Subcommittee on NAS Operations
Summer – Fall 2016 Report

Findings: ***UAS Integration in the NAS***

The Subcommittee commends the continuing progress that the FAA is making in responding to the challenge of integrating UAS in the NAS. In its previous meeting, the subcommittee recommended that the FAA actively engage with the UAS stakeholder community and share the work it has done to date, including the FAA UAS Concept Maturation Plan. The Subcommittee further recommended that the FAA establish high level system engineering leadership that can prioritize UAS research and development across all the FAA organizations. The Subcommittee has the following findings and recommendations:

Finding 1
The FAA has begun to engage the UAS stakeholder community as part of the NASA UAS Traffic Management (UTM) workshops. The FAA has established a framework for future engagement through the Drone Advisory Committee and has developed a UAS External Stakeholder Plan. The Subcommittee finds that these are significant steps in the right direction.

Finding 2
FAA has recently established an agency-wide UAS leadership structure consisting of a senior UAS Board, a UAS Executive Committee, and a UAS Implementation Plan Working Group. These steps are valuable in accelerating the pace of FAA engagement with the burgeoning industry. However, the subcommittee remains concerned about the adequacy of these actions alone to sustain the pace of engagement necessary to avoid having the industry and government lose ground in economic opportunities for the nation.   In its briefing to the subcommittee, the FAA stated that this structure was intended to organize and prioritize the UAS research, development, and implementation across the FAA. During its briefing on the FY2017 budget, the FAA provided the subcommittee with the language that accompanied the House and Senate marks on the FY2017 RE&D budget request. In previous years, the Unmanned Aircraft Systems Budget Line Item (BLI) has been used to perform safety-related research (e.g., airframe safety and certification) overseen by AVS. The Subcommittee notes that the FY2017 language pertaining to Unmanned Aircraft Systems Research includes language that would allow the FAA to use a portion of that BLI to develop and validate operational concepts and procedures supporting the integration of UAS into the National Airspace System that are necessary to close the operational and technical shortfalls identified in

the UAS Concept Maturation Plan. This would require participation of multiple FAA organizations to accomplish work within this single BLI.

Whether or not this language appears in the final FY2017 appropriation, there is a clear need to prioritize and coordinate UAS research and development across the RE&D and F&E budgets and across FAA organizations.

Recommendation 1
The Subcommittee recommends that the FAA continue this momentum, placing considerable emphasis on communication of its technical and operational challenges to the user community, through sharing of documents such as the UAS Concept Maturation Plan, and in turn merging input received from a broad range of UAS stakeholders into future planning activities. While the FAA ultimately has the responsibility for the safety and efficiency of the NAS, it is the subcommittee's strong opinion that an open dialog of these issues with the user community will foster a more collaborative environment in which to solve them.

Recommendation 2
The FAA should leverage the new UAS leadership structure to prioritize and plan UAS research and development across budget elements and across organizations, broadening from safety-related efforts to an increased emphasis on UAS integration into NAS operations. The UAS Concept Maturation Plan provides one potential framework for this plan.