

# Course Development: COMPOSITES AWARENESS FOR THE AVIATION SAFETY INSPECTOR

Charles Seaton, Principal Investigator









### COMPOSITES AWARENESS FOR THE AVIATION SAFETY INSPECTOR



- Motivation and Key Issues
  - Training is required to provide ASI's with the knowledge and skills required for oversight and auditing of aircraft manufacturing and maintenance facilities for composite aircraft
- Objective
  - Develop knowledge and skills for performing FAA inspector job functions
- Approach
  - Customize prior Phase IV awareness course
  - Prototype class to refine framework & content
  - Identify training organizations for sustained training



## FAA Sponsored Project Information



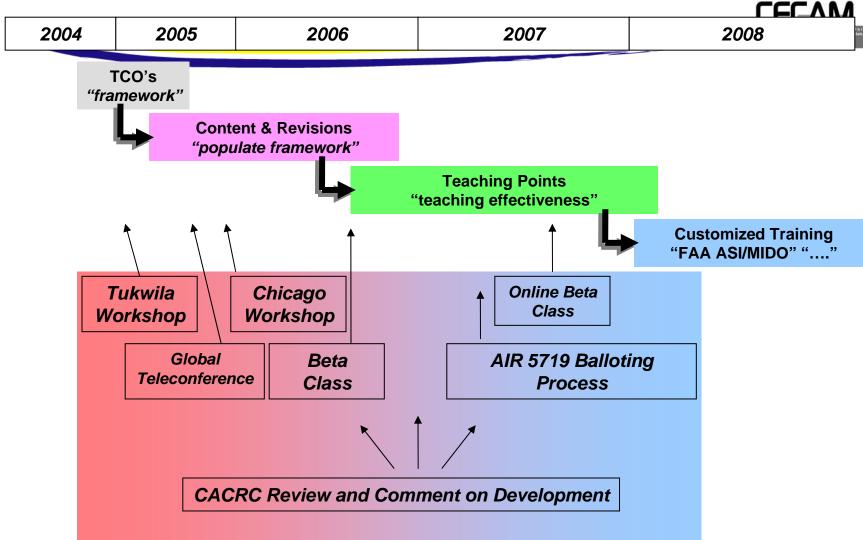


- Principal Investigators & Researchers
  - Charles Seaton
- FAA Technical Monitor
  - Curtis Davies
- Other FAA Personnel Involved
  - Rusty Jones ASI
  - William Scott ASI
  - Mike Hendricks ASI
  - Charles Ruggiero ASI
  - Gail Williams Educational Development
  - Matthew Royston Contracts
  - Arsenio Cabanas-Jr. Contracts
- Industry Participation (Phase V only)
  - Abaris Training Resources, Inc.
  - Consultants: Hank Offermann and Bill Basse (for FAA employees)

**Edmonds Community College** 

## COMPOSITES AWARENESS FOR THE AVIATION SAFETY INSPECTOR





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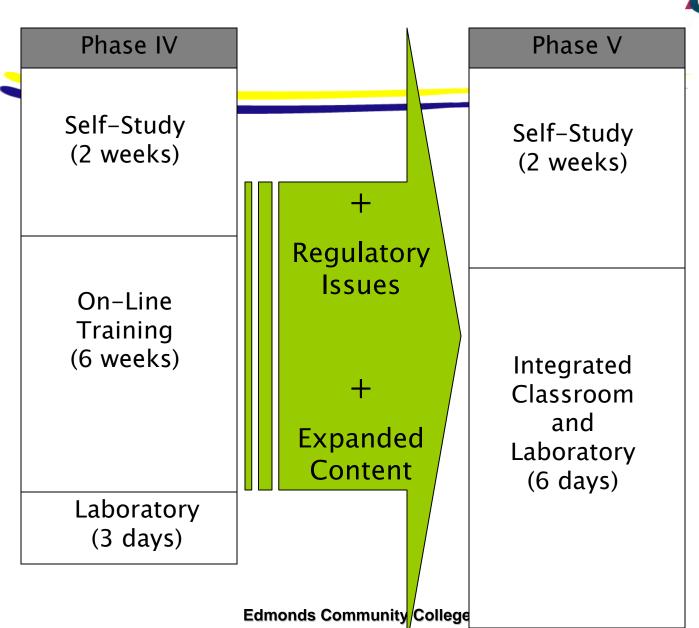


#### Development Outcomes (Phases I – IV) Completed December 2007



- Industry standard
  - 3 years in development by broad spectrum of experts from all facets of composites industry
- Demonstration of online training to composites' maintenance training
  - Hybrid format self-directed study, online education, 3- day laboratory
  - Global outreach capability, cost-effective
- Technical Center reports currently under review
  - Development process and background (I III)
  - Online training evaluation and Training Repair Manual (TRM) (Phase IV)

JMS







## IMPLEMENTING THE PHASE V PRODUCT



- ASI Workshop (February 2008)
  - Refined the course framework through modified course objectives
  - Developed draft for job aid (inspector checklist)
- Prototype Class (September 2008)
  - Hybrid format: self-directed online education, classroom and laboratory
  - Conducted at Abaris, Reno NV
- Establish contractual basis for ASI/MIDO training
  - Site evaluation based on scorecard
  - Minimum of 4 sites



#### **SUMMARY**





- Development of a course standard
  - Estimated \$2.5 million funding from all sources
  - Global involvement
- Improved teaching tools in composite maintenance
  - Framework (TCOs) governs a balanced content
  - Training Repair Manual to simulate an OEM 'structural repair manual'
  - Illustrated effectiveness of online training
- Customizing the course to specific audience (FAA inspectors)



#### A Look Forward





- Benefit to Aviation
  - Provides awareness of safety and technical issues associated with composites' maintenance to practitioners (FAA inspectors)
  - Illustrates a process for customizing Phase IV course to specific needs
- Future needs: Customization of awareness course content and format to:
  - Other audience groups within FAA
  - Other regulatory agencies such as EASA, TCCA