



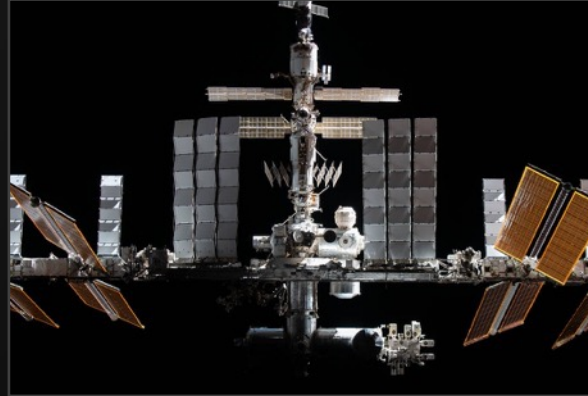
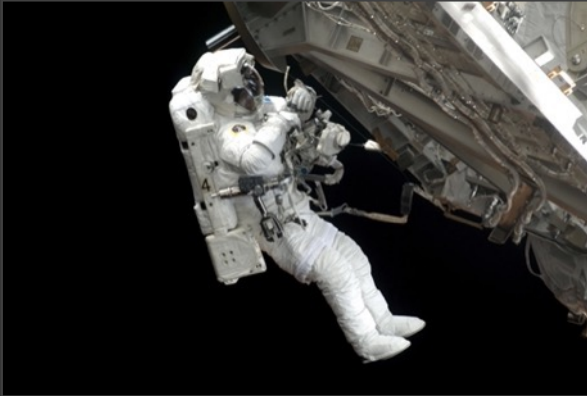
NAC Quarterly

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Space Operations Mission Directorate

Nurturing the capabilities needed to build a new future in space



**INTERNATIONAL SPACE STATION - COMMERCIAL SPACE - SPACE COMMUNICATIONS and NAVIGATION
HUMAN SPACEFLIGHT CAPABILITIES - LAUNCH SERVICES**

Status of Organizational Refinement



- Personnel placement procedures developed to ensure fair and equitable opportunities



- Communications and employee engagements to update staff included:
 - ESDMD/SOMD All Hands
 - Division Level All hands
 - One on one or group engagements with employees who working conditions changed (i.e. organization or supervisor changes)

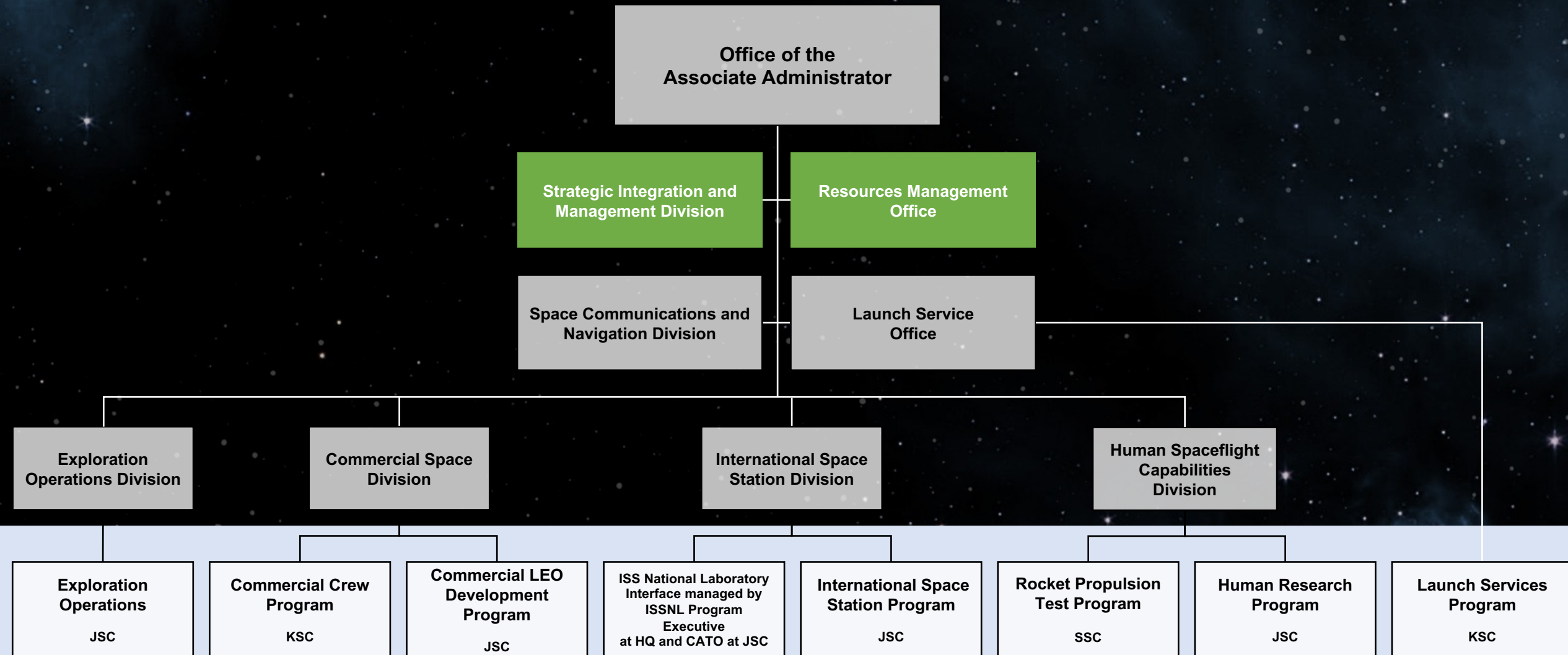


- ESDMD/SOMD Org Refinement Memos currently routing for final approval by the A-Suite



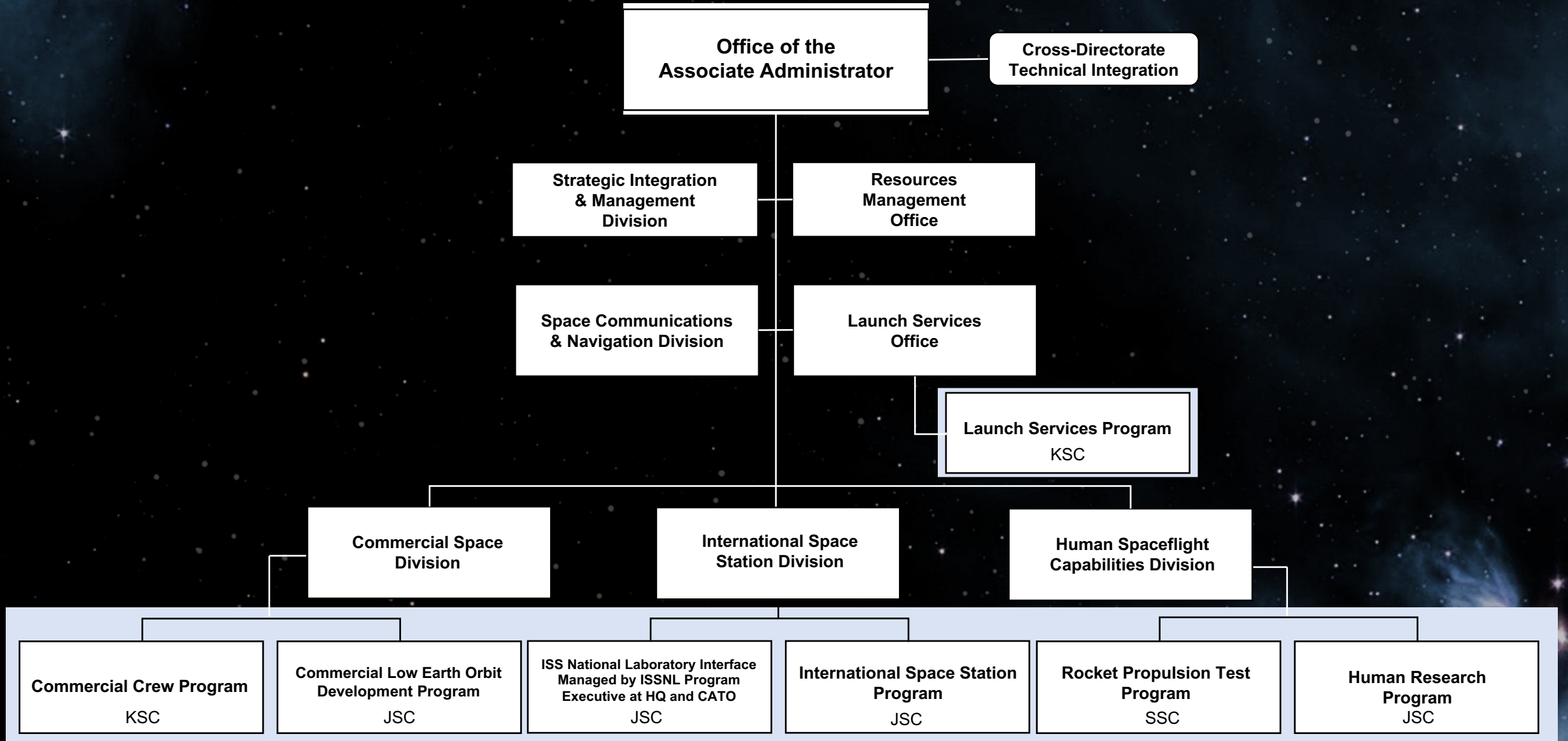
- HR actions: employee reassignments/realignments will be accomplished once final approval received

Previous Space Operations Mission Directorate Org Chart



Note: ESDMD and SOMD shared the existing Strategic Integration and Management Division and Resources Management Office

New Space Operations Mission Directorate Org Chart



International Space Station Division

The International Space Station supports a continuous human presence in low-Earth orbit and will operate through 2030.

- All ISS International Partners have committed to extending ISS operations (Roscosmos to 2028, NASA, CSA, ESA, and JAXA to 2030)
- ISS is working with all its partners to begin transition planning from ISS to future commercial destinations
 - International Partner Working Group is evaluating post-ISS partnership options (meeting quarterly)
 - SOMD/ISS developing recommendation for ISSNL transition to LEO NL
 - Strategic planning for research transition that provides user continuity
- ISS is busier than ever with crew & cargo missions, private astronaut missions, upcoming Boeing CFT, EVAs to install new IROSA's, and impactful research
- ISS research has reached an all time high with over 2500 peer reviewed publications and over 500 in top tier journals
- Currently challenged by delays in cargo missions – DCC, HTV-X, NG-19



Commercial Spaceflight Division

NASA's development of a low-Earth orbit economy is opening space to more people and incorporating space into our economic sphere.

- The Commercial Crew Program is delivering on its goal of safe, reliable and cost-effective transportation to and from ISS from the United States through a partnership with American private industry
- The Commercial LEO Program is making good progress on facilitating the development of Commercial LEO Destinations to enable continuous U.S. human presence after the ISS is retired.
- The Suborbital Crew project is laying the groundwork for a potential significant innovation in human spaceflight certification.



Space Communications and Navigation (SCaN) Division

NASA SCaN enables the Agency's space missions by providing reliable space communications through the Near Space Network (NSN) and Deep Space Network (DSN), managing spectrum, and developing advanced communication and navigation technology.

Network Status

- All network services are operating well above the proficiency requirement of 95%.
- DSN outages at Canberra and Goldstone were reviewed during a Failure Review Board (FRB) with recommendations presented to stakeholders.

Moon to Mars/Artemis

- Artemis I support from NSN, DSN, and SAR was successful from launch through recovery. Final lessons learned debrief to be held with ESDMD in September 2023.
- NASA is leading a newly formed Committee to Study LunaNet Governance within the Interagency Operations Advisory Group.
- After November 2022 ground-breaking of Lunar Exploration Ground Site (LEGS) in South Africa, Australia site selection is pending final approval.

Network Enhancements

- The last of the four NSN Ka-Band Initiative Advancement (NIKA) antennas was brought into operations in December 2022.
- DSN Lunar Enhancement Upgrades: Completed 2 of 6 lunar upgrades (DSS-24) 3rd is in progress with expected return to service December 2023.

Commercialization

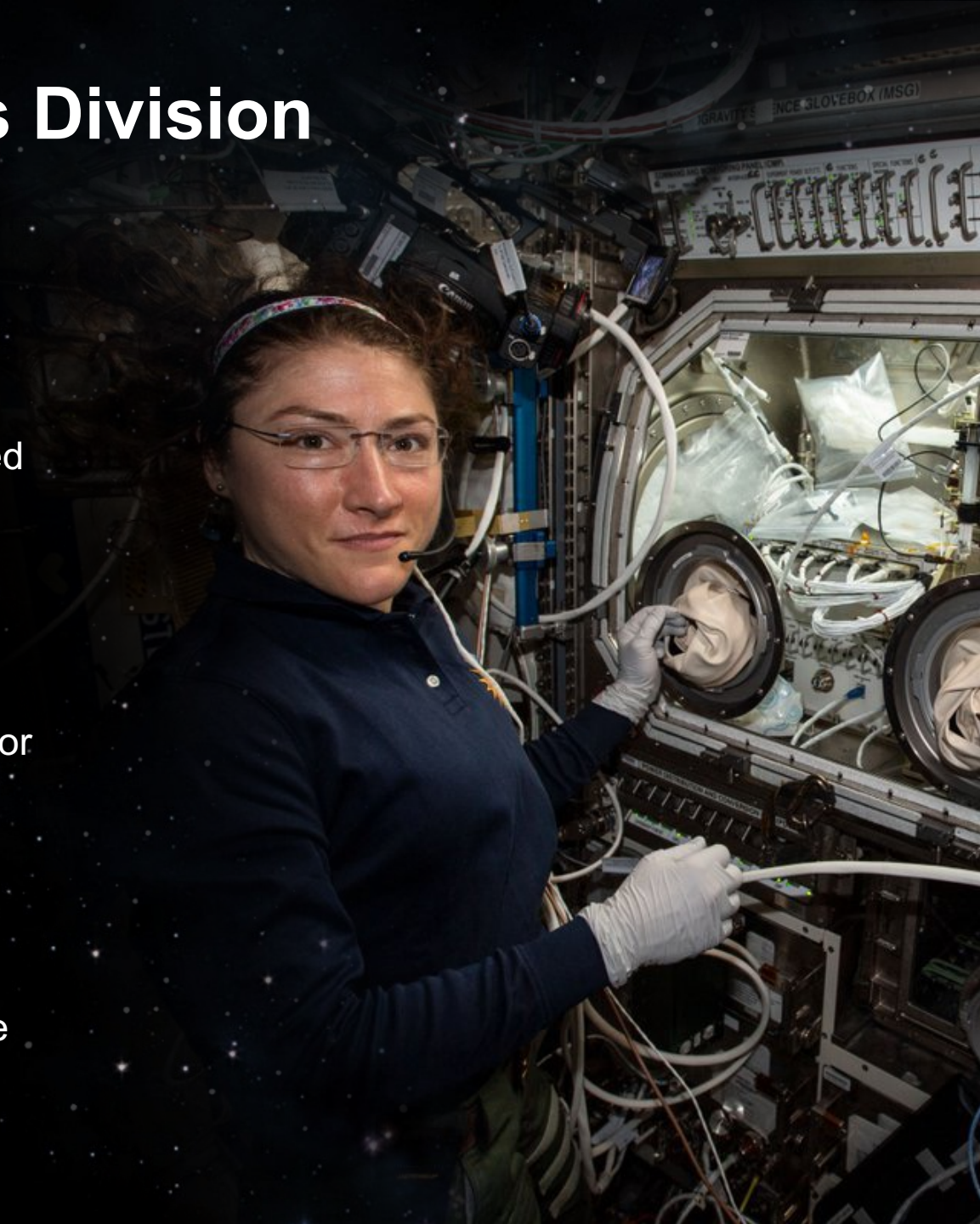
- NSN Request for Proposal was released in February with proposals received April 10. The RFP includes requests for commercial DTE services (near Earth and lunar) and lunar relay.



Human Spaceflight Capabilities Division

U.S. Crew are highly qualified and prepared ready to execute ongoing and the future missions; Significant progress in developing counter measures to health risks of spaceflight and for the moon to mars architecture; Leading the Agency in ensuring an affordable infrastructure and the appropriately sized compliment of facilities.

- Adapting crew health care program to support both ISS and Artemis missions increased total crew levels;
- Developing strategy for commercial engagement to enable sharing of biomedical information, increasing opportunities for human research in support of exploration in LEO and future missions to Mars;
- Transforming the Stennis Space Center to align with the changing National landscape of Rocket Engine Testing; and
- Leading the way for transforming the pricing of facility usage and for divesting of underutilized or unneeded facilities.



Launch Services Office

~25 years launching

101 full missions + advisory services

NASA's Launch Services Program (LSP) unites scientific and robotic spacecraft customers' needs with the appropriate rocket, managing the process to ensure the spacecraft is placed in orbit around the Earth, the Sun, or powered to destinations deeper into the solar system.

- TROPICS launch processing going well in Mahia.
 - Targeting NET 5/8, NZST for first launch
 - Second launch will follow ~15 days later
- Certification efforts are underway for several new launch vehicles including the upgraded Electron configuration, Vulcan-Centaur, New Glenn, and Alpha
 - Falcon Heavy certification now complete, in support of Psyche in Oct 2023
- Leading SOMD involvement in ongoing space policy efforts including NSpC led mission authorization and continuing supervision working group; national spaceport strategy

Significant Events

Successful launch of JPSS-2/LOFTID and SWOT in November and December 2022

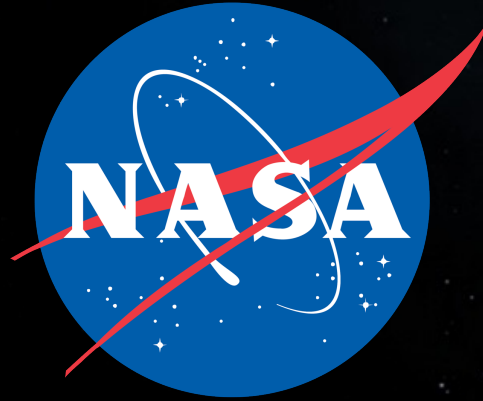
Award of Roman Space Telescope in July 2022

VADR Award for TROPICS in November 2022

Award of Sentinel-6B in December 2022

VADR Award for ESCAPADE in February 2023





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