

FAA ACADEMY



Training the Next Generation of Aviation Professionals

FAA Academy Perspective

Presentation to: NGAP Symposium

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Federal Aviation Administration

FAA Academy

- **Mission:** Provide quality, cost effective learning solutions to develop a highly skilled workforce for the FAA and the global community
- **Location:** Oklahoma City Campus of the Mike Monroney Aeronautical Center
- **Facilities & Campus**
 - Approximately 459,956 square feet of space.
 - 70% Classroom/Lab, 30% Office/Support Space
 - Over 2,500 classes conducted each year
- **Staffing:** 948 Employees
 - Includes 443 FAA FTE's and 505 Contractors





Products & Services

- Resident/Non-Resident Technical Training
- Management & Executive Training
- Training Assessments/Evaluations
- Courses available in:
 - Air Traffic
 - Maintenance & Electronics
 - Aviation English
 - Flight Standards
 - ICAO Endorsed Government Safety Inspector
 - Operations
 - Airworthiness
 - Personnel Licensing
 - Airports
 - Instrument Procedures Development

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Our Customers



- Federal Aviation Administration
- Department of Defense
- Other Federal Agencies
- Aviation Industry
- State & International Governments

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Accreditation & Certification

- Quality Control Strategy:
 - ✓ North Central Association of Colleges and Schools (NCA)
 - ✓ Commission on International & Trans-Regional Accreditation (CITA)
 - ✓ ISO-9001:2008 Certification
 - ✓ Project Management Professional Certification



Academy Training Completions

Media Type	FY-09	FY-10	FY-11
Resident	17,534	16,622	16,258
OAT/Field-Conducted	2,936	2,836	2771
International	456	630	847
Management/Executive	4,571	4,678	3317
Distance Learning			
eLMS/eLearning	30,982	30,750	19,840
Computer-Based Instruction	22,729	28,387	32,300
Aviation Training Network	6,061	4,812	3,100
Correspondence Study	6,398	3,196	2,904
Grand Total:	91,667	91,911	81,337

Note: Totals above do not include Air Traffic Refresher Training (Lesson of the Month) – 15,000 per Month/180,000 per Year.



Distance Learning Program

- **Aviation Training Network**
 - 130 Downlink Sites
 - Accessible to 95% of the FAA
- **eLMS/eLearning**
 - Over 4,000 Courses
- **Computer-Based Instruction**
 - 205 Courses
 - Over 2,200 Delivery Platforms
- **Correspondence Study**
 - Over 100 Courses
 - On-line Registration & Enrollment



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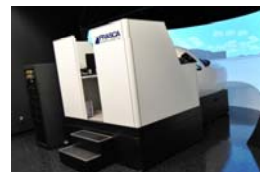


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FAA Academy - Organizations

1. **Center for Management & Executive Leadership**
 - ✓ Located in Palm Coast, Florida
 - ✓ Core leadership training, customized workshops
2. **Training Services Support Division**
 - ✓ Distance Learning Program,
 - ✓ Instructor Training & Evaluation
 - ✓ Financial Management
 - ✓ Capital Investment Planning
 - ✓ Student Services
3. **Regulatory Standards Division**
 - ✓ Aviation Safety Inspectors
 - Aircraft Operations
 - Airworthiness
 - Maintenance
 - Aircraft Certification
4. **Technical Operations Training Division**
 - ✓ Reliability and Safety of the National Airspace System
 - Engineers
 - Technicians
 - System/Environmental Specialist
 - Programmers



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FAA Academy - Organizations

5. Air Traffic Division

- ✓ Technical Training for Controllers: Tower, Terminal Radar, Area Control
- ✓ Specialized Controller Training
 - Traffic Management
 - Quality Assurance
 - Airspace & Procedures
 - Facility Training Administration
 - Basic Obstruction Evaluation
- ✓ Since 2005, over 8,900 Controllers graduated



6. Airports & International Training Division

- ✓ Designs, develops, and delivers training for international aviation officials and also provides related services such as training assessments and consultations.
- ✓ Courses Available in:
 - Flight Standards
 - Instructor Development
 - Air Traffic Control
 - Management Development
 - Maintenance & Electronics
 - Aviation English
 - Airports
 - Aviation Security
 - Instrument Flight Procedures Development
 - Safety Management Systems

7. NAS Technical Services Division

- ✓ Technical support and maintenance for Academy simulation systems
- ✓ Over 140 systems with 415 equipment profiles

FAA Academy – The Challenge

• The Academy provides training for 3 main occupations:

- ✓ Air Traffic Controllers
- ✓ Maintenance & Electronics Personnel
- ✓ Aviation Safety Inspectors

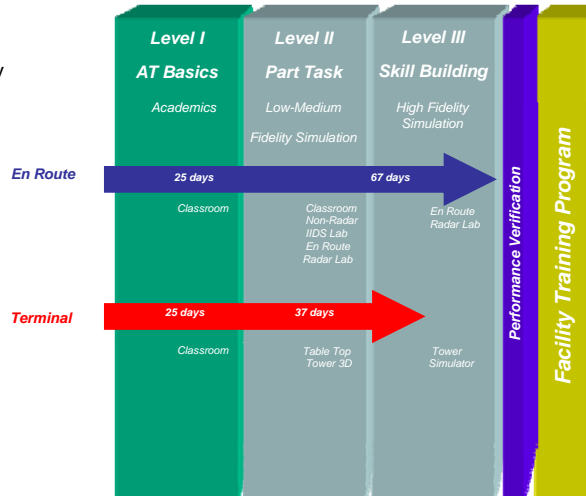
FY-12 Hiring	
Air Traffic Controllers	900
Maintenance & Electronics Personnel	250
Aviation Safety Inspectors	320

• Common Strategies Across Occupations

- ✓ Headquarters determines hiring requirements and funding levels
- ✓ FAA Academy is responsible for determining how to meet those requirements within budget constraints
- ✓ Applicant pools adequate for each occupation at this time

Air Traffic Training – FAA Academy

- All newly hired controllers begin training at the Academy
- AT-CTI students bypass the AT Basics course
- Combination of classroom and simulation training
- Performance Verification is the final graded scenario



Air Traffic Training

- **FAA Academy Simulation**
 - **Tower**
 - 16 Tower Simulators
 - Desktop Tower Simulation (Tower 3D)
 - Table Top Simulation
 - **Terminal Radar**
 - High fidelity simulation in two versions
 - **En Route (Area Control Centers)**
 - High fidelity simulation identical to field facilities in two versions
 - En Route Training Simulation System (ERTSS)



Air Traffic Training – Facility

TERMINAL FACILITY TRAINING					
Stage II Flight Data	Stage III Clearance Delivery	Stage IV Ground Control	Stage V Local Control / Cab Coordinator	Stage VI Non-Radar Terminal Control	Stage VII Radar Control
1. Classroom 2. OJT 3. Certification	1. Classroom 2. OJT 3. Certification	1. Classroom 2. OJT 3. Certification	1. Classroom 2. OJT 3. Certification	(if applicable) 1. Classroom 2. Simulation 3. OJT 4. Certification	(if applicable) 1. Classroom 2. Simulation 3. OJT 4. Certification

Note: The order of Stages III through VII may be changed at the discretion of the facility manager.

EN ROUTE FACILITY TRAINING		
Stage II Assistant Controller (Flight Data)	Stage III Non-Radar and Radar Associate (RA)	Stage IV Radar Controller
1. Classroom 2. OJT 3. Certification	•Classroom •OJT •Simulation •Certification <i>Note: Certification on two (2) positions qualifies a developmental to work independently and to proceed to Stage IV training.</i>	•Classroom •OJT •Simulation •Certification <i>Note: Certification on two (2) radar positions qualifies a developmental to work independently.</i>

Air Traffic Training

- In order to achieve hiring and training targets, the FAA needed to reduce training time
- Achieved efficiencies by improving the training and scheduling process, increased use of simulation, and increased management oversight

Years to Certify

Fiscal Year	En Route	Terminal
2005	4.1 years	3.1 years
2006	3.7 years	2.7 years
2007	3.1 years	1.9 years
2008	2.6 years	1.1 years
2009	2.6 years	1.4 years
2010	2.6 years	1.7 years

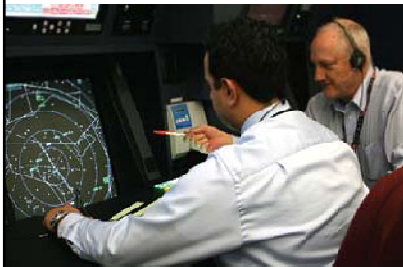
FAA Academy – Meeting the Requirements

- **Biggest Obstacles**
 - ✓ Constantly changing hiring numbers
 - ✓ Budget constraints
- **Best Practices**
 - ✓ Develop a Workforce Plan
 - ✓ Regular communication, scheduled meetings
 - ✓ Innovative Class Scheduling
 - Use of low, medium and high fidelity simulation
 - Night Shifts
 - Overlapping classes
 - Don't change the dates, adjust class size to meet changed new hire goals
 - ✓ Instructor Flexibility
 - Use of contract instructors



FAA Academy – Meeting the Requirements

- **Key to Success**
 - ✓ **Be Flexible**



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