

Collaborating to address
LOSS OF CONTROL IN-FLIGHT

Upset Prevention and Recovery Training Workshop

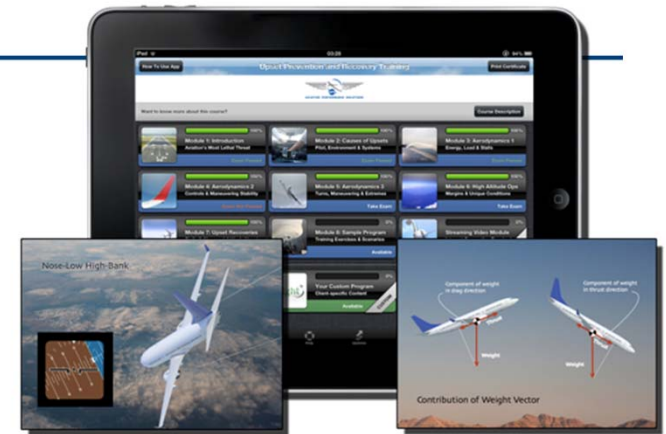
UPRT in FSTDs and aeroplanes

Module 1 – Day 1



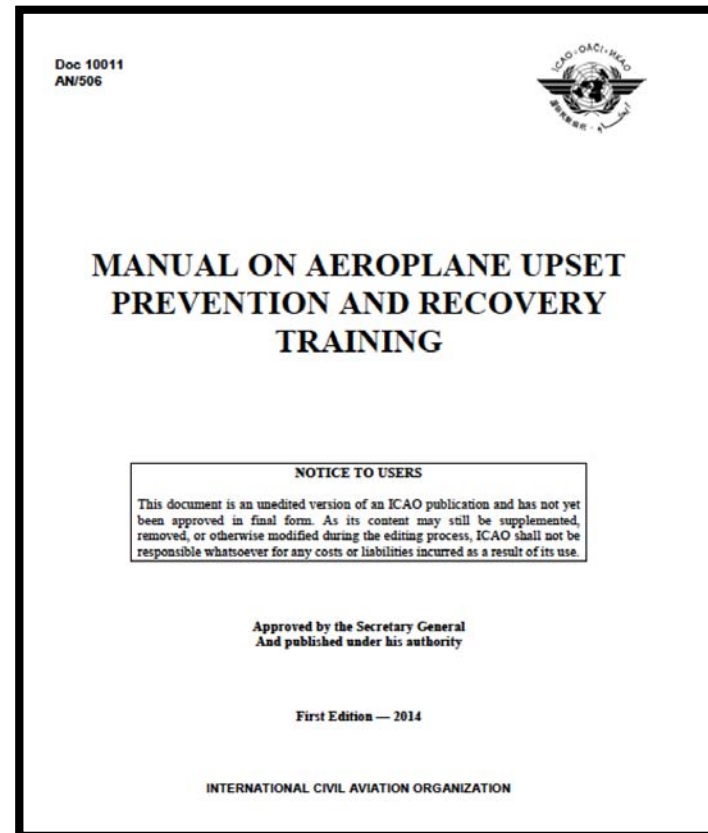
Overview

- Navigating the Manual
- Core Resource Requirements
 - Platforms and Mediums
 - Human and Technical Requirements
- High-level ATO Impact
 - Flight Schools
 - Airline Training Providers
 - Integrated Programs



ICAO Manual on AUPRT

- In development since 2009
 - Royal Aeronautical Society's ICATEE
 - 40 Organizations
 - 80 Members
 - 16 WG Meetings
- 2012: ICATEE, FAA, EASA and ICAO Combined Efforts (7 meetings)
 - LOCART
- Diversity of organizations including NAAs, OEMs and SMEs.



tinyurl.com/icao10011

Navigating ATO Relevant Sections

- Entire Manual: High level Resource
- Section 3: Aeroplane Training
 - SMS: airplanes, ops, maneuvers and instructors
- Section 4: FSTD Fidelity Requirements
- Section 5: UPRT Instructors
 - Academic / On-aeroplane / FSTD
- Section 6: Regulator Oversight

6. Regulatory Oversight

- Competency Based Training Preferred
 - Targeted competencies vs. events
 - SMS
 - On-aeroplane maneuvering and aeroplane certification
 - Instructor competence
 - Avert negative training (includes sim fidelity)
 - QA and SMS Evaluations
 - Approval process
 - Sustainable outcomes
 - Graduated UPRT integration options
 - Approval and On-going Surveillance
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Core URPT Resource Requirements

Platforms & Mediums

- Academic Delivery
 - Distance Learning
 - Live Instructor-led
- On-Aeroplane
 - Acrobatic Category
 - Utility vs. Normal Category
- Simulators
 - Fidelity Requirements
 - Instructor Tools



Human & Technical Resources

- Qualified UPRT Instructor
 - Ground Instructor
 - Simulator Instructor
 - On-Aeroplane Instructor
- Training Program
 - Compliant with ICAO and Resulting NAA Guidance
 - Transferrable and Complimentary to Future UPRT Training
- Facility Considerations
- SMS



Academic Delivery

- Web-based
 - Internet Accessible
 - Inter-browser Compatible
 - LMS
 - Track Activity
 - Record Results (optional)
- Tablet Solutions
 - Potentially web-disconnected
 - Tracking
- Live Instructor-led
 - More later on Ground UPRT Instructors

On-Aeroplane Platform

- Acrobatic Capable
 - Availability
 - Expanded All-attitude Training
 - Positively Transferrable Training
- Non-Acrobatic Capable
 - Normal vs. Utility Category
 - Maneuvering Limitations



Slide 9

Gu1

What about Normal vs. Utility?, Is it vs., or is the point the same for Normal and/or Utility?

Guest, 12/09/2014

Why use a real aeroplane? (Part One)



Why use a real aeroplane? (Part Two)



Simulators

- Motion vs. Non-motion
- Fidelity Requirements
- Enhancements
 - Flight Envelope
 - > Full Stall Training
 - Instructor Operating Station



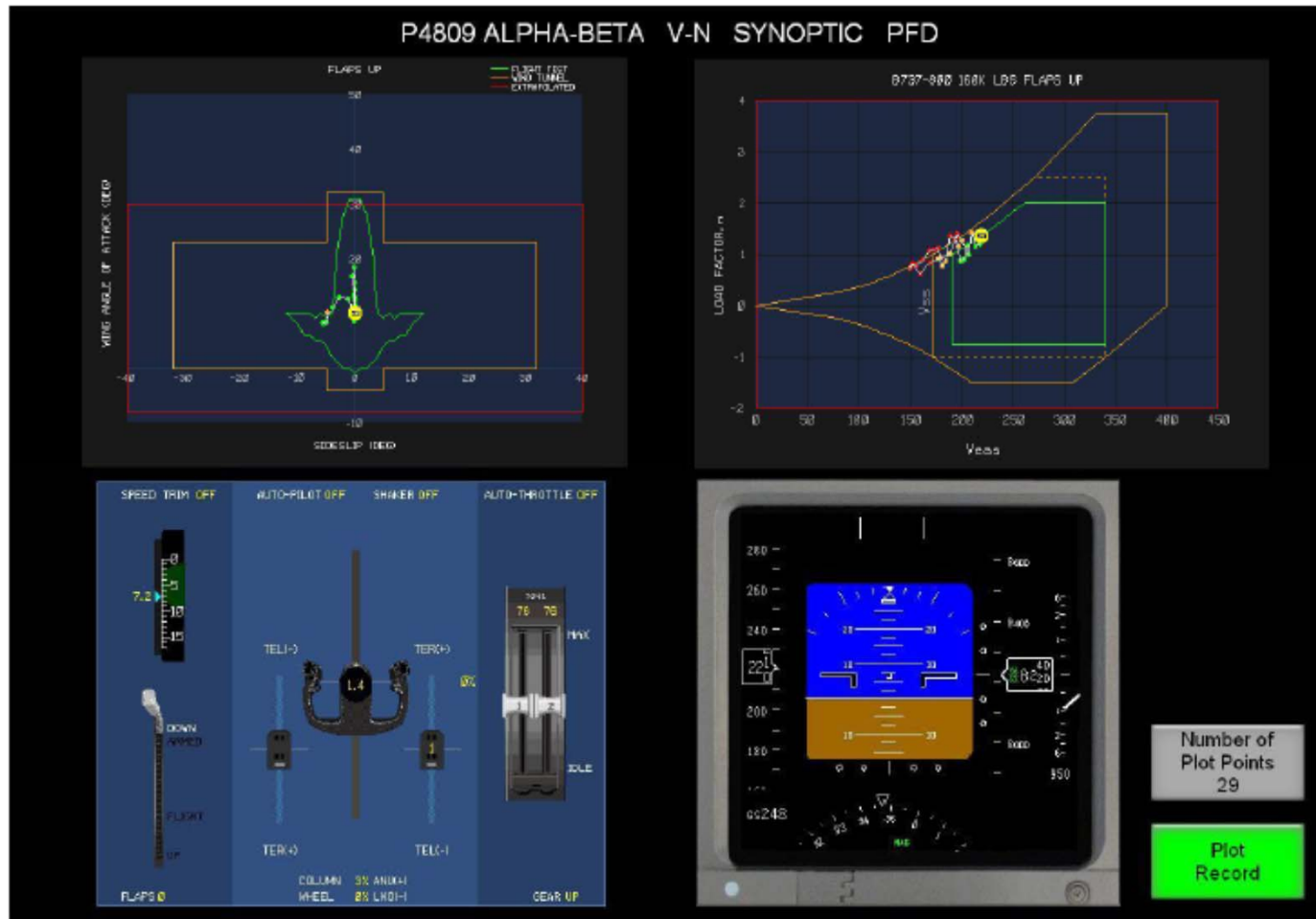
Slide 12

Gu2

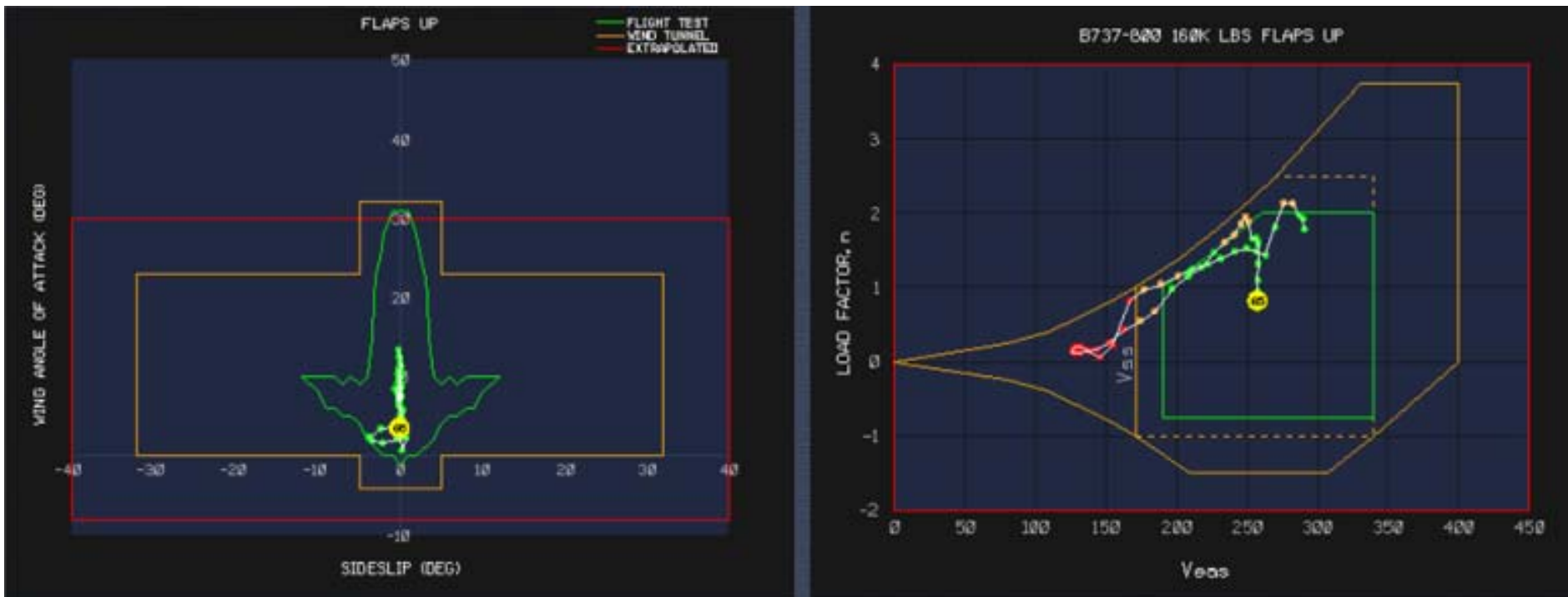
Curious what our take is on the Motion/Non-Motion debate. This one is an emotionally charged issue for some people.

Guest, 12/09/2014

IOS VTE Depictions



IOS VTE Depictions (Part 2)



Contrasting Aeroplane & Simulator (part 1)



Contrasting Aeroplane & Simulator (part 2)



Qualified UPRT Instructor

- The Most Crucial Part of UPRT Delivery
 - Experience Level
 - Positive vs. Negative Training (Baseline)
 - Averting Negative Transfer of Training (Much more difficult to accomplish)
 - Qualifying
 - Specialized Knowledge
 - Specialized Skills
 - Error Analysis
- Ground vs. Simulator vs. On-Aeroplane



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Gu3

I know what the issues are re: Ground/Sim/On-aircraft IPs, but I would be interested in hearing how you describe these qualification requirements.

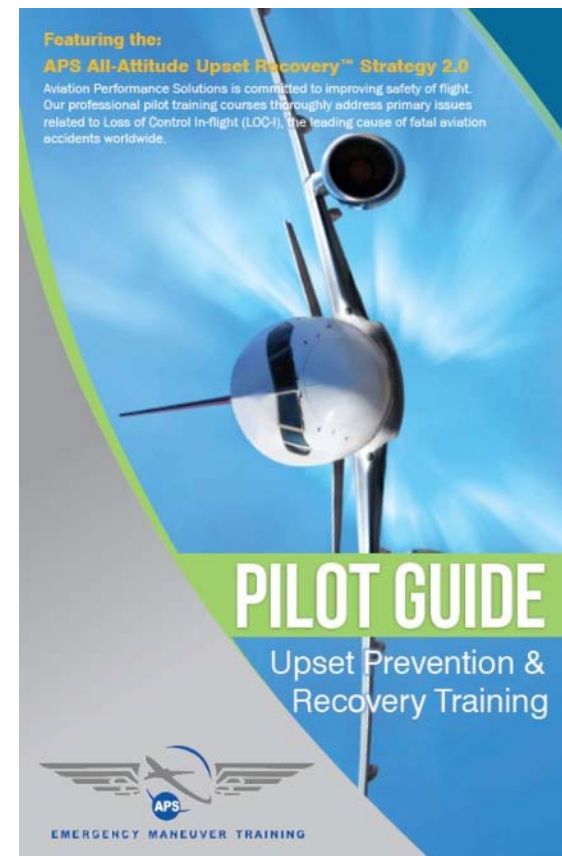
Guest, 12/09/2014

Instructor Training Example



Training Program

- Compliance with ICAO and Resulting NAA Guidance
- Transferrable and Complimentary to Future UPRT Training



Facility Considerations

- Specialized or Full Service UPRT
 - Flight Schools
 - Internal Capability
 - Airplane storage
 - Video / data resources
 - Outsource
 - Training Centers
 - Simulator Operations
 - Briefing Facilities
 - Location and Proximity to Clients



Slide 20

Gu4

This will be an important point. If we can get schools to consider out-sourcing this (as they often do simulator training) it could really be good for us.

Guest, 12/09/2014

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Flight School Impact

- Approved Program
- Appropriate Training Platform
- Qualified Instructors
- SMS



Airline Training Provider Impact

- Approved Training Program
- Appropriate Simulator Platforms
- Qualified Instructor



Integrated Programs

- MPL for Example
 - Phase 1 / 2
 - On-Aeroplane UPRT
 - Phase 3 / 4 (CRM)
 - Non-type Specific UPRT, and/or
 - Type Specific UPRT



Take-home messages
