




NAS OPS SUBCOMMITTEE

Spring 2018 Report



Finding and Recommendation

Commercial Space Transportation

The Office of Commercial Space Transportation (AST) regulates the civil, military, and commercial sectors of the space program to ensure the protection of the public, property and national security and to encourage, facilitate, and promote U.S. commercial space transportation.

Finding: Today's commercial space traffic (CST) operation is based primarily on airspace segregation and has significant impact to airspace use by other NAS users. The feasibility applying future TBO automation applications as the primary way to integrate commercial space operations into the NAS is unknown and requires careful study the extension of TBO methods for CST requires an understanding of the ramification of space operations to all NAS users.

Recommendation: The NAS Operations subcommittee recommends that scheduling and causal factor analysis to all NAS operations be included to the research and development portfolio. Further given the number of space ports that are under the certification process and the forecast of demand for increased number of launches, analysis is needed before an assumption that TBO will mitigate CST on the NAS.

Finding and Recommendation

ATDP - Operations Concept Development and Infrastructure (BLI 1A01C)

The NASOPS Subcommittee was briefed on the ATDP project at its March 2018 meeting. The subcommittee has, over the past, been extremely interested in FAA work in this area and has always been of the view that this work is critically important. The subcommittee believes that insufficient work in operational concept development and validation significantly increases the risk of operational problems after implementation.

Finding: The ATDP presentation did not address how FAA decides which concepts will be studied with the limited ATDP budget. It was not clear what criteria are used to select and to prioritize concepts for concept development and validation.

Recommendation: The FAA should develop clear criteria for selecting and prioritizing concepts to be evaluated. They should identify potential implementation risks for concepts that are not selected for study or concepts that are subjected to only limited validation.

Finding and Recommendation

NextGen ATC/TechOps Human Factors

This program addresses R&D needs in five focus areas: human factors standards; workforce optimization; improved safety; human factors in NAS technology integration; and human performance enhancement.

Finding: The current A11.i portfolio and proposed R&D roadmap focuses solely on tactical air traffic control and technical operations personnel. Absent any R&D investment addressing these issues, the TFM workforce will continue to have significant challenges both in today's environment as well as when transitioning toward TBO, jeopardizing the expected benefits possible from new technologies and procedures.

Recommendation: The NAS Operations subcommittee recommends that TFM workforce human factors considerations be directly included in future R&D portfolio planning. Representatives from the TFM stakeholder community should be included in the ATO R&D Requirements Roundtable and research requirements specific to the TFM workforce should be identified and included in the planning process.

Action Items

New ATM Requirements

- The subcommittee asks that, at future meetings, the funding amount that has been allocated to each subtask is also provided along with the subtask descriptions.
- The committee requests additional information on how the 1A09D portfolio will support potential ATM changes driven by these disruptive concepts and technologies.

Pathfinder

- We request a refresh for the Subcommittee on this project to include budget, progress, plans, and implications to the broader needs of UAS in the NAS, UTM, and such emerging developments as Urban Air Mobility and related airspace management needs.

Cybersecurity

- We request a refresh for the Subcommittee on this project to include budget, progress, plans, and summary of the public-private partnering aspect of the project.

Remote Tower Project

- We request a refresh for the Subcommittee on this project to include budget, progress, plans, and the implications of advancements such as space-based ADS-B.

Operations Concept Development and Infrastructure

- The subcommittee requests that these briefings detail how research in these three areas is mitigating risk associated with the operational integration of these concepts.
- The subcommittee also requests information about how funding within the budget line is divided between the three identified focus areas.