RPAS/UAS Integration Considerations into Non-Segregated Airspace

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Agenda

• Policy Considerations
• Airspace Considerations
• ATM Infrastructure Considerations
• Training Considerations
• Moving forward
Policy Considerations

- Policy maturation takes time
  - Typically incremental
  - Often through lessons learned
- Feedback from operators is crucial
  - Operational data collection
  - Incident/accident data
- Collaboration within organization
  - Harmonized and complimentary
- Safety Management
  - Identifying Risks and mitigations
Airspace Considerations

• Current operational challenges
  – Mission driven flights (aerial photo, fire/rescue)

• Existing airspace structure vs desired UAS operations
  – Package delivery
  – ATM vs UTM airspace environment

• Airspace regulatory change
  – Needed? Or can existing structure support?

• Separation standards
  – Small UAS integration will drive different thoughts
ATC Automation Considerations

• Automation/UAS Procedure Development
  – En Route Automation Modernization (ERAM)
  – Modifications to recognize unique operating characteristics (Conflict probe, vertical/spiral take-off)
  – ATM Software
    • Beacon code allocation for UAS lost link (Code 7400)
  – UAS Contingency Procedure Development
    • Standardizing UAS Lost Link
      – FAA Working Group
      – ICAO RPAS Panel
Training Considerations

• RPAS Terminology
  – Lost Link
  – Remote Pilot Station
  – Visual line of sight

• RPAS Performance Characteristics
  – Tremendous variability
  – Operational performance capabilities

• Contingency planning
  – Lost link (air and ground)
  – Not ad hoc, but preplanned
Moving Forward

• How best to support a very fast moving industry?
  – Nimble policy development that safely supports growth
  – Conduct appropriate research and development
  – Collaboration with all stakeholders

• Maturation of technology
  – Enabling RPAS to safely integrate with few impediments
  – Innovation will drive new capability
THANK YOU!