Where Have We Been; Where Are We Going?

Tom Weitzel & Dave Esser
Personal Introduction to the Programs
Some Good Help

- Carl Halford
- Don Hunt
- Doug Farrow
- Loren Rosenthal
- Sagem Avionics
- Roger Mason
- Applied Av Sci
- Graduate Students

- Han Wu
- Neil Roberts
- Heather Seltzer
- Aalap Trivedi
- Ethan Money
- Luis Bucheli
- Allen Cleveland
- Julie Wilson
ERAU COA Courses (DAB)

- Master of Science in Aeronautics
  - MSA 610 – programs and international
  - MSA 615 – methodology and statistics

- Undergraduate
  - George Neal
  - Anthony Brickhouse
  - Gatekeeper
Use of FOQA Techniques in General Aviation Training: Analysis of Feasibility

Research Questions

- What difficulties are encountered while equipping general aviation aircraft with FOQA recording abilities?
- What difficulties are encountered in monitoring the data from FOQA equipped general aviation aircraft data?
- What information can be drawn from the collected FOQA data?

Internal Grant
Fall 2006 Progress

- Initially received support from all constituents
  - Guidance from FAA AFS-230 (Dr. Doug Farrow)
  - ERAU Administration (Dean COA, Chair of the Flight Department, Eagle Works)
  - Instructors’ Union President (Joe Hanley)
  - External Expertise (Carl Halford)
What Exactly is FDM?

- Another name for FOQA (Flight Operational Quality Assurance)
- Objective data from the airplane
- De-identified and analyzed for trends
- AC 120-82: The AFS-230 blueprint for an authorized FOQA program
- The blueprint should work for an FAA-authorized GA FDM program
The Complement to FDM

- **ASAP** (Aviation Safety Action Program)
  - Subjective data from operating personnel (pilots, mechanics, etc.)
  - De-identified and analyzed
- **AC 120-66B**: The AFS-230 description of the program and its MOU
  - Has been referred to as “ASRS on Steroids”
Programs Working Together

- FDM – what was done
  - Airplanes
  - Flight Training Devices (FTDs)
- ASAP – why it was done
  - Pilots
  - Mechanics
- ERAU COA: FDM combined with ASAP
- The first collegiate version of an SMS
Graduate Research Projects (GRPs)

- Analysis of Current Hardware and Software for GA – Aalap Trivedi
- Analysis of the GA environment and acceptability of FDM – Heather Seltzer
Next Phase: Spring 2007

- Acquire hardware and software
- Install on aircraft
- Begin data collection
- Review data at the end of the Spring Semester — Ethan Money