REDAC SAS FY24 Aviation Safety Research Portfolio Documents March 1-2, 2022 (Virtual Meeting)

In preparation for the upcoming Spring Meeting of the Research, Engineering, and Development Advisory Committee (REDAC) Sub-Committee on Aircraft Safety (SAS), the following documents are being submitted for member review and highlighted below:

1) AVS RE&D Portfolio: 11 Budget Line Items (BLIs) Research Plans (2022-2027)

2) FY24 AVS Portfolio Funding Profile

3) FAA Research BLI REDAC Forecast and Assessment

4) Edition 5 (2021-2026) of the FAA UAS/AAM Integration Research Plan (submitted separately)

1) AVS RE&D Portfolio: 11 Budget Line Items (BLIs) Research Plans (2022-2027): Each of our BLI Teams have developed a BLI Plan. There is a total of 11 BLI Plans. Note: Throughout the UAS BLI Plan (A11L), there will be reference to their "Edition 5 (2021-2026) of the FAA UAS/AAM Integration Research Plan".

There are four parts in each BLI Plan which include:

- <u>Part 1: BLI Definition and Scope</u>: This part of the plan describes the area(s) of work that is covered by the BLI Plan over the 5-year planning period. "What is this program" and "what does the funding level support" will be answered in this part of the plan.
- <u>Part 2: Service/Office (S/O) Research Requirements and Research Gap Analysis</u>: This part of the plan focuses on the program's operational capabilities in the Service/Office (S/O). An operational capability is the ability to do something in the aerospace ecosystem. In our context of aviation safety research, it is a desired future ability that cannot be realized until one or more knowledge gaps are addressed. In addition, in this section, information is provided on who is the primary and the secondary S/O. Also, this section will conclude with an outcome. An outcome is how the S/O will measure achievement of the targeted operational capability. After this information is defined, information on a "Research Gap Analysis" is included. Each

knowledge gap can be framed as a research question, which in turn drives a research project that is designed to answer the question. The S/O determine the relative contribution of addressing each knowledge gap in realizing the targeted operational capability and identify the Research Output which describes what specific products the research project will deliver to the sponsors.

- <u>Part 3: RE&D Management Team Programming</u>: This section includes two tables. The first table is comprised of BLI planning 3-year funding profile. The second table includes a table of all operational capabilities and the research questions within that operational capability as well as all planned, or needed, activities in the out years.
- <u>Part 4: BLI Team Members</u>: This section of the BLI plans captures all BLI Team participants including the participants' name, role, and routing symbol.

<u>2) FY24 AVS Portfolio Funding Profile</u>: This document is a single table of funding numbers from FY20 to FY24 that is broken into program areas by Domains.

<u>3) FAA Research BLI REDAC Forecast and Assessment</u>: This template provides the Sub-Committee with a structure on how to provide feedback back to the FAA on the BLI Plans. The Sub-Committee will provide feedback on the Operational Capabilities identified in the individual BLI Plans using the Forecast and Assessment Template.

<u>4)</u> Edition 5 (2021-2026) of the FAA UAS/AAM Integration Research Plan</u>: This plan is being submitted from AUS through the REDAC DFO and should be used when reviewing the UAS BLI Plan.