



**Federal Aviation
Administration**

AVS Research, Engineering
and Development

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



REDMT Charter

- 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

BLI	Program Area	Research Sponsoring Service/Office	Research Managing Service/Office
A11A	Fire Research and Safety	AIR	ANG-E2
A11B	Propulsion and Fuel Systems*	AIR	ANG-E2
A11C	Advanced Materials/Structural Safety	AIR, AFS	ANG-E2
A11D	Aircraft Icing/Digital System Safety	AIR, AFS	ANG-E2
A11E	Continued Air Worthiness	AIR	ANG-E2
A11G	Flightdeck/Maintenance/System Integration Human Factors	AIR, AFS, AAM	ANG-C1
A11H	System Safety Management/Terminal Area Safety	AIR, AFS, AOV, AVP	ANG-E2
A11J	Aeromedical Research	AIR, AAM	AAM
A11L	Unmanned Aircraft System Research	AIR, AFS, AAM, AOV, AVP, AUS	ANG-E2, ANG-C1, ANG-C2
A11M	Alt Fuels for GA	AIR	ANG-E2

* 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
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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
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06/01/2021 Submit FAA Portfolio to OST



Back-up Materials