



**Federal Aviation
Administration**

A Plan For The Future

2007-2016

**The Federal Aviation Administration's 10-Year
Strategy for the Air Traffic Control Workforce**

March 2007

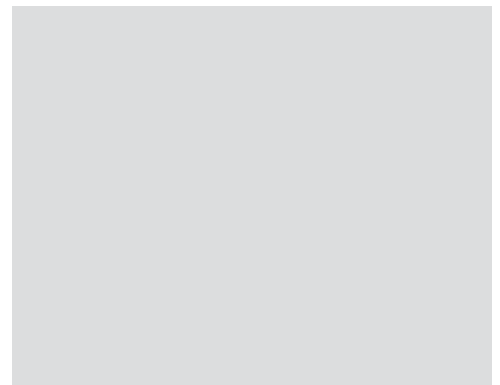
A Plan For The Future 2007-2016

The Federal Aviation Administration's 10-Year
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Executive Summary

Air traffic controllers are an integral part of the National Airspace System (NAS). The work they do, every day of the year, is essential to the mission of the Federal Aviation Administration – providing the safest, most efficient aerospace system in the world.

The FAA employs more than 14,000 air traffic controllers. They work in air traffic facilities of all sizes, safely guiding about 50,000 aircraft through the system each day. These employees provide air navigation services to aircraft in the U.S. domestic airspace, and in the 24.6 million square miles of international oceanic airspace delegated to the United States by the International Civil Aviation Organization.

Over the next decade, approximately 72 percent of this workforce will become eligible to retire. In order to meet the challenges of this wave of retirements and the increasing demand for air travel, the FAA will hire and train more than 15,000 new air traffic controllers over the next 10 years. The plan for fiscal year 2007 includes hiring more than 1,300 new controllers from the thousands of qualified applicants waiting to be hired.

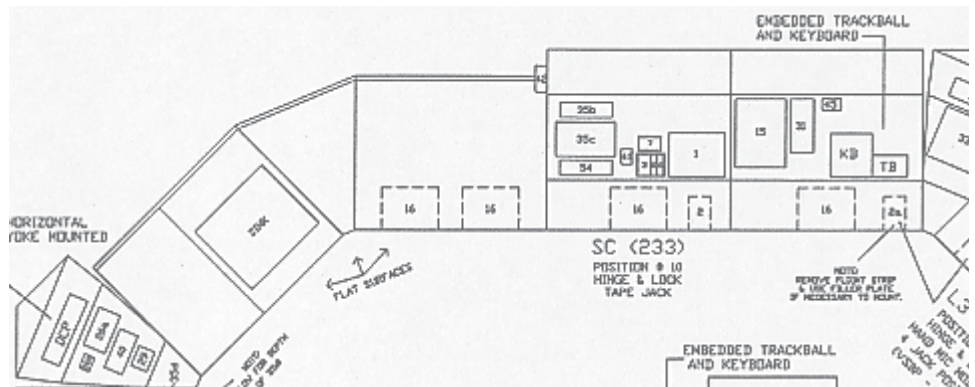
Thanks to a centralized hiring process and improved training, the FAA is confident that the new controller hires will be able to meet the needs of the future.

Accomplishments

In FY 2006, the FAA met several key milestones in the staffing plan.

Hiring

- We hired 1,116 new controllers – increasing the total number of controllers on board to 14,618.
- We began reaching out to former military personnel through the military separation centers to ensure our veteran population is aware of air traffic control opportunities, and hired 404 veterans into controller positions.
- We held a job fair in Kansas City, Mo., to recruit controllers for local positions.



- We established a senior coordinator position in the Air Traffic Organization with accountability to fully integrate all required hiring and training efforts to achieve our goals.
- We streamlined the steps in our security clearance process for new hires, reducing the time it takes by 45 days.

Training

- We increased the FAA Academy training capacity to train a total of 2,248 students a year thanks to new tower cab simulators and expanded classroom capacity.
- We completed a national on-the-job training data tracking system to identify where improvements in the training process could be implemented.

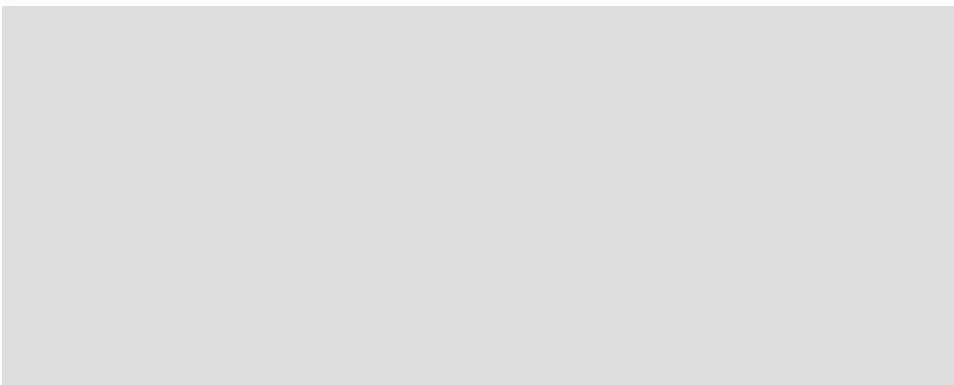
Finally, the FAA has made significant progress in refining controller staffing requirements and in effectively staffing facilities across the NAS by utilizing improved scheduling practices, new automated tools and better management of leave. In our last update we introduced the concept of controller staffing ranges. In this report we have established staffing ranges for every FAA air traffic control facility. These ranges are published in Appendix A and will be updated annually.

The Department of Transportation’s Office of the Inspector General audits the FAA’s controller workforce plan. The Feb. 9, 2007, report, *FAA Continues to Make Progress in Implementing its Controller Workforce Plan, but Further Efforts are Needed in Several Key Areas*, confirms that the FAA is indeed making progress implementing a comprehensive staffing plan. The inspector general found that the “FAA has made significant improvements by centralizing its hiring process and has made progress in reducing the time and costs to train new controllers, primarily through greater use of simulator training at the FAA Training Academy and implementation of a new national database to track on the job training statistics.”

The FAA understands how critical it is to have an adequately staffed air traffic controller workforce. Staffing is, and will continue to be, monitored at all facilities. We will continue to take action at the facility level should adjustments become necessary due to changes in traffic volume, unanticipated retirements or other attrition.



FAA Air Traffic Control Workforce Plan 2007-2016



Chapter 1: Introduction



Air traffic controller workload and traffic volume are dynamic. So are staffing needs. The FAA's goal is to staff to traffic. This requires that we have the flexibility to match the number of controllers at various facilities with traffic volume and workload. For many years, this was not the case.

Staffing levels negotiated with the National Air Traffic Controllers Association bargaining unit from 1999 to 2003 did not adequately reflect traffic demand, complexity, or the most efficient utilization of both human and fiscal resources. As a result of these negotiations, the FAA agreed to maintain a minimum staffing level of 15,000 full time equivalents, or FTEs, for FY 1999 through FY 2001, and to increase the level by 2 percent per year in FY 2002 and FY 2003.

The agency committed to maintain the required minimum levels by hiring as many controllers as necessary to offset retirements and other attrition out of the controller workforce. The minimum levels would govern regardless of changes in the number of aircraft operations handled by FAA controllers, preventing the agency from adjusting staffing should requirements fall below the agreed upon minimums, and from incorporating productivity improvements from new technology or streamlined procedures.

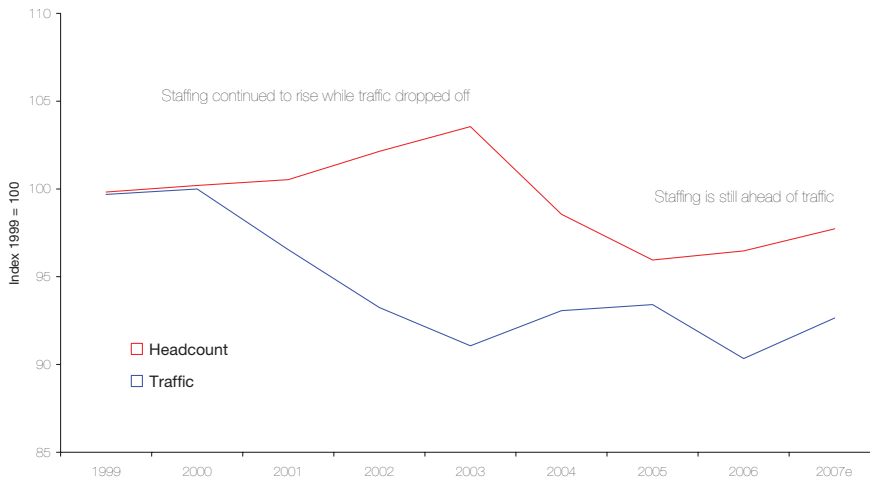
Between 2000 and 2003, we experienced a 9 percent drop in air traffic volume, but saw a 4 percent increase in air traffic controller headcount, as shown in the table below. The contractual commitment to minimum staffing levels required us to increase staffing even as the number of FAA-handled operations plummeted. As a result, we were unable to address the dramatic fall off in traffic following the Sept. 11, 2001, terrorist attacks. While the agency continued to hire, our



customers in the aviation industry were laying off tens of thousands of employees and drastically scaling back operations.

Systemwide Traffic and Total Headcount Trends

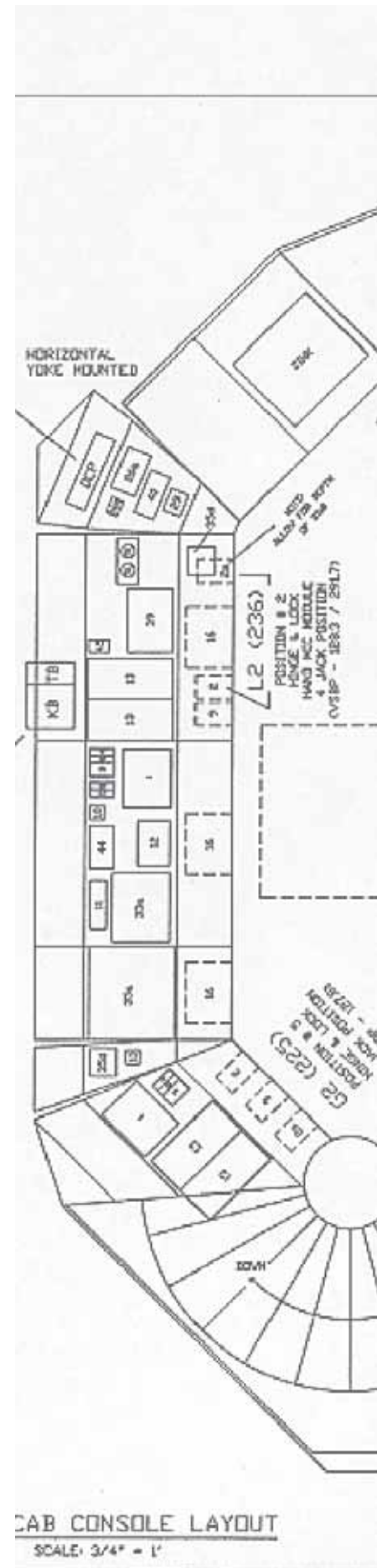
Indexed from 1999 When Staffing Was Negotiated



A perfect example of this occurred at St. Louis Airport, a former hub airport for Trans World Airlines. After TWA went bankrupt, traffic dropped off dramatically, reducing total controller workload in the area. The FAA, however, was contractually bound to a negotiated number of controllers at the facility and hence had too many controllers and not enough work. At the same time, Independence Air traffic was dramatically increasing at Dulles Airport, but we couldn't realign staffing to handle that increase – again because of the negotiated staffing agreements.

The inflexibility of negotiated staffing at the national and at the facility level was clearly a problem as the FAA tried to provide service to a changing aviation industry. As the agency saw controller productivity fall, we determined to run the NAS more efficiently.

Our new contract provides the flexibility. Under the 2006 controller contract, the FAA is able to staff according to workload and traffic, so the divergence in staffing levels and traffic is unlikely to happen again. The FAA is now staffing our facilities based on traffic with workload



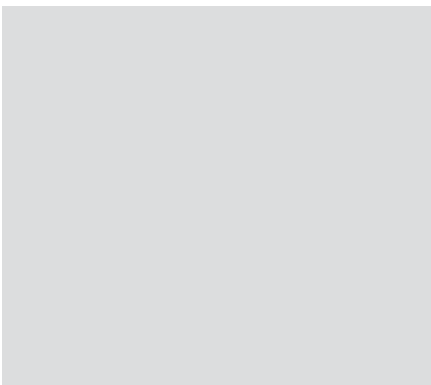


driven by the number of positions that need to be staffed due to actual and forecasted traffic demands.

The concept of staffing to traffic requires the FAA to incorporate many individual facility characteristics. They include facility-specific traffic volumes based on FAA forecasts and hours of operation, as well as individualized forecasts of controller retirements and other attrition losses.

Proper staffing levels also depend on the efficient scheduling of employees, so we track the use of overtime and leave as we review staffing levels to make sure that controllers are not overworked. In FY 2006, the system average for overtime was 1.1 percent, a slight decrease from the FY 2005 level of 1.6 percent.

This staffing plan takes all of those factors into account. The plan is updated annually; we will continue to monitor progress in implementing the plan, and take action at the facility level should adjustments become necessary due to changes in air traffic volume, anticipated retirements or other reasons.







Chapter 2: Air Traffic Control Facilities and Services

There are about 7,000 aircraft aloft over the United States at any one time, some flying at nearly supersonic speed. It is up to the men and women of the FAA to keep them safely separated and on efficient flight paths. With vigilant eyes and a vast array of radar, satellites, computers and other systems, we monitor and guide air traffic around the clock.

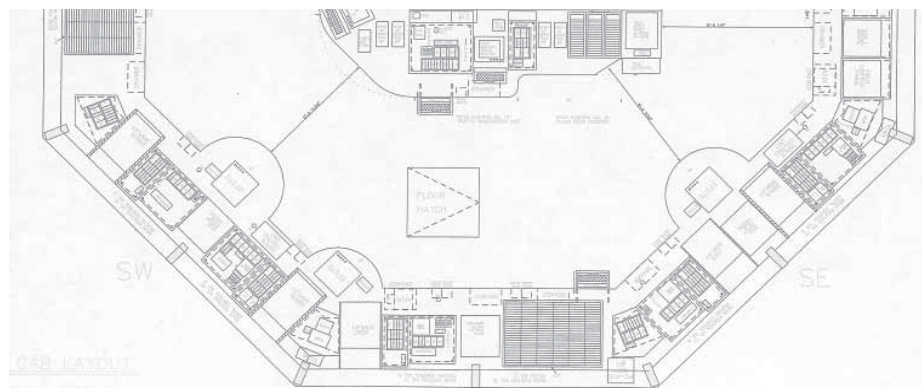
More than 14,000 federal air traffic controllers in airport towers, terminal radar control facilities, and air route traffic control centers guide pilots through the system. It is estimated that an additional 1,450 civilian contract controllers and more than 9,000 military controllers also provide air traffic services. These employees provide air navigation services to aircraft in the U.S. domestic airspace, and in 24.6 million square miles of international oceanic airspace delegated to the United States by the International Civil Aviation Organization. Leaders at every level work to ensure these safety services are provided in a safe, efficient and cost-effective manner.

2.1 FAA Air Traffic Control Facilities

As of February 2007, the FAA operated 314 air traffic control facilities and the Air Traffic Control System Command Center in the United States. Table 2.1 lists the type and number of these FAA facilities.

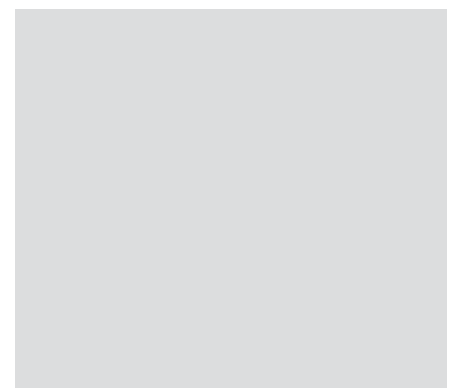
More than one type of facility may be collocated in the same building(s).

Each type of facility has several classification levels that are based on numerous factors including traffic volume, complexity and



Types and Number of FAA Air Traffic Control Facilities

Type	Name	Number	Description
1	Tower Without Radar	1	An airport traffic control terminal that provides service using direct observation primarily to aircraft operating under visual flight rules. These terminals are located at airports where the principal user category is low performance aircraft.
2	Terminal Radar Approach Control (TRACON)	22	An air traffic control terminal that provides radar-control service to aircraft arriving or departing the primary airport and adjacent airports, and to aircraft transiting the terminal's airspace.
3	Combination Radar Approach Control and Tower with Radar	138	An air traffic control terminal that provides radar control services to aircraft arriving or departing the primary airport and adjacent airports, and to aircraft transiting the terminal's airspace. This terminal is divided into two functional areas: radar approach control positions and tower positions. These two areas are located within the same facility, or in close proximity to one another, and controllers rotate between both areas.
4	Combination Non-Radar Approach Control and Tower without Radar	2	An air traffic control terminal that provides air traffic control services for the airport at which the tower is located and without the use of radar, approach and departure control services to aircraft operating under instrument flight rules to and from one or more adjacent airports.
6	Combined Control Facility	4	An air traffic control facility that provides approach control services for one or more airports as well as en route air traffic control (center control) for a large area of airspace. Some may provide tower services along with approach control and en route services.
7	Tower with Radar	122	An airport traffic control terminal that provides traffic advisories, spacing, sequencing and separation services to VFR and IFR aircraft operating within the vicinity of the airport using a combination of radar and direct observations.
8	Air Route Traffic Control Center (ARTCC)	21	An air traffic control facility that provides air traffic control service to aircraft operating on IFR flight plans within controlled airspace and principally during the en route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.
9	Combined TRACON Facility	4	An air traffic control terminal that provides radar approach control services for two or more large hub airports, as well as other satellite airports, where no single airport accounts for more than 60 percent of the total Combined TRACON facility's air traffic count. This terminal requires such a large number of radar control positions that it precludes the rotation of controllers through all positions.
-	Air Traffic Control System Command Center	1	The Air Traffic System Command Center is responsible for the strategic aspects of the NAS. The Command Center modifies traffic flow and rates when congestion, weather, equipment outages, runway closures, or other operational conditions affect the NAS.





sustainability of traffic. Controller pay is tied to those classification levels. To compensate controllers at facilities that work the highest and most complex volume of traffic, facilities are monitored continuously for upward and downward trends.

2.2 Air Traffic Control Services at Airports

Air traffic control services are provided from a variety of sources (federal air traffic controllers, contract controllers, military controllers and others) at public- and private-use airports. As of February 2007, there were 20,512 airports within the NAS, including civil, military, joint-use civil-military airports, heliports, short takeoff and landing ports, and seaplane bases in the U.S. and its territories. Of this total, 5,217 are public-use airports, with the rest classified as private use airports. The majority of the private-use airports receive no air traffic control services.

The table below summarizes the various providers of air traffic control services at public- and private-use airports.

	Air Traffic Control Service					None	Total
	FAA	Contract	Military	City, County or other	Remote FAA		
Public Use	262	209	22	21	2,135	2,568	5,217
Private Use	1	1	143	5	28	15,117	15,295
Total	263	210	165	26	2,163	17,685	20,512 ¹

2.3 FAA Air Traffic Control Services

The FAA provides air traffic control services at 262 public-use airports (FAA facility types 1, 3, 4 and 7) and at Andrews Air Force Base. FAA also provides services at 51 non-towered facilities (FAA facility types 2, 6, 8 and 9).

2.4 Federal Contract Air Traffic Control Services

In 1982, Congress authorized the FAA to begin a pilot program to contract for air traffic control services for five visual flight rule towers that were closed as a result of the controller strike in August 1981. Since then, the contract tower program has been expanded to include additional FAA-operated VFR towers and to include towers at airports that never had an FAA-operated tower.

¹Much of the difference between last year's figures and this year's reflects a concerted effort to clear up a backlog of private airport filings that had not been completed previously.



Congress added a cost-sharing provision to the program in FY 1999. This provision allowed airports that would not normally qualify to be in the FAA's Contract Tower Program to enter the program by paying for a portion of the tower's operating cost.

Contract controllers providing air traffic control services in towers that are in the Contract Tower Program must meet the same controller certification requirements as FAA controllers and are certified by the FAA. As of February 2007, there were 210 contract towers providing air traffic control services by contract controllers.

2.5 Military Air Traffic Control Services

There are 165 military towers located at military installations throughout the United States or where there is a heavy military presence at a combination civilian and military airport. Military controllers provide air traffic control services to civilian aircraft as well as military aircraft at those airports. Military controllers must meet the same qualification criteria as FAA controllers.

2.6 City, County or other Air Traffic Control Services

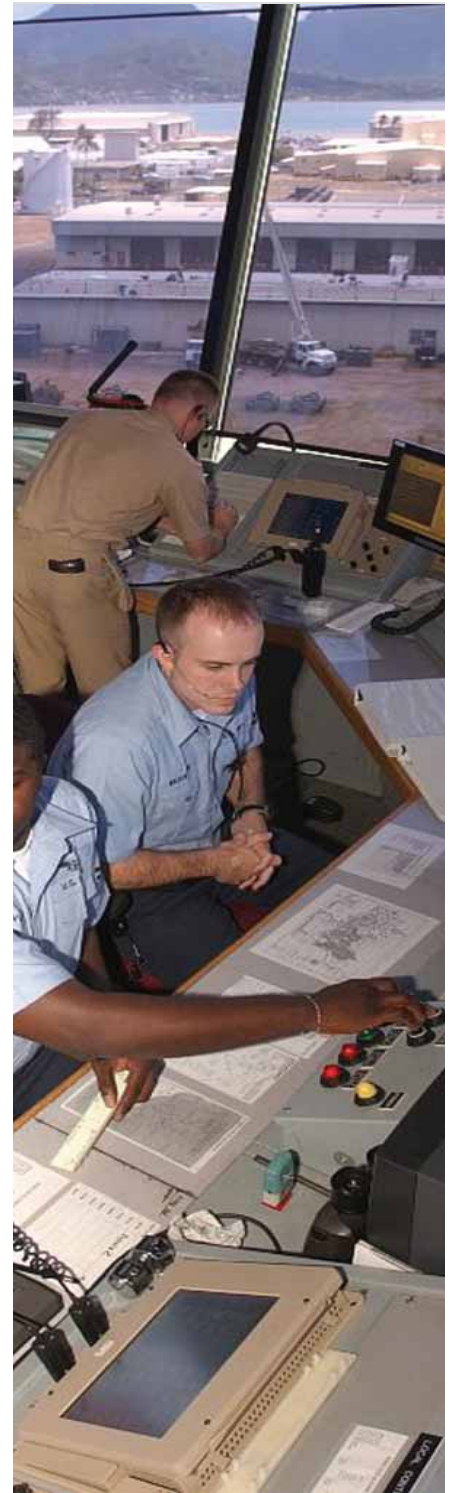
There are 26 non-federal towers located at 21 public-use and five private-use airports. Controllers operating in these towers must meet the same qualification criteria as FAA controllers. The FAA does not provide funding or air traffic control services at these towers.

2.7 Remote FAA Air Traffic Control Services

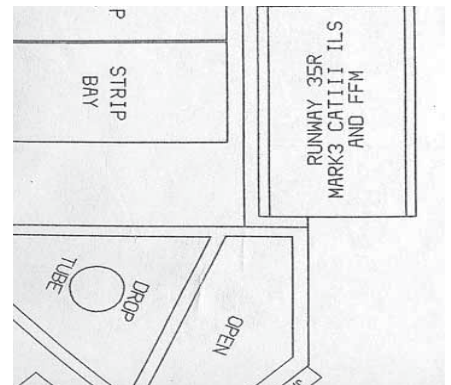
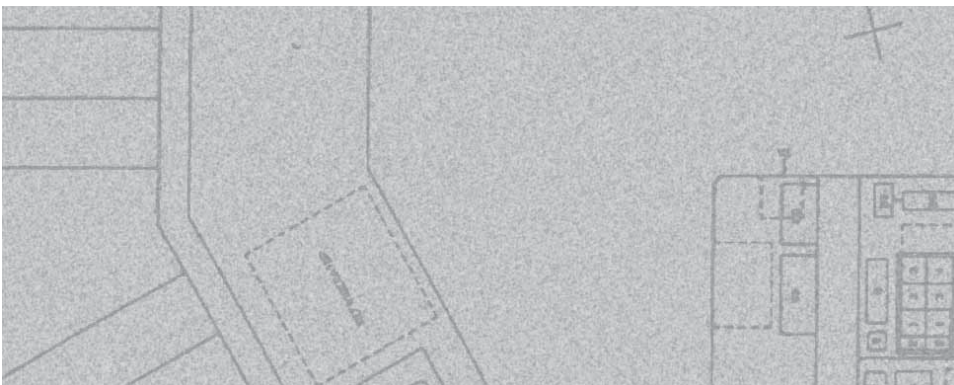
FAA towers, approach controls, and en route centers also provide terminal approach and departure control services to 2,163 non-towered airports using remote communications services and radar.

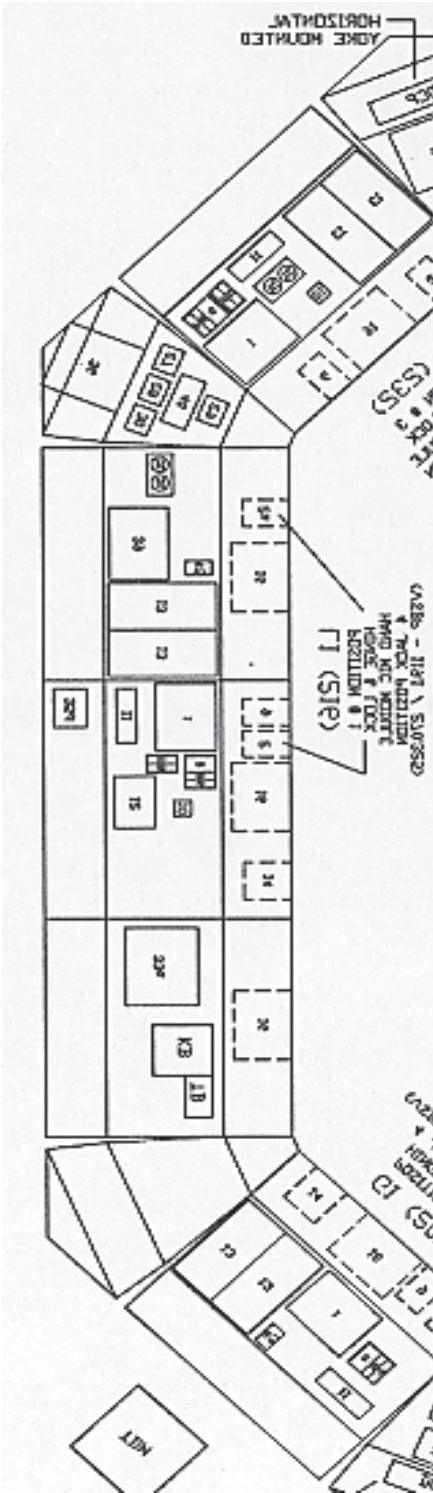
2.8 No Air Traffic Control Services

There are 17,685 airports with no air traffic control services.



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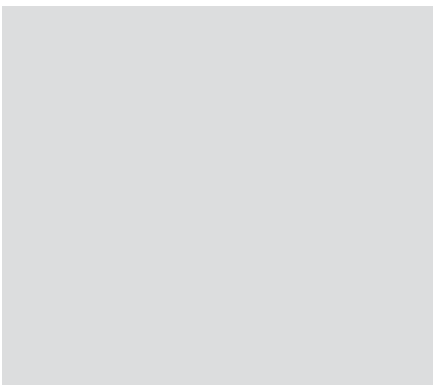
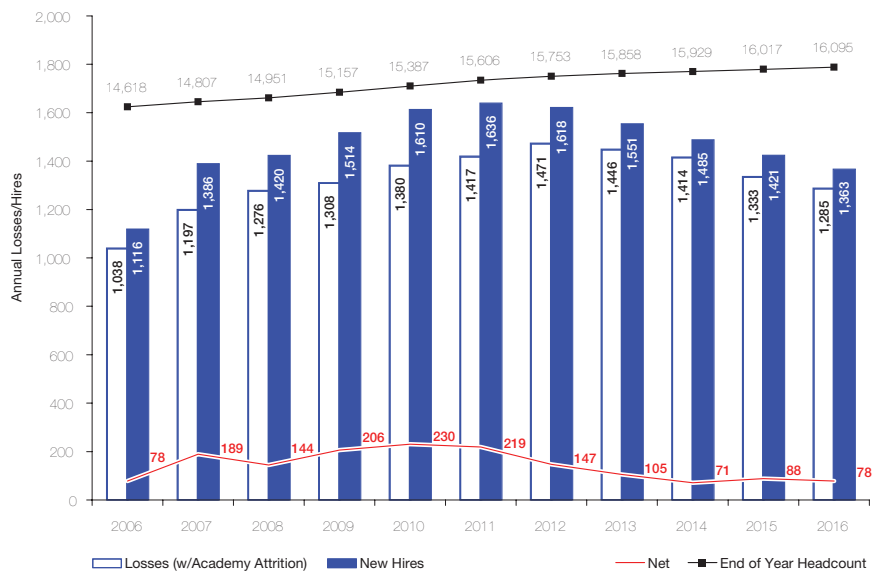


Chapter 3: Air Traffic Controller Staffing Requirement

A well-trained and fully-staffed air traffic control workforce is essential to the FAA's ability to provide the safest air traffic services in the world. Every decision we make is done to ensure both the safety and the future viability of the NAS. Having enough controllers in place, when and where we need them, is critical.

This chapter presents the national air traffic controller staffing levels the FAA estimates it will need through FY 2016 to manage air traffic demands. These staffing levels will be updated as necessary to reflect changes in the traffic forecasts, productivity, and other factors. An updated report will be issued every year.

Projected Controller Workforce



The above chart shows the expected end-of-year headcount, losses, new hires and net additions by year through FY 2016. Figures for FY 2006 represent actual losses, hires and end-of-year headcount.

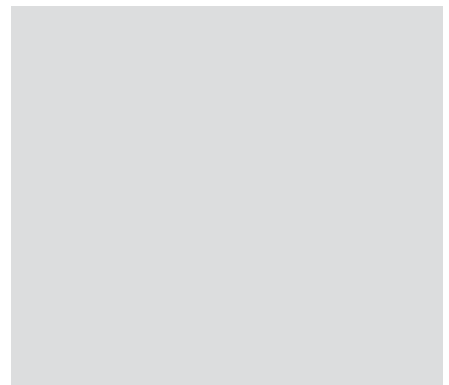
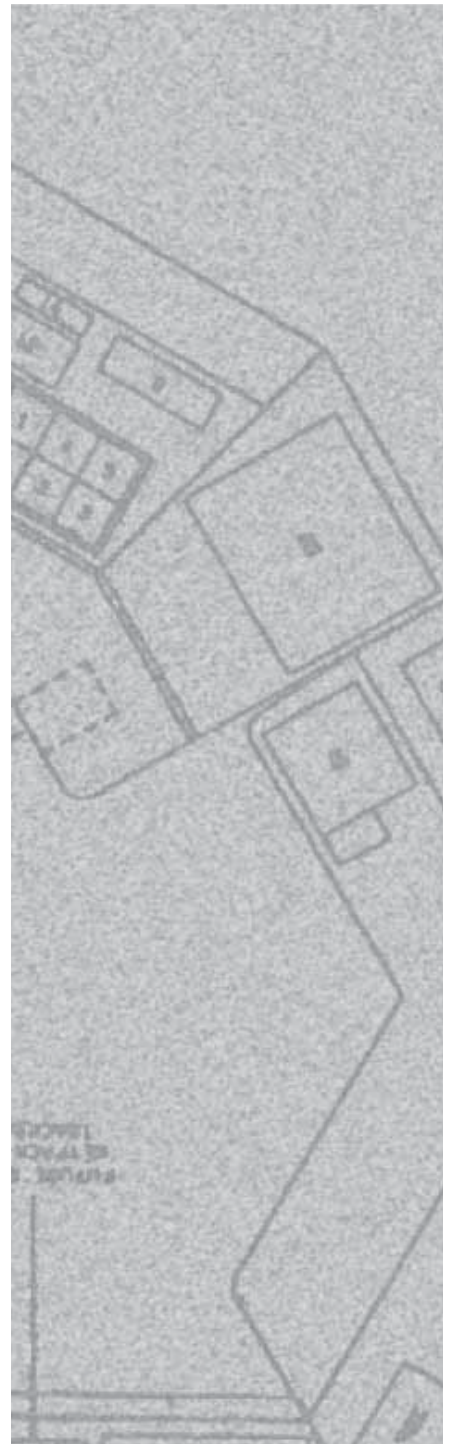
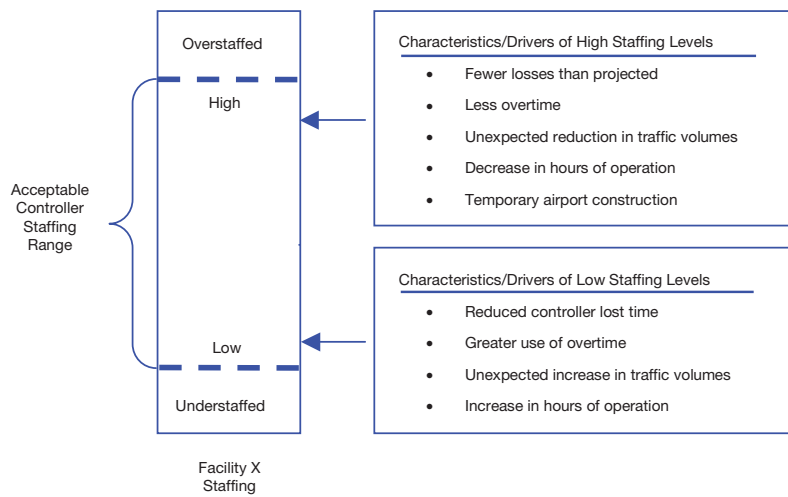
FAA uses sophisticated classical industrial engineering methods to measure controller workload when determining controller staffing requirements. Items that can affect controller workload include:

- number of aircraft in a sector
- aircraft flight paths
- altitude changes
- speed differences

In addition, staffing at each location can be affected by unique facility requirements such as temporary airport runway construction, seasonal activity and the number of controllers currently in training. Staffing numbers will vary as the requirements of the location vary. For example, staffing levels may swell during training, and then come back down.

We introduced the concept of controller staffing ranges at the facility level in our last update. We have now established facility ranges to allow for efficient operation, even if they are impacted by a variety of causes, as shown in the graphic below.

Controller Staffing Range





These ranges include the number of controllers needed to perform the work. While most of the work is accomplished by Certified Professional Controllers (CPC), it is important to note that during the certification process, work is also being accomplished in facilities by Certified Professional Controllers in Training² (CPC-ITs) and developmentals³ who are proficient, or “checked-out” in specific sectors or positions, and can handle workload independently. These position-qualified controllers, along with CPCs, are the focus of our staffing to traffic efforts.

This year’s plan includes a list of FY 2007 staffing ranges by facility. Please note that these numbers are fluid for the reasons already cited in this section. Therefore, Appendix A, *FY 2007 Staffing Ranges by Facility*, will only show this year’s staffing ranges.

3.1 Air Traffic Controller Annual Staffing Ranges

Because traffic and other factors are dynamic at individual facilities, we have established facility-level controller staffing ranges. These ranges ensure that there are enough controllers to cover operating positions every day of the year.

The process for establishing controller ranges by facility involves the use of several data sources. In developing these ranges, the FAA considered past facility performance, the performance of other similar facilities, productivity improvements, industrial engineering standards and recommendations from the National Academy of Sciences, along with input from managers in the field, overtime trends, time-on-position data and expected retirements and other losses.

Each facility is reviewed to evaluate headcount, operational activity and productivity trends. Productivity trends are then compared with appropriate peer facilities. These peers are determined by the facility type and level.

Exceptional situations, or outliers, are removed from the averages (for example, if a change in the type or level of a facility occurred over the period of evaluation). By analyzing the remaining data points, staffing ranges are generated for each facility.

²CPC-ITs are controllers who have been previously certified, but are in training on a new sector or position.

³Developmentals are controller trainees who have not yet been classified as Certified Professional Controllers. As they progress through training they can work independently on increasingly more complex sectors or positions.



We start with the following four data sources:

1. Industrial engineering staffing models.
2. Past productivity – the headcount required to match the historical best productivity for the facility. Productivity is defined as operations per controller. Facility productivity is calculated using operations and controller data from the years 1997 to 2006. If any annual point falls outside +/- 5 percent of the 1997 to 2006 average, it is thrown out. From the remaining data points, the highest productivity year is then used.
3. Service Unit input – including field manager input.
4. Peers (the headcount required to match peer group productivity) – like facilities are grouped by type and level and their corresponding productivity is calculated. If the facility being considered is consistently above or below the peer group, the peer group figure is not used in the overall average and analysis.

The average of this data is calculated, rounded to the nearest whole number, multiplied by plus 10 percent and minus 10 percent and then rounded again to determine the high and low points in the staffing range.

3.2 Air Traffic Staffing Standard Review and Assessment

The FAA has used air traffic staffing standards to determine national controller staffing levels since the 1970s. In 2005, the FAA began an air traffic staffing standard review and reassessment with the expectation of developing staffing ranges at the facility level.

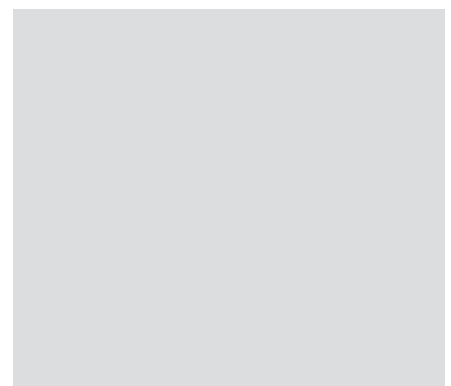
In FY 2006, this assessment yielded data that allowed the FAA to determine facility level staffing ranges. These ranges will be refined as further study continues.

En route progress:

Efforts are ongoing to improve and enhance en route modeling capabilities. There are more than 750 sectors in the 20 continental



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U.S. en route centers and each sector and center has unique operational characteristics.

Techniques and models, for each sector in each center, that consider traffic complexity and volume are being developed and validated to provide a more accurate assessment of en route sector operations than has been available in the past. These techniques are the result of site visits, interviews with operational personnel, extensive data collection and detailed analysis of all 20 centers over a period of several months. They provide information on sector operations that change dependent on the traffic characteristics and patterns of the traffic transiting the sector.

Such information, once work is complete, will be used to update the staffing ranges for each center. Updates to en route ranges will be included in the 2008 update of this plan.

Terminal progress:

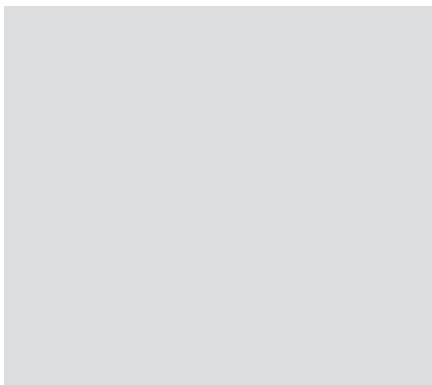
The FAA is performing a comprehensive review of its current tower cab staffing standards. An important part of this review is identifying factors that have changed since the standards were last updated.

Information gathered from this comprehensive review will be used to either update or create new standards. Results of this project, along with our plan to update the TRACON standards, will be included in the 2008 update of this plan.

3.3 Increased Work Efficiency

The new air traffic controller contract, which became effective on June 5, 2006, and was implemented on Sept. 3, 2006, allows the FAA to more effectively set watch schedules based on traffic needs. The new contract allows us to be more responsive to changes in both traffic and workload and schedule accordingly.

For example, on holidays such as Thanksgiving and Christmas, users often make dramatic changes in their flight schedules resulting in decreased traffic and workload at most air traffic facilities. Under the old contract, all certified employees were eligible to work the holiday



and receive premium pay and the employees who were off on the holiday were usually those who requested it.

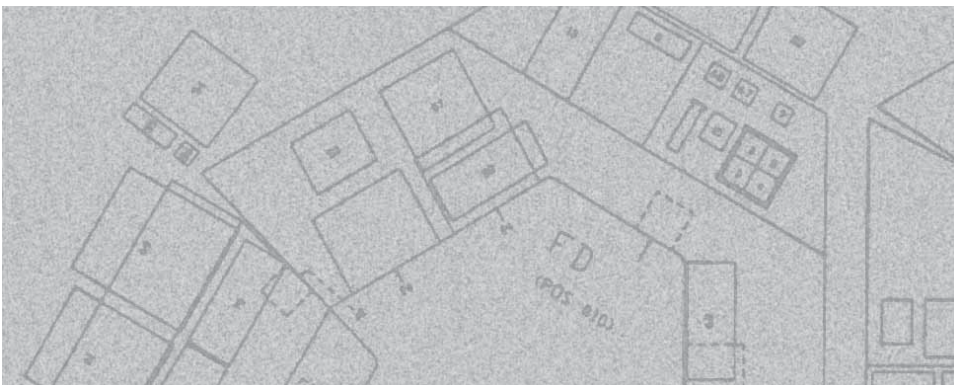
Under the new contract, we schedule only those employees needed to meet workload demands. This has resulted in a substantial reduction of scheduled, and therefore paid, holiday hours. For example, at Boston Air Route Traffic Control Center, 1,888 hours of premium time were scheduled and paid over the Thanksgiving holiday in 2005. Due to scheduling efficiencies gained in the new contract, this number was reduced by 31 percent to just over 1,300 premium hours scheduled and paid over the Thanksgiving holiday in 2006.

The new contract also allows us to bring in the right number of people to manage traffic at various times of the day. At many air traffic facilities, air traffic operations ebb and flow in response to customer scheduling practices and priorities, resulting in peak demand periods.

Under the old contract, scheduling agreements frequently resulted in schedules built around personal preference versus workload and traffic demands. Inefficiencies resulted when shifts were not aligned with traffic and when sufficient overlap of shifts did not provide needed continuity without the expenditure of overtime. New scheduling flexibilities will allow us to better meet operational requirements by allowing us to staff to traffic and to provide better shift overlap.

3.4 Changing National Airspace System Technologies

The FAA will continue to review the effect of new technologies on controller workload and adjust staffing practices accordingly. The FAA expects that new automation technologies and changes supported by the Joint Planning and Development Office will result in a more automated system that, over time, will change the role of controllers. However, we have not factored these technologies into our hiring and staffing ranges for the 2007 report.



Chapter 4: Air Traffic Controller Losses

In FY 2006, there were 583 controller retirements, which were 116 more than anticipated. While some of this increase may be attributed to contract impasse, it nonetheless provides us with another year of actual retirement data, and we have therefore updated our projected total losses through FY 2016. Should retirements or other losses exceed our predictions, we will hire more controllers to reach our FY 2007 end of year goal of 14,807 air traffic controllers.

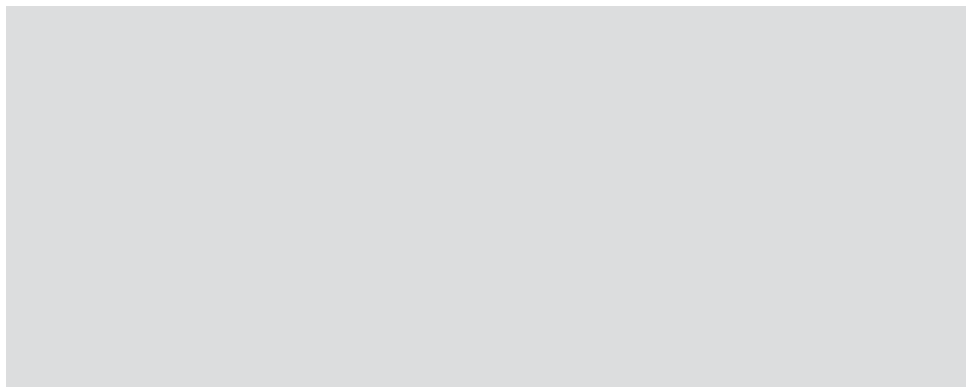
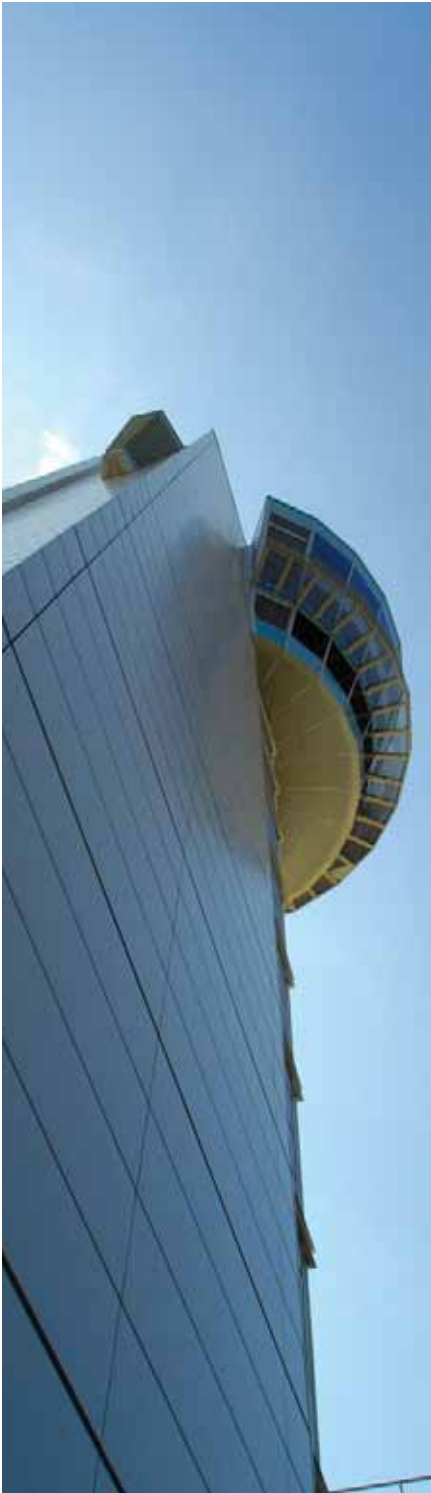
4.1 Controller Loss Summary

In addition to retirements, the agency loses controllers to promotions, transfers, resignations, removals, deaths and Academy attrition. Table 4.1 shows the total estimated number of controllers that will be lost, by loss category, over the period FY 2007-FY 2016.

Loss Category	Losses: 2007 -2016
Retirements	7,146
Resignation, removal & death	1,982
Promotions/transfers	3,648
Academy attrition	751
Total	13,527

4.2 Controller Workforce Age Distribution

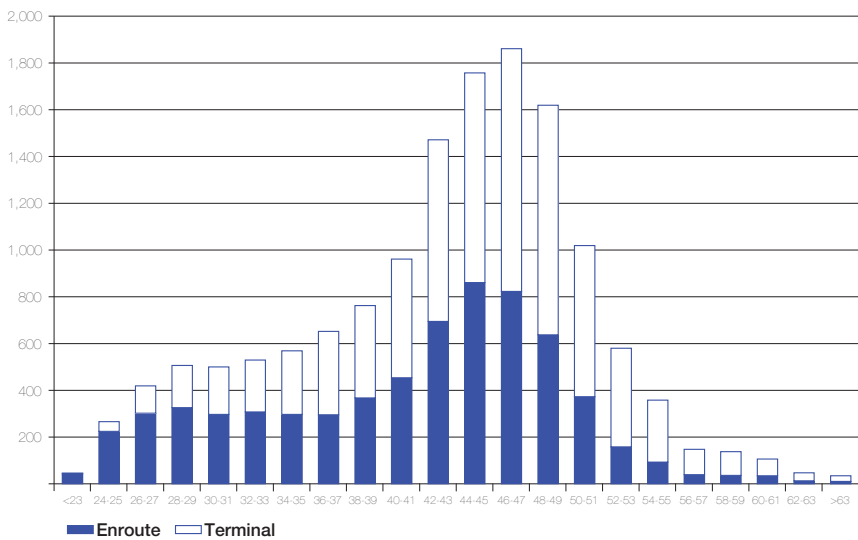
On Aug. 3, 1981, a majority of the air traffic controller workforce went on strike. President Ronald Reagan ordered the striking controllers to return to duty within 48 hours. President Reagan fired 10,438 controllers who



elected not to return to duty within the specified time frame. About 4,700 controllers remained on duty. From 1982 through 1991, the agency hired an average of 2,655 controllers per year. This hiring wave created the likelihood that a large portion of the controller workforce would reach retirement age in roughly the same period of time.

We know that an additional 1,247 controllers will become eligible to retire in FY 2007, and we expect to lose around 1,200 controllers due to retirements and other losses this year. Figure 4.2 shows the controller workforce age distribution as of Sept. 30, 2006.

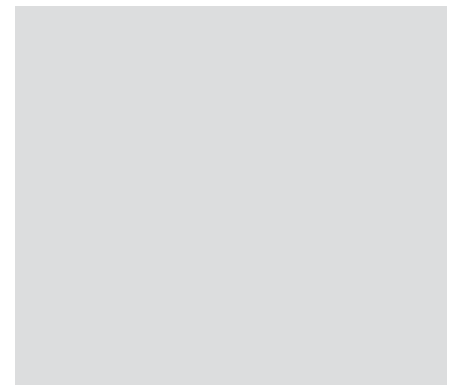
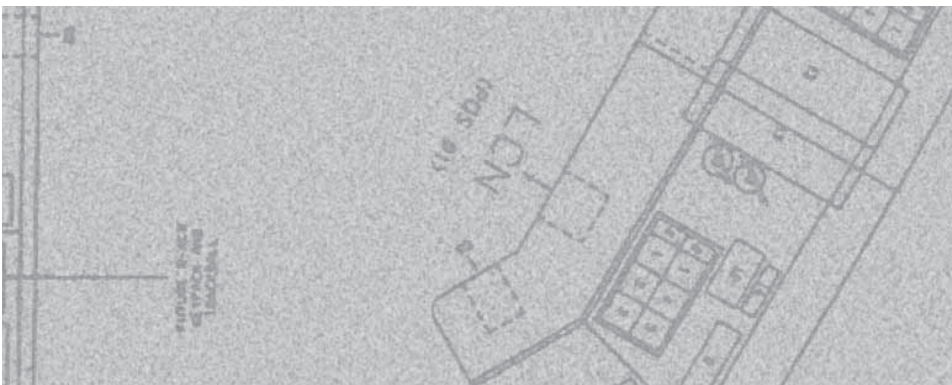
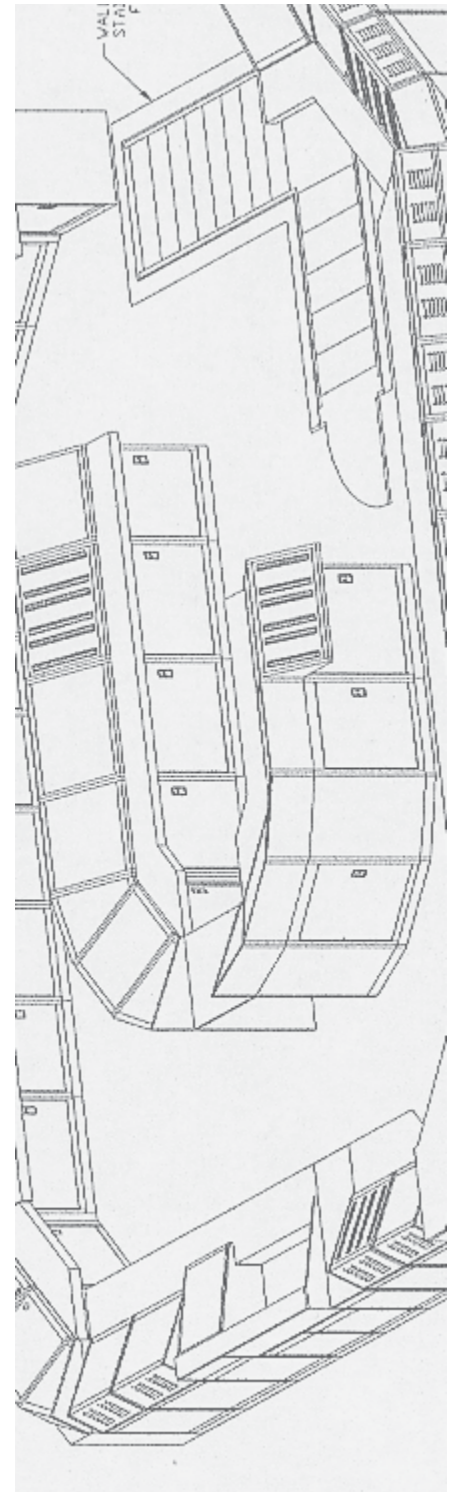
Controller Workforce Age Distribution As of 9/30/2006

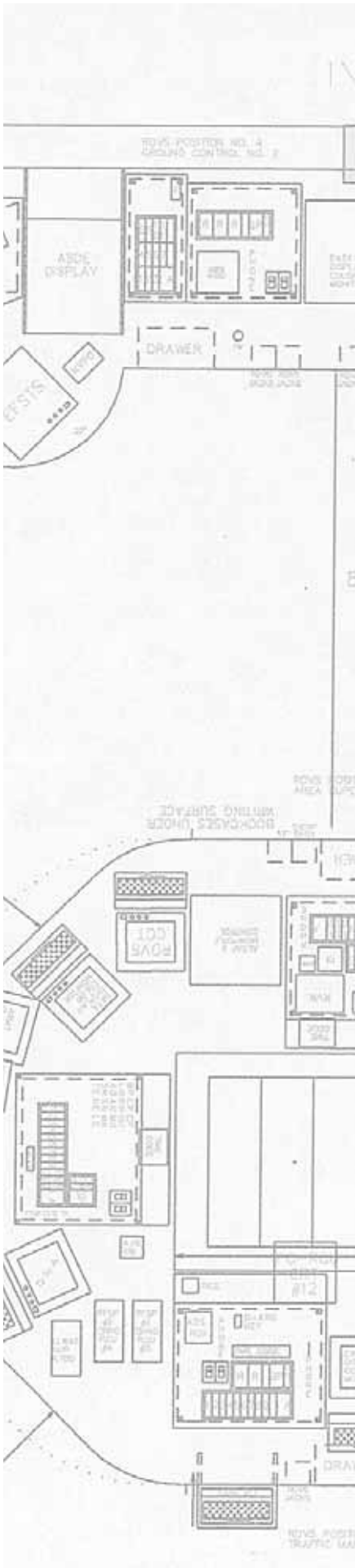


4.3 Controller Retirement Eligibility

In addition to normal civil service retirement criteria, controllers can become eligible under special retirement provision criteria for air traffic controllers (age 50 with 20 years of good time service or any age with 25 years good time service). Good time is defined as service in a covered position, as defined in Public Law 92-297.

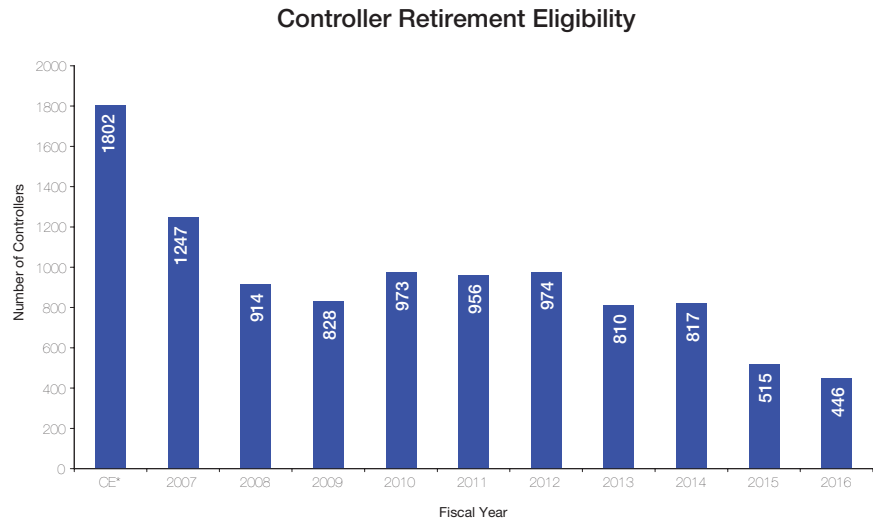
After computing eligibility dates using all criteria, we assign the earliest of the dates as the eligibility date. Eligibility dates were then





aggregated into classes based on the fiscal year in which eligibility occurs; the results are shown below.

Figure 4.3 shows the number of controllers who are currently retirement eligible⁴ as of September 2006 and those projected to become retirement eligible through FY 2016.



4.4 Controller Retirements

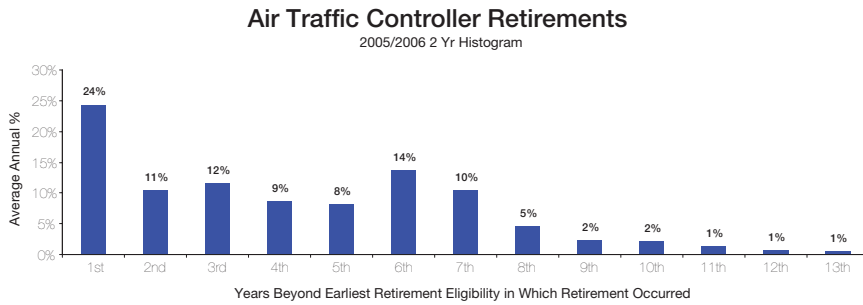
In the first six months of FY 2006, FAA's retirement projections tracked very close to actual retirements. However, in the second half of FY 2006, actual retirements versus projections began to diverge, for a total of 116 more retirements than expected by the end of the fiscal year. Through the first quarter of FY 2007, actual retirements are tracking according to our projections.

Controller retirement eligibility data and the FY 2005 and FY 2006 controller retirement patterns were used to estimate future controller retirements. Although there are large numbers of controllers who presently qualify to retire, history shows that not all controllers retire when they first become eligible. Figure 4.4

⁴CE in the chart represents the number of controllers currently retirement eligible.



shows the FY 2005 and FY 2006 controller retirement pattern used to generate current controller estimates.

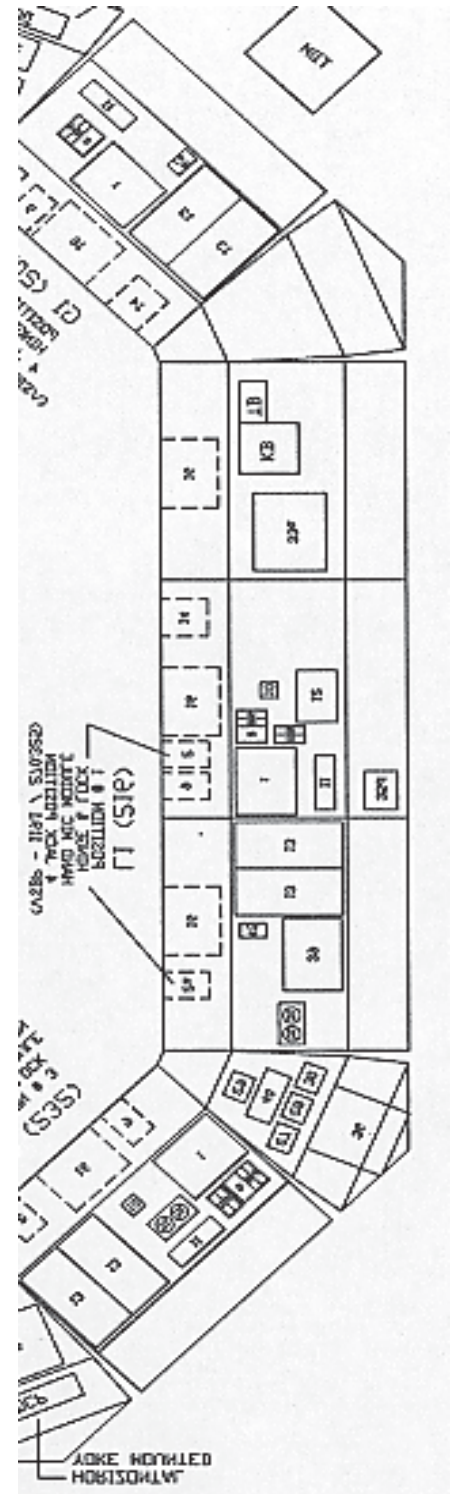
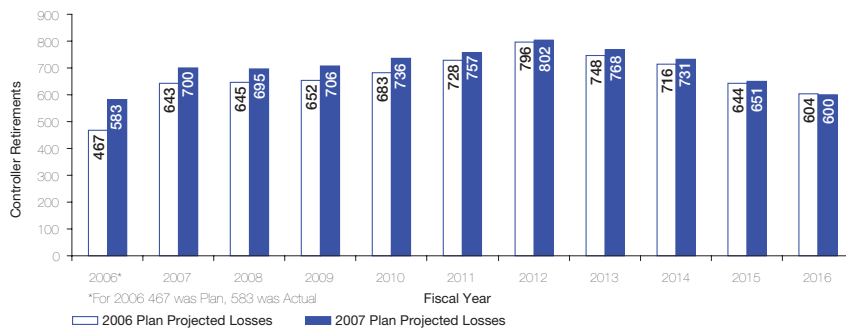


4.5 Controller Losses Due to Retirements

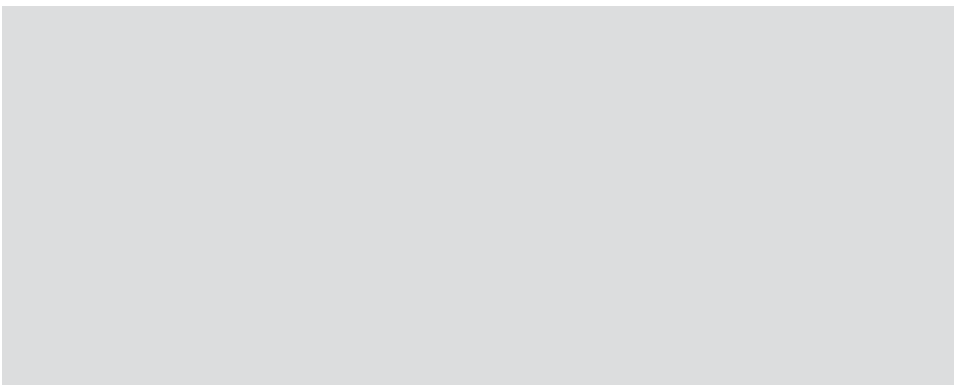
As with prior years, we projected future retirements by analyzing both the eligibility criteria of our workforce (Figure 4.3) and the pattern of retirement based on eligibility (Figure 4.4). For each eligibility class, we applied the histogram percentage to allocate the retirements for each class by year.

For the FY 2007 plan, we incorporated two years of retirement data into the retirement histogram used for our projections. In FY 2006, we saw controllers retire slightly earlier in their eligibility than they did in FY 2005. Incorporating this data caused a modest increase in our forecast, accounting for a change of less than 10 percent in each year.

2006 Plan versus 2007 Plan Projected Controller Losses - Retirements



FAA Air Traffic Control Workforce Plan 2007-2016





4.6 Controller Losses Due to Resignations, Removals and Deaths

In FY 2006, we observed a significant level of resignations and removals from the developmental training pipeline after trainees left the Academy. The large number of new hires in FY 2005 and FY 2006 represented our first recent opportunity to observe these developmental attrition rates, and we have incorporated this knowledge into our latest forecasts. Therefore, we increased our forecast for losses due to resignations, removals and deaths accordingly.

Projected Controller Losses due to Resignation, Removal and Death

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Losses	185	186	183	195	202	205	207	207	206	206	1,982

4.7 Controller Losses Due to Promotions and Transfers

This section presents our estimates of controller losses due to internal transfers to other positions (staff support specialists, traffic management coordinators, etc.) and controller losses due to promotions to operational supervisor.

In prior years, promotions to operational supervisor were assumed to equal retirements from the supervisor population (one for one) under the assumption that all such retirements would be backfilled by controllers. However, we are now projecting that the supervisor workforce will likely grow along with the controller workforce, and these additional supervisors will also come from the controller population.

Projected Controller Losses due to Promotions and Transfers

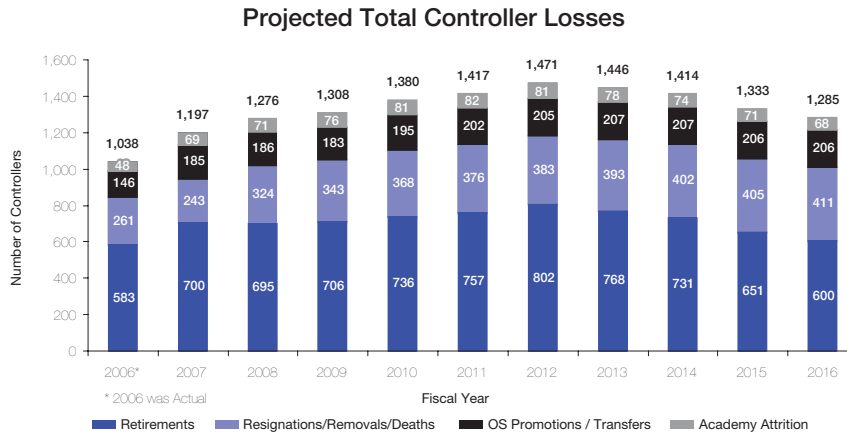
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Losses	243	324	343	368	376	383	393	402	405	411	3,648

4.8 Academy Attrition

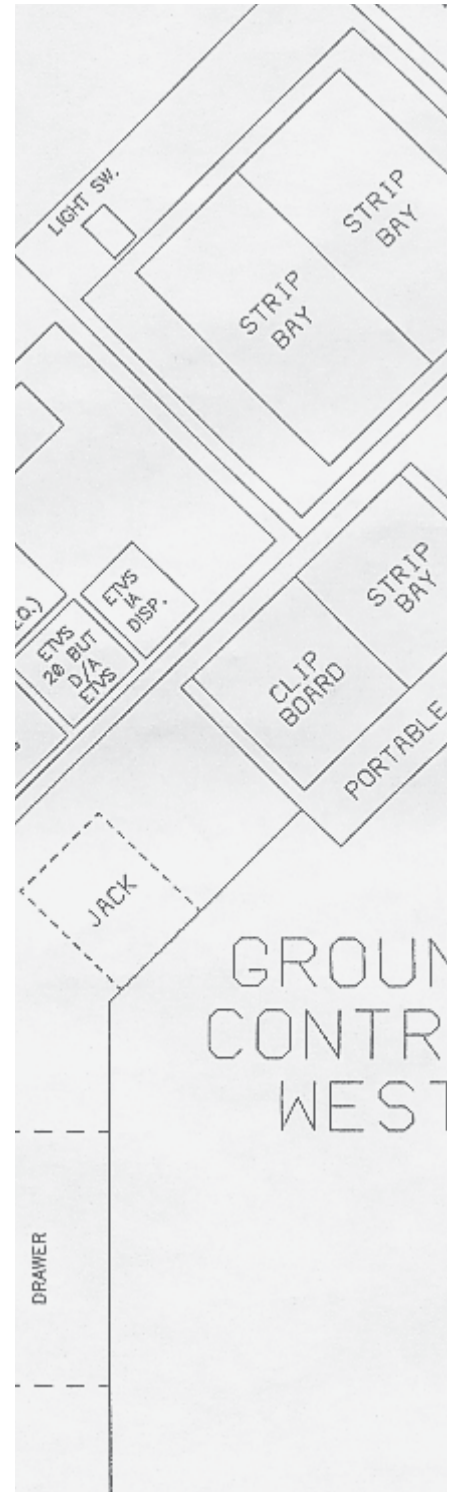
We projected a 5 percent attrition rate at the FAA Academy for FY 2006, with an actual rate of 4.3 percent. We continued to use a 5 percent attrition rate for the Academy in this update of the plan.

4.9 Total Controller Losses

We project a total loss of 13,527 controllers over the next 10 years, broken out as follows.



Total expected losses by facility for FY 2007 – FY 2010 are provided in Appendix B.



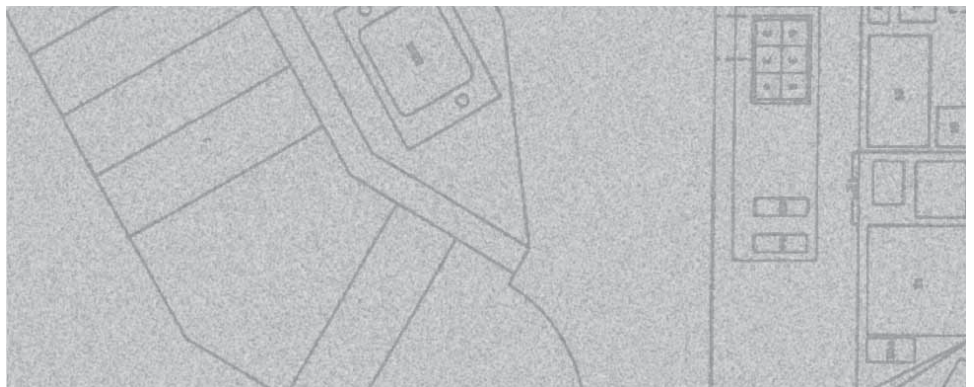


Chapter 5: Air Traffic Controller Hiring Plan

Our goal is to operate the safest and most efficient airspace in the world. This goal is at the forefront of everything we do. The FAA understands how critical it is to have an adequately staffed air traffic controller workforce. In order to have the right number of people in the right places at the right time, we must be responsive to changes in traffic or changes in the number of losses from the controller workforce.

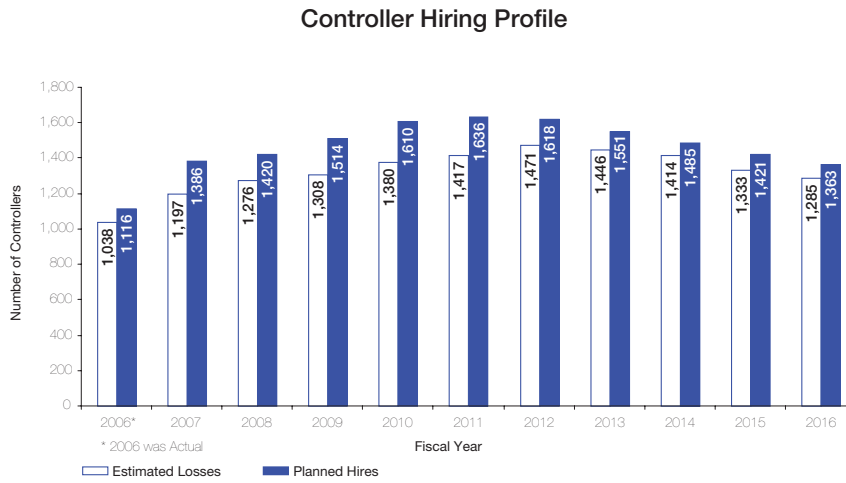
This dynamic hiring plan will be updated as necessary to reflect those changes. Staffing is and will continue to be monitored at all facilities, and we will continue to take action at the facility level should adjustments become necessary due to changes in volume, anticipated retirements or other attrition. We demonstrated this flexibility by proactively increasing our hiring pipeline during the last quarter of FY 2006 in order to compensate for increased losses.

We hired 1,116 new controllers in FY 2006, increasing the total number of controllers on board at the end of the fiscal year to 14,618. There are thousands of qualified controller candidates on a wait list hoping to receive job offers from the FAA. We expect that number to increase dramatically as we open these jobs up to the general public and begin administering the Air Traffic Selection and Training (AT-SAT) aptitude test this spring. We are also working with military separation centers to ensure that our veteran population is aware of air traffic control opportunities. Through these sources, we plan to maintain a sufficient number of applicants to achieve our hiring plan.



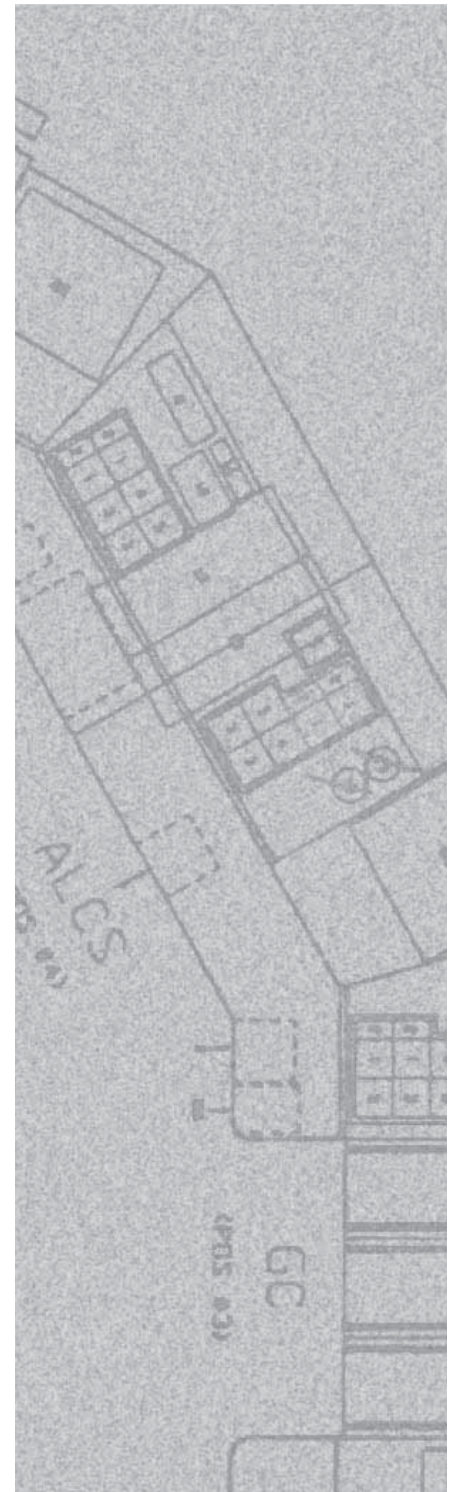
5.1 Controller Hiring Profile

The controller hiring profile is shown in the chart below. The total number of controllers projected to be hired through FY 2016 is 15,004.



5.2 Trainee to Total Controller Ratio

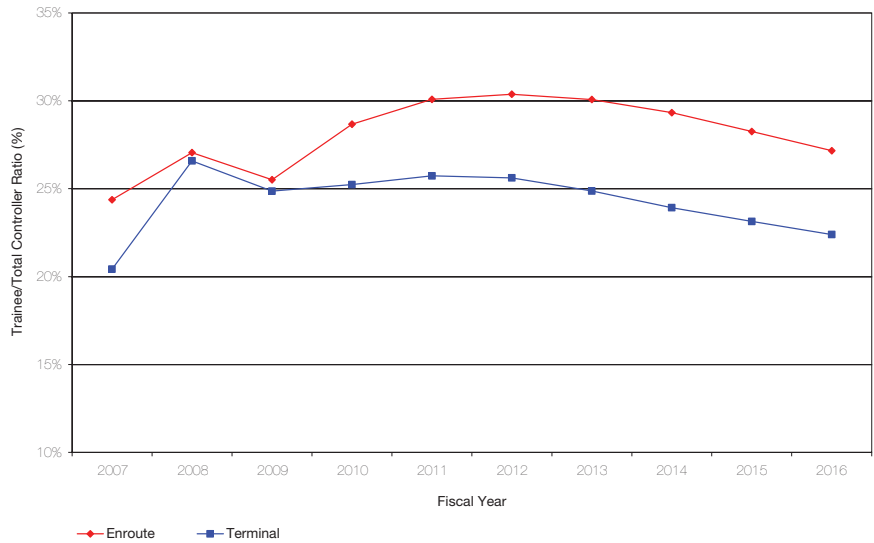
The trainee-to-total controller ratio for terminal and en route controller groups achieved with this hiring plan is shown in Figure 5.2. For example, a ratio of 25 percent would mean an average of one trainee out of every four controllers. For this chart, the trainee ratios include





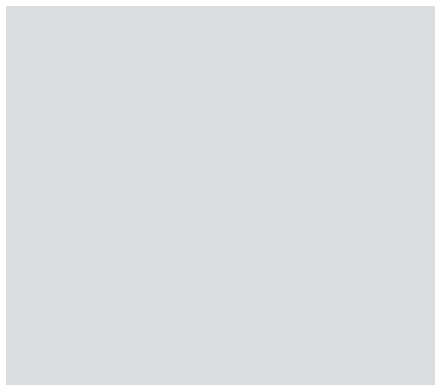
not only developmentals but also CPC-ITs. This plan maintains the trainee-to-total controller ratio at a manageable level.

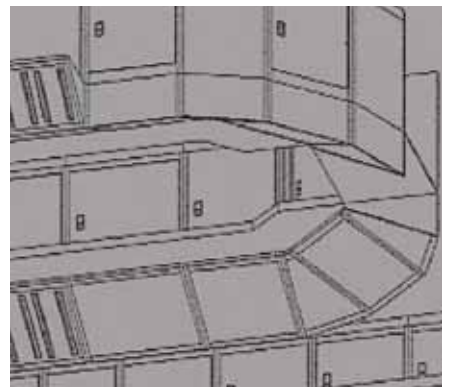
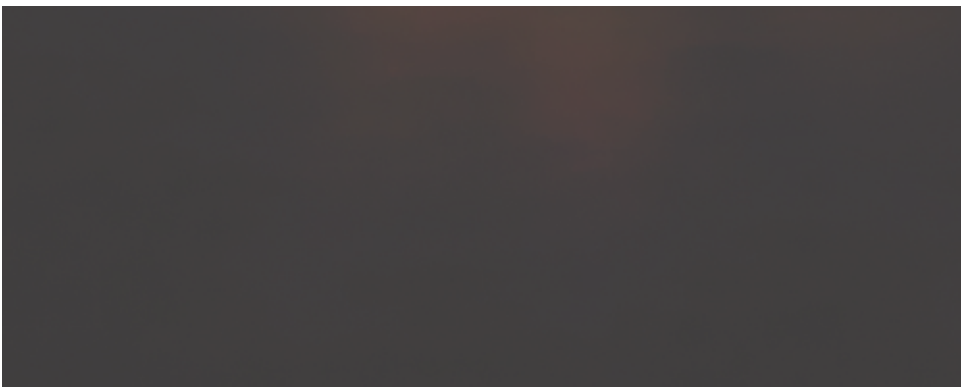
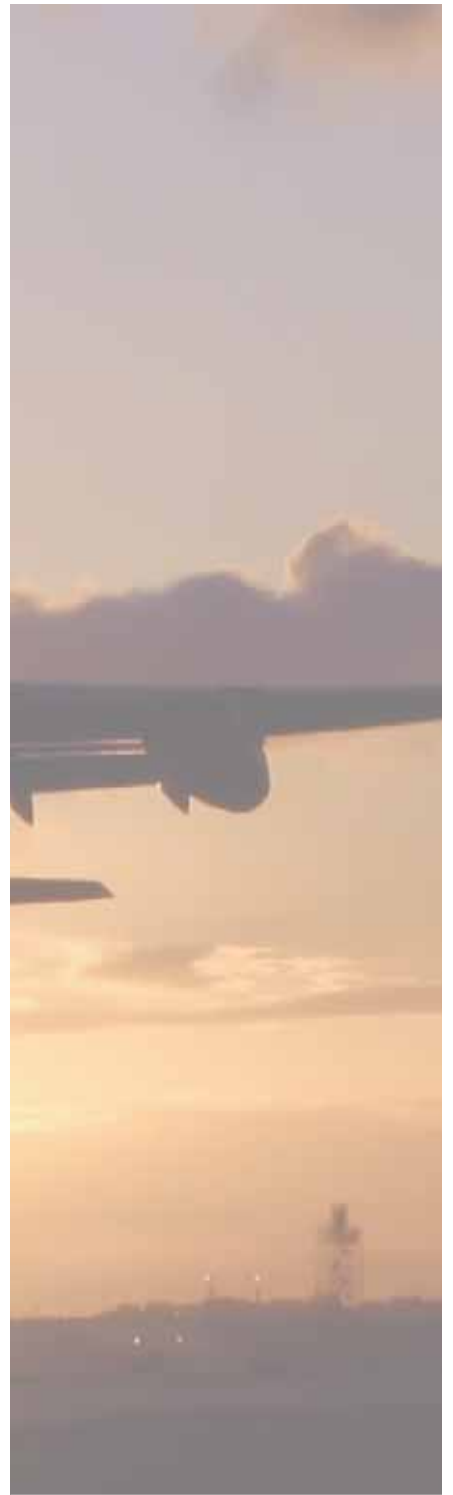
Trainee to Total Controller Ratio



5.3 Potential Adjustments to Controller Hiring

The FAA believes that waivers to the Age 56 Rule may be of value for targeted locations where there may be a critical staffing shortage or where the ratio of trainee controllers to CPCs approaches a level where training could be severely impacted. Special Federal Aviation Regulations SR 103 was implemented in April 2005. SR 103 provides authority to the FAA administrator to grant waivers to the mandatory retirement age of 56 years for air traffic controllers.





Chapter 6: Air Traffic Controller Hiring Process

In January 2006, the FAA centralized the entire controller hiring process, streamlining it and allowing individual facilities to identify prospective new controllers, as much as one year in advance. The agency was also able to improve the security and medical clearance process.

6.1 Controller Hiring Sources

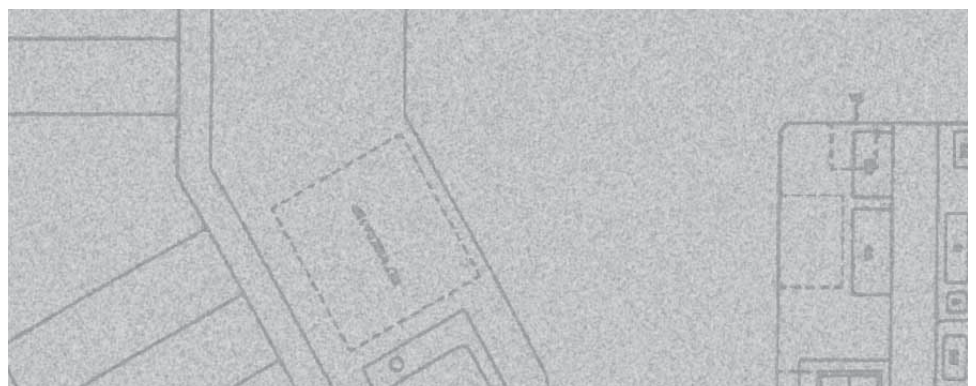
The FAA has three categories of controller hiring sources.

Previous controllers: These individuals have prior FAA or Department of Defense (civilian or military) air traffic control experience.

Collegiate Training Initiative program: These individuals have successfully completed an aviation-related program of study from a school under FAA's collegiate training initiative program.

General public: These individuals may apply for vacancies announced by the FAA.

There are thousands of applicants from numerous sources who have expressed interest in becoming air traffic controllers. We expect to announce vacancies to the general public in the second quarter of FY 2007. The specific hiring sources within each of these categories and the candidates identified to date are shown in Table 6.1.



As of the end of FY 2006, the FAA had 3,479 controller candidates to choose from.

Controller Hiring Sources

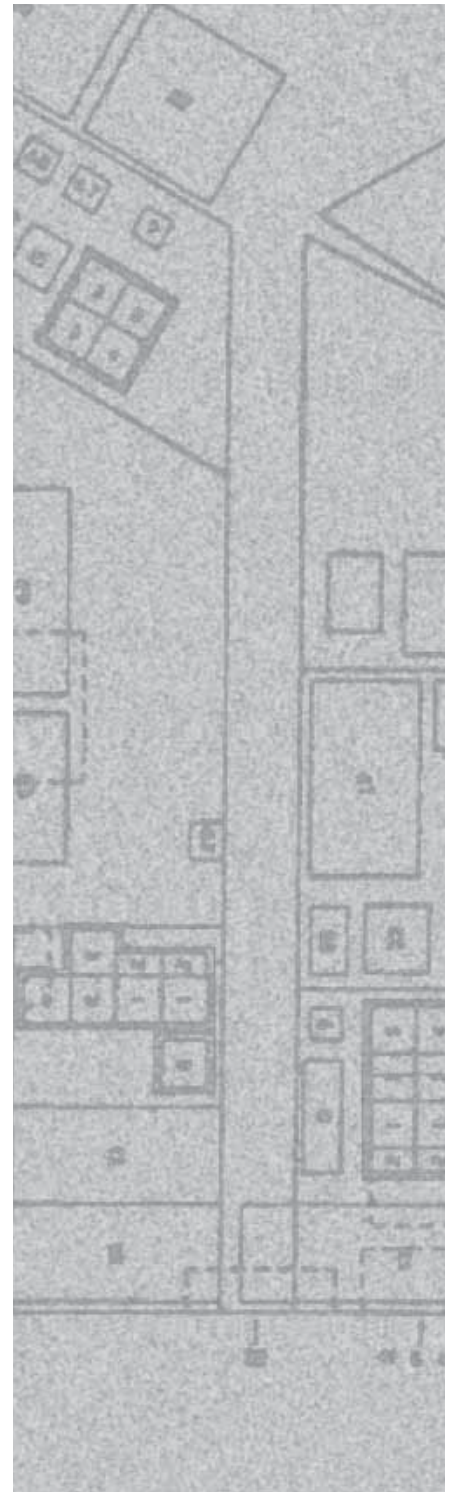
<i>Previous Controllers</i>	
Veterans Readjustment Appointment (VRA)	1,865
Retired Military Controllers (RMC)	255
Former Professional Air Traffic Control Organization (PATCO) Controllers	492
<i>Collegiate Training Initiative (CTI)</i>	
Air Traffic Collegiate Training Initiative	867
<i>General Public</i>	
Job Fairs	TBD
Total	3,479

The applicant pools, selections and loss rates of individuals from each applicant pool are being carefully and continually monitored to identify any trends that need to be addressed to ensure that the best candidates are available for consideration.

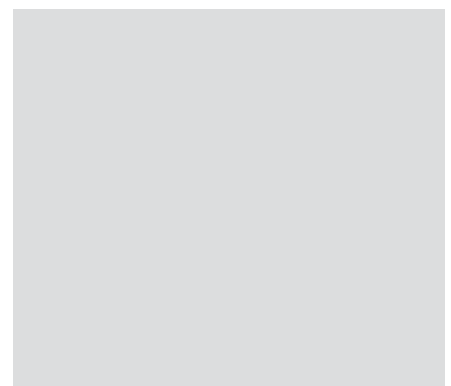
6.2 Recruitment

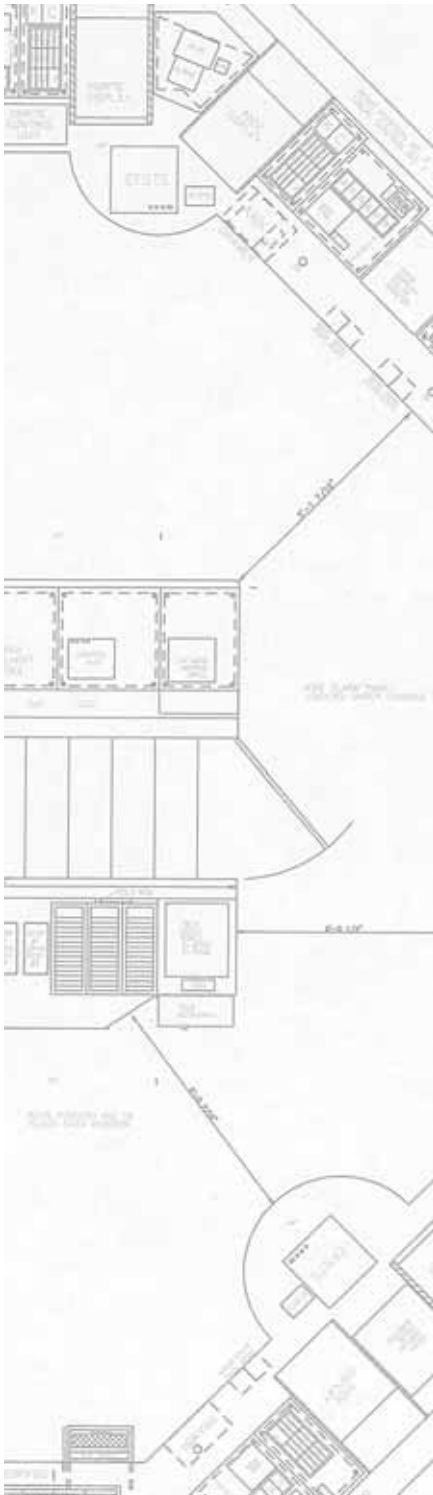
While we have thousands of qualified controller candidates in our hiring pool, we expect that number to increase dramatically when we open these jobs up to the general public this year. Once the jobs are advertised, an automated application process will be available to general public applicants. The process incorporates a tool to select candidates to take the AT-SAT examination. The tool consists of a questionnaire that awards points for background experience and educational factors that are predictive of success in the controller occupation.

We also now administer the AT-SAT examination at CTI schools twice each year. This is done so that pre-employment processing can begin as soon as possible. All students within six months of graduation (and recommended by their school) are tested, and if they pass, are selected for specific facilities.



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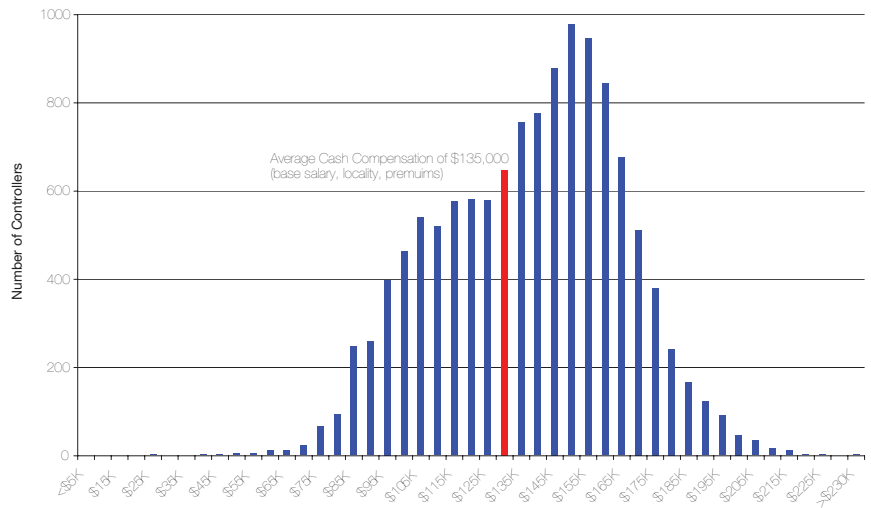




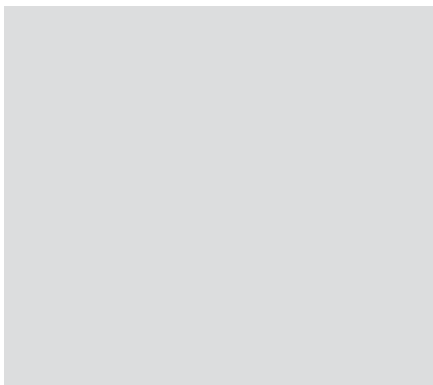
Modifications to the compensation system of operational air traffic controllers do not appear to be impacting the FAA's ability to recruit and to hire new air traffic controllers. Perhaps this result is due to the fact that it is widely known that air traffic controllers are still one of the highest paid professions in government.

FY06 Cash Compensation for Full-Time Certified Controllers

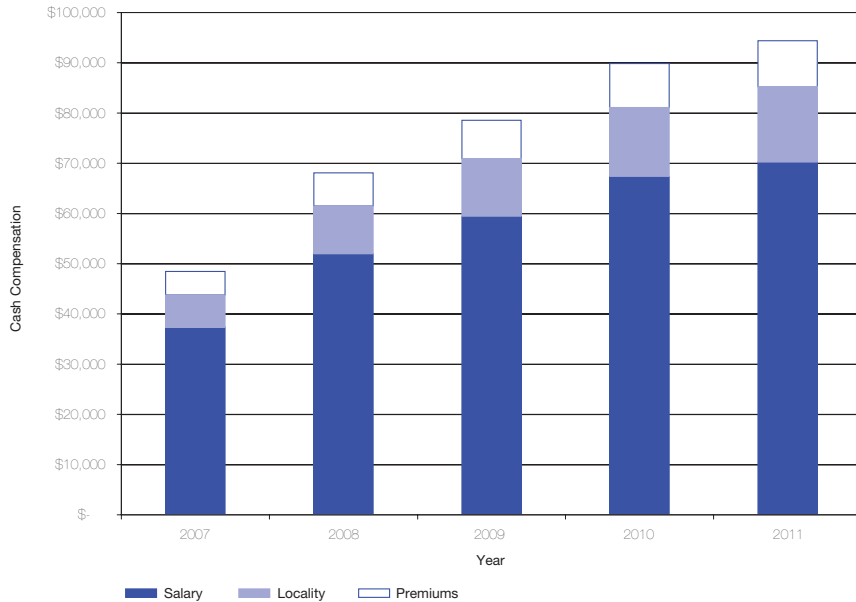
Excludes Developmentals, Part-Time and Employees Who Left in FY06



A controller hired in 2007 will make an average of almost \$50,000 a year in cash (including base salary, locality, and premiums) by the end of the first year, and \$94,000 by the end of the fifth year (this does not include benefits). In addition, the FAA pays new hires for the two to three years they are in training, as well as paying for all of their training costs.



Average Cash Compensation for First Five Years of a New Hire in 2007

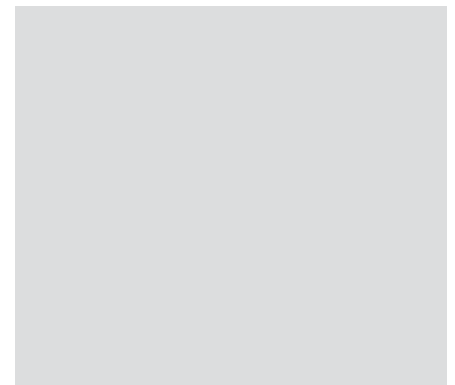
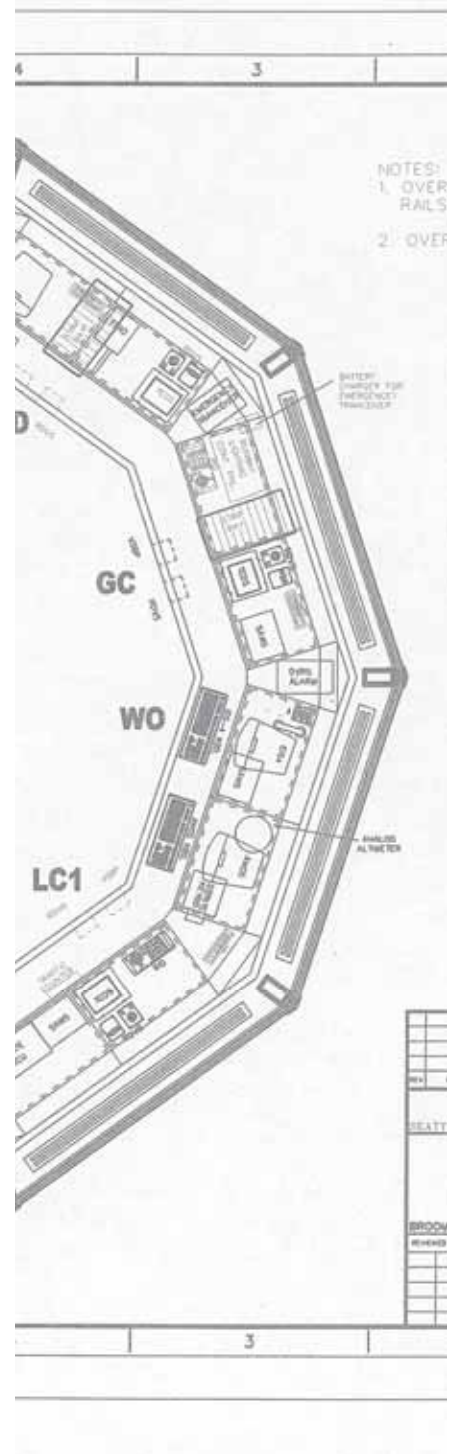


6.3 The Streamlined Clearance Process

Central oversight of security and medical clearances has streamlined the process and reduced delays. After completing initial background checks, FAA security now grants a conditional clearance to selected employees no later than 45 days prior to their FAA Academy start date, enabling them to attend class pending final clearance.

The FAA also tracks the level of clearance necessary at specific facilities, and plans its hiring pipeline accordingly. The average time for security clearances is 90-120 days for terminal candidates and 9-12 months for en route candidates. Medical clearances require 60-90 days on average. Drug screenings are valid for six months.

The FAA worked with the Office of Personnel Management to reduce the time frame required to complete all steps in the security approval process for applicants for controller positions. The multiple steps involve completion of clearance applications from candidates, submission of fingerprints that are checked with local and national





law enforcement, credit reports, name checks through the FBI, review of military or civilian personnel and medical records, and finally OPM conducting reference checks.

The FAA has established a full-time, permanent position at the Military Records Center in St. Louis, Mo., to review personnel and medical records of prospective applicants. One of our staff members also travels to the National Archives and Records Center once a week to conduct the same review of civilian records for those applicants tentatively selected for positions.

Both of these measures have reduced the security approval time by at least 45 days.

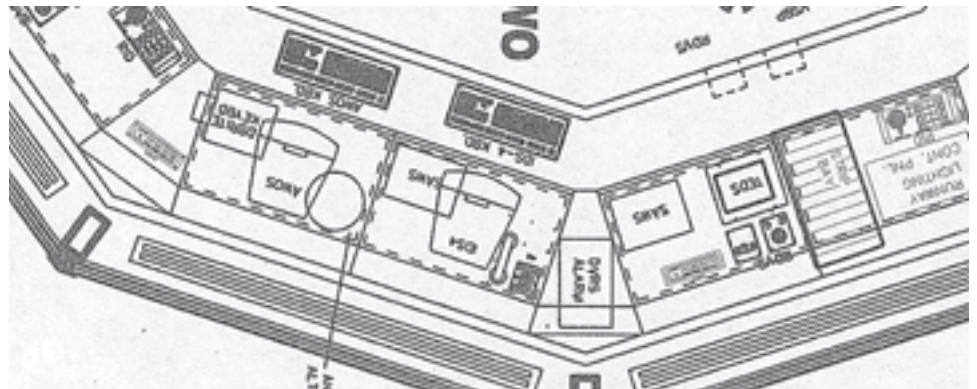
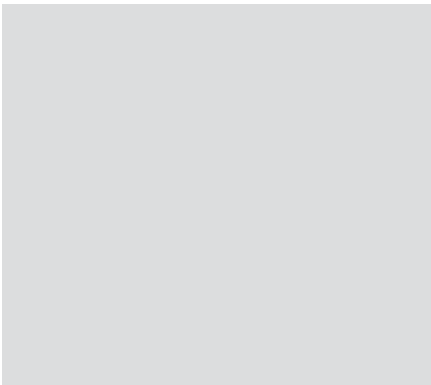
6.4 New Hire Interview Process

We have instituted a mandatory interview process for tentatively selected controller new hires. The interview process helps us with placement decisions by putting the right people in the right places based on their skill levels. This also gives us the opportunity to validate the experience of candidates before they report to work. The interview process does not significantly add to the clearance processing time.

6.5 Track Applicants

In an effort to provide management with the most current hiring information for air traffic controllers throughout the FAA, the agency is making enhancements to the applicant tracking system computer program that was established in March 2006. This automated tracking tool is being used for referral, selection, pre-hire activities and placement of controllers.

In FY 2006, the FAA began tracking 1,493 controllers from the point of initial employment offer until the time they were certified. The system assigns different separation codes for any of the controllers who do not complete their training so that the FAA can make hiring and training adjustments as needed.

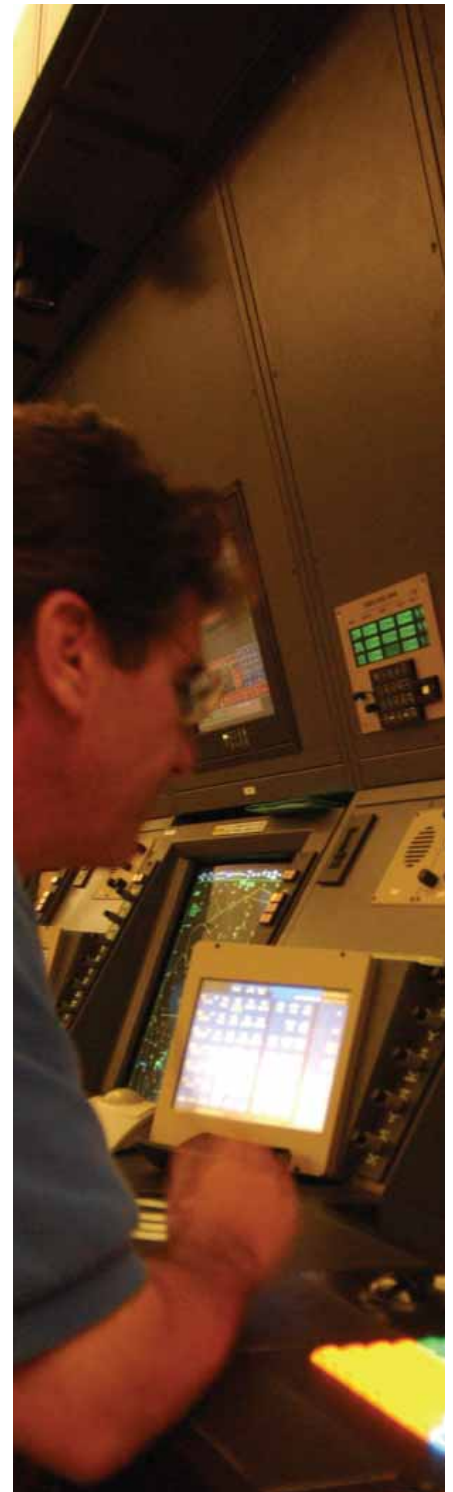


6.6 Air Traffic Selection and Training

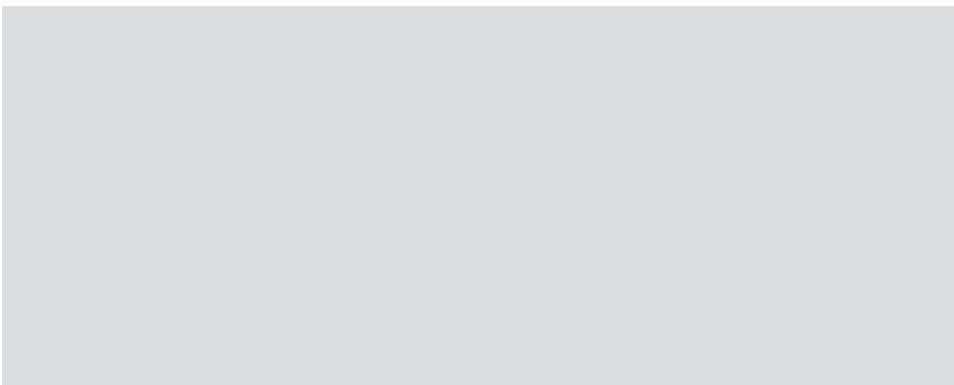
In FY 2006, the FAA administered 977 AT-SAT tests, and 899 examinees passed the test. The pass rate for the AT-SAT is 92 percent. The Civil Aerospace Medical Institute is monitoring the AT-SAT pass rate and the relationship of AT-SAT scores to controller training success and job performance, and adjustments will be made to the AT-SAT scoring as necessary.

6.7 Effectiveness of the AT-SAT for Placement

The Uniform Guidelines on Employee Selection Procedures (29 CFR 1607) require that the FAA evaluate the effectiveness of AT-SAT over the long term. The Civil Aerospace Medical Institute has launched a study to meet this requirement. As part of this, the FAA is studying the use of AT-SAT as a way to aid in the placement of new controllers at facilities of varying complexity.



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Chapter 7: Air Traffic Controller Training

The FAA must have a well-trained air traffic controller workforce to allow it to successfully meet the current and future needs of the NAS and address safety, capacity and efficiency objectives. To do this, the FAA is making today's training more effective by gearing it towards the skills needed for success in the context of career-long development, and ensuring alignment to the mission of the FAA as a premier air traffic service provider.

7.1 Reduced Training Time

Today, with the introduction of high-fidelity simulators and an increased focus on training time, we are seeing improvements. Our goal is to reduce training time to two years for terminal controllers and three years for en route controllers.

With increased capacity at the FAA Academy plus access to facility simulators, controller developmentals finish their training faster and become available for regular staffing. This also frees their instructors to control traffic.

7.2 Establish National On-the-Job Training Data Tracking System

The FAA has fully implemented the on-the-job training database for both en route and terminal training, but has expanded its use to include information on all air traffic control applicants as they enter the hiring pool. This database tracks controller training through certification. It maintains accurate and current staffing information for air traffic controllers and provides a timely picture of FAA's controller hiring and staffing progress.



Developmental controllers go through four stages of training at their facilities and there are a certain number of days allotted for each stage. Our goal is to have 90 percent of controller developmentals on track in their on-the-job training. A developmental controller is considered to be on track when he or she progresses through the four stages at or below his or her allotted number of days. Developmentals that exceed the allotment are closely tracked by both the facility and headquarters. The FAA reviews this data monthly and examines individual facility training practices and efficiency.

7.3 Expanded Simulation

At the FAA Academy, we doubled the terminal simulation capability by installing four new high fidelity tower simulators, providing a realistic tower environment in which to teach new controllers. We also installed a state-of-the-art en route training lab at the Academy. The lab simulates the air traffic control technology (the Display System Replacement or DSR) currently in use in FAA en route facilities and provides unique training opportunities.

7.4 Tower Simulation

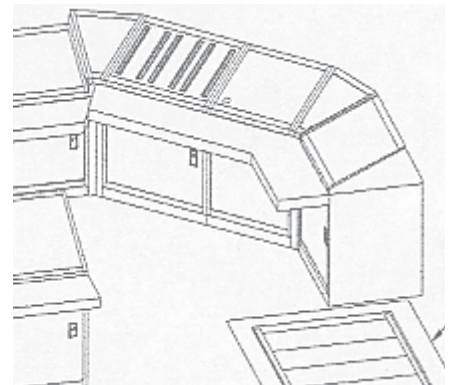
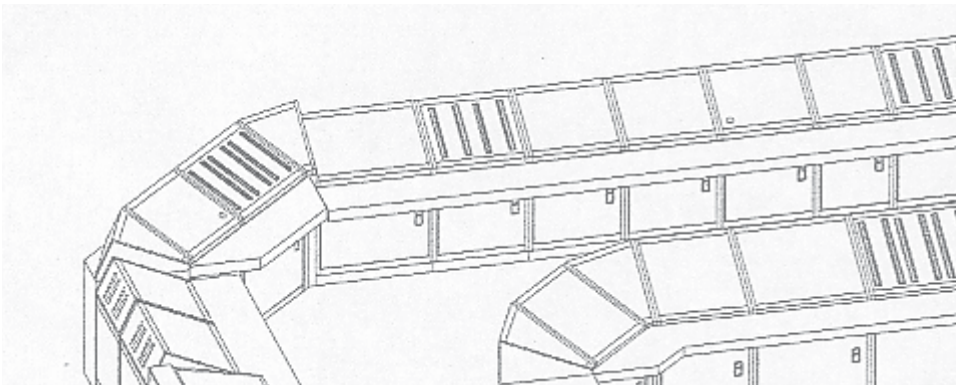
Terminal tower simulators in the field are reducing on-the-job training time and providing a more streamlined training process for developmental controllers. Three terminal tower simulators, to be used in the VFR environment, have been installed at the Chicago O'Hare, Miami and Ontario, Calif., air traffic control towers.

These simulators are programmed with scenarios and occurrences exclusive to those airports, using actual aircraft with their respective call signs. Trainers can program departure and arrival paths and even include airport construction, new runways, weather patterns and any other situations particular to the location.

Controllers learn three things in the simulator, all of which have to become second nature: (1) innate knowledge of the particular airport – runways, taxiways, restrictions, and weather patterns; (2) how to use the correct phraseology; and (3) application of procedures, such as separations, size restrictions, etc. The problems in the



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simulators are designed to be 10 percent more difficult than the most challenging occurrence at the particular airport. In four hours controllers can accomplish meaningful training in the simulator that would take several weeks to do in the tower.

The effectiveness of FAA's on-site tower simulator program was evaluated by the NASA Ames Research Center in California. The study period, which lasted about six months and included data collected on trainees (transfers and developmentals), was completed in January 2007. Results are shown below:

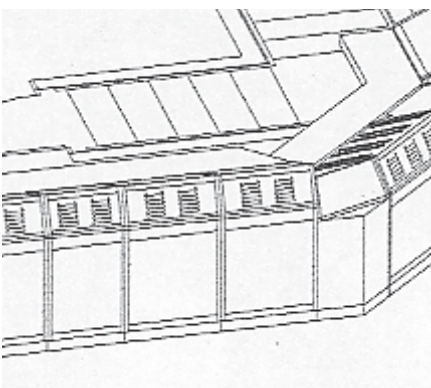
Tower Simulator Benefits

- Ontario Tower Results – Ground Control
 - 31 percent fewer days to complete training
 - 59 percent fewer hours of on-the-job training required
- O'Hare Tower Results – Ground Control
 - 42 percent fewer days to complete training
 - 38 percent fewer hours of on-the-job training required
- Miami Tower Results – Ground Control
 - 60 percent fewer days to complete training
 - 21 percent fewer hours of on-the-job training required
- Miami Tower Results – Local Control
 - 56 percent fewer days to complete training
 - 24 percent fewer hours of on-the-job training required

A fourth terminal tower simulator was installed in Phoenix, Ariz., in February 2007, with an acquisition and research process underway to expand the program to additional sites.

7.5 En Route Simulation

Facility training for en route controllers is the longest portion of any air traffic training program. The average length of time to reach full



certification for an en route controller has been more than three years and can vary depending upon many variables including:

- facility complexity
- staffing requirements and instructor availability
- using qualified developmentals for staffing rather than training
- scheduling of classes in order to have a core number of students
- traffic level and complexity to get quality on-the-job training time
- seasoning time

Research indicates that increased use of high-fidelity simulation has the potential to reduce training time. The FAA is exploring the use of high-fidelity simulation in en route facilities as a key strategy to reduce training time. This strategy includes a long-term solution and an interim proposal.

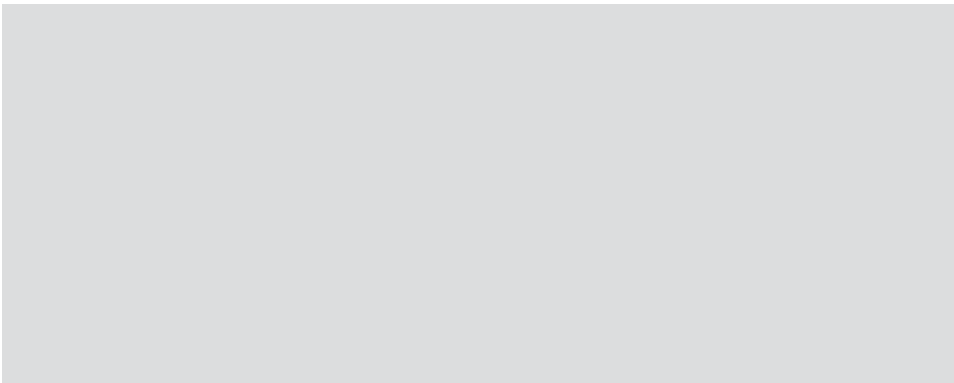
The long-term solution to high-fidelity simulation capability is included within the En Route Automation Modernization (ERAM) program. ERAM will be deployed in 2008 and will replace the current Host Computer System software/hardware, Direct Access Radar Channel software/hardware and other associated interfaces, communications and support infrastructure. ERAM also includes an enhanced, combined, test and training system, or simulator, which replicates ERAM and operates independently of the live operational system. Upon ERAM completion, every en route facility will have state-of-the-art training capability on full-fidelity simulators. This training system will allow scenario generation from actual radar data. The enhanced training capability provided by ERAM will make significant contributions to reduce training time.

While ERAM provides a long-term solution for high-fidelity simulation in the en route environment, the FAA believes interim steps are needed to ensure adequate resources exist to train the number of controllers required in this plan.

Currently, site-specific training is provided at each of the 20 en route control centers utilizing dynamic simulation. The En Route Training



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Simulation System program provides a simulation training system, to be used on an interim basis, until ERAM is fully functional.

The En Route Training Simulation System will be used at the Salt Lake, Albuquerque, Miami, and Washington air route traffic control centers. It will also reduce the number of students backlogged in the training program at these four facilities.

7.6 Voice Recognition and Response Technology

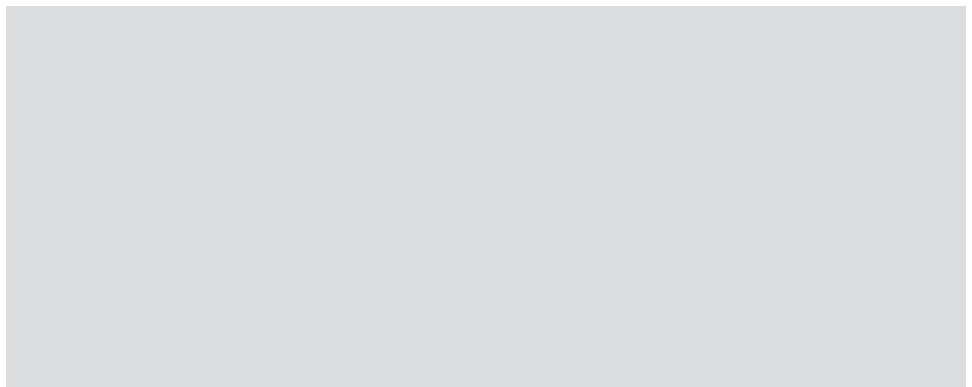
In 2006, the FAA completed an effort to expand the use of Voice Recognition and Response Technology into terminal and en route field simulation capabilities. This effort is unprecedented in the FAA's field facilities and is expected to reduce training resources, training time and training costs associated with facility certification training. The FAA's FY 2007 budget includes funds to complete the enhancements necessary to field this technology in the next few years.

7.7 Convert Air Traffic Academics to Web-Based Delivery

Only newly hired controllers without any previous experience or specialized education are required to complete the first five weeks of initial qualification training. The first five weeks of training, called Air Traffic Academics, provide the fundamental aeronautical knowledge essential to both en route and terminal controllers.

The Air Traffic Academics course consists of 200 hours and covers a wide variety of topics and objectives. This course is the equivalent of six college courses. It is a blended approach to methods and media providing the student the same curriculum in an interesting and challenging manner. Methods and media include online access, computer-based instruction, video streaming, and correspondence courses.

This course was redeveloped for Web-based delivery. The portions of the course inappropriate for Web-based delivery (teamwork scenarios, etc.) are incorporated into the resident training and skills building courses.

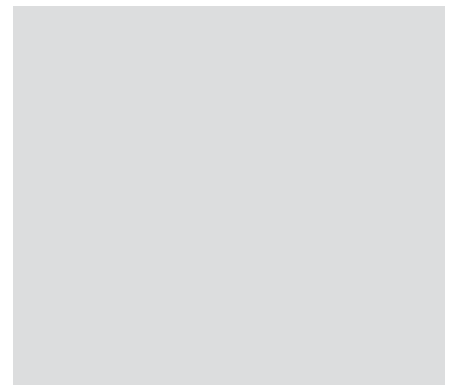


This resulted in:

- Eliminating salary and associated costs for five weeks of training at the Academy
- Improving student preparedness, even when they are eligible to bypass academics
- Providing an objective measure of student knowledge prior to reporting to the Academy



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Chapter 8: Air Traffic Controller Workforce Funding Status

8.1 Cost Savings

The FAA has taken numerous steps in the last several years to become more financially responsible, while maintaining the same high levels of service. For example, the Air Traffic Organization reduced executive, management and non-safety staffing by more than 900 positions, which freed up funding and allowed us to hire additional controllers.

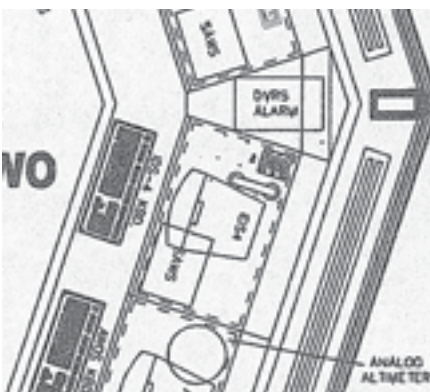
8.2 Contract Results

The new controller contract will save the taxpayers nearly \$1.9 billion over the next five years. The contract preserves the base pay and locality pay for the existing workforce and provides new hires with a very competitive, average annual cash compensation of \$94,000 after five years on the job. Cost avoidance and cost savings from the new contract will help fund new hires.

Equally important, it has restored management's ability to set schedules that staff to traffic. This should result in more efficient staffing and scheduling across the system. We intend to use this restored ability to meet the needs of the system, staffing the right number of controllers in the right places at the right time.

8.3 Reclassification of Air Traffic Control Facilities

As of Sept. 30, 2006, 101 facilities were evaluated for reclassification based on traffic counts and other factors in order to better allocate human and fiscal resources.



Of these, six facilities were re-classified to a higher level, 60 facilities were reclassified to a lower level, 24 facilities have reclassifications pending, and 11 facilities were examined, but had no change in classification.

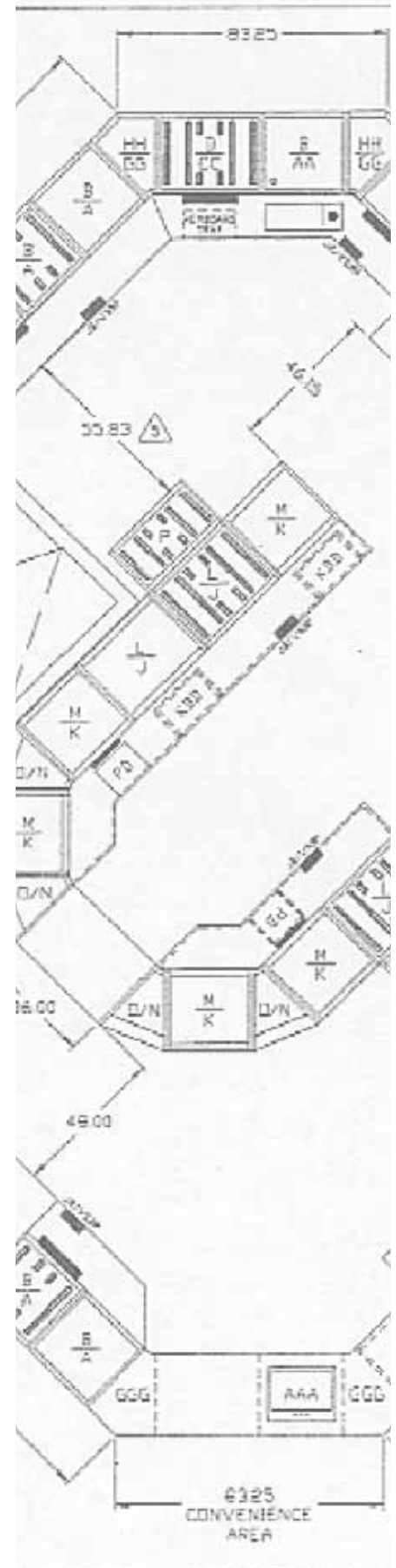
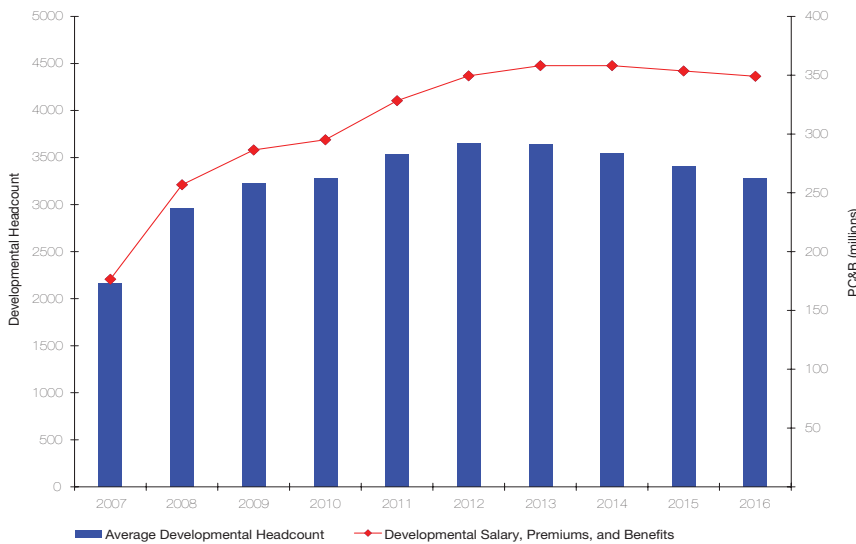
Action	FY 2005	FY 2006
Reclassified Higher	4	6
Reclassified Lower	41	60
Reclassifications Pending	12	24
No change in Classification	5	11

8.4 Cost of the Hiring Plan

In addition to direct training costs, FAA will incur salary and other costs of developmentals before they certify.

The chart below depicts expected annual compensation costs of developmentals, as well as the expected number of developmentals. As training takes two to three years, the chart depicts a rolling total of hires and costs from the current and previous years. In later years, costs do not decrease as quickly as headcount due to unit costs (salaries, etc.) rising over time.

Estimated Cost of Developmentals Before Certification



Appendix A

FY 2007 Staffing Ranges by Facility

Appendix A presents a controller staffing range, by facility, for en route and terminal air traffic control facilities for FY 2007⁵. These ranges include the number of controllers needed to perform the work. While most of the work is accomplished by Certified Professional Controllers, it is important to note that during the certification process, work is also being accomplished in facilities by Certified Professional Controllers in Training and developmentals who are proficient, or checked-out in specific sectors or positions, and can handle workload independently. These position-qualified controllers, along with Certified Professional Controllers, are the focus of our staffing to traffic efforts.

En Route Facility Controller Staffing Ranges

ID	Facility Name	Staffing Range		Actual On Board Staffing as of 09/30/06
		Low	High	
ZAB	ALBUQUERQUE ARTCC	215	263	261
ZAN	ANCHORAGE	88	108	113
ZAU	CHICAGO ARTCC	308	376	423
ZBW	BOSTON ARTCC	200	244	291
ZDC	WASHINGTON ARTCC	297	363	374
ZDV	DENVER ARTCC	230	282	300
ZFW	FORT WORTH ARTCC	238	290	355
ZHU	HOUSTON ARTCC	241	295	322
ZID	INDIANAPOLIS ARTCC	284	347	373
ZJX	JACKSONVILLE ARTCC	247	301	323
ZKC	KANSAS CITY ARTCC	259	317	338
ZLA	LOS ANGELES ARTCC	227	277	318
ZLC	SALT LAKE ARTCC	162	198	201
ZMA	MIAMI ARTCC	225	275	286
ZME	MEMPHIS ARTCC	244	298	329
ZMP	MINNEAPOLIS ARTCC	227	277	311
ZNY	NEW YORK ARTCC	236	288	353
ZOA	OAKLAND ARTCC	175	213	261
ZOB	CLEVELAND ARTCC	306	374	439
ZSE	SEATTLE ARTCC	151	185	209
ZSU	SAN JUAN	47	57	58
ZTL	ATLANTA ARTCC	309	377	426
ZUA	GUAM	14	18	17

⁵The "Actual On Board Staffing" number includes developmentals.

Terminal Facility Controller Staffing Ranges

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
A11	ANCHORAGE TRACON	24	30	27
A80	ATLANTA TRACON	80	98	88
A90	BOSTON TRACON	48	58	68
ABE	LEHIGH VALLEY INTERNATIONAL ARPT	23	29	27
ABI	ABILENE REGIONAL ARPT	19	23	21
ABQ	ALBUQUERQUE INTL SUNPORT ARPT	32	39	38
ACK	NANTUCKET MEMORIAL ARPT	9	11	10
ACT	WACO REGIONAL ARPT	14	17	18
ACY	ATLANTIC CITY INTERNATIONAL ARPT	23	29	30
ADS	ADDISON ARPT	10	12	13
ADW	ANDREWS AFB	11	13	12
AFW	FORT WORTH ALLIANCE ARPT	11	13	17
AGC	ALLEGHENY COUNTY ARPT	9	11	11
AGS	AUGUSTA RGNL AT BUSH FIELD ARPT	13	15	14
ALB	ALBANY INTERNATIONAL ARPT	22	26	26
ALO	WATERLOO MUNICIPAL ARPT	10	12	12
AMA	AMARILLO INTL ARPT	18	22	21
ANC	TED STEVENS ANCHORAGE INTL ARPT	22	26	26
APA	CENTENNIAL ARPT	17	21	20
APC	NAPA COUNTY ARPT	8	10	8
ARB	ANN ARBOR MUNICIPAL ARPT	6	8	10
ARR	AURORA MUNICIPAL ARPT	7	9	10
ASE	ASPEN PITKIN COUNTY / SARDY FIELD ARPT	10	12	11
ATL	THE WILLIAM B HARTSFIELD ATLANTA INTL ARPT	39	47	37
AUS	AUSTIN-BERGSTROM INTL ARPT	33	41	37
AVL	ASHEVILLE REGIONAL ARPT	14	17	13
AVP	WILKES-BARRE / SCRANTON INTL ARPT	18	22	22
AZO	KALAMAZOO / BATTLE CREEK INTERNATIONAL ARPT	17	21	22
BDL	BRADLEY INTL ARPT	12	14	14
BED	LAURENCE G HANSCOM FLD ARPT	10	12	12
BFI	BOEING FIELD / KING COUNTY INTL ARPT	15	19	18
BFL	MEADOWS FIELD ARPT	14	18	20
BGM	BINGHAMTON REGIONAL / EDWIN A LINK FIELD ARPT	11	13	12
BGR	BANGOR INTL ARPT	16	20	18
BHM	BIRMINGHAM INTL ARPT	27	33	30
BIL	BILLINGS LOGAN INTL ARPT	15	19	18

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
BIS	BISMARCK MUNI ARPT	10	12	14
BJC	JEFFCO ARPT	9	11	13
BNA	NASHVILLE INTL ARPT	38	46	42
BOI	BOISE AIR TERMINAL / GOWEN FLD ARPT	22	26	24
BOS	GENERAL EDWARD LAWRENCE LOGAN INTL ARPT	28	34	32
BPT	SOUTHEAST TEXAS REGIONAL ARPT	11	13	11
BTR	BATON ROUGE METROPOLITAN, RYAN FIELD ARPT	17	21	20
BTV	BURLINGTON INTL ARPT	16	20	18
BUF	BUFFALO NIAGARA INTL ARPT	23	28	30
BUR	BURBANK - GLENDALE-PASADENA ARPT	14	18	17
BWI	BALTIMORE-WASHINGTON INTL ARPT	22	26	26
C90	CHICAGO TRACON	81	99	89
CAE	COLUMBIA METROPOLITAN ARPT	20	24	23
CAK	AKRON CANTON REGIONAL ARPT	20	24	24
CCR	BUCHANAN FIELD ARPT	6	8	7
CDW	ESSEX COUNTY ARPT	8	10	10
CHA	LOVELL FIELD ARPT	16	20	21
CHS	CHARLESTON AFB / INTL ARPT	21	25	26
CID	THE EASTERN IOWA ARPT	14	18	18
CKB	HARRISON / MARION REGIONAL ARPT	12	14	12
CLE	CLEVELAND HOPKINS INTL ARPT	51	63	58
CLT	CHARLOTTE / DOUGLAS INTL ARPT	65	79	72
CMA	CAMARILLO ARPT	8	10	9
CMH	PORT COLUMBUS INTL ARPT	39	47	46
CMI	UNIVERSITY OF ILLINOIS-WILLARD ARPT	18	22	21
CNO	CHINO ARPT	8	10	12
COS	CITY OF COLORADO SPRINGS MUNI ARPT	23	28	29
CPR	NATRONA COUNTY INTL ARPT	8	10	8
CPS	ST. LOUIS DOWNTOWN ARPT	9	11	11
CRP	CORPUS CHRISTI INTL ARPT	40	48	44
CRQ	MC CLELLAN-PALOMAR ARPT	10	12	11
CRW	YEAGER ARPT	17	21	22
CSG	COLUMBUS METROPOLITAN ARPT	6	8	7
CVG	CINCINNATI / NORTHERN KENTUCKY INTL ARPT	63	77	76
D01	DENVER TRACON	51	63	58
D10	DALLAS - FORT WORTH TRACON	83	101	83
D21	DETROIT TRACON	47	57	51
DAB	DAYTONA BEACH INTL ARPT	50	61	52
DAL	DALLAS LOVE FIELD ARPT	19	23	21
DAY	AMES M COX DAYTON INTL ARPT	37	45	40

ID	Facility Name	Staffing Range		Actual On Board Staffing as of 09/30/06
		Low	High	
DCA	RONALD REAGAN WASHINGTON NATIONAL ARPT	22	26	27
DEN	DENVER INTL ARPT	32	39	35
DFW	DALLAS/FORT WORTH INTERNATIONAL ARPT	47	57	51
DLH	DULUTH INTL ARPT	13	15	17
DPA	DUPAGE APRT	9	11	12
DSM	DES MOINES INTL ARPT	23	28	26
DTW	DETROIT METROPOLITAN WAYNE COUNTY ARPT	28	34	37
DVT	PHOENIX DEER VALLEY ARPT	15	19	15
DWH	DAVID WAYNE HOOKS MEMORIAL ARPT	12	14	12
E10	HIGH DESERT TRACON	18	22	20
ELM	ELMIRA / CORNING REGIONAL ARPT	11	13	14
ELP	EL PASO INTL ARPT	18	22	25
EMT	EL MONTE ARPT	8	10	9
ERI	ERIE INTL / TOM RIDGE FIELD ARPT	14	17	18
EUG	MAHLON SWEET FIELD ARPT	18	22	23
EVV	EVANSVILLE REGIONAL ARPT	15	19	19
EWR	NEWARK LIBERTY INTL ARPT	30	36	30
FAI	FAIRBANKS INTL ARPT	17	21	28
FAR	HECTOR INTL ARPT	14	17	14
FAT	FRESNO YOSEMITE INTERNATIONAL ARPT	24	30	29
FAY	FAYETTEVILLE REGIONAL / GRANNIS FIELD ARPT	18	22	23
FCM	FLYING CLOUD ARPT	9	11	11
FFZ	FALCON FLD ARPT	12	14	11
FLL	FORT LAUDERDALE / HOLLYWOOD INTL ARPT	22	26	24
FLO	FLORENCE REGIONAL ARPT	12	14	13
FNT	BISHOP INTERNATIONAL ARPT	18	22	20
FPR	ST LUCIE COUNTY INTL ARPT	9	11	12
FRG	REPUBLIC ARPT	10	12	11
FSD	JOE FOSS FIELD ARPT	14	17	15
FSM	FORT SMITH REGIONAL ARPT	27	33	29
FTW	FORT WORTH MEACHAM INTL ARPT	11	13	19
FWA	FORT WAYNE INTL ARPT	18	22	23
FXE	FT. LAUDERDALE EXECUTIVE ARPT	12	14	15
GCN	GRAND CANYON NATIONAL PARK ARPT	7	9	8
GEG	SPOKANE INTL ARPT	23	29	29
GFK	GRAND FORKS INTL ARPT	14	17	16
GGG	EAST TEXAS RGNL ARPT	16	20	19
GPT	GULFPORT BILOXI INTL ARPT	14	18	17
GRB	AUSTIC STRAUBEL INTERNATIONAL ARPT	20	24	25
GRR	GERALD R. FORD INTERNATIONAL ARPT	18	22	21

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
GSO	PIEDMONT TRIAD INTERNATIONAL ARPT	25	31	28
GSP	GREENVILLE-SPARTANBURG INTL ARPT	17	21	16
GTF	GREAT FALLS INTL ARPT	12	14	12
HCF	HONOLULU CONTROL FACILITY CERAP	68	84	78
HEF	MANASSAS REGIONAL / HARRY P DAVIS FIELD ARPT	9	11	10
HIO	PORTLAND HILLSBORO ARPT	10	12	11
HLN	HELENA REGIONAL ARPT	7	9	9
HOU	WILLIAM P. HOBBY ARPT	16	20	19
HPN	WESTCHESTER CNTY ARPT	11	13	15
HSV	HUNTSVILLE INTL - CARL T JONES FIELD ARPT	15	19	18
HTS	TRI-STATE / MILTON J FERGUSON FIELD ARPT	14	17	16
HUF	TERRE HAUTE INTERNATIONAL-HULMAN FIELD ARPT	14	18	17
HWD	HAYWARD EXECUTIVE ARPT	7	9	11
I90	HOUSTON TRACON	68	83	77
IAD	WASHINGTON DULLES INTL ARPT	31	37	37
IAH	GEORGE BUSH INTERCONTINENTAL ARPT	32	39	30
ICT	WICHITA MIDCONTINENT ARPT	32	40	39
ILG	NEW CASTLE COUTY ARPT	10	12	9
ILM	WILMINGTON INTL ARPT	14	17	13
IND	INDIANAPOLIS INTL ARPT	43	53	50
ISP	LONG ISLAND MACARTHUR ARPT	13	15	19
ITO	HILO INTERNATIONAL ARPT	9	11	11
JAN	JACKSON INTL ARPT	16	20	20
JAX	JACKSONVILLE INTL ARPT	47	57	52
JFK	JOHN F KENNEDY INTL ARPT	28	34	32
JNU	JUNEAU INTL ARPT	8	10	9
K90	CAPE TRACON	18	22	24
L30	LAS VEGAS TRACON	42	52	55
LAF	PURDUE UNIVERSITY ARPT	9	11	9
LAN	CAPITAL CITY ARPT	20	24	24
LAS	MC CARRAN INTL ARPT	35	43	41
LAX	LOS ANGELES INTL ARPT	38	46	40
LBB	LUBBOCK INTL ARPT	18	22	23
LCH	LAKE CHARLES REGIONAL ARPT	13	15	14
LEX	BLUE GRASS ARPT	18	22	19
LFT	LAFAYETTE REGIONAL ARPT	17	21	19
LGA	LA GUARDIA ARPT	28	34	31
LGB	LONG BEACH / DAUGHERTY FIELD / ARPT	17	21	20
LIT	ADAMS FIELD ARPT	32	40	37
LNK	LINCOLN MUNICIPAL ARPT	14	18	17

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
LOU	BOWMAN FIELD ARPT	9	11	10
LVK	LIVERMORE MUNI ARPT	9	11	11
M98	MINNEAPOLIS TRACON	49	59	66
MAF	MIDLAND INTERNATIONAL ARPT	22	26	25
MBS	MBS INTL ARPT	14	18	19
MCI	KANSAS CITY INTL ARPT	34	42	38
MCO	ORLANDO INTL ARPT	69	85	71
MDT	HARRISBURG INTL ARPT	20	24	24
MDW	CHICAGO MIDWAY ARPT	21	25	29
MEM	MEMPHIS INTL ARPT	59	72	70
MFD	MANSFIELD LAHM REGIONAL ARPT	11	13	12
MGM	MONTGOMERY RGNL (DANNELLY FIELD) ARPT	15	19	17
MHT	MANCHESTER ARPT	10	12	13
MIA	MIAMI INTL ARPT	77	95	85
MIC	CRYSTAL ARPT	7	9	7
MKC	CHARLES B WHEELER DOWNTOWN ARPT	10	12	12
MKE	GENERAL MITCHELL INTERNATIONAL ARPT	37	45	48
MKG	MUSKEGON CNTY ARPT	16	20	20
MLI	QUAD CITY INTL ARPT	14	17	15
MLU	MONROE REGIONAL ARPT	13	15	16
MMU	MORRISTOWN MUNICIPAL ARPT	10	12	13
MOB	MOBILE REGIONAL ARPT	21	25	22
MRI	MERRILL FIELD ARPT	10	12	11
MRY	MONTEREY PENINSULA ARPT	6	8	8
MSN	DANE COUNTY REGIONAL - TRUAX FIELD ARPT	21	25	24
MSP	MINNEAPOLIS ST. PAUL INTL ARPT	29	35	39
MSY	LOUIS ARMSTRONG NEW ORLEANS INTL ARPT	28	34	35
MWH	GRANT COUNTY INTL ARPT	12	14	14
MYF	MONTGOMERY FIELD ARPT	10	12	11
MYR	MYRTLE BEACH INTL ARPT	15	19	16
N90	NEW YORK TRACON	176	215	200
NCT	NORTHERN CA TRACON	141	173	163
NEW	LAKEFRONT ARPT	6	8	5
NMM	MERIDIAN NAS / MC CAIN FIELD / ARPT	12	14	14
OAK	METROPOLITAN OAKLAND UBTk ARPT	23	28	27
OGG	KAHULUI ARPT	9	11	12
OKC	WILL ROGERS WORLD ARPT	29	35	37
OMA	EPPLEY AIRFIELD ARPT	11	13	15
ONT	ONTARIO INTL ARPT	12	14	17
ORD	CHICAGO O'HARE INTL ARPT	51	63	62

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
ORF	NORFOLK INTL ARPT	34	42	38
ORL	EXECUTIVE ARPT	9	11	12
P31	PENSACOLA TRACON	32	40	34
P50	PHOENIX TRACON	50	62	61
P80	PORTLAND TRACON	25	31	31
PAE	SNOHOMISH COUNTY (PAINE FLD) ARPT	8	10	9
PAO	PALO ALTO ARPT OF SANTA CLARA CO ARPT	9	11	8
PBI	PALM BEACH INTL ARPT	37	45	41
PCT	POTOMAC TRACON	147	179	165
PDK	DE KALB PEACHTREE ARPT	12	14	14
PDX	PORTLAND INTL ARPT	18	22	23
PHF	NEWPORT NEWS / WILLIAMSBURG INTL ARPT	12	14	13
PHL	PHILADELPHIA INTL ARPT	71	87	84
PHX	PHOENIX SKY HARBOR INTL ARPT	32	40	38
PIA	GREATER PEORIA REGIONAL ARPT	17	21	18
PIE	ST. PETERSBURG - CLEARWATER INTL ARPT	11	13	13
PIT	PITTSBURGH INTERNATIONAL ARPT	41	51	65
PNE	NORTHEAST PHILADELPHIA ARPT	8	10	10
PNS	PENSACOLA REGIONAL ARPT	9	11	12
POC	BRACKETT FIELD ARPT	9	11	10
POU	DUTCHESS COUNTY ARPT	9	11	9
PRC	ERNEST A LOVE FIELD ARPT	13	15	17
PSC	TRI-CITIES ARPT	14	17	15
PSP	PALM SPRINGS INTERNATIONAL ARPT	11	13	17
PTK	OAKLAND COUNTY INTERNATIONAL ARPT	14	18	18
PUB	PUEBLO MEMORIAL ARPT	11	13	12
PVD	THEODORE FRANCIS GREEN STATE ARPT	28	34	34
PWK	PALWAUKEE MUNI ARPT	9	11	11
PWM	PORTLAND INTL JETPORT ARPT	16	20	19
R90	OMAHA TRACON	14	18	17
RDG	READING REGIONAL / CARL A SPAATZ FIELD ARPT	13	15	14
RDU	RALEIGH DURHAM INTL ARPT	37	45	41
RFD	GREATER ROCKFORD ARPT	19	23	23
RHV	REID HILLVIEW OF SANTA CLARA COUNTY ARPT	9	11	11
RIC	RICHMOND INTL ARPT	11	13	14
RME	GRIFFISS AIRPARK ARPT	7	9	8
RNO	RENO / TAHOE INTERNATIONAL ARPT	20	24	23
ROA	ROANOKE REGIONAL / WOODRUM FIELD ARPT	20	24	27
ROC	GREATER ROCHESTER INTERNATIONAL ARPT	21	25	26
ROW	ROSWELL INDUSTRIAL AIR CENTER ARPT	14	17	14

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
RST	ROCHESTER INTERNATIONAL ARPT	12	14	13
RSW	SOUTHWEST FLORIDA INTL ARPT	23	29	23
RVS	RICHARD LLOYD JONES JR ARPT	14	17	16
S46	SEATTLE TRACON	40	48	51
S56	SALT LAKE CITY TRACON	37	45	48
SAN	SAN DIEGO INTL-LINDBERGH FLD ARPT	14	18	19
SAT	SAN ANTONIO INTL ARPT	44	54	47
SAV	SAVANNAH / HILTON HEAD INTERNATIONAL ARPT	21	25	25
SBA	SANTA BARBARA MUNI ARPT	23	28	31
SBN	SOUTH BEND REGIONAL ARPT	20	24	23
SCK	STOCKTON METROPOLITAN ARPT	6	8	8
SCT	SOUTHERN CA TRACON	186	228	222
SDF	LOUISVILLE INTL - STANDIFORD FIELD ARPT	40	48	43
SDL	SCOTTSDALE ARPT	9	11	10
SEA	SEATTLE TACOMA INTL ARPT	23	29	29
SEE	GILLESPIE FIELD ARPT	10	12	8
SFB	ORLANDO SANFORD ARPT	15	19	19
SFO	SAN FRANCISCO INTL ARPT	23	29	27
SGF	SPRINGFIELD BRANSON REGIONAL ARPT	24	30	30
SHV	SHREVEPORT REGIONAL ARPT	19	23	22
SJC	NORMAN Y MINETA SAN JOSE INTERNATIONAL ARPT	13	15	15
SJU	LUIS MUNOZ MARIN INTL ARPT	14	17	20
SLC	SALT LAKE CITY INTL ARPT	25	31	30
SMF	SACRAMENTO INTERNATIONAL ARPT	11	13	11
SMO	SANTA MONICA MUNI ARPT	9	11	12
SNA	JOHN WAYNE AIRPORT-ORANGE COUNTY ARPT	21	25	24
SPI	CAPITAL ARPT	12	14	15
SRQ	SARASOTA / BRADENTON INTL ARPT	10	12	12
STL	LAMBERT - ST LOUIS INTL ARPT	20	24	34
STP	ST. PAUL DOWNTOWN HOLMAN FLD ARPT	9	11	14
STS	SONOMA COUNTY ARPT	7	9	9
STT	CYRIL E KING ARPT	6	8	7
SUS	SPIRIT OF ST. LOUIS ARPT	9	11	15
SUX	SIOUX GATEWAY/COL BUD DAY FIELD ARPT	11	13	12
SYR	SYRACUSE HANCOCK INTL ARPT	21	25	25
T75	ST. LOUIS TRACON	42	52	49
TEB	TETERBORO ARPT	14	18	20
TLH	TALLAHASSEE REGIONAL ARPT	16	20	17
TMB	KENDALL-TAMIAMI EXECUTIVE ARPT	10	12	10
TOA	ZAMPERINI FIELD ARPT	8	10	10

ID	Facility Name	Staffing Range		Actual On
		Low	High	Board Staffing as of 09/30/06
TOL	TOLEDO EXPRESS ARPT	19	23	21
TPA	TAMPA INTL ARPT	57	69	60
TRI	TRI-CITY RGNL TN/VA ARPT	14	18	16
TUL	TULSA INTL ARPT	28	34	31
TUS	TUCSON INTL ARPT	16	20	18
TVC	CHERRY CAPITAL ARPT	7	9	9
TWF	JOSLIN FIELD - MAGIC VALLEY RGNL ARPT	6	8	6
TYS	MC GHEE TYSON ARPT	21	25	22
U90	TUCSON TRACON	20	24	20
VGT	NORTH LAS VEGAS ARPT	12	14	13
VNY	VAN NUYS ARPT	17	21	16
VRB	VERO BEACH MUNICIPAL ARPT	9	11	10
Y90	YANKEE TRACON	20	24	24
YIP	WILLOW RUN ARPT	8	10	12
YNG	YOUNGSTOWN-WARREN REGIONAL ARPT	17	21	19

Appendix B

Projected Controller Losses By Facility: FY 2007 – FY 2010

Appendix B presents the projected controller losses for en route and terminal air traffic control facilities for the period FY 2007 to FY 2010. Due to rounding, the facility level projections may not equal exactly the controller loss figures portrayed in Figure 4.4. These projections are based on facility demographics and historical data. Consequently, the data is subject to change.

En Route Facility Controller Staffing Losses

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
ZAB	ALBUQUERQUE ARTCC	18	23	24	24
ZAN	ANCHORAGE	11	12	12	12
ZAU	CHICAGO ARTCC	32	34	38	43
ZBW	BOSTON ARTCC	25	25	29	32
ZDC	WASHINGTON ARTCC	28	34	33	35
ZDV	DENVER ARTCC	26	28	30	32
ZFW	FORT WORTH ARTCC	24	29	32	34
ZHU	HOUSTON ARTCC	27	30	32	32
ZID	INDIANAPOLIS ARTCC	25	28	31	35
ZJX	JACKSONVILLE ARTCC	25	27	31	32
ZKC	KANSAS CITY ARTCC	26	30	32	34
ZLA	LOS ANGELES ARTCC	21	23	23	26
ZLC	SALT LAKE ARTCC	16	20	18	20
ZMA	MIAMI ARTCC	19	21	23	29
ZME	MEMPHIS ARTCC	24	26	28	31
ZMP	MINNEAPOLIS ARTCC	24	26	29	33
ZNY	NEW YORK ARTCC	26	26	26	28
ZOA	OAKLAND ARTCC	19	21	19	20
ZOB	CLEVELAND ARTCC	34	35	40	44
ZSE	SEATTLE ARTCC	16	21	20	23
ZSU	SAN JUAN	4	4	4	4
ZTL	ATLANTA ARTCC	34	35	37	42
ZUA	GUAM	2	2	2	2
TOTAL EN ROUTE		506	560	593	647

Terminal Facility Controller Staffing Losses

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
A11	ANCHORAGE TRACON	3	3	3	3
A80	ATLANTA TRACON	8	7	8	8
A90	BOSTON TRACON	5	5	6	6
ABE	LEHIGH VALLEY INTERNATIONAL ARPT	2	3	3	3
ABI	ABILENE REGIONAL ARPT	1	2	1	1
ABQ	ALBUQUERQUE INTL SUNPORT ARPT	3	3	3	4
ACK	NANTUCKET MEMORIAL ARPT	0	0	0	1
ACT	WACO REGIONAL ARPT	1	1	1	1
ACY	ATLANTIC CITY INTERNATIONAL ARPT	3	3	3	3
ADS	ADDISON ARPT	1	1	1	1
ADW	ANDREWS AFB	1	1	1	1
AFW	FORT WORTH ALLIANCE ARPT	2	2	1	1
AGC	ALLEGHENY COUNTY ARPT	1	1	1	1
AGS	AUGUSTA RGNL AT BUSH FIELD ARPT	1	1	1	1
ALB	ALBANY INTERNATIONAL ARPT	3	2	3	3
ALO	WATERLOO MUNICIPAL ARPT	1	1	1	1
AMA	AMARILLO INTL ARPT	1	1	2	2
ANC	TED STEVENS ANCHORAGE INTL ARPT	2	2	2	2
APA	CENTENNIAL ARPT	1	1	1	1
APC	NAPA COUNTY ARPT	1	1	1	1
ARB	ANN ARBOR MUNICIPAL ARPT	1	1	1	1
ARR	AURORA MUNICIPAL ARPT	1	1	1	1
ASE	ASPEN PITKIN COUNTY / SARDY FIELD ARPT	1	1	1	1
ATL	THE WILLIAM B HARTSFIELD ATLANTA INTL ARPT	4	4	4	4
AUS	AUSTIN-BERGSTROM INTL ARPT	5	5	4	4
AVL	ASHEVILLE REGIONAL ARPT	2	2	2	2
AVP	WILKES-BARRE / SCRANTON INTL ARPT	2	3	2	2
AZO	KALAMAZOO / BATTLE CREEK INTERNATIONAL ARPT	2	3	2	2
BDL	BRADLEY INTL ARPT	2	2	2	1
BED	LAURENCE G HANSCOM FLD ARPT	1	1	1	1
BFI	BOEING FIELD / KING COUNTY INTL ARPT	1	1	2	2
BFL	MEADOWS FIELD ARPT	1	1	2	2
BGM	BINGHAMTON REGIONAL / EDWIN A LINK FIELD ARPT	1	1	1	1
BGR	BANGOR INTL ARPT	2	2	2	2
BHM	BIRMINGHAM INTL ARPT	3	2	3	2
BIL	BILLINGS LOGAN INTL ARPT	3	2	2	2
BIS	BISMARCK MUNI ARPT	1	1	1	1
BJC	JEFFCO ARPT	1	2	2	1
BNA	NASHVILLE INTL ARPT	5	6	5	5

Controller Loss Estimates
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ID	Facility Name				
BOI	BOISE AIR TERMINAL / GOWEN FLD ARPT	1	2	2	2
BOS	GENERAL EDWARD LAWRENCE LOGAN INTL ARPT	3	3	4	3
BPT	SOUTHEAST TEXAS REGIONAL ARPT	2	1	1	1
BTR	BATON ROUGE METROPOLITAN, RYAN FIELD ARPT	1	1	1	1
BTV	BURLINGTON INTL ARPT	3	3	2	2
BUF	BUFFALO NIAGARA INTL ARPT	4	4	4	4
BUR	BURBANK - GLENDALE-PASADENA ARPT	1	2	2	2
BWI	BALTIMORE-WASHINGTON INTL ARPT	2	3	2	3
C90	CHICAGO TRACON	10	10	9	9
CAE	COLUMBIA METROPOLITAN ARPT	3	3	2	3
CAK	AKRON CANTON REGIONAL ARPT	2	2	2	2
CCR	BUCHANAN FIELD ARPT	1	1	1	1
CDW	ESSEX COUNTY ARPT	0	1	1	1
CHA	LOVELL FIELD ARPT	3	3	2	3
CHS	CHARLESTON AFB / INTL ARPT	2	2	3	3
CID	THE EASTERN IOWA ARPT	2	2	2	1
CKB	HARRISON / MARION REGIONAL ARPT	1	1	1	1
CLE	CLEVELAND HOPKINS INTL ARPT	5	6	5	6
CLT	CHARLOTTE / DOUGLAS INTL ARPT	9	7	8	7
CMA	CAMARILLO ARPT	1	1	1	1
CMH	PORT COLUMBUS INTL ARPT	6	6	6	6
CMI	UNIVERSITY OF ILLINOIS-WILLARD ARPT	1	1	1	2
CNO	CHINO ARPT	0	0	1	1
COS	CITY OF COLORADO SPRINGS MUNI ARPT	2	3	3	4
CPR	NATRONA COUNTY INTL ARPT	1	1	1	1
CPS	ST. LOUIS DOWNTOWN ARPT	1	1	1	1
CRP	CORPUS CHRISTI INTL ARPT	5	4	4	4
CRQ	MC CLELLAN-PALOMAR ARPT	1	1	1	1
CRW	YEAGER ARPT	2	2	2	2
CSG	COLUMBUS METROPOLITAN ARPT	1	1	1	1
CVG	CINCINNATI / NORTHERN KENTUCKY INTL ARPT	6	7	8	9
D01	DENVER TRACON	7	6	6	5
D10	DALLAS - FORT WORTH TRACON	10	11	9	10
D21	DETROIT TRACON	5	4	6	5
DAB	DAYTONA BEACH INTL ARPT	6	6	6	5
DAL	DALLAS LOVE FIELD ARPT	4	3	3	3
DAY	AMES M COX DAYTON INTL ARPT	2	3	3	4
DCA	RONALD REAGAN WASHINGTON NATIONAL ARPT	3	2	3	2
DEN	DENVER INTL ARPT	3	4	4	4
DFW	DALLAS/FORT WORTH INTERNATIONAL ARPT	5	6	6	6
DLH	DULUTH INTL ARPT	1	1	1	1

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
DPA	DUPAGE APRT	1	1	1	1
DSM	DES MOINES INTL ARPT	2	2	2	2
DTW	DETROIT METROPOLITAN WAYNE COUNTY ARPT	3	3	3	3
DVT	PHOENIX DEER VALLEY ARPT	1	1	1	1
DWH	DAVID WAYNE HOOKS MEMORIAL ARPT	2	1	1	1
E10	HIGH DESERT TRACON	2	2	2	2
ELM	ELMIRA / CORNING REGIONAL ARPT	1	1	1	1
ELP	EL PASO INTL ARPT	1	2	2	2
EMT	EL MONTE ARPT	1	1	1	1
ERI	ERIE INTL / TOM RIDGE FIELD ARPT	3	2	2	2
EUG	MAHLON SWEET FIELD ARPT	1	2	3	3
EVV	EVANSVILLE REGIONAL ARPT	1	1	1	1
EWR	NEWARK LIBERTY INTL ARPT	2	2	3	3
FAI	FAIRBANKS INTL ARPT	1	2	2	2
FAR	HECTOR INTL ARPT	1	1	1	1
FAT	FRESNO YOSEMITE INTERNATIONAL ARPT	4	3	4	3
FAY	FAYETTEVILLE REGIONAL / GRANNIS FIELD ARPT	2	2	2	2
FCM	FLYING CLOUD ARPT	1	1	1	1
FFZ	FALCON FLD ARPT	2	2	1	1
FLL	FORT LAUDERDALE / HOLLYWOOD INTL ARPT	2	3	3	3
FLO	FLORENCE REGIONAL ARPT	1	1	1	1
FNT	BISHOP INTERNATIONAL ARPT	1	1	1	2
FPR	ST LUCIE COUNTY INTL ARPT	1	1	1	1
FRG	REPUBLIC ARPT	1	1	1	1
FSD	JOE FOSS FIELD ARPT	1	1	1	1
FSM	FORT SMITH REGIONAL ARPT	3	2	2	2
FTW	FORT WORTH MEACHAM INTL ARPT	2	2	2	2
FWA	FORT WAYNE INTL ARPT	3	3	3	3
FXE	FT. LAUDERDALE EXECUTIVE ARPT	1	1	1	1
GCN	GRAND CANYON NATIONAL PARK ARPT	1	1	1	1
GEG	SPOKANE INTL ARPT	2	3	3	3
GFK	GRAND FORKS INTL ARPT	1	1	1	1
GGG	EAST TEXAS RGNL ARPT	1	1	1	1
GPT	GULFPORT BILOXI INTL ARPT	1	1	1	2
GRB	AUSTIC STRAUBEL INTERNATIONAL ARPT	3	3	3	4
GRR	GERALD R. FORD INTERNATIONAL ARPT	3	3	2	2
GSO	PIEDMONT TRIAD INTERNATIONAL ARPT	1	1	2	3
GSP	GREENVILLE -SPARTANBURG INTL ARPT	1	1	1	1
GTF	GREAT FALLS INTL ARPT	1	1	1	1
HCF	HONOLULU CONTROL FACILITY CERAP	9	8	7	7
HEF	MANASSAS REGIONAL / HARRY P DAVIS FIELD ARPT	0	1	1	1

Controller Loss Estimates
2007 2008 2009 2010

ID	Facility Name				
HIO	PORTLAND HILLSBORO ARPT	2	2	1	1
HLN	HELENA REGIONAL ARPT	1	1	2	1
HOU	WILLIAM P. HOBBY ARPT	1	1	1	1
HPN	WESTCHESTER CNTY ARPT	1	1	1	1
HSV	HUNTSVILLE INTL - CARL T JONES FIELD ARPT	2	2	2	2
HTS	TRI-STATE / MILTON J FERGUSON FIELD ARPT	1	2	2	2
HUF	TERRE HAUTE INTERNATIONAL-HULMAN FIELD ARPT	2	2	2	2
HWD	HAYWARD EXECUTIVE ARPT	1	1	1	1
I90	HOUSTON TRACON	8	8	8	8
IAD	WASHINGTON DULLES INTL ARPT	3	3	3	3
IAH	GEORGE BUSH INTERCONTINENTAL ARPT	3	4	3	3
ICT	WICHITA MIDCONTINENT ARPT	2	2	3	3
ILG	NEW CASTLE COUTY ARPT	1	1	1	1
ILM	WILMINGTON INTL ARPT	1	1	2	1
IND	INDIANAPOLIS INTL ARPT	5	5	4	4
ISP	LONG ISLAND MACARTHUR ARPT	2	2	2	2
ITO	HILO INTERNATIONAL ARPT	1	1	1	1
JAN	JACKSON INTL ARPT	2	2	2	2
JAX	JACKSONVILLE INTL ARPT	7	6	6	6
JFK	JOHN F KENNEDY INTL ARPT	4	4	4	3
JNU	JUNEAU INTL ARPT	0	1	0	0
K90	CAPE TRACON	2	3	2	3
L30	LAS VEGAS TRACON	3	4	4	4
LAF	PURDUE UNIVERSITY ARPT	1	1	1	1
LAN	CAPITAL CITY ARPT	2	2	2	2
LAS	MC CARRAN INTL ARPT	3	3	3	4
LAX	LOS ANGELES INTL ARPT	4	4	4	4
LBB	LUBBOCK INTL ARPT	1	1	2	2
LCH	LAKE CHARLES REGIONAL ARPT	0	1	1	1
LEX	BLUE GRASS ARPT	3	1	2	1
LFT	LAFAYETTE REGIONAL ARPT	1	1	1	1
LGA	LA GUARDIA ARPT	2	2	2	2
LGB	LONG BEACH / DAUGHERTY FIELD / ARPT	1	2	2	1
LIT	ADAMS FIELD ARPT	3	3	3	4
LNK	LINCOLN MUNICIPAL ARPT	1	2	1	1
LOU	BOWMAN FIELD ARPT	2	1	1	1
LVK	LIVERMORE MUNI ARPT	1	1	1	1
M98	MINNEAPOLIS TRACON	5	5	5	5
MAF	MIDLAND INTERNATIONAL ARPT	2	2	2	2
MBS	MBS INTL ARPT	1	2	2	2
MCI	KANSAS CITY INTL ARPT	4	5	4	5

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
MCO	ORLANDO INTL ARPT	11	9	8	9
MDT	HARRISBURG INTL ARPT	2	2	2	2
MDW	CHICAGO MIDWAY ARPT	3	3	3	3
MEM	MEMPHIS INTL ARPT	3	5	6	6
MFD	MANSFIELD LAHM REGIONAL ARPT	2	1	1	1
MGM	MONTGOMERY RGNL (DANNELLY FIELD) ARPT	1	1	2	1
MHT	MANCHESTER ARPT	1	1	1	1
MIA	MIAMI INTL ARPT	6	7	8	9
MIC	CRYSTAL ARPT	0	0	1	0
MKC	CHARLES B WHEELER DOWNTOWN ARPT	1	1	1	1
MKE	GENERAL MITCHELL INTERNATIONAL ARPT	4	4	5	5
MKG	MUSKEGON CNTY ARPT	2	2	2	2
MLI	QUAD CITY INTL ARPT	2	1	1	2
MLU	MONROE REGIONAL ARPT	1	1	1	1
MMU	MORRISTOWN MUNICIPAL ARPT	2	1	1	1
MOB	MOBILE REGIONAL ARPT	1	1	1	2
MRI	MERRILL FIELD ARPT	0	0	0	0
MRY	MONTEREY PENINSULA ARPT	0	0	1	1
MSN	DANE COUNTY REGIONAL - TRUAX FIELD ARPT	2	2	2	2
MSP	MINNEAPOLIS ST. PAUL INTL ARPT	4	3	3	3
MSY	LOUIS ARMSTRONG NEW ORLEANS INTL ARPT	2	3	3	2
MWH	GRANT COUNTY INTL ARPT	1	1	1	1
MYF	MONTGOMERY FIELD ARPT	0	1	1	1
MYR	MYRTLE BEACH INTL ARPT	1	1	1	1
N90	NEW YORK TRACON	16	16	16	16
NCT	NORTHERN CA TRACON	16	17	16	15
NEW	LAKEFRONT ARPT	1	0	0	0
NMM	MERIDIAN NAS / MC CAIN FIELD / ARPT	1	1	1	1
OAK	METROPOLITAN OAKLAND UBTX ARPT	3	3	3	3
OGG	KAHULUI ARPT	1	1	1	1
OKC	WILL ROGERS WORLD ARPT	4	4	3	4
OMA	EPPLEY AIRFIELD ARPT	0	1	1	1
ONT	ONTARIO INTL ARPT	1	1	1	2
ORD	CHICAGO O'HARE INTL ARPT	5	6	6	6
ORF	NORFOLK INTL ARPT	4	4	3	4
ORL	EXECUTIVE ARPT	2	1	1	1
P31	PENSACOLA TRACON	2	3	2	4
P50	PHOENIX TRACON	6	7	6	6
P80	PORTLAND TRACON	2	3	3	3
PAE	SNOHOMISH COUNTY (PAINE FLD) ARPT	1	1	1	1
PAO	PALO ALTO ARPT OF SANTA CLARA CO ARPT	1	1	1	1

Controller Loss Estimates
2007 2008 2009 2010

ID	Facility Name				
PBI	PALM BEACH INTL ARPT	4	5	5	4
PCT	POTOMAC TRACON	13	13	13	15
PDK	DE KALB PEACHTREE ARPT	1	1	1	2
PDX	PORTLAND INTL ARPT	1	2	2	2
PHF	NEWPORT NEWS / WILLIAMSBURG INTERNATIONAL ARPT	2	1	1	1
PHL	PHILADELPHIA INTL ARPT	7	7	7	7
PHX	PHOENIX SKY HARBOR INTL ARPT	4	4	5	4
PIA	GREATER PEORIA REGIONAL ARPT	1	1	1	1
PIE	ST. PETERSBURG - CLEARWATER INTL ARPT	1	1	1	1
PIT	PITTSBURGH INTERNATIONAL ARPT	6	6	6	7
PNE	NORTHEAST PHILADELPHIA ARPT	2	1	2	1
PNS	PENSACOLA REGIONAL ARPT	1	1	1	1
POC	BRACKETT FIELD ARPT	1	1	1	1
POU	DUTCHESS COUNTY ARPT	1	1	1	1
PRC	ERNEST A LOVE FIELD ARPT	1	1	1	1
PSC	TRI-CITIES ARPT	2	1	1	1
PSP	PALM SPRINGS INTERNATIONAL ARPT	1	2	2	3
PTK	OAKLAND COUNTY INTERNATIONAL ARPT	1	1	1	2
PUB	PUEBLO MEMORIAL ARPT	1	1	1	2
PVD	THEODORE FRANCIS GREEN STATE ARPT	4	4	4	4
PWK	PALWAUKEE MUNI ARPT	1	1	1	1
PWM	PORTLAND INTL JETPORT ARPT	3	3	3	3
R90	OMAHA TRACON	1	2	2	2
RDG	READING REGIONAL / CARL A SPAATZ FIELD ARPT	2	2	2	1
RDU	RALEIGH DURHAM INTL ARPT	4	4	4	4
RFD	GREATER ROCKFORD ARPT	2	2	2	2
RHV	REID HILLVIEW OF SANTA CLARA COUNTY ARPT	1	1	1	1
RIC	RICHMOND INTL ARPT	1	1	1	1
RME	GRIFFISS AIRPARK ARPT	1	1	1	1
RNO	RENO / TAHOE INTERNATIONAL ARPT	2	2	2	2
ROA	ROANOKE REGIONAL / WOODRUM FIELD ARPT	4	4	3	3
ROC	GREATER ROCHESTER INTERNATIONAL ARPT	2	2	2	2
ROW	ROSWELL INDUSTRIAL AIR CENTER ARPT	1	1	1	1
RST	ROCHESTER INTERNATIONAL ARPT	0	1	1	1
RSW	SOUTHWEST FLORIDA INTL ARPT	3	2	2	2
RVS	RICHARD LLOYD JONES JR ARPT	0	1	1	1
S46	SEATTLE TRACON	6	6	6	6
S56	SALT LAKE CITY TRACON	2	3	3	4
SAN	SAN DIEGO INTL-LINDBERGH FLD ARPT	2	3	2	2
SAT	SAN ANTONIO INTL ARPT	6	6	5	5
SAV	SAVANNAH / HILTON HEAD INTERNATIONAL ARPT	2	2	2	2

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
SBA	SANTA BARBARA MUNI ARPT	2	3	3	3
SBN	SOUTH BEND REGIONAL ARPT	2	2	2	2
SCK	STOCKTON METROPOLITAN ARPT	1	1	1	1
SCT	SOUTHERN CA TRACON	21	21	21	22
SDF	LOUISVILLE INTL - STANDIFORD FIELD ARPT	3	3	3	4
SDL	SCOTTSDALE ARPT	1	1	1	1
SEA	SEATTLE TACOMA INTL ARPT	4	4	4	4
SEE	GILLESPIE FIELD ARPT	1	1	1	1
SFB	ORLANDO SANFORD ARPT	1	1	2	1
SFO	SAN FRANCISCO INTL ARPT	2	3	3	3
SGF	SPRINGFIELD BRANSON REGIONAL ARPT	2	2	2	2
SHV	SHREVEPORT REGIONAL ARPT	2	1	2	1
SJC	NORMAN Y MINETA SAN JOSE INTERNATIONAL ARPT	1	1	1	1
SJU	LUIS MUNOZ MARIN INTL ARPT	1	1	1	1
SLC	SALT LAKE CITY INTL ARPT	3	4	3	4
SMF	SACRAMENTO INTERNATIONAL ARPT	1	1	1	1
SMO	SANTA MONICA MUNI ARPT	2	2	1	1
SNA	JOHN WAYNE AIRPORT-ORANGE COUNTY ARPT	2	2	2	2
SPI	CAPITAL ARPT	0	0	1	1
SRQ	SARASOTA / BRADENTON INTL ARPT	1	2	2	1
STL	LAMBERT - ST LOUIS INTL ARPT	2	3	3	3
STP	ST. PAUL DOWNTOWN HOLMAN FLD ARPT	1	1	1	2
STS	SONOMA COUNTY ARPT	0	0	0	1
STT	CYRIL E KING ARPT	0	0	1	1
SUS	SPIRIT OF ST. LOUIS ARPT	1	1	2	1
SUX	SIOUX GATEWAY/COL BUD DAY FIELD ARPT	0	0	0	0
SYR	SYRACUSE HANCOCK INTL ARPT	3	3	3	2
T75	ST. LOUIS TRACON	6	6	6	6
TEB	TETERBORO ARPT	1	1	1	1
TLH	TALLAHASSEE REGIONAL ARPT	2	2	1	2
TMB	KENDALL-TAMIAMI EXECUTIVE ARPT	1	1	1	1
TOA	ZAMPERINI FIELD ARPT	0	1	0	1
TOL	TOLEDO EXPRESS ARPT	2	2	2	2
TPA	TAMPA INTL ARPT	8	8	8	9
TRI	TRI-CITY RGNL TN/VA ARPT	1	1	2	2
TUL	TULSA INTL ARPT	2	3	2	3
TUS	TUCSON INTL ARPT	1	2	2	2
TVC	CHERRY CAPITAL ARPT	1	1	1	1
TWF	JOSLIN FIELD - MAGIC VALLEY RGNL ARPT	0	0	0	0
TYS	MC GHEE TYSON ARPT	2	1	2	3
U90	TUCSON TRACON	2	2	2	2

ID	Facility Name	Controller Loss Estimates			
		2007	2008	2009	2010
VGT	NORTH LAS VEGAS ARPT	1	1	1	2
VNY	VAN NUYS ARPT	2	2	1	1
VRB	VERO BEACH MUNICIPAL ARPT	1	1	1	1
Y90	YANKEE TRACON	4	4	3	3
YIP	WILLOW RUN ARPT	1	1	1	1
YNG	YOUNGSTOWN-WARREN REGIONAL ARPT	2	2	2	2
TOTAL TERMINAL		691	716	715	733
TOTAL EN ROUTE AND TERMINAL LOSSES		1197	1276	1308	1380

