

FY21 Strategic Guidance

Presented to: SAS

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Date: 31 July 2018



**Federal Aviation
Administration**

Strategic Guidance

The FY21 Strategic Guidance is with management for AVS-1 signature.

Strategic Guidance

- Gives guidance for sponsoring offices and TCRGs to consider as they develop requirements
- Used by sponsor management to apply adequate resources for requirement development
- Identifies some hazards, risks, and safety issues based on samples of data that drive AVS research needs.

Strategic Guidance is NOT...

- AVS Strategic Guidance is not a checklist



Strategic Guidance

Strategic Guidance Highlights

- **Provides focused safety hazard and risk data for the sponsoring offices to consider**
 - The FAA Office of Accident Investigation and Prevention (AVP) analyzed data sources to identify some high priority hazards and risks facing the National Airspace System (NAS).
 - Consideration of these hazards and risks during research requirement development will stimulate multi-disciplinary and coordinated efforts across AVS offices and TCRGs, and the development of research requirements that address these hazards and risks
- **Supports implementation of Safety Management System (SMS) processes**
 - Including leveraging Safety Management Transformation (SSMT). The SSMT program consists of tools to collect data, identify risk, and support risk mitigation evaluation in the NAS, including surface / runway anomalies, terminal / en route anomalies, wake encounters, and NextGen Operational Improvements.
 - Baseline risk metrics are established from multiple data sources, including ASIAs, and future risk assessments can be determined



Strategic Guidance

Strategic Guidance Highlights

- **Lists emerging risks for Aviation Safety**
 - Identifies current or emerging hazards with a high likelihood or potential to result in significant safety risks
 - Based on proactive and forecast approaches that enable AVS to move forward in the research cycle to prevent accidents and manage safety with the changing composition of hazards.
 - Includes use of Aviation Safety Information Analysis and Sharing (ASIAS)
 - Includes research recommendations from the REDAC's Subcommittee on Aircraft Safety (SAS)



Strategic Guidance

Strategic Guidance Highlights

- **Describes the process for identifying System-level Safety Issues (*new*)**
 - Under the Administrator's Risk-Based Decision Making Strategic Initiative, the FAA Lines of Business (LOBs) and appropriate organizations established an annual process for identifying, prioritizing, and tracking safety issues that cross FAA LOBs.
 - The purpose of the process is to proactively identify emerging threats that are most effectively addressed through cross-organizational collaboration to achieve meaningful system-level outcomes.
 - The goal is to have a system in place where aerospace system data is collected and analyzed to identify and address the most critical safety risks first and study the system data, look for emerging trends, identify the emerging safety risk, and mitigate the risk before incidents or accidents occur.
 - Through this evolving process, the FAA identifies potential safety issues through two primary methods
 - FAA LOBs and Services/Offices identify potential issues through data analysis, system monitoring, and subject matter expertise
 - FAA LOBs/Staff Offices discover potential safety issues through their existing organizational processes
 - Utilizes safety issue tracking systems such as the Hazard Identification Risk Management and Tracking (HIRMT), a single integrated tool that provides a consistent and standardized methodology for managing and tracking safety issues.
 - This tool ensures the issues are tracked, and information and decisions are documented.



Strategic Guidance

Strategic Guidance Highlights

- **Considers Key Technology Areas in which FAA has provided research leadership**
 - FAA must maintain critical research in areas that make up the backbone of its long-term FAA R&D program
- **Provides the latest metrics from the Commercial Aviation Safety Team (CAST) as well as General Aviation Joint Steering Committee (GAJSC) and Helicopter Safety Team data.**
- **References the requirement to identify Long-term Research (*new*)**
 - In accordance with 49 U.S. Code § 48102 and GAO-17-372 Report- Research and development, at least 15% of RE&D funding must be for long term research (defined by GAO Best Practice as outcomes beyond five years).
- **References OMB Executive Memo M-17-30 (*new*)**
 - This executive memorandum details the Administration's Research and Development Budget Priorities. All research proposed for FY21 must show how it is in compliance with this memo

