



Testimony of
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Good morning Chairman Costello, and Members of the Subcommittee. I am pleased to be here today to discuss air traffic controller training, the Federal Aviation Administration's (FAA) Collegiate Training Initiative (CTI), and suggestions for increasing the number of qualified air traffic controllers (ATC). As you are probably aware, there is a looming crisis in the nation's control towers as the cohort of controllers hired in the wake of the 1981 strike reach retirement age. Not only do these controllers need to be replaced, but there is also a growing need to provide air traffic control services for the new transportation systems of very light jets (VLJ). Government experts predict that by 2025 there will be three times the number of planes in the skies as today.¹ Numerous General Accounting Office (GAO) reports have been warning for years about the need to better prepare for controller attrition^{2,3,4}, and the FAA's own projections indicate that approximately 72 percent of the current air traffic controller workforce will be eligible to retire in the next ten years.⁵ Clearly there is a need to attract and train new air traffic controllers and use all available resources to provide the exacting, technical training they require.

Controller Hiring Sources

There are three sources of air traffic controllers:

- **Previous controllers** – Includes former Department of Defense (DOD) and FAA controllers;
- **Collegiate Training Initiative** -- Graduates of an aviation-related course of study from a school in the FAA's CTI program; and
- **General Public** – Applicants responding to an FAA vacancy announcement.

The percentage of controllers supplied by the CTI program varies, but was 33 percent of the total as of November 2005⁶, and 25 percent at the end of Fiscal Year 2006 (September 2006).

¹ "Flying the Crowded Skies: Challenges for Aviation," *New York Times*, January 15, 2007.

² *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition*, GAO 02-591, June 2002.

³ *Federal Aviation Administration: Plan Still Needed to Meet Challenges to Effectively Managing Air Traffic Controller Workforce*, GAO 04-887T, June 15, 2004.

⁴ *Air Traffic Control: Status of the Current Modernization Program and Planning for the Next Generation System*, GAO 06-738T, May 4, 2006.

⁵ *A Plan for the Future 2007-2016: The Federal Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce*, FAA, March 2007.

⁶ *A Plan for the Future 2006-2015: The Federal Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce*, FAA, June 2006.

Controller Hiring Sources⁵
(As of the end of FY 2006)

	Number of Controllers	% of Total
Previous Controllers		
Veterans Readjustment Appointment	1,865	54%
Retired Military Controllers	255	7%
Former PATCO Controllers	492	14%
Collegiate Training Initiative	867	25%
TOTAL	3,479	

These figures do not, however, reflect the true value of CTI graduates who require less time to be certified after the mandatory on-the-job, facility-specific training for all controllers. Only controllers who have transferred from another FAA facility require less time to certify at their new facility.

Time to Certify Air Traffic Controllers⁷

Source of ATC Hire	Average Number of Years to Certify
Transfers from other facilities	1.6
Collegiate Training Initiative Graduates/FAA Roster	2.5
Department of Defense Controllers	3
Reinstatements (former PATCO controllers)	3.9

⁷ *Opportunities to Improve FAA's Process for Placing and Training Air Traffic Controllers in Light of Pending Retirements*, FAA Rpt. No. AV-2004-060, June 2, 2004.

It is clear that the training and education that controllers receive at the colleges and universities in CTI prepares them to join the air traffic controller workforce with minimal cost and additional training from the FAA.

The Collegiate Training Initiative (CTI)

CTI was started 1989 when Congress established the Mid-America Aviation Resource Consortium (MARC) to provide ATC training in Minnesota.⁸ Hampton University was shortly thereafter awarded FAA funds for ATC training in 1990. Interest in the program led the FAA to add three more schools in 1991 – Community College of Beaver County, University of North Dakota, and the University of Alaska.⁹ Nine more schools were admitted to the CTI program in 1997.¹⁰ MARC was disbanded as a consortium when funding was discontinued, but Minneapolis Community & Technical College was added to CTI. There have been no new schools added to CTI since 1997 and there is no process at the FAA to become a CTI school, although there is strong interest in joining by well-qualified schools.¹¹

Graduates of CTI schools earn either an associate (2-year) or bachelors (4-year) degree in aviation administration or management that incorporates basic training courses for air traffic controllers. Air traffic controllers need to have an associates degree. Those who wish to go into management need a bachelors degree. CTI graduates can complete the requirements for a bachelors degree, if they desire, while working as controllers. The cost of earning a degree varies widely among the CTI schools, from a low of about \$4,000 for an associate's degree from a public school, to a high of almost \$100,000 for a bachelor's degree from a private university.

This cost is borne by the student, who comes to the FAA ready for the on-the-job training that is necessary to be certified. Appendix A contains the detailed process that CTI graduates must go through to get a training slot at the FAA Academy in Oklahoma City. Once in Oklahoma, they undergo further training before going to the FAA facility where they will have on-the-job training that is specific to each facility (control tower or en route center). Only after successfully completing this training are the "developmental" controllers certified and able to begin working as air traffic controllers.

⁸ *Aviation Safety: Opportunities Exist for FAA to Refine the Controller Staffing Process*, GAO/RCED-97-84, April 1997.

⁹ *A Formative Evaluation of the Collegiate Training Initiative – Air Traffic Control Specialist (CTI-ATCS) Program*, FAA, DOT/FAA/AM-96/6, February 1996.

¹⁰ Purdue University, Embry-Riddle University, Dowling College, Mt. San Antonio College, Middle Tennessee State University, College of Aeronautics (now Vaughn College), Miami-Dade Community College (now Miami-Dade College), Inter American University of Puerto Rico, and Daniel Webster College.

¹¹ Arizona State University and Florida Community College at Jacksonville have both tried to be admitted to the CTI program.

What CTI Designation Means

Being designated as a CTI school is very important for a college or university that wants to offer ATC training. Only graduates from a CTI school's program can have their names added to the Air Traffic Collegiate Training Initiative (AT-CTI) database maintained by the FAA. It is from this database that individuals are chosen for further training and employment. The FAA currently has no process to admit new schools to the CTI program. Well-qualified schools -- that offer other FAA-certified aviation training -- have indicated an interest in becoming CTI schools and were rebuffed.

The FAA needs to open CTI to schools that are able to meet FAA standards for air traffic controller training. If the FAA can certify training for pilots and aircraft mechanics, there should be no reason why they cannot also certify air traffic controller training programs and degrees at colleges and universities.

Benefits of Opening CTI to the FAA

- Increase the number of qualified applicants for the large number of air traffic controller jobs that are opening due to the increase in air traffic and the retirement of the cohort of controllers hired in the early 1980's.
- Increase the number of qualified applicants at little to no cost to the FAA. CTI graduates bear the cost of attaining their associates or bachelors degree in an aviation-related program.
- Increase the number of pre-screened, low attrition applicants for ATC positions.
- Increase the applicant pool by offering basic ATC education and training where demand exists.
- Take advantage of the flexibility of public community colleges and universities -- experts in meeting workforce education and training needs -- in designing ATC training programs which can be offered at a fraction of the cost to what private schools charge.

Mr. Chairman, this concludes my remarks, and I hope I have convinced you of the need to open up the FAA's Collegiate Training Initiative. Air traffic control specialists have high-skill, high-wage jobs and the demand for these special individuals is only going to increase. I can tell you that Florida Community College at Jacksonville is currently providing FAA certified training in aviation maintenance and pilot instruction, and is ready and able to assist in meeting the training requirements of our nation's future air traffic controllers as they direct flight operations in our air traffic control centers, terminal radar facilities, and control towers.

I would be pleased to answer any questions you may have.

Appendix A

Qualification Process for Air Traffic Collegiate Training Initiative (AT-CTI) Graduates

(from the FAA Web site)

1. AT-CTI schools submit names of students enrolled in their AT-CTI program to FAA, Aviation Careers, AMH-300. Names are maintained in the AT-CTI database for tracking purposes until graduation and recommendation.
2. The FAA authorized pre-employment test is given just after enrollment in an AT-CTI program. The purpose of the test is to determine whether an individual has the aptitude to become an air traffic control specialist. **Prior to testing, individuals complete and submit a citizenship paper stating that he/she is a United States citizen. Individuals who are not United States citizens will NOT be allowed to test.** After achieving a qualifying score on the FAA authorized pre-employment test, individuals are notified of their results. If an individual achieves a qualifying score, he/she is asked to complete several forms, which include geographic preference sheet and self identify veterans' preference sheet.
3. Upon successful completion of a FAA approved AT-CTI program, individuals who receive school recommendation and who meet basic qualification requirements, including age limit and achieving a qualifying score on the FAA authorized pre-employment test, are made eligible in the AT-CTI database from which he/she may receive employment consideration. Candidates who do not receive recommendation will not be considered under this program and their name removed from the AT-CTI database. Recommendations, by school officials, may only be obtained once through the AT-CTI program.
4. When it has been determined that Air Traffic Control Specialist (ATCS) vacancies can be filled from the AT-CTI database, a region contacts the Aviation Careers Division for a list of eligible graduates for that geographic location.
5. Referral lists are issued based on the graduates' PRIMARY geographic preference and graduates are referred by GPA with veterans' preference rules applied. Note that secondary and third geographic preferences are ONLY utilized if there is a shortage in that location.
6. Candidates, who are being considered for employment by the hiring region, will begin the pre-employment process, i.e., suitability, medical, and security clearances. If selected by the agency, employees will attend the FAA Academy in Oklahoma City for training.
7. Candidates, who were referred but not selected, are returned to the AT-CTI database for future referral unless the candidates' eligibility expires, candidate reaches age 31, candidate declines a position, or the candidate is selected, whichever comes first.
8. Eligibility under this program is good for 2 years from the candidate's graduation date, candidate reaches age 31, candidate declines a position, or the candidate is selected, whichever comes first.
9. Individuals may not reapply through this program if removed for failure to meet any qualification requirements or failure to receive recommendation from authorized school officials.