Next Generation of Aviation Professionals

Competency-based Training in FAA’s Flight Standards Service

Marcia Payne, Manager
AFS-500, Flight Standards Training Division
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Flight Standards’ Training Vision is…

A real-time training system that provides competency-based education and training to meet the evolving needs of the Flight Standards’ workforce and our stakeholders.
Why competencies?

Background and Evolution of the Flight Standards Training Program

- Job function courses based on current or new regulations/guidance
- Identified need for comprehensive ASI curriculum
- Developed Master Plan for Training
- Established the Flight Standards Service National Training Program
Flight Standards Training Program Foundation

Training Curriculum

Training Evaluation

Training Infrastructure

Training Processes (ISO)

Organizational Support for Training
Linkage between Hiring and Training

• Developed competencies
  • Business
  • Interpersonal
  • Technical

• Updated hiring standards
Training Curriculum Transformation

- Defined future curriculum model
- Comprehensive review of existing courses
- Gap analysis
- Developed curriculum to support competencies using blended delivery methods
Training that is “Student Centric”

• Tailor training to the individual and recognize their past training and experience
• Develop learning/career paths for all employees
• Improve quality of instructors
• Provide technology training using industry, colleges, and universities to support delivery
Sample of Competency-Based Curriculum

**Foundational Training**
- Organizational structure
- Standards of professionalism
- System Safety & Safety Management Systems
- Flight Standards philosophy
- Legal authority and liabilities
- Ethical conduct
- Model work Environment

**Indoctrination E-Learning**
- Specialized foundational knowledge
- Test-driven modules that allow learners to take what they need
- Where appropriate, build in the use of AFS automation tools in completion of the tasks

**Indoctrination Classroom**
- Practical Applications Workshops (PAWs) use scenario-based exercises to test ability to apply e-learning knowledge

**On-the-Job Training**
- Demonstration of proficiency in using classroom and e-learning knowledge in the work environment. Three levels of proficiency can be demonstrated:
  1. Knowledge
  2. Understanding
  3. Performance

**Web Resources**
Library of aids and links to available resources are maintained for continued learning.

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AC-AW Macro Design

- **Course 27031**: Orientation to FAA and Flight Standards (WBT)
- **Course 27032**: Introduction to ASI Business & Interpersonal Competencies (WBT)

**Foundation Training: AFS Philosophy**
- Course 22006: System Safety
- Course 27033: Intro to Air Carrier Certification and Surveillance (WBT)
- Course 27100028: Overview of Safety Management Systems (WBT)

**Air Carrier/Operator Training**

- FAA Processes for Evaluating Air Carrier/Operators
  - Course 2100051: ATOS 1.2 Interactive Training For ASIs
  - Course 27034: Intro to Authorizing Documents (WBT)
  - Exemption/Deviation Requests/Letter of Dev. Authority (WBT)

- Technical Topics for Evaluating Air Carrier/Operators
  - WBT courses on Design and Performance Assessment of Air Carrier Programs
  - Classroom Course with Case Study Practice (PAW 1)
  - Classroom Course with Case Study Practice (PAW 2)

**Investigations Training**

- Introduction to Investigations (WBT)
  - Course 21059: Air Cargo Operations
  - Course 25712: CASS
  - Course 28473: Human Factors In Aviation Maint
  - Course 21406: En Route Inspection - Airworthiness
  - Course 12020: Compliance and Enforcement Classroom Course
  - Course 00035: Basic Aircraft Accident Investigation

**Automation Training**

- Course 21423: Flt Standards Automation Tools

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WBT Courses on Design and Performance Assessments of Air Carrier Programs

- Introduction to Manual Management
- Introduction to Maintenance Organization
- Introduction to Air Carrier Maintenance Programs
- General Maintenance Manual
- Maintenance and Inspection Programs
- AD Management
- MEL/CDL/Deferred Maintenance
- Ground De-Icing/Anti-Icing for Airworthiness ASIs
- Introduction to Evaluation of Vendors
- Short-Term Escalations
- Parts Pooling/Parts Borrowing
- Calibrated Tools and Test Equipment
- Maintenance Facility/Main Base/Line Stations
- Special Maintenance Programs (LLM & RVSM)
- RII
- Engineering/Major Repairs/Alterations
- Parts/Materials Control/SUP
- Fueling
- Weight and Balance
- Engine Condition Monitoring

- Records and Reporting Systems
- Aircraft Airworthiness
- Appropriate Operational Equipment
- Special Flight Permits
- Maintenance Training Program
- Maintenance Personnel Qualifications and Certification Requirements/Key Personnel
- Introduction to ETOPS
- Voluntary Programs
- Safety Program

Legend:
Green = Classroom
Orange = Web-based

AC-AW Practical Applications Workshop Part 1
AC-AW Practical Applications Workshop Part 2
Training Infrastructure

Curriculum Oversight Steering Committee

Curriculum Oversight Board

ACAW COT
ACOPs COT
GAOPs COT
GAAW COT
TSUP COT
MGRs COT
TSYS COT

Training Processes (ISO)

Organizational Support for Training

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Federal Aviation Administration
Training Evaluation

- Programmatic Evaluations
- Course Evaluations
  - End-of-Course (EOC)
  - Student Post-course
  - Supervisory Post-course
- Tri-annual evaluation of each course
  - Annual review of course technical content
- Return on Investment
Positive Impacts on Organization

- Provides comprehensive, technical training that eliminates competency gaps
- Incorporates knowledge checks to ensure a more thoroughly trained and better prepared workforce
- Accommodates various learning styles
- Provides a flexible mode of delivery
- Permits consistent presentation of material
- Reduces travel costs and time away from job environment
- Guides professional development
What’s Next…

- Utilize tablet personal computers for just in time training
- Podcasts
- RSS (Real Simple Syndication) feeds
We Can Assist...

- Government Safety Inspector (GSI) courses
  - Personal Licensing
  - Operations
  - Airworthiness

- US Inspector courses in support of International Operations in foreign countries
Flight Standards Training Division

Contacts

Marcia Payne
Division Manager
00-1-703-487-3910

Chris Heizer
Assistant Division Manager
00-1-703-487-3915

Carol Usher
International Program Manager
00-1-703-487-3923