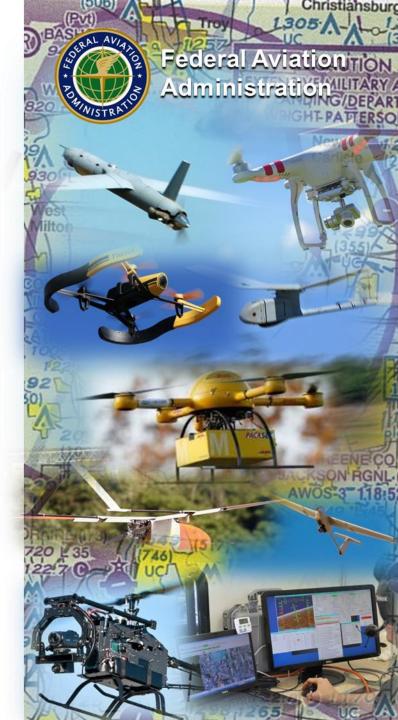
RPAS/UAS Integration Considerations into Non-Segregated Airspace

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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!

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