NASA Science Mission Directorate Rideshare Office

➢ The Science Mission Directorate has a rideshare policy and an established SMD Rideshare Office (SRO) to develop standard rideshare processes for the NASA SMD.

➢ SPD-32 Evolved Expendable Launch Vehicle (EELV) Secondary Payload Adapter (ESPA) Secondary Payloads Rideshare

  ➢ Baseline policy signed Oct. 2018; Policy updated January 2021 (Rev 2); Rev 3 underway… ETA early 2023

    ➢ SMD policy enables rideshare or launch accommodation opportunities using an ESPA-type ring integrated on the launch service procured for an SMD primary payload **_with identified excess performance_**.

    ➢ SMD may offer any excess capacity not utilized for SMD investigations to other NASA Mission Directorates (MD), other U.S. Government Agencies, or NASA's International partners in accordance with international agreements for international collaborative efforts relating to science, technology, and exploration goals.

    ➢ *** This policy only applies to ESPA-class and independent Cubesat missions on ESPA ports (not Cubesats which are managed through the CubeSat Launch Initiative-CSLI).*

NASA SMD Rideshare Office (SRO)

➤ **Goal:** To provide a single POC for SMD Rideshare-related inquiries for both NASA Center and external partners; to maintain overall knowledge and tracking of Rideshare activities for SMD missions, and to ensure best utilization of excess LV performance to obtain maximum science on SMD missions

➤ Located within the Heliophysics Division
  ➤ Supports **ALL** SMD Divisions
  ➤ Aly Mendoza-Hill is the Rideshare Lead for SMD
    ➤ Other key SMD Rideshare Team Members: Alan Zide, David Cheney, Pete Wilczynski, & Florence Tan
  ➤ Works closely with the Launch Services Program
  ➤ Works with NASA Center Rideshare POCs to create unified NASA/SMD Rideshare message; delegates tasks to appropriate Center POCs as required; does not replace Center-level Rideshare work

➤ Developing a robust rideshare program to utilize excess mass to orbit and enable additional launch opportunities for the science community
  ➤ Standardizing Announcement of Opportunity (AO) language and reviewing each AO for consistency
  ➤ Developing key documents: SMD RS101, SMD RUG & DNH requirements, & the SMD RS Implementation Plan
  ➤ Performing top-level payload compatibility analyses of rideshare missions to identify potential impacts to the primary payload or the success of the secondaries
  ➤ Maintaining a list of SMD launch opportunities and tracking potential external launch opportunities
    ➤ External information is made available on the Small Spacecraft Systems Virtual Institute (S3VI) website (NASA Launch Portal - https://www.nasa.gov/smallsat-institute)

Rideshare Office Coordination

NASA Mission Directorates

- Science
- Exploration Systems Dev
- Space Operations
- Space Technology

Small Spacecraft Coordination Group (SSCG)
Florence Tan / Aly Mendoza-Hill
Sam Johnson*/Andres Martinez
Chris Baker/Justin

SmallSat Database

SMD Rideshare Office (SRO)
Lead: Aly-Mendoza-Hill, Prog Exec
- David Cheney, Prog Exec
- Alan Zide, Prog Exec
- Brooke Burns, Process

SMD AA, Thomas Zurbuchen, established SMD's initial Rideshare Policy in late 2018; Rideshare Office in mid-2020

Submit PLs to SSCG data calls to be included in dB

Launch Services Program
@ KSC (reports to SOMD/LSO)
Shaun Daly (Rideshare)
Norman Phelps & Liam Cheney (CSLI)

LSO – Flight Planning Board

NASA Center Reps
Ames, GRC, GSFC, JPL, JSC, KSC, LaRC, MSFC, WFF, etc.

NASA ASK ME ANYTHING Access to Space Tuesday, August 9 9:45-10:45AM MT ESLC 130 (Auditorium)

Questions? Email:
hq-smd-rideshare@mail.nasa.gov