National Aeronautics and Space Administration

EXPLORE SCIENCE

Solar Terrestrial Probes, Program Overview

DYNAMIC Kickoff Meeting

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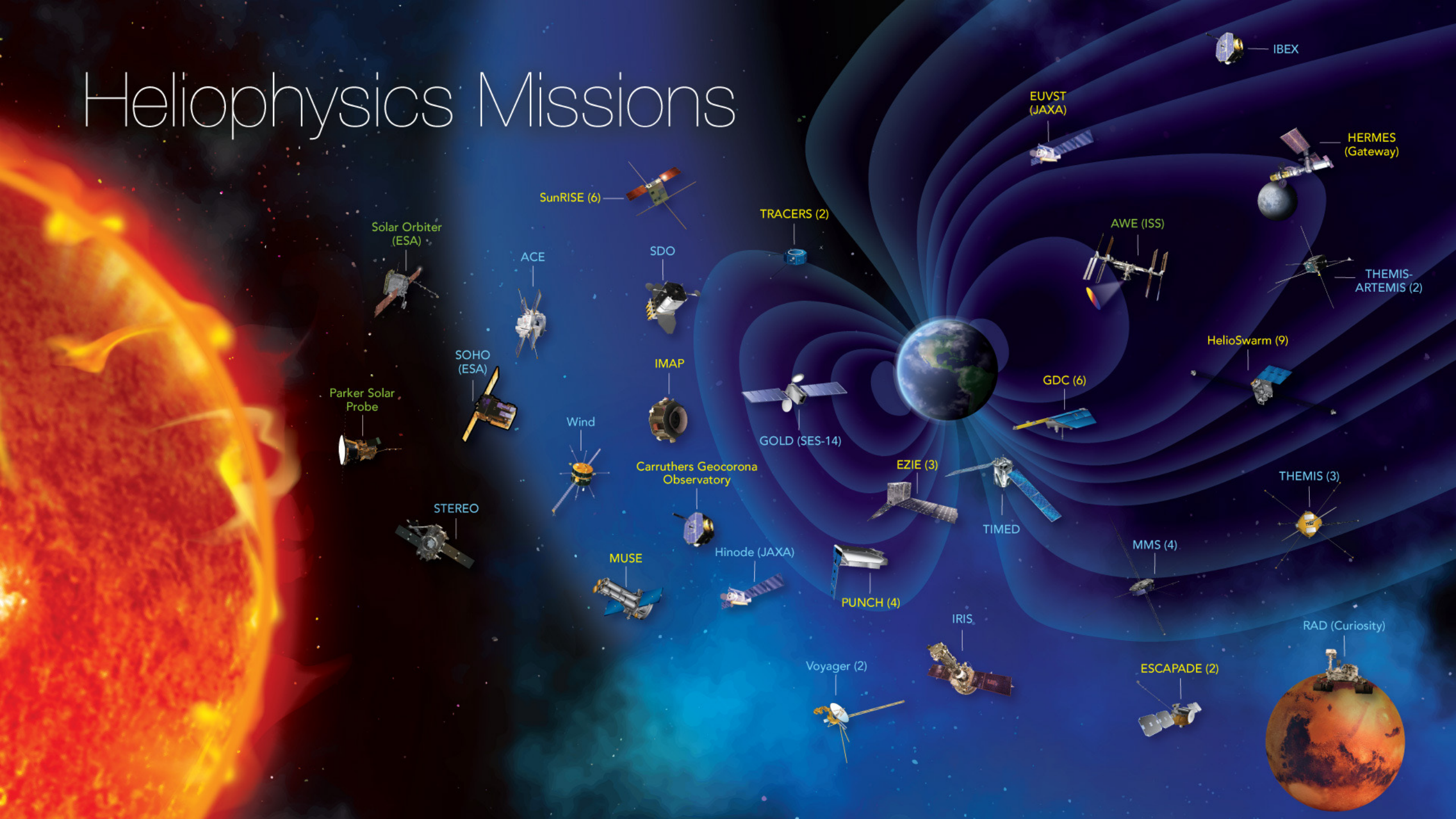
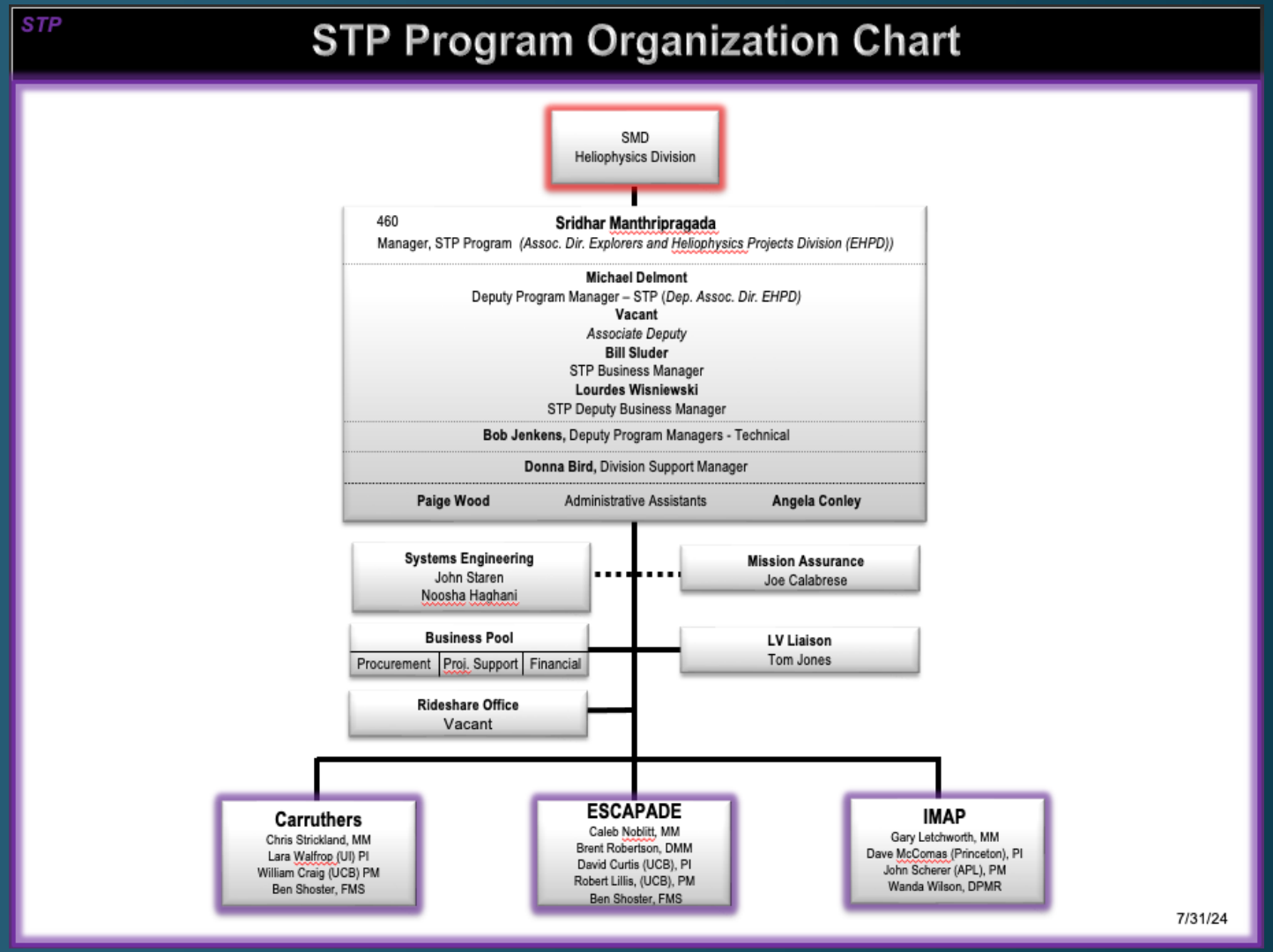
Heliophysics Missions



Solar Terrestrial Probes



- Program goal is to understand the physical processes that determine the mass, momentum, and energy flow in the solar system from the Sun to planetary bodies, including Earth. Flow down from:
  - NASA Strategic Objective 1.1, “Understand the Sun, Earth, Solar System, and the Universe” (NASA Policy Directive [NPD] 1001.0)
  - NASA Science 2020-2024: A Vision for Scientific Excellence
- STP Program Office resides at NASA Goddard (GSFC)

Program Exec/Sci, Roles and Resp. [1]

- Primary HQ interface with Program Office (Mission Manager), SRB (e.g., Review Manager, Chair/Deputy Chair), NASA communications (Helio Comms)
- Participate in project weekly and monthly status meetings/briefing
- Participate in project-level and (sub)system-level lifecycle reviews
- Represent project within NASA HQ:
  - to Division Director
  - in Division-/Directorate-level budget discussions
  - in Weekly Activities Report
  - in monthly Flight Program Review (FPR)
  - in SMD Monthly Status Review (MSR)
  - in NASA's Baseline Performance Review (BPR)
  - with OIIR for International Agreements
- Promote project science and successes with NASA senior leadership, public

Program Exec/Sci, Roles and Resp. [2]

PROGRAM EXECUTIVE

- Ensures project meets obligations (cost, schedule, and technical) and that the mission is in accordance with procedural requirements and standards (e.g., 7120.5F)
- Facilitates transition between Phases to get your project through each gate, schedules Key Decision Point with SMD DPMC
- Your spokesperson and advocate at NASA HQ
- Manage approval process for required documents (e.g., PLRA/Level 1s, Project Plan, Orbital Debris, Mishap, and Planetary Protection Plans, Project Protection Plan , National Environmental Policy Act (NEPA), etc.)

PROGRAM SCIENTIST

- Ensures project meets scientific success within budgetary and programmatic constraints
- Serves as SMD's interface with investigation PI, ensures project science remains viable and consistent with strategic objectives, and monitors development of plan for science implementation and operations
- Your spokesperson and advocate at NASA HQ and within the Heliophysics community
- Steward of the Level 1 Science Requirements (PLRA), Science Data Management Plan, and other documents relevant to the scientific success of the mission

Program Office, Roles and Resp.

- Manages project contracts (incl. IAAs)
- Independently evaluates project technical, schedule and cost performance
- Reports issues and risks to HPD and Center management
- Provides support to independent review boards
- Provides evaluation and recommendation at SMD-level meetings KDP gates
- Provide annual budget coordination and responses (PPBE; NPR 9420.1)
- Provides support for audits conducted by NASA and external agencies
- Supports technical support and problem resolution

Class D Perceptions vs. Reality

• Class D missions are typically smaller in dollar value than Class A-C missions, therefore fewer problems will occur and there is less to worry about	FALSE
• If a project doesn't share its risks with NASA, it will reduce the burden of effort and save time and money for the project	FALSE
• Class D projects are less complex; thus, maintaining a project schedule is not very important to mission success	FALSE
• Class D projects typically have fewer changes between PDR and CDR	FALSE
• Class D smaller teams don't need to emphasize communications	FALSE
• NASA SMD does not spend as much time managing Class D projects as higher risk classes	FALSE

GO DYNAMIC!

Questions?

Backup

PE Spokesperson and Advocate at HQ

Representative to:

- Office of Legislative and Intergovernmental Affairs (OLIA) for congressional inquiries, updates, etc.
- General Counsel and Office of International and Interagency Relations (OIIR) for export control, MOUs, etc.
- Office of Chief Financial Officer (OCFO):
  - Office of Management & Budget (OMB) reports,
  - General Accounting Office (GAO) reports,
  - Basis Of Estimates (BOEs),
  - Joint Cost & Schedule Confidence Levels (JCLs),
  - Cost Analysis Data Requirement (CADRe)
- Public Affairs Office (PAO) for good and bad news
- Office of Chief Engineer (OCE) & Office of Safety and Mission Assurance (OSMA) for 7120 compliance, LCRs, technical issues

PE Role with Policies and Reporting

Ensure mission in accordance with:

- NPR 7120.5F (Program Management)
- NPR 7123.1D (Systems Engineering)
- NASA-STD-1006A (Space System Protection Standard)
- HPD Science Data Management Policy
- SMD Handbook (guidelines)
- Cost and obligation metrics
- NPR 8715.6B (Orbital debris)
- NID 7120.132 (Collision Avoidance)
- SPD-26B (SMD Communication policy)

Assess and report:

- Technical performance and risks
- Project/Program status: technical, schedule, cost, and overall
- Mission success criteria and accomplishment