Drone Delivery – How Close Are We?
Drone Delivery – How Close Are We?

Earl Lawrence, FAA
John Duncan, FAA
Mel Johnson, FAA
The Fundamentals of Air Carrier Transport

Aircraft
Design and Production Certification

Operator
Pilot & Operator Certification

Airspace
Performance/Equipage Requirements
Aircraft

• Design and Production Certificate (Part 21)
  – Tailored to the type of operation and size of aircraft

Operator

• Pilot in Command / Crew – onboard or remote
• Part 135 Certificate – common carriage

Airspace Authorization

• Performance/Equipage Requirements
  – E.g. Detect and Avoid, Communications, UTM, etc.
Part 135 Certification Process

- Inquire or request to start
- Safety Assurance System (SAS)

Pre-Application

Formal Application
- Initial paperwork submitted to FAA

Design Assessment
- FAA review of applicant documentation

Performance Assessment
- FAA review of proposed training procedures

Administrative Functions
- Issuance of certificate and operations specifications
Aircraft Certification Services

- We ensure equipment meets supports the operation
- Current rules and processes are ready
- Be prepared to integrate into an established system
What do I need to succeed?

Consider having experience in:

1. Aviation – certification, production, operations
2. Design assurance concepts – design in reliability
3. Navigation and surveillance
4. Production of aviation products
5. Aviation maintenance concepts
Be Aware

• Noise – community requirements, public acceptability

• Level of safety
  – Safety needs to match the risk
  – What is the risk of your proposed aircraft and operation:
    • where you operate,
    • how you operate,
    • effect of failure