Point-Counterpoint

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The purpose of this special section of the journal is to bring to light those articles which take a stand or make a point, that have also been presented in the formal format of a research paper. The point made by Ruiz and Voges, as regards air traffic controller recruitment and training, focuses on recruitment, now that the number of Collegiate Training Initiative institutions has nearly doubled. Those institutions just getting started will need to understand recruitment and training from the FAA's perspective. Certainly the objectives, provided for by the FAA, will help guide the curriculum, but much of what is actually taught and assessed will be determined by the institution. Is there a potential problem here?

Please consider what Jose Ruiz and John Voges have to say on their subject. After you've considered their work, please feel free to send your counterpoint. A counterpoint is an objection or clarification that needs to be published to bring balance to the subject being contested. As you think of a counterpoint, please keep in mind that this forum is not for public beatings or public insults. Consider those making a point to be honest and open, and desirous for your response.

What do you have to say?

Please send your counterpoint to:

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Air Traffic Controller Recruitment and Training:
A Changing Environment

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Abstract

The Federal Aviation Administration (FAA) is in the midst of an air traffic controller staffing crisis. The FAA anticipates that approximately 72 percent of the air traffic controller workforce will be eligible for retirement (FAA, 2007a). To offset this impending wave of retirements, the FAA plans to hire and train more than 15,000 new air traffic controllers over the next 10 years (FAA, 2007a). In response to this staffing challenge, the FAA is modifying and expanding its recruitment and training policies. This article discusses the sequence of events leading to the FAA's air traffic control (ATC) staffing dilemma. It also examines the numerous recruitment and training venues being explored by the FAA as it struggles to negotiate the challenges of staffing the safest and most complex ATC system in the world.

Introduction

The Federal Aviation Administration (FAA) employs approximately 14,000 air traffic controllers (FAA, 2007a). On a daily basis, these professionals safely guide more than 50,000 aircraft in U.S. domestic airspace and the 24.6 million square miles of international oceanic airspace delegated to the United States by the International Civil Aviation Organization (FAA, 2007a).

Over the next 10 years, the FAA anticipates that more than 70 percent of the air traffic controller workforce will be eligible for retirement (FAA, 2007a). To offset this impending wave of retirements, the FAA plans to hire and train more than 15,000 new air traffic controllers over the next decade (FAA, 2007a). How is the FAA planning to recruit and train the thousands of applicants needed to supplant an aging air traffic controller workforce?

The FAA recognizes the decisive nature of the air traffic controller staffing challenges it faces over the next decade. The following quote from the 2007 ATC Workforce Plan communicates the sense of urgency the FAA has placed on the staffing issue.

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, 2007a, p. 3)

This article discusses the sequence of events leading to the FAA's air traffic control (ATC) staffing dilemma. It also examines the numerous recruitment and training venues being explored by the FAA as it struggles to negotiate the challenges of staffing the safest and most complex air traffic control (ATC) system in the world.

Position Description

What is an air traffic controller? An air traffic control specialist (ATCS) is described as an individual responsible for providing the safe, orderly, and expeditious flow of air traffic (Nolan, 2004). Air traffic controllers are generally categorized into one of three specializations: terminal, en route and flight service.

Terminal Controller – There are two types of terminal controllers based on operational function: tower specialists and terminal radar approach control (TRACON) specialists. Tower specialists control air traffic at airports. They issue taxi and takeoff instructions, air traffic control clearances, and provide aircraft separation services based on visual observation. TRACON specialists provide radar separation services to aircraft within their airspace. They assist aircraft transition from the terminal environment to the en route environment (Nolan, 2004).

En Route Center Controller - Air traffic control specialists at FAA Air Route Traffic Control Centers (ARTCCs) provide radar separation services to aircraft operating in the en route environment. In some cases, manual procedures are used to track the progress of aircraft within a center's airspace. En Route Center controllers manage large parcels of airspace that, in some cases, may encompass an entire state (Nolan, 2004).

Flight Service Station (FSS) Controller - FSS controllers provide pilot briefings, enroute communications, Visual Flight Rules (VFR) aircraft search and rescue services, assist lost aircraft and aircraft in emergency situations, relay ATC clearances, originate Notices to Airmen (NOTAMs), broadcast aviation weather information, receive and process IFR flight plans, and monitor the status of navigational aids (Nolan, 2004). However, as of 2005, many of these functions have now been assumed by Automated Flight Service Stations (FAA, 2008a).

Background

The sequence of events that placed the FAA in such a precarious staffing dilemma began when members of the Professional Air Traffic Controllers Organization (PATCO) staged an illegal strike on August 3, 1981 (Nolan, 2004). 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 prescribed deadline (FAA, 2004). From 1982 through 1991, the agency hired an average of 2,655 controllers per year (FAA, 2004). This hiring initiative created the likelihood that a large portion of the controller workforce would reach retirement age in roughly the same period of time. That expectation has come to fruition. Figure 1 indicates the

number of controllers who are currently retirement eligible as of September 2006 and those projected to become retirement eligible through FY 2016 (FAA, 2007a).

Figure 1. Projected numbers of retirement eligible air traffic controllers.
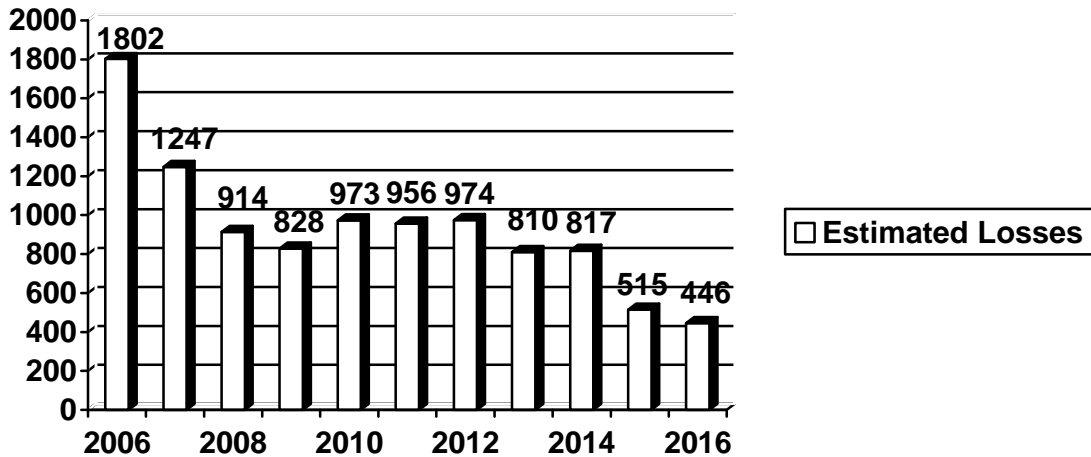
Recruitment and Training Venues

The FAA is pursuing a multi-pronged approach toward ATC applicant recruitment. The FAA is focusing its recruitment efforts toward four primary venues: two categories of veterans with previous ATC experience, former members of the Professional Air Traffic Controllers Organization (PATCO), graduates of an Air Traffic Collegiate Training Initiative (AT-CTI) program, and members of the general populace without previous ATC experience (FAA, 2007a).

*Veterans with Previous ATC Experien*ce

These applicants have prior Department of Defense (military) ATC experience. The FAA has begun reaching out to former military personnel through military separation centers to ensure the veteran population is aware of ATC employment opportunities (FAA, 2007a). This section discusses ATC employment opportunities for veterans who are eligible under two different programs, the Veterans Recruitment Appointment (VRA) authority and the retired military air traffic controllers (RMC) program.

Veterans Who Are Eligible Under The Veterans Recruitment Appointment Authority

The Veterans Recruitment Appointment (VRA) is an authority by which agencies may appoint an eligible veteran without competition. The applicant does not have to be on a list of eligible candidates; but to be eligible, veterans must meet the following qualification requirements (USAJOBS, 2007 and FAA, 2007c):
1. Have a compensable service-connected disability rating of 10% or more; or
2. Have served on active duty in the Armed Forces during a war or in a campaign or expedition for which a campaign badge or expeditionary medal was awarded; or
3. Have served on active duty in the Armed Forces during a military operation for which an Armed Forces Service Medal (AFSM) was awarded on or after June 1, 1992; or
4. Have separated from active service (for other than training purposes) within the last three years.
5. Have been discharged under general or honorable conditions.

6. Possess 52 consecutive weeks of ATC experience in a military or civilian ATC
facility which demonstrates possession of the knowledge, skill and ability required to
perform the level of work.

This experience must have provided a comprehensive knowledge of the laws, rules, regulations and procedures governing the movement of air traffic; knowledge of aircraft separation standards and control techniques; and the ability to apply them properly, often under conditions of great stress. A maximum age of less than 31 years is established   for entry into air traffic control positions covered by Public Law 92-291.

Veterans who are eligible under the VRA authority represent a particularly rich source of experienced ATC applicants. In FY 2006, the FAA recruited 1,865 veterans under the auspices of the VRA authority (FAA, 2007a).

Veterans Who Are Retired Military Air Traffic Controllers

The maximum entry age of less than 31 years of age criteria negated the possibility of retired military air traffic controllers from pursuing careers with the FAA as civil air traffic controllers. However, the FAA recognizes that retired military air traffic controllers represent an experienced cadre of air traffic control professionals. This source of personnel could assist the FAA in meeting short term staffing goals. As a result, the FAA created the Employment of Retired Military Air Traffic Controllers Program. Selected candidates are employed on a time-limited appointment that cannot exceed ten years. Additional, successive five year appointments are possible. However, no appointment may exceed the last day of the month in which the individual reaches the age of 56 (FAA, 2007b).

Applicants must possess the following minimum qualifications (FAA, 2007b):
1. Be on terminal leave pending retirement from active duty military service or have retired from active duty military service on or after September 17, 1999.
2. Have received either air traffic control specialist certification or a facility rating according to FAA standards.
3. Must be a U.S. citizen at the time of application and meet all application, qualification and position requirements, including applicable medical and security requirements.

Selected candidates will not be required to attend the FAA Academy or receive initial training. They are entered at the level of training deemed appropriate by the receiving facility (FAA, 2007b). In FY 2006, the FAA recruited 255 retired military ATC candidates (FAA, 2007a).

Former PATCO Controllers

ATC employment opportunities exist for former PATCO controllers. Originally, PATCO air traffic controllers who were fired, by President Reagan in 1981, were subject to a lifetime ban from federal employment. President Bill Clinton lifted that ban in 1993 (Washington Post, 2007).

The FAA maintains a PATCO register composed of former members interested in resuming a career as an air traffic controller. However, many former PATCO members have since moved on to other careers, some have reached the mandatory retirement age of 56, and others still harbor resentment toward the FAA. Consequently, former PATCO controllers cannot be viewed as a principal source of experienced air traffic controllers.

Former PATCO members are directed to contact specific ATC regions for employment details unique to that region (TheTRACON, 2007). The FAA received 492 applications from former PATCO members - which represent 14% of the 3479 applications collected in FY 2006 (FAA, 2007a).

Graduates of an Air Traffic Collegiate Training Initiative Program

These applicants have successfully completed an aviation-related program of study from an institution participating in the FAA's AT-CTI program. AT-CTI is a post-secondary academic program designed to recruit and train students for careers as ATC specialists. The FAA established the AT-CTI program with the intent of using collegiate aviation as a primary means of realizing future ATC staffing requirements (FAA, 1998).

The AT-CTI program was implemented in 1989 with a specific set of objectives (FAA, 1998):

1. Test the concept that non-federal, post-secondary educational institutions can develop, deliver and implement air traffic control recruiting, selection and training programs;

2. Attract females and minorities to careers in air traffic control; and

3. Develop a more educated work force in the FAA.

The FAA originally partnered with two academic institutions, the Minneapolis Community and Technical College, formerly known as the Mid-America Aviation Resource Consortium, Eden Prairie, MN; and Hampton University, Hampton, VA (Broach, 1998). In 1991, three more academic institutions were selected for the program: Community College of Beaver County, Monaca, PA; University of North Dakota, Grand Forks, ND; and University of Alaska-Anchorage, Anchorage, AK (Morrison, Fotouhi & Broach, 1996).

"These schools are an excellent jump start for a job in air traffic control", said Robert A. Sturgell, the FAA's acting administrator. "These institutions will give thousands of future controllers an inside track on a great career." (FAA, 2008b, p. 1).

Over the last three years, the agency has hired 5,000 new controllers and plans to hire more than 2,000 in fiscal year 2009. In the past five years, CTI schools have graduated more than 4,000 students from their aviation programs. Three thousand of those graduates were hired by the FAA (FAA, 2008b, p. 1).

Presently, 31 collegiate institutions across the United States offer two year or four year ATC degree programs that can lead to employment with the FAA (FAA, 2008b):

1. College of Aeronautics, Flushing, NY
2. Community College of Beaver County, Beaver Falls, PA
3. Daniel Webster College, Nashua, NH
4. Dowling College, Oakdale, NY
5. Embry-Riddle Aeronautical University, Daytona Beach, FL
6. Hampton University, Hampton, VA
7. Inter American University of Puerto Rico, San Juan, PR
8. Miami-Dade Community College, Homestead, FL
9. Middle Tennessee State University, Murfreesboro, TN
10. Mount San Antonio College, Walnut, CA
11. Purdue University, West Lafayette, IN
12. University of Alaska-Anchorage, Anchorage, AK
13. University of North Dakota, Grand Forks, ND
14. Minneapolis Community & Technical College, MN
15. Middle Georgia College, GA
16. The University of Oklahoma, OK
17. Metropolitan State College of Denver, CO
18. Florida Community College at Jacksonville, FL
19. Arizona State University, AZ
20. Lewis University, IL
21. Green River Community College, WA
22. Community College of Baltimore County, MD
23. Kent State University, OH
24. Aims Community College, CO
25. Broward College, FL

26. Eastern New Mexico-Roswell, NM
27. Embry Riddle Aeronautical University-Prescott, AZ
28. Jacksonville University, FL
29. LeTourneau University, TX
30. St. Cloud University, MN
31. Tulsa Community College, OK

The General Populace Without Previous ATC Experience

Applicants from the general public may request consideration for vacancies announced by the FAA. This represents a significant departure from the FAA's former recruitment policy which excluded individuals without previous ATC experience or a degree from an AT-CTI institution. In recent years, two methods have been used by the FAA to recruit individuals from the general populace: General Public Positions and Local FAA Job Fairs.

General Public Positions

General public job postings indicate that a specific ATC employment posting is available to applicants from the general population. Prior ATC experience or training is not required. General public positions typically apply to a specific ATC region.

To qualify for an entry-level air traffic control specialist position, applicants must meet the following requirements (FAA, 2005):
1. Achieve a qualifying score on the current FAA authorized aptitude test;
2. Have a minimum of three years of progressively responsible work experience or a full four-year course of study leading to a bachelor's degree, or an equivalent combination of work experience and college credits;
3. Be a U.S. citizen
4. Be able to speak English clearly enough to be understood over radios, intercoms, and similar communications equipment; and
5. Be below the maximum entry age of 31 years of age.

General work experience is defined as any progressively responsible work. For example, a person working a full-time (40 hours per week) for three years would meet the three-year general work experience requirement. A person who works part-time (20 hours per week) for six years would also meet the three-year general work experience requirement. Qualifying education is successfully completed study in any field leading to a bachelor's or higher degree at an accredited college or university (FAA, 2005).

Local Federal Aviation Administration Job Fairs

Local FAA job fairs have been held by the FAA in an effort to recruit applicants for a specific ATC facility. Open Applicant Positions and Local FAA Job Fairs require identical applicant qualifications. However, unlike "open applicant positions", local job fairs target their efforts toward the recruitment of applicants for specific ATC facilities. In 2006, the FAA hosted a local job fair in Kansas City, Missouri (FAA, 2007a).

The FAA did not report the total number of candidates recruited under either of the two "general population" programs discussed in this section.

Additional Training Developments

The FAA intends to make greater use of ATC simulation in an attempt to reduce air traffic controller training time. The 2007 FAA ATC Workforce Plan mentions that, "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" (FAA, 2007a, p. 34).

The FAA has also increased its training capacity at the FAA Academy to accommodate greater numbers of ATC trainees (FAA, 2007a). The 2007 FAA ATC Workforce Plan states, "With increased capacity at the FAA Academy plus access to facility simulators, controller developmentals [trainees] finish their training faster and become available for regular staffing. This also frees their instructors to control traffic" (FAA, 2007a, p. 34).

The FAA has not only increased its recruitment efforts, it also wants to ensure that ATC trainees become fully qualified air traffic controllers as quickly as possible.

<center>Conclusion</center>

The FAA has assumed a multi-pronged approach toward air traffic control recruitment and training that is a significant departure from its previous policies. Past practice dictated that applicants had to possess previous ATC experience or be the graduate of an AT-CTI program to be considered viable ATC candidates. Present recruiting and training policies are no longer bound to those restrictions.

The FAA's present recruiting and training policies reflect the sense of urgency dictated by the FAA's ATC staffing situation, for example: (a) the FAA is now recruiting candidates without previous ATC experience from the general population; (b) the FAA is making concessions that permit retired military air traffic controllers to pursue, previously unattainable, FAA ATC positions; (c) the FAA has expanded the Air Traffic Collegiate Training Initiative program; (d) the FAA has increased the use of ATC simulation to reduce training time; and (e) the FAA has increased training capacity at the FAA Academy to accommodate greater numbers of ATC trainees (FAA, 2007a).

What will be the long term effectiveness of the FAA's recruiting and training strategies be on the re-staffing of the ATC workforce? Only the passage of time and increased observation will permit a response to that query. However, the FAA appears committed to adequately re-staffing the ATC workforce. The 2007 FAA ATC Workforce Plan states:

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 [National Airspace System]. Having enough   controllers in place, when and where we need them, is critical. (FAA, 2007a, p. 12)

Innovative methods of recruiting and training a new air traffic control workforce are at the core of the FAA's staffing strategy, a strategy upon which the safety of the national airspace system hinges.

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