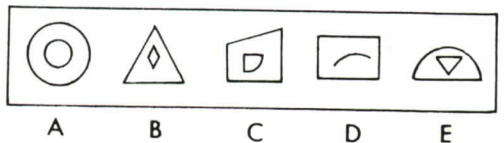
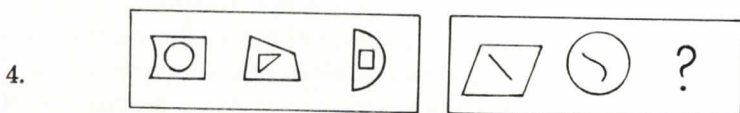
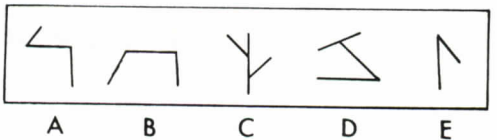
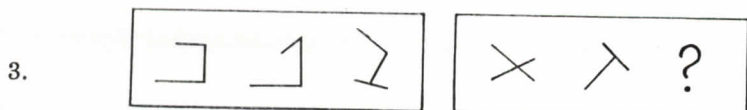
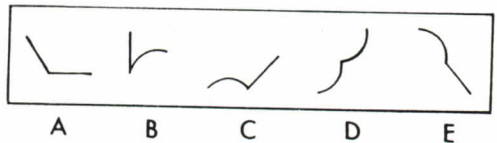
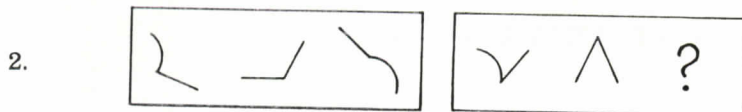
Each of the first four questions has two boxes at the left. The symbols in the second box are different from the symbols in the first box. There is a relationship among the symbols within the first box and a relationship among the symbols within the second box. The relationship in the second box is similar but not identical to the relationship in the first box. Using these similarities and differences, choose from the five lettered alternatives (A, B, C, D, or E) the symbol that can best be substituted for the question mark in the second box. The correct answer is never based upon the series or progression of the symbols.

SAMPLE ANSWER SHEET					
	A	B	C	D	E
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



In question 1 all the symbols in the first box are curved while the symbols in the second box are straight. Of the lettered symbols in the third box, only B is straight, so B has been marked on the sample answer sheet. (Note that although

one symbol in the second box is made of dashes, the other is not, and so a dashed type of line is not the difference between the two boxes.) Now do questions 2 through 4.



You should bring with you to the examination room the following items:

- the form below when it is returned to you;
- a pen, three medium No. 2 black lead pencils, and an eraser;
- the completed SF-171 and OPM Form 1203-M (see pages 7 and 8 of this announcement).

IDENTIFICATION MAY BE REQUIRED FOR THE WRITTEN EXAMINATION. Impersonation in the examination room can result in being barred from competing in Federal civil service examinations or from accepting employment in the competitive service for 3 years.

This information is requested under the authority of sections 1302, 3301, and 3304 of title 5 of the U.S. Code. These sections require the Office of Personnel Management to conduct examinations for competitive positions in the Federal service. The information sought will be used to schedule you for a written examination, serve as an admission card to that exam, and to ascertain whether you may be affected by laws determining who may be tested or employed. Other possible uses of the data include disclosure to a source (e.g., former employer or school) who is requested to furnish information about you that will assist in determining whether to hire you; to a Federal, State, or local agency for checking on law violation; or to the courts where the Government is a party to a suit. Your Social Security Number (SSN) is requested under authority of Executive Order 9397, which requires agencies to use the SSN as the means of identifying individuals in Government information systems. The furnishing of your SSN and the other information is voluntary. Failure to provide your SSN will result in your not being scheduled for an exam. Failure to provide the other data may have the same result.

1. Please PRINT all the information CLEARLY in INK.
2. Mail your application to the OPM office which is closest to the city where you wish to be tested. OPM addresses are on the next 2 pages of this announcement.
3. Be sure to mail your application in a stamped envelope.

MAIL
TODAY

**OPM addresses
next 2 pages.**

<i>Cut Along Dotted Line</i>		<i>(Initial)</i> <i>(First Name)</i> _____
1. YOUR ADDRESS (<i>Street & Number, or R.D., City, State & Zip Code</i>) _____ _____ _____	3. DATE OF BIRTH (Mo., Day, Year) _____/_____/_____ _____/_____/_____ _____/_____/_____	
2. WHERE DO YOU WISH TO TAKE THE WRITTEN TEST? (City) _____(State) _____		
<p style="margin: 0;">1. AIR TRAFFIC CONTROL SPECIALIST 2. Announcement No. FAA/ATC 008</p> <hr/> <p style="margin: 0;">3. TELEPHONE NO. [] _____ 4. Social Security No. [][][][][][][][][][]</p> <p style="margin: 0;">5. Where do you wish to take the written test?</p> <p style="margin: 0;">City _____ State _____</p> <p style="margin: 0;">6. If you observe the sabbath or religious holiday on a day other than Sunday or if you have a disability requiring special arrangements, specify the day of your sabbath or the nature and degree of your disability and the special arrangements you will need.</p> <p style="margin: 0;">_____</p> <p style="margin: 0;">7. If you performed active duty in the armed forces in the United States and were separated under honorable conditions, indicate periods of service: from month ____ day ____ year ____ to month ____ day ____ year ____</p> <p style="margin: 0;">Do you claim veterans preference? <input type="checkbox"/> yes <input type="checkbox"/> no</p> <p style="margin: 0;">8. Are you a United States citizen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
DO NOT WRITE IN THIS SPACE		
When this form is returned to you, bring it with you when you report for the test		

When this form is returned to you, bring it with you when you report for the test.

where to send your application

(OPM Federal Job Information/Testing Offices)

ALABAMA

Huntsville:
Southerland Building
806 Governors Dr., S.W., 35801
(205) 544-5802

ALASKA

Anchorage:
Federal Building
701 C. St., Box 22, 99513
(907) 271-5821

ARIZONA

Phoenix:
U.S. Postal Service Building
522 N. Central Ave.,
Room 120, 85004
(602) 261-4736

ARKANSAS

Little Rock:
Federal Building, Rm. 3421
700 W. Capitol Ave., 72201
(501) 378-5842

CALIFORNIA

Los Angeles:
Linder Building, 3rd Floor
845 S. Figueroa, 90017
(213) 894-3360

Sacramento:

1029 J St., 2nd floor, 95814
(916) 551-1464

San Diego:

880 Front St., 92188
Federal Bldg., Rm. 459
(619) 575-6165

San Francisco:

211 Main St.,
Second Floor, Room 235, 94105
(415) 974-9725

COLORADO

Denver:
P.O. Box 25167, 80225
(303) 236-4160
Physically located at
12345 W. Alameda Pkwy.,
Lakewood, CO
For job information (24 hrs. a day)
in the following States dial:
Montana: (303) 236-4162
Utah: (303) 236-4165
Wyoming: (303) 236-4166
For forms and local supplements dial:
(303) 236-4159

CONNECTICUT

Hartford: Federal Building, Rm. 613
450 Main St., 06103
(203) 240-3263

DELAWARE

(See Philadelphia, PA listing)

DISTRICT OF COLUMBIA

Metro Area: 1900 E. St., N.W.,
Rm. 1416, 20415
(202) 653-8468

FLORIDA

Orlando: Commodore Bldg., Suite 125
3444 McCrory Pl., 32803-3712
(305) 648-6148

GEORGIA

Atlanta:
Richard B. Russell Federal Bldg.
Rm. 960, 75 Spring St., S.W., 30303
(404) 331-4315

GUAM

Agana:
Pacific Daily News Building
238 O'Hara St., Rm. 902, 96910
472-7451

HAWAII

Honolulu (and other Hawaiian Islands
and overseas):
Federal Building, Rm. 5316
300 Ala Moana Blvd., 96850
(808) 541-2791
(808) 541-2784 - Overseas Jobs

IDAHO

(See Washington listing)

ILLINOIS

Chicago:
175 W. Jackson Blvd., Rm. 530, 60604
(312) 353-6192



INDIANA

Indianapolis:
Minton-Capehart Federal Building
575 N. Pennsylvania Ave., 46204
(317) 269-7161

IOWA (See Kansas City listing)

KANSAS

Wichita:
One-Twenty Building, Rm. 101
120 S. Market St., 67202
(316) 269-6796
In Johnson, Leavenworth and
Wyandotte Counties dial
(816) 374-5702

KENTUCKY (See Ohio listing)

LOUISIANA

New Orleans:
F. Edward Hebert Building
610 S. Maestri Pl., Rm. 802, 70130
(504) 589-2764

MAINE

(See New Hampshire listing)

MARYLAND

Baltimore:
Garmatz Federal Building
101 W. Lombard Street, 21201
(301) 962-3822

MASSACHUSETTS

Boston:
Boston Federal Office Bldg.,
10 Causeway St., 02222-1031
(617) 565-5900

MICHIGAN

Detroit:
477 Michigan Ave.,
Rm 565, 48226
(313) 226-6950

MINNESOTA

Twin Cities:
Federal Building
Ft. Snelling, Twin Cities, 55111
(612) 725-3430

MISSISSIPPI

(See Alabama listing)

MISSOURI

Kansas City:
Federal Building, Rm 134
601 E. 12th St., 64106
(816) 374-5702

St. Louis:

Old Post Office, Rm. 400
815 Olive St., 63101
(314) 425-4285

MONTANA

(See Colorado listing)

NEBRASKA

(See Kansas listing)

NEVADA

(See Sacramento, CA listing)

NEW HAMPSHIRE

Portsmouth:
Thomas J. McIntyre Federal Bldg.,
Rm. 104
80 Daniel Street, 03801-3879
(603) 431-7115

NEW JERSEY

Newark:
Peter W. Rodino, Jr. Federal Bldg.,
970 Broad St., 07102
(201) 645-3673.
In Camden, dial (215) 597-7440

NEW MEXICO

Albuquerque:
Federal Building
421 Gold Ave., S.W., 87102
(505) 766-5583.
In Dona Ana, Otero and El Paso
Counties dial (505) 766-1893

NEW YORK

New York City:
Jacob K. Javits Federal Building
26 Federal Plaza, 10278
(212) 264-0422

Syracuse:

James N. Hanley Federal Building
100 S. Clinton St., 13260
(315) 423-5660

NORTH CAROLINA

Raleigh:
Federal Building,
310 New Bern Ave.
P.O. Box 25069, 27611
(mailing address)
(919) 856-4361

NORTH DAKOTA (See Minnesota listing)

OHIO

Dayton:
Federal Building, Room 506
200 W. 2nd St., 45402
(513) 225-2720

OKLAHOMA

Oklahoma City:
(mail or phone only)
200 N.W. Fifth St.,
Second Floor, 73102
(405) 231-4948

OREGON

Portland:
Federal Building, Rm. 376
1220 S.W. Third St., 97204
(503) 221-3141

PENNSYLVANIA

Harrisburg:
Federal Building, Rm. 168
P.O. Box 761, 17108
(717) 782-4494

Philadelphia:

Wm. J. Green, Jr. Federal Building
600 Arch St., Rm. 1416, 19106
(215) 597-7440

Pittsburgh:

Federal Building
1000 Liberty Ave., Rm. 119, 15222
(412) 644-2755

PUERTO RICO

San Juan:
Federico Degetau Federal Building
Carlos E. Chardon St.
Hato Rey, P.R. 00918
(809) 753-4209

RHODE ISLAND

Providence:
John O. Pastore Federal Building
Rm. 310, Kennedy Plaza, 02903
(401) 528-5251

SOUTH CAROLINA

(See North Carolina listing)

SOUTH DAKOTA

(See Minnesota listing)

TENNESSEE

Memphis:
200 Jefferson Ave.
Suite 1312, 38103-2355
(901) 521-3956

TEXAS

Dallas:
(mail or phone only)
Rm. 6812, 1100 Commerce St., 75242
(214) 767-8035

Houston:

(phone-recording only)
(713) 226-2375

San Antonio:

(mail or phone only)
643 E. Durango Blvd., 78206
(512) 229-6611 or 6600

UTAH

(See Colorado listing)

VERMONT

(See New Hampshire listing)

VIRGINIA

Norfolk:
Federal Building, Rm 220
200 Granby Mall, 23510-1886
(804) 441-3355

WASHINGTON

Seattle: Federal Building
915 Second Ave., 98174
(206) 442-4365

WEST VIRGINIA

(See Ohio listing)
or dial (573) 225-2866

WISCONSIN

Residents in Counties of Grant, Iowa,
Lafayette, Dane, Green, Rock, Jefferson,
Walworth, Waukesha, Racine, Kenosha
and Milwaukee should dial (312)
353-6189 for job information. All other
Wisconsin residents should refer to the
Minnesota listing for Federal job
information in their area.

WYOMING

(See Colorado listing)