Air Traffic Control

Significant Points

The vast majority of air traffic controllers are employed by the Federal Aviation Administration (FAA), an agency of the Federal Government. Applicants without prior air traffic control experience must be 30 years of age or younger. Replacement needs will continue to account for most job openings, reflecting the large number of air traffic controllers who will be eligible to retire over the next decade. Competition for jobs will remain keen.

Nature of the Work

The National Airspace System (NAS) is a vast network of people and equipment that ensures the safe operation of commercial and private aircraft. Air traffic controllers work within the NAS to coordinate the movement of air traffic to make certain that planes stay a safe distance apart. Their immediate concern is safety, but controllers also must direct planes efficiently to minimize delays. Some regulate airport traffic through designated airspaces; others regulate airport arrivals and departures.

Terminal controllers watch over all planes traveling in an airport's airspace. Their main responsibility is to organize the flow of aircraft into and out of the airport. They work in either the control tower or the terminal radar approach control (TRACON) room or building. Relying on visual observation, the tower local controllers sequence arrival aircraft for landing and issue departure clearances for those departing from the airport. Other controllers in the tower control the movement of aircraft on the taxiways, handle flight data, and provide flight plan clearances. Terminal radar controllers manage aircraft departing from or arriving to an airport by monitoring each aircraft's movement on radar to ensure that a safe distance is maintained between all aircraft under their control. In addition, terminal controllers keep pilots informed about weather and runway conditions.

Many different controllers are involved in the departure of an airplane. If the plane is flying under instrument flight rule conditions, a flight plan is filed prior to departure. The tower flight data controller receives the flight plan in the form of a flight strip, which is output from a computer, and arranges it in sequence. When an aircraft calls for clearance the clearance delivery controller issues the clearance and moves the strip over to the ground controller who manages the movement of aircraft on the airport surface, except the active runway. When the aircraft arrives at the active runway the strip is moved to the local controller who issues the departure clearance, observes the takeoff and turns the plane over to the departure controller. The TRACON departure controller identifies the plane on radar, climbs it, and directs it on course.

After each plane departs, terminal controllers notify en route controllers, who take charge next. There are 20 air route traffic control centers located around the country, each employing 300 to 700 controllers, with more than 150 on duty during peak hours at the busiest facilities. Airplanes usually fly along designated routes; each center is assigned a certain airspace containing many different routes. En route controllers work either individually or in teams of two, depending on how heavy traffic is; each team is responsible for a sector of the center's airspace.

As the plane proceeds on its flight plan to its destination it is handed off from sector to sector both within the center and to adjoining centers. To prepare for planes about to enter the team's sector, the radar associate controller organizes flight plans output from a printer into strip bays. If two planes are scheduled to enter the team's sector in conflict, the controller may arrange with the preceding sector unit for one plane to change its flight path or altitude. As a plane approaches a team's airspace, the radar controller accepts responsibility for the plane from the

previous sector. The controller also delegates responsibility for the plane to the next sector when the plane leaves the team's airspace.

When the plane is approximately 50 miles from the destination airport, it is handed off to that airport's terminal radar arrival controller who sequences it with other arrivals, and issues an approach clearance. As the plane nears the runway, the pilot is issued a clearance to contact the tower. The local controller issues the landing clearance. Once the plane has landed, the ground controller directs it along the taxiways to its assigned gate. The local and ground controllers usually work entirely by sight, but may use airport surface radar if visibility is very poor.

Both airport tower and en route controllers usually control several planes at a time, often making quick decisions about completely different activities. For example, a controller might direct a plane on its landing approach and at the same time provide pilots entering the airport's airspace with information about conditions at the airport. While instructing these pilots, the controller also might observe other planes in the vicinity, such as those in a holding pattern waiting for permission to land, to ensure that they remain well separated.

In addition to airport towers and en route centers, air traffic controllers also work in flight service stations at 17 locations in Alaska. These flight service specialists provide pilots with preflight and in-flight weather information, suggested routes, and other aeronautical information important to the safety of a flight. Flight service specialists relay air traffic control clearances to pilots not in direct communications with a tower or center, assist pilots in emergency situations, and initiate and coordinate searches for missing or overdue aircraft. At certain locations where there is no airport tower or the tower has closed for the day, flight service specialists provide airport advisory services to landing and departing aircraft. However, they are not involved in actively managing and separating air traffic.

Some air traffic controllers work at the FAA's Air Traffic Control Systems Command Center in Herndon, VA, where they oversee the entire system. They look for situations that will create bottlenecks or other problems in the system and then respond with a management plan for traffic into and out of the troubled sector. The objective is to keep traffic levels in the trouble spots manageable for the controllers working at en route centers.

Work environment. During busy times, controllers must work rapidly and efficiently. Total concentration is required to keep track of several planes at the same time and to make certain that all pilots receive correct instructions. The mental stress of being responsible for the safety of several aircraft and their passengers can be exhausting. Unlike tower controllers, radar controllers also have the extra stress of having to work in semi-darkness, never seeing the actual aircraft they control except as a small "blip" on the radarscope. Controllers who work in flight service stations work in offices close to the communications and computer equipment.

Controllers work a basic 40-hour week; however, they may work additional hours, for which they receive overtime, or premium pay, or equal time off. Because most control towers and centers operate 24 hours a day, 7 days a week, controllers rotate night and weekend shifts. Contract towers and flight service station working conditions may vary somewhat from the FAA.

Air Traffic Control Specialist (Center)

The primary function of the air route traffic control centers is the control and separation of air traffic within designated controlled airspace, along the airways and over certain oceanic routes. A network of centers located throughout the country and in certain areas outside the continental United States provides for an orderly flow of en route traffic and the interchange of traffic control between adjacent centers and the terminals.

In addition to controlling en route traffic, the centers also provide control services for IFR aircraft operating, during certain periods, to and from nonapproach control airports. Workload permitting, the centers provide advisory services to aircraft operating under visual flight rules. Such advisory service to pilots includes information as to the status of navigational aids, other air traffic of concern to the pilot, weather and airport conditions, and the status of restricted and military operating areas.

In airspace designated as positive control airspace, all air traffic is under the mandatory control of the centers. Safety requires positive control of the higher speed and performance aircraft which use that airspace. These aircraft fly too fast and high to rely on the "see and be seen" principle employed under visual flight rules procedures by slower speed aircraft at lower altitudes.

To fly within controlled airspace under instrument flight rules the pilot must file a flight plan which identifies the aircraft, its origin and destination, proposed route of flight, speed and proposed altitude. Based on traffic conditions, the center initiating control of the flight issues clearances specifying the route and authorized altitude, and when necessary, the time and initial direction for the departure.

Flight plan information is computer processed in the center to inform controllers within the facility initiating control of the flight that the aircraft will be entering their airspace and flying a specified route. The computer processed flight plan (flight progress strip) is forwarded to all adjacent centers which will control the aircraft during the course of the flight and to the destination terminal.

Through the analysis of the flight progress strip information and constant radar surveillance, the center controller issues instructions to pilots on the proper flight headings and altitudes to maintain separation from other aircraft, to space arrivals and departures, to avoid severe weather, and to remain clear of restricted flight areas. The center retains control of aircraft until they are released to an adjacent center or the destination terminal.

Air Traffic Control Specialist (Center), GS-2152-05

This is a trainee level for center controllers. GS-5 center controllers receive training and indoctrination in such subjects as: air traffic rules; airport traffic control; communications operating procedures; principles of flight; air navigation; aids to air navigation; aviation weather; and terrain, navigational aids, reporting fixes and airway structure in the center's control area.

GS-5 employees are under direct supervision. Higher level controllers observe the work on a continuing basis to insure proper performance of tasks and to provide training in basic controller skills.

Air Traffic Control Specialist (Center), GS-2152-07

This is a developmental level for center controllers. GS-7 center controllers receive training in the subjects described at GS-5 and, in addition, perform some of the basic tasks required in center work.

GS-7 center controllers perform such tasks as receiving, processing, and delivering flight plan information; operating the communications system; entering flight data into the computer and coordinating flight data processing problems; servicing the flight data strip printer; and processing flight plans manually.

Initially, the GS-7 controller is under direct supervision. As the GS-7 progresses through training, the employee works at routine assignments with more independence than the GS-5

controller. On less routine tasks, e.g., those that would otherwise be characteristic of the GS-9 level, GS-7 controllers are evaluated in terms of their potential to perform those tasks with greater independence.

Air Traffic Control Specialist (Center), GS-2152-09

This is an advanced developmental level for center controllers. Under close supervision and guidance, GS-9 center controllers assist controllers of higher grade by performing various control tasks.

GS-9 center controllers perform such duties as: recording clearances and control information on flight data strips; relaying clearances; entering flight data into the computer; maintaining a continuous record of traffic; reviewing proposed and active flight plans to resolve discrepancies; sequencing of flight progress strips; and coordinating with other center controllers.

At the time of each assignment to a new kind of work, the GS-9 receives close supervision and guidance. As the GS-9 controller completes various phases of the developmental program, the work is spot-checked and the GS-9 works with more independence than the GS-7 controller. Employees are evaluated both on their performance as a GS-9 and on their potential for progression to higher levels.

Air Traffic Control Specialist (Center), GS-2152-11

GS-11 center controller assignments vary between the performance of control functions as a team member, and assignments geared to qualify the controller to operate a limited number of radar control positions.

As a team member, GS-11 center controllers assist radar controllers of higher grade by performing such work assignments as: establishing and maintaining separation of aircraft using non-radar (manual) procedures; sequencing of air traffic for orderly handoff; accomplishing handoffs with adjacent controllers or facilities; issuing departure clearance, beacon code and altitude assignments; employing holding procedures; and providing in-flight weather advisories.

In comparison with the GS-9 controller who sequences traffic and issues clearances to pilots directly or indirectly, the GS-11 controller plans aircraft movements and issues instructions directly to the pilot. GS-11 center controllers make more frequent and difficult decisions than the GS-9 controller because of the greater complexity in sequencing aircraft and determining their movements, and the need for more frequent coordination with pilots and other controllers. More frequently than the GS-9, the GS-11 must provide approach or en route clearances to pilots and furnish information to other controllers regarding traffic entering their sectors. The GS-11, therefore, has less time for acting or reacting, for correcting mistakes or for clarifying instructions than does the GS-9.

The GS-11 controller has the added responsibility for such actions as executing shortened holding patterns to expedite aircraft movements, and directing deviations from normal courses and speeds to reduce potential delays, which the GS-9 controller is not normally called upon to do.

At this level controllers apply previous training and on-the-job qualification to operate, under general supervision, a limited number of radar control positions. This is in contrast to the GS-9 level where the emphasis is more on training to provide basic radar control skills and techniques.

Controllers at this level receive only general guidance and supervision while performing the duties of those positions of operation on which they have qualified. Developmental on-the-job assignments to qualify on radar control positions are performed under the technical direction of full performance level controllers.

Air Traffic Control Specialist (Center), GS-2152-12

The GS-12 level of difficulty and complexity is characterized by the first full performance level of radar control in the centers. At this level controllers perform, under general supervision, the duties of all radar positions of operation within an assigned area of specialization in those centers which typically handle traffic densities ranging up to 169 IFR aircraft handled per hour (average) during the day and evening shift periods.

GS-12 level controllers are responsible for the independent control and separation of aircraft under the reduced separation standards typical of radar control. This is distinguished from manual control assignments at the GS-11 level because radar involves more positive and continuous control over aircraft than does the GS-11 manual control work situation.

Because of the reduced separation standards in radar control, the GS-12 level requires more precise and rapid judgments than GS-11 in applying a comprehensive knowledge of the operating characteristics of a wide variety of aircraft. With the lesser distances separating aircraft operating at widely varying speeds, the GS-12 controller must react more quickly, with far less tolerance for error, to prevent potential conflict situations than the GS-11.

The GS-12 radar controller has a more constant control responsibility because radar displays the traffic situation continuously. Thus, in this situation, the GS-12 radar controller must continually issue instructions to pilots on what headings to follow to maintain separation, what altitudes to fly to remain clear of traffic, and what maneuvers are necessary to avoid severe weather or to remain clear of restricted or special military operations areas.

GS-12 control assignments are distinguished from similar assignments at the GS-11 level by the greater degree of freedom from supervision and the requirements for performing the duties of a much broader range of radar positions. Where at the GS-11 level assignments are geared to qualify the controllers to perform the duties of less than the full scope of the radar positions, GS-12 full performance level assignments involve the independent performance of radar control duties for all sectors within an area of specialization.

Center control work at this level is characterized by the presence of such complicating environmental and operational factors as: size and configuration of center airspace; mixture of arriving, departing and en route traffic; mixtures of aircraft with widely varying operating speeds and weights; unfavorable terrain features; military operations and restricted areas; a large number of navigational aids and reporting fixes; numerous airports and airways in the area; and the regular occurrence of special military missions and training operations. A substantial number of these or similar complicating factors are found in the GS-12 situations on a regular and recurring basis.

The GS-12 center controller must have a detailed knowledge of: all techniques and procedures for separation and control of air traffic using radar; the special operating procedures for all radar positions of operation within the assigned area of specialization; the letters of agreement and operational procedures for coordinating traffic flows with other air traffic facilities adjacent to the area of specialization; the procedures pertaining to military operations and training areas; and the traffic patterns and flows characteristic of the area of specialization.

Air Traffic Control Specialist (Center), GS-2152-13

The GS-13 level involves extremely difficult and complex radar control work in the centers, and places exceptional demands on the GS-13 radar controller, which surpass the difficulty inherent in the GS-12 radar control assignment. Where GS-12 center controllers regularly handle traffic densities ranging up through heavy, the GS-13 center work situation involves recurring traffic densities which are characterized as extremely heavy and range on the average from 170 to 274 IFR aircraft handled hourly.

GS-13 full performance level controllers, like those at the next lower level, regularly perform the duties of all radar positions of operation within an assigned area of specialization. However, the characteristics of the GS-13 level work situation impose on the controller the requirement for a substantially higher level of skill, judgment, and decision making abilities than the GS-12 work situation.

The greatly increased traffic density at the GS-13 level not only imposes the requirement for controlling appreciably more aircraft within closer tolerances, but there is less time to analyze traffic situations, formulate the control decision and communicate these instructions to the greater number of aircraft occupying the airspace. Planning and coordinating the movements of the greater number of aircraft with different speed and performance characteristics, requires almost constant communications between controllers and pilots for sustained periods.

The extremely heavy density and congestion of air traffic typical of this level requires almost continuous use of minimum separation among aircraft and severely limits the number of alternatives that might otherwise be employed to control and separate traffic. Consequently the GS-13 controller works at a much faster pace and under greater stress than the GS-12.

Thus, a substantially higher level of control skill, judgment and decision-making ability are required at this level than at GS-12. Because of the greater congestion of traffic present in the GS-13 level control situation, these centers must devise a larger number of more intricate and complex sector configurations of airspace. With the increased intricacy and complexity of airspace configurations, the GS-13 controller must maintain an intense knowledge of more complex and precise control procedures to insure that proper separation is maintained and that aircraft under his control do not penetrate airspace assigned other controllers without prior coordination. For example, under the time and space limitations imposed by the sustained congestion and density of traffic characteristic of the GS-13 level control environment, the center controller for prolonged periods must separate and place intrail many types of aircraft operating at widely varying speeds (e.g., 200 knots or better), descending from various altitudes, crossing and converging from several directions. In such situations the GS-13 controller must use to a significantly greater extent than the GS-12 his knowledge of:

the general relation of speed to descent rate at various speeds and altitudes for many types and weight categories of aircraft; the effect of seasonal temperature variances on the operational parameters of aircraft; the relation of indicated airspeed to groundspeed at different altitudes; and the minimum and maximum operating speeds and climb rates for each type of aircraft under control.

Those complicating environmental and operational factors described at GS-12 are present in the GS-13 work situation, but the extremely heavy density and congestion of air traffic characteristic of the GS-13 level materially increases the difficulty of the problems that combinations of these factors present to the GS-13 controller. The extremely heavy density of traffic typical of this level leaves less airspace for each aircraft and requires minimum separation among aircraft. Consequently, the GS-13 controller must work with greater speed, within closer tolerances and under more stressful conditions than the GS-12.

Similarly, the sustained and extremely heavy density of traffic characteristic of this level greatly intensifies the difficulty and complexity of such problems as those involved in controlling and coordinating the movements of a much greater combination of arriving, departing and en route traffic on crossing or converging flight patterns at and around numerous high activity airports. For example, more frequently and for longer periods the GS-13 controller must change aircraft from intrail to vertical separation over holding fixes. Because of the much greater density of traffic controlled for longer periods, the GS-13 must exercise greater judgment and make quicker decisions than the GS-12 so as to assure that holding aircraft are in the correct positions to proceed in the proper direction and sequence when the saturation condition clears. Errors in judgment, or the failure to make rapid and precise decisions, in such situations as these, could cause major delays and bottlenecks along heavily used airway routes and at major airport terminals, ultimately impacting the efficient movement of traffic over a large area of the country.

Air Traffic Control Specialist (Center), GS-2152-14

The GS-14 level includes the most difficult and complex air traffic control work situations in the centers. The GS-14 level work situation involves controlling the most extreme and continuous peaks of traffic density and congestion under the most demanding and stressful conditions, which surpass the difficulties inherent in the GS-13 level control situation.

This level of control work is characterized by the requirement for handling sustained traffic densities that are appreciably greater than those extremely heavy densities of traffic typical of the GS-13 level. The pace of work is such that there are virtually no lulls in activity with peak periods tending to blend and overlap. Continual, rapid, and precise coordination of control actions is required among the center controllers and with controllers in adjacent terminals and centers to insure efficient and rapid interchange of the control of air traffic.

Controllers in this work situation are under continuous pressure to move traffic rapidly and efficiently so as to avoid excessive and costly holding of aircraft. They must apply a thorough knowledge of the procedures, action plans and problems of the major terminals served. They generally work with little relief from the stress associated with such a demanding control situation, yet must remain calm and objective in the face of possible tension on the part of pilots whose flights are being delayed on the ground or held in the air.

The GS-14 level is further differentiated from GS-13 by the significantly greater scope and effect of the work, i.e., the critical importance of the most efficient and expeditious handling of air traffic to the effective operation of the national air traffic system, and the potentially adverse economic impact resulting from failure to maintain efficient movement of traffic during these highest levels of traffic activity. Failure to perform effectively in this situation could result in nationwide air traffic bottlenecks and slowdowns as opposed to the more limited traffic problems which would be caused by a similar lack of efficiency in centers with GS-13 level work situations.

Excessive traffic delays or slowdowns incurred by centers at this level would seriously impair airline operations by disrupting equipment turnaround and redistribution, require the excessive use of fuel, and cause delays in passenger and cargo schedules, all of which would result in great inconvenience to the general public and in substantial economic impact on major industries.

Three of the air route traffic control centers are currently identified as having work situations characteristic of this level, the Chicago, New York, and Cleveland centers. The three are differentiated from centers at the GS-13 level by the significantly greater traffic densities handled on a continuous basis; the critical importance of these centers to efficient operation of

the national air traffic system; and the substantial economic impact which would result from failure to accept and efficiently handle the exceedingly high air carrier traffic densities. Centers at this level regularly handle 275 or more IFR aircraft hourly (average).

The three centers identified as having work situations characteristic of the GS-14 level should not be construed as forever excluding other centers from attaining this level, or forever including the three centers specifically identified. Changes in the patterns of air traffic activity plus the anticipated growth in aviation may alter both the number and identification of centers having work situations which meet the criteria for the GS-14 level.

Individual Occupational Requirements

To become an air traffic controller with the FAA, a person must achieve a qualifying score on the FAA-authorized pre-employment test and meet the basic qualification requirements in accordance with Federal law. Those without prior air traffic control experience must be 30 years of age or younger.

Education and training. There are three main pathways to become an air traffic controller with the FAA. The first is air traffic controllers with prior experience through either the FAA or the Department of Defense as a civilian or veteran. Second are applicants from the general public. These applicants must have 3 years of progressively responsible full-time work experience, have completed a full 4 years of college, or a combination of both. In combining education and experience, 1 year of undergraduate study—30 semester or 45 quarter hours—is equivalent to 9 months of work experience. The third way is for an applicant to have successfully completed an aviation-related program of study through the FAA's Air Traffic-Collegiate Training Initiative (AT-CTI) program. In 2008, there were 31 schools in the AT-CTI program.

AT-CTI program schools offer 2–year or 4-year non-engineering degrees that teach basic courses in aviation and air traffic control. In addition to graduation, AT-CTI candidates need a recommendation from their school before being considered for employment as an air traffic controller by the FAA.

Candidates with prior experience as air traffic controllers are automatically qualified for FAA air traffic controller positions. However, applicants from the general public and the AT-CTI program must pass the FAA-authorized pre-employment test that measures their ability to learn the duties of a controller. The test is administered by computer and takes about 8 hours to complete. To take the test, an applicant must apply under an open advertisement for air traffic control positions and be chosen to take the examination. When there are many more applicants than available testing positions, applicants are selected randomly. However, the FAA guarantees that all AT-CTI students in good standing in their programs will be given the FAA pre-employment test. Those who achieve a qualifying score on the test become eligible for employment as an air traffic controller. Candidates must be granted security and medical clearance and are subject to drug screening. Additionally, applicants must meet other basic qualification requirements in accordance with Federal law. These requirements include United States citizenship and the ability to speak English.

Upon selection, employees attend the FAA Academy in Oklahoma City, OK, for 12 weeks of training, during which they learn the fundamentals of the airway system, FAA regulations, controller equipment, and aircraft performance characteristics, as well as more specialized tasks. Graduates of the AT-CTI program are eligible to bypass the Air Traffic Basics Course, which is the first 5 weeks of qualification training at the FAA Academy.

After graduation from the FAA Academy in Oklahoma City, candidates are assigned to an air traffic control facility and are classified as "developmental controllers" until they complete all requirements to be certified for all of the air traffic control positions within a defined area of a

given facility. Generally, it takes new controllers with only initial controller training between 2 and 4 years, depending on the facility and the availability of facility staff or contractors to provide on-the-job training, to complete all the certification requirements to become certified professional controllers. Individuals who have had prior controller experience normally take less time to become fully certified. Controllers who fail to complete either the academy or the on-the-job portions of the training usually are dismissed. Controllers must pass a physical examination each year and a job performance examination twice each year. Failure to become certified in any position at a facility within a specified time also may result in dismissal. Controllers also are subject to drug screenings as a condition of continuing employment.

Other qualifications. Air traffic controllers must be articulate to give pilots directions quickly and clearly. Intelligence and a good memory also are important because controllers constantly receive information that they must immediately grasp, interpret, and remember. Decisiveness also is required because controllers often have to make quick decisions. The ability to concentrate is crucial because controllers must make these decisions in the midst of noise and other distractions.

Advancement. At airports, new controllers begin by supplying pilots with basic flight data and airport information. They then advance to the position of ground controller, local controller, departure controller, and, finally, arrival controller. At an air route traffic control center, new controllers first deliver printed flight plans to teams, gradually advancing to radar associate controller and then to radar controller.

Controllers can transfer to jobs at different locations or advance to supervisory positions, including management or staff jobs—such as air traffic control data systems computer specialist—in air traffic control, and top administrative jobs in the FAA. However, there are only limited opportunities for a controller to switch from a position in an en route center to a tower.

Employment

Air traffic controllers held about 26,200 jobs in 2008. The vast majority were employed by the FAA, while a small number of civilian controllers also work for the U.S. Department of Defense. In addition to controllers employed by the Federal Government, some work for private air traffic control companies providing service to non-FAA towers and contract flight service stations.

Job Outlook

Air traffic controllers should experience about as fast as average employment growth, but most opportunities are expected to result from the need to replace workers who retire or leave the occupation for other reasons. Keen competition is expected for air traffic controller positions.

Employment change. Employment of air traffic controllers is projected to grow by 13 percent from 2008 to 2018, which is about as fast as the average for all occupations. Increasing air traffic will require more controllers to handle the additional work. Job growth, however, is not expected to keep pace with the increasing number of aircraft flying due to advances in technology.

The FAA is implementing an automated air traffic control system that will allow controllers to more efficiently deal with the demands of increased air traffic. It includes the replacement of aging equipment and the introduction of new systems, technologies, and procedures to enhance safety and security and support future aviation growth. Future developments will include the use of the Global Positioning System (GPS) to eliminate radar-based air traffic control and give controllers real-time displays of aircraft locations. This will allow for more efficient flight paths and reduced air traffic congestion, and it will also allow controllers to handle more traffic, increasing their productivity.

Job prospects. Most job opportunities are expected as the result of replacement needs from workers leaving the occupation. The majority of today's air traffic controllers will be eligible to retire over the next decade, although not all are expected to do so. Despite the increasing number of job openings for air traffic controllers, competition to get into the FAA Academy is expected to remain keen, as there generally are many more test applicants than there are openings.

Air traffic controllers who continue to meet the proficiency and medical requirements enjoy more job security than do most workers. While demand for air transportation declines during recessions, controllers are rarely laid off.
Additional Sources

Source: Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2010-11 Edition, and OPM's Position Classification Standards for White Collar Work