




NAS OPS SUBCOMMITTEE

Spring 2019 Report



Finding and Recommendation

Enterprise Concept Development and Technical Operations Human Factors

Finding: One Enterprise Concept Development project is the re-architecture of the U.S. NOTAM System. This was identified as a project of significance to the NAS from both safety of flight and an operations efficiencies perspectives. Human factors considerations must be taken into account during the development of the concept for this re-engineered NOTAM system to guide configuration, adaptation, and integration of NOTAMS for pilots, ATC, and airport operators critical to the safety of the NAS.

- Tech Ops Human Factors carries out research projects that address factors affecting human performance in air traffic control operations which can be used by projects during system acquisition to improve the safety and efficiency of the NAS.

Recommendation: The subcommittee recommends that the Enterprise Concept Development project for NOTAM modernization engage human factors experts to help develop and validate effective concepts that adequately address human performance issues.

It is recommended that the Tech Ops Human Factors Program determine whether the current state of the art is adequate or whether human factors research is necessary to support the development of the NOTAM concept and, if so, carry out the necessary research and provide the results to the human factors experts working on the NOTAM modernization project.

Finding and Recommendation

Weather Technology in the Cockpit Program (WTIC)

Finding: WTIC plans to address weather information requirements and service criteria affecting existing UAS operations. UAS criteria are likely to differ significantly from those associated with GA owing to differences in aircraft dynamics, the airspace in which they operate and possible sensing and control latencies. WTIC does not appear to have extended this research to other important new entrants, in particular small, (in the future) pilotless passenger aircraft. The subcommittee could not ascertain WTIC research plans addressing pertinent aspects of Simplified Vehicle Operations to support this class of aircraft.

Recommendation: WTIC should include research activities in their FY2021 portfolio that address weather information requirements and minimum service criteria for pilotless passenger aircraft, particularly when these operate in urban airspace over people, structures or ground vehicles. Unique meteorological aspects of the urban environment, for example blockage and/or channeling of winds which could affect safety of ascent or descent should be considered.

Action Item

Commercial Space Transportation

The subcommittee requests a more detailed technical briefing regarding the methods in development for launch vehicle-to-aircraft trajectory separation management. This would likely be a briefing presented by one of the organization's subject matter experts.