Research, Engineering, and Development Advisory Committee
REDAC: Sub-committee on Aircraft Safety (SAS) Meeting

Presented to: REDAC SAS
Date: 2/23/21
Purpose

• Provide updates on the FY23 Aviation Safety Research Portfolio
  – REDMT
  – BLI Teams/Plans
  – Current Status
  – Next Steps
• History of the REDMT
  – Formed in 2018 (FY21 Portfolio)
  – Assumed Process Redesign in 2019 (FY22 Portfolio)
  – Redesigned a new standardized process in 2020 (FY23 Portfolio)

• REDMT Charter signed October 2020
Roles and Responsibilities

• The AVS REDMT is a decision-making body with the authority to make decisions based on service/office input and support.

• The team is comprised of at least one or two managers from each of the following organizations:
  – Office of Aerospace Medicine (AAM)
  – Flight Standards Service (AFS)
  – Aircraft Certification Service (AIR)
  – Air Traffic Safety Oversight Service (AOV)
  – Office of Accident Investigation and Prevention (AVP)
  – UAS Integration Office (AUS)

• In addition, the team is chaired and managed by the Office of Accident Investigation and Prevention; where the program management responsibilities lie:
  – AVP Director for Safety Management and Research Planning, AVP-300 will Chair the AVS REDMT
  – AVS R&D Program Manager, AVP-300 will facilitate and manage all meetings
## FY23 Research BLIs

<table>
<thead>
<tr>
<th>BLI</th>
<th>Program Area</th>
<th>Research Sponsoring Service/Office</th>
<th>Research Managing Service/Office</th>
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<tbody>
<tr>
<td>A11A</td>
<td>Fire Research and Safety</td>
<td>AIR</td>
<td>ANG-E2</td>
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<tr>
<td>A11B</td>
<td>Propulsion and Fuel Systems*</td>
<td>AIR</td>
<td>ANG-E2</td>
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<tr>
<td>A11C</td>
<td>Advanced Materials/Structural Safety</td>
<td>AIR, AFS</td>
<td>ANG-E2</td>
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<tr>
<td>A11D</td>
<td>Aircraft Icing/Digital System Safety</td>
<td>AIR, AFS</td>
<td>ANG-E2</td>
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<tr>
<td>A11E</td>
<td>Continued Air Worthiness</td>
<td>AIR</td>
<td>ANG-E2</td>
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<tr>
<td>A11G</td>
<td>Flightdeck/Maintenance/System Integration Human Factors</td>
<td>AIR, AFS, AAM</td>
<td>ANG-C1</td>
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<tr>
<td>A11H</td>
<td>System Safety Management/Terminal Area Safety</td>
<td>AIR, AFS, AOV, AVP</td>
<td>ANG-E2</td>
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<tr>
<td>A11J</td>
<td>Aeromedical Research</td>
<td>AIR, AAM</td>
<td>AAM</td>
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<tr>
<td>A11L</td>
<td>Unmanned Aircraft System Research</td>
<td>AIR, AFS, AAM, AOV, AVP, AUS</td>
<td>ANG-E2, ANG-C1, ANG-C2</td>
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<tr>
<td>A11M</td>
<td>Alt Fuels for GA</td>
<td>AIR</td>
<td>ANG-E2</td>
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* Note: For FY23, the Aircraft Catastrophic Failure Prevention (A11F) BLI is being rolled into the Propulsion and Fuel Systems (A11B) BLI.
BLI Team Plans and Construct

Created 5-year Plans for each BLI (modelled after the UAS Research Plan)

• Scope
• Operational Capabilities
• Research Objectives
• Funding target profile
• Research projects/Rankings
  – Ranked using pairwise comparison methodology
    • Policy Direction, OC Alignment, OC Impact, Previous Commitment, Best Value
  – Budget programmed within each BLI to AFN provided target contract funding levels
  – 10% Hold-back allocation for FAA level Research Portfolio view
5-Year BLI Plans

Intent of Plans

• Top-down approach
• 5-Year planning (with regular updates as conditions warrant)
• Annual (1 year) budgeting is just a slice of the full 5-Year Plan, as opposed to developing an annual “single year” plan (culture shift)

Current State

• First attempt with this approach and it is mostly bottom-up because of the short timeframes
• BLI Teams worked independently on the Plans and they have not been fully integrated into the AVS and FAA Level

Next Steps

• Seek ASV Executives and others input to make the BLI Plans more top-down
• Integrate AVS BLI Plans into an FAA Level Plan
Upcoming Key Dates

02/23/2021
REDAC SAS Meeting

- Present Draft AVS Portfolio to the REDAC SAS
- Provide Draft AVS Portfolio to ANG-E4

04/08/2021
AVS-1 Approval of FY23 AVS Research Portfolio

- FINAL FY23 Research Portfolio with completed Budget Proposals
- Complete Budget Narratives
- Begin integration into the FAA Portfolio

06/01/2021
Submit FAA Portfolio to OST
Back-up Materials