

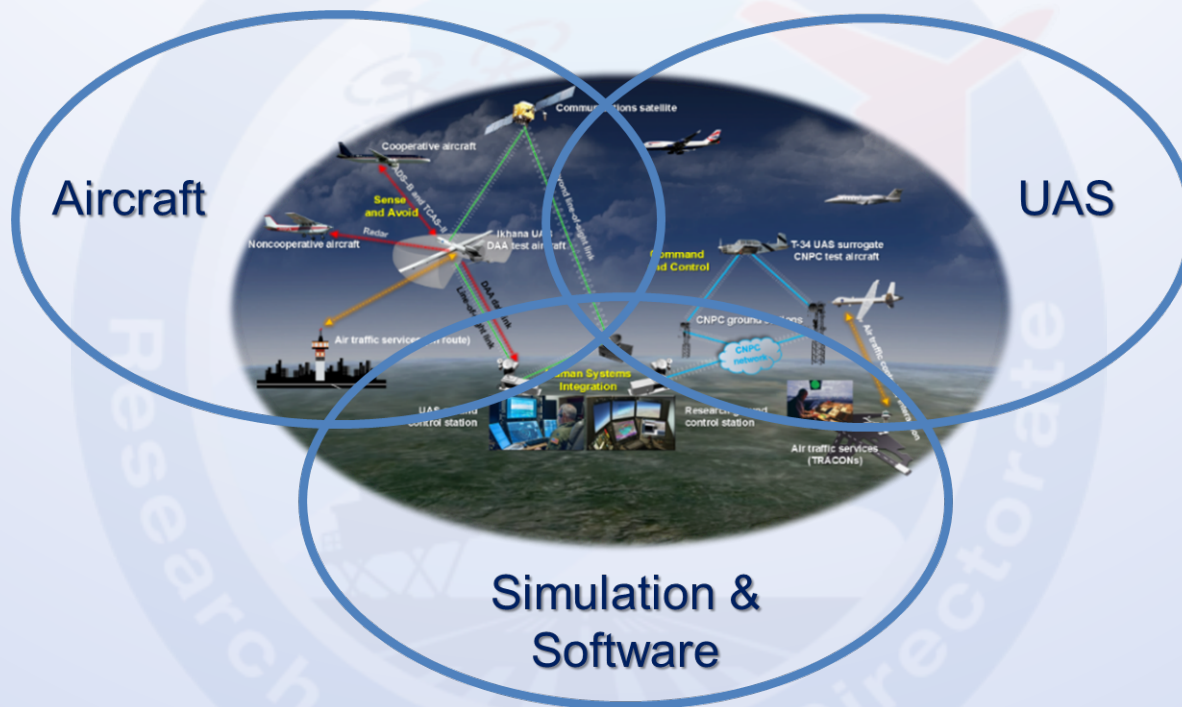


Research Services Directorate



Frank Jones, RSD Deputy Director
Langley Contractor Steering Council Briefing
June 17, 2021

NASA Langley Research Center Research Services Directorate...

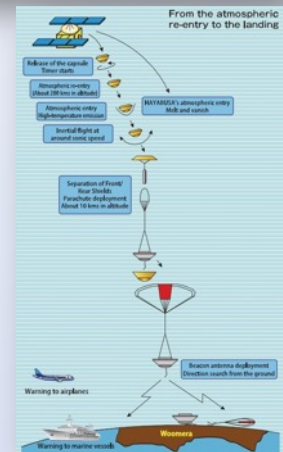




Aircraft Updates & Issues...



- ACTIVATE (SD/LaRC – EVS3/SMD)
 - Completed campaign #2 & #3 during COVID on UC-12B and HU-25A
 - Redesigned research power system on HU-25A prior to flying #4 summer campaign
 - Scope of summer campaign flight operations in progress
- SHARC JAXA/NASA Hayabusa2 Mission (Heliophysics/SMD)
 - Completed imaging of Hayabusa2 asteroid return capsule with SCIFLI imagers during reentry to Australia
 - First G-III project (Challenges: P-Card, safety Stand down, COVID protocols, International partnership, 2 flight organizations (LaRC and JSC), International deployment)
- CMIS for APL/Johns Hopkins (Instrument Incubator Program/ SMD)
 - Compact Midwave Imaging System development flights on G-III
- KiNET-X (Heliophysics/SMD)
 - Sounding Rocket launch from Wallops – G-III mission with SCIFLI and U of Alaska imagers
- MOOSE (LaRC/SMD)
 - Data flights in vicinity of Detroit, MI and Southern Ontario Province, Canada on the G-III
- S-MODE (JPL – EVS3/SMD)
 - G-III mission to ARC delayed to September due to COVID
- SLAP (GSFC/SMD)
 - International deployment in July to Spain on the B200
- G-IV Acquisition in progress (SMD)
 - C-REX in 1QFY22 (Heliophysics/SMD)
 - Sounding Rocket launch from Norway, with G-III or G-IV based in Iceland





Regionalization Updates

- LaRC/WFF Regional Integration
 - WFF P-3 Pylon Support (LaRC team - RD, ED & RSD for SMD)
 - Tasks: Project management, design, structural and aerodynamic analysis, fabrication, integration and development of flight test plan for V&V
 - RSD agreed to perform 2 IRAD projects on Cessna 206H for GSFC and WFF researchers (SMD)-Aircraft to be excessed after completion
 - On-going planning and workforce integration with WFF in all functional areas
 - Aircraft safety, engineering, operations and airworthiness
 - Discussions of regionalization/coordination of UAS operations on-going
- Agency-wide Collaboration
 - Established LaRC G-III/JSC G-V crosscutting Integrated Product Team under ASP/SMD sponsorship
 - Conducted 16 Science integration design reviews: 2 held jointly with JSC; 1 held with ARC and JPL; 2 with WFF lead and RSD support



UAS Updates & Issues...



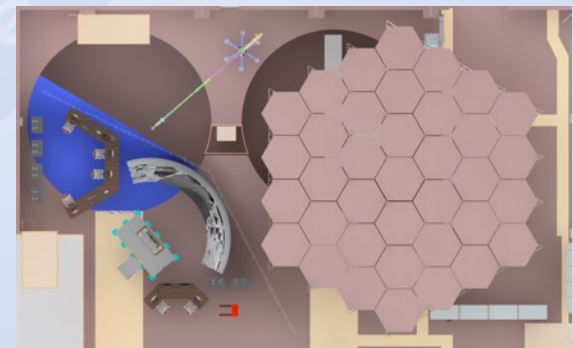
- CERTAIN Smart Center (LaRC)
 - Mission Operations and Data Center proposal accepted
- Preparing to conduct two flight projects involving manned aircraft and UAVs (ARMD)
 - STEReO on SR22
 - HDV on LC40
- Completed checkout of four new UAS research platforms
- Partnerships
 - Skydio – SAA/Procurement
 - ARISE (Ft. Monroe) – SAA
- 2020 GSA Federal Aviation Award
 - Unmanned Program Award





Flight Simulation Updates

- AAM FlyTEC (ARMD)
 - Completed FAA's initial pilot in-the-loop assessment of eVTOL handling qualities in the CMF RFD with motion.
- Artemis Lunar Landing Handling Qualities simulation in the Lunar Flight Deck (LFD) simulator (HEOMD)
 - Dynetics/Draper/Sierra Nevada Corporation completed evaluation of early-stage lander design
 - Support LFD astronaut evaluation of concepts on the trajectory design, displays, and controls for manual and automatic control of human lunar landing vehicles.
- XVS X-59 Pilot Visual System (ARMD)
 - Flight pallet software verification and validation
 - Pallet ship date to AFRC 5/21/21
- Building 1268 Room 1180 Progress
 - RSD, STED, RD & ED collaboration
 - Facility refurbishment initiated





Questions?