Questions/Answers of the Federal Aviation Administration (FAA) System Wide Information Management (SWIM) Industry Collaboration Workshop and SWIM Industry-FAA Team (SWIFT) Meeting #17 March 3rd, 2022

Zoom Meeting Conferencing System Virtual Event.

1. Special Topics: The Information-centric National Airspace System (NAS): Steve Bradford & Diana Liang (FAA)

- 1.1. Due to the known fragility of satellite signals, at what level can the NAS function with their loss? Has that scenario been modeled on current and future infrastructure?
 - 1.1.1. Depends, in navigation, we assume a fragility in navigation. We backup our navigation. We add 123 DMEs to provide a fully robust RNAV environment. (Efficient backup)
- 1.2. Part of my question is related to upgraded NAS infrastructure that may inadvertently rely on satellite signals, such as DME/DME station that gets its timing from the GPS signal, therefore not resilient when those signals are gone. This is in addition to the holistic CNS concept, which is becoming more reliant on those signals, not just navigation. I was asking if it has been modeled, as we (DOD) perform jamming exercises we've found the NAS isn't as resilient as the FAA thinks, let alone what the future infrastructure might bring.
 - 1.2.1. Conversation on this question will be followed-up offline.
- 1.3. When will an update to the "Future of the NAS" document be published covering info-centric NAS?
 - 1.3.1. The document is currently at the department for final review, once this is completed, the document will be published.
- 2. NAS Programs: Extensible Traffic Management (UTM, UAM & ETM) Biruk Abraham (FAA 2.1. Is UAM ConOps Version 2.0 Available?
 - 2.1.1. The UAM ConOps is still a work in progress with an expected timeline to be provided later in the year.
- 3. NAS Programs Commercial Space & Space Data Integrator: Crystal Toney and Duane Freer (FAA)
 - 3.1. Is Commercial Space/Space Data Integrator (SDI) data available to external SWIM users?
 - 3.1.1. The SDI team is currently investigating the approach to provide/share data with external users.
 - 3.2. *Is the data, like a flight plan which can be received 24 hours in advance?*
 - 3.2.1. Currently it is a set process, in which data is submitted a week in advance before being supplied to the SDI.
 - 3.3. So many new entrants into the NAS; for Space, do operators have variable launch opportunities? Do they consider least impact to the NAS?
 - 3.3.1. Yes, good collaboration with operators where we calculate aircraft projected to be impacted, mileage involved in reroutes; work with reducing hazard areas and times; how do we mitigate and minimize impacts to the aviation community.
 - 3.4. Does SDI only share information within the NAS? After the debris zone exceeds the NAS airspace, is the data shared with other countries/ANSPs, or do they have to track the launch themselves?
 - 3.4.1. Currently Not sharing data with other ANSPs.
 - 3.5. SWIFT Portal Mark Parra & Lucas Curns (Noblis)
 - 3.5.1. What is the link to the SWIFT Portal?
 - 3.5.1.1. https://community.swim.faa.gov/