



United States Unmanned Aircraft System Executive Committee: Progress and Activities

Presented on behalf of the
UAS ExCom Senior Steering Group

by

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NASA



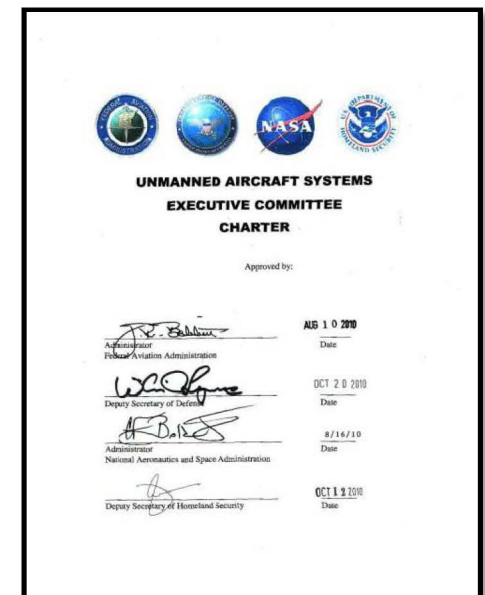
Presentation Outline

- What is the Unmanned Aircraft System (UAS) Executive Committee (ExCom)
- What has it accomplished
- What are its current activities
- What can be expected in the future
- Conclusion



UAS Executive Committee

- Purpose
 - Enable routine, safe operation of Federal Gov't unmanned aircraft in US civil airspace
- Composition
 - Federal Aviation Administration (FAA)
 - Department of Defense (DOD)
 - Department of Homeland Security (DHS)
 - National Aeronautics and Space Administration (NASA)
- Staffed at the senior executive level
- First meeting occurred Oct 2009





Goals

- Coordinate and align efforts among key Federal Government agencies (FAA, DOD, DHS, and NASA) to ultimately achieve routine safe federal public UAS operations in the NAS.
- Coordinate and prioritize technical, procedural, regulatory, and policy solutions needed to deliver incremental capabilities.
- Develop a plan to accommodate the larger stakeholder community, at the appropriate time.
- Resolve conflicts among Federal Government agencies (FAA, DOD, DHS, and NASA) related to the above goals.



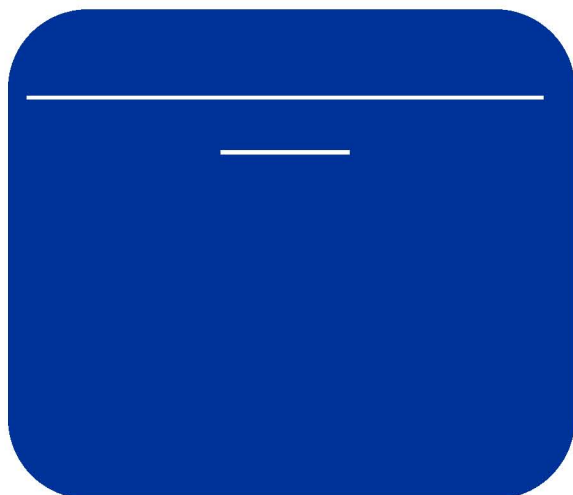
Accomplishments

- Initial focus was on “early victories” which led to work on process improvements
 - UAS flight approval process (Certificate Of Authorization or Waiver (COA))
 - Safety and operational data sharing
 - Transitioning from Class D airspace over military installations to adjacent special use airspace
- Latter focus turned to more challenging airspace issues
 - Multiple manned and unmanned operations in class D airspace



NAS Access Plan

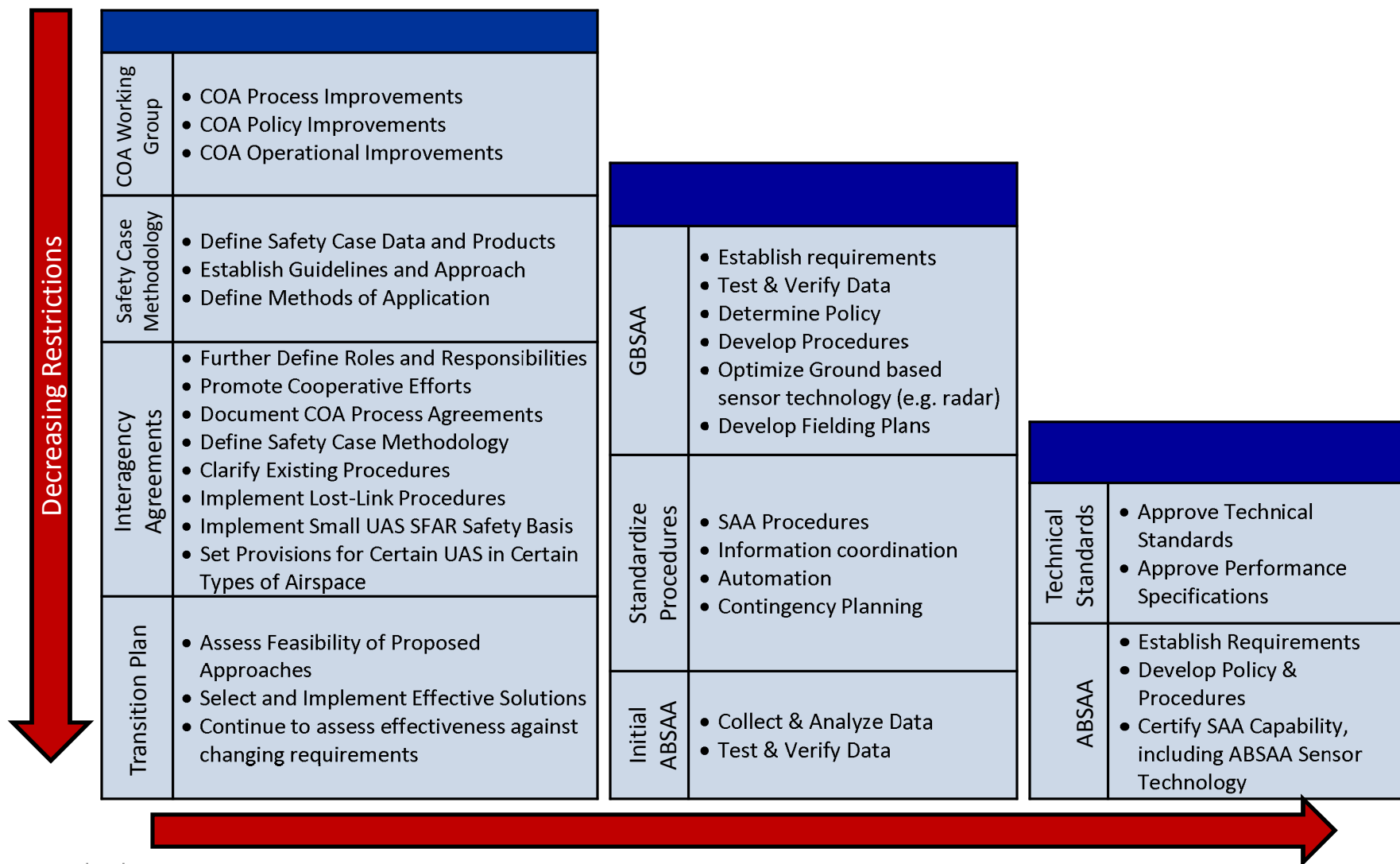
An early requirement from Congress was to deliver a
NAS Access Plan



- Cooperatively develop UAS NAS Access plan –as required by Congress
- Examine the range of technical, regulatory, and legal issues

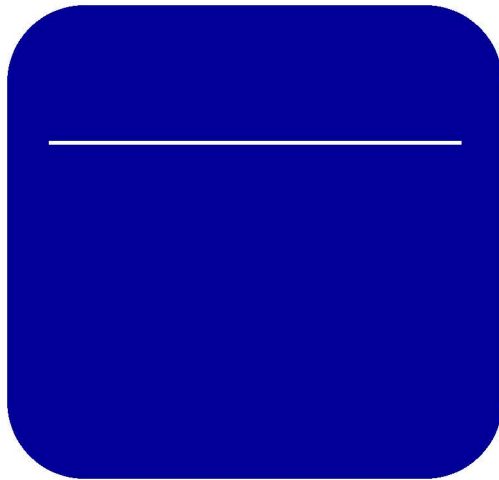


NAS Access Plan Implementation Products





COA Process Improvements



- Examine process, policy, and operational procedure changes
- Phase I – 14 Process Issues Identified
- Phase II - 11 Policy & Operations Issues Identified

- Phase I - Complete
 - Process improvements resulted in dramatic reduction in time and resources to obtain flight approval
 - Significant improvement in common understanding of COA language and requirements resulted
 - This has allowed the agencies to improve their quality control systems
 - Process approval timeline reduced from 180 days to 60 days
- Phase II - In Work



Additional Process Improvements

- Safety Data Sharing
 - DOD transferred 6 years of mishap data to FAA on 22 September 2012
- COA Expiration Extension
 - FAA internal guidance change in process to extend COA's from 12 to 24 months
- Transitioning from Class D airspace over military installations to adjacent special use airspace
 - Clarification issued to eliminate the need to file a COA for transition to SUA from Class D



Airspace Accomplishments

- Multiple manned and unmanned operations in class D airspace
 - Risks identified
 - Mitigations proposed that would allow routine operations
 - Validation plan for mitigations is in development



Current Activities

- Validate Recommendations for Multiple Manned & Unmanned operations in Class D airspace
 - Demonstration & Documentation plan being developed
 - Expect completion this year
- Small UAS (less than 55 pounds/25 kg) Operations in Class G Airspace
 - Expected to deliver operating procedures to enable day & night small UAS operations at specific locations
- Access to (Flight Information regions) FIRs and Remote Areas Recommend ways to align approval process and operational restrictions
- Process Improvements
 - Update internal FAA guidance on COA and special airworthiness certification processing
 - Ensure consistent UAS Incident/Accident Definitions for data collection and reporting
- Continue to respond to Congressional direction when given
 - Status Report on integration progress
 - FAA to establish 6 UAS test sites
- Continue to monitor COA process time lines and take action as required



Future Plans

- Validate and implement recommendations regarding
 - Small UAS operations in class G airspace
 - UAS operations in US managed flight information regions and remote areas
- Continue to monitor COA processing time line and identify process improvements
- Beyond the UAS ExCom
 - Extending the progress to other government UAS operations
 - Transitioning benefits to civil/commercial/NextGen community



Conclusion

- The UAS ExCom provides a senior executive level forum to address government UAS airspace integration challenges
- Progress to date has resulted in increased access and operational improvements
- The ExCom organizations are moving forward to achieve both near- and far-term objectives for UAS NAS integration