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Airspace Coordination and Air Traffic Control Interaction Requirements for UAV Operators

As UAVs become integrated into the national airspace system (NAS), it is increasingly important to consider how UAV operators will coordinate with the FAA on a variety of issues. Once UAV usage in the NAS becomes routine, airspace coordination and interaction with air traffic controllers will occur on a regular basis. The UAV Systems Operations and Validation Program (USOVP) is a new DOD program that has been developing UAV procedures for the NAS, including those for UAV operators. Specifically, the USOVP was created to design, develop, demonstrate, and validate UAV systems operations in the NAS, international oceanic, and domestic airspace of foreign states. This program supports any category of DOD UAVs, as appropriate, in all airspace classes of the NAS. Preliminary findings on airspace coordination and air traffic control interaction requirements for UAV operators will be presented. These findings will touch upon several areas, including coordination with the FAA at the terminal, en route, and region levels. Airspace development, including the process, analysis, and interaction with the FAA in the establishment of long distance airspace routes and the establishment of the local, regional, and border airspace will be covered as well. Further findings will include operator requirements that impact the coordination of UAV airspace from New Mexico to Alaska that were gathered from the FAA, foreign aviation authorities, the DOD, and local airport users. These requirements involve such issues as flight planning and scheduling, and air traffic control interaction during take off, in flight and approach procedures. Requirements regarding training for UAV operators and mission or payload personnel will also be discussed. The USOVP is operated by the Physical Science Laboratory at New Mexico State University and by the 46th Test Group at Holloman Air Force Base in New Mexico.