

Synthetic Vision System (SVS)

PROGRAM/PROJECT: Aviation Safety Program

LEAD AGENCY/COLLABORATING AGENCIES: National Aeronautics and Space Administration (NASA)

LEAD AGENCY POINT OF CONTACT: George Finelli, LaRC, 757-864-9100, <g.b.finelli@larc.nasa.gov>

PROGRAM POINT OF CONTACT: Dan Baize, LaRC, 757-864-1071, <d.g.baize@larc.nasa.gov>

SERVICE AREA (S)/INITIATIVE (S)

- *National Aviation Weather Initiatives:*
1: 14

FUNDING

- *Programmed/Planned (Net \$'s/FY):* \$6.1M/FY 03 \$6.0M/FY 04 \$6.0M/FY 05

TYPE OF PROGRAM/APPLICATION

R&D/Decision Support

SCOPE OF PROGRAM/PROJECT

- *What's being developed, procured, etc.:* a display of terrain and other airport surface features to provide guidance cues and enhance airport surface awareness. The SVS Project will develop and demonstrate display configurations, display concepts, and enabling technologies.
- *How will operations be changed/improved:* Eliminates low visibility conditions as a causal factor to civil aircraft accidents. In addition, SVS will increase National Airspace System efficiency by allowing operations to more runways and to lower weather minimums.

PROGRAM/PROJECT MANAGEMENT

- *Basic guidance document for this program:* SVS Project Plan, dated November 28, 2001.
- *Program/Project verification process:* The SVS Project participates in annual independent reviews and in reviews by the Aviation Safety Program's Executive Council.
- *Method used for end product validation:* The Office of Mission Assurance will provide support to the SVS Project in the areas of systems safety, reliability, quality assurance and environmental impact. Analyses will be prepared in order to develop a safety information package to provide to industry partners to facilitate or expedite their certification of the technology. Technologies are also validated using simulations and flight tests.
- *Operational training for the user:* Industry will be responsible for setting training standards for their final, certified products.

SCHEDULE/IMPLEMENTATION

- *Next major program milestone:* 1QFY04- Initial air transport flight evaluation using SVS display concepts integrated with runway incursion prevention concepts.
- *Program becomes operational:* The SVS Project develops enabling technologies that must be implemented by industry or other government agencies. The current research and technology project is funded through FY 05. Operations in air transport aircraft probably at least five years away.
- *Plans for further improvements:* Consider advanced display media and other second-generation SVS technologies that will be flyable and navigable.