ISS NATIONAL LABORATORY®

International Space Station National Laboratory

Appendices for Annual Report for Fiscal Year 2022

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Contents

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A. Solicitations

Previously released solicitations with project selection in FY22:

- NLRA 2021-7: Technology Advancement and Applied Research on the ISS National Lab
- MassChallenge Technology in Space Prize
- NASA Vascular Tissue Challenge

Solicitations released in FY22 with project selection in FY22:

- NASA Selects Proposals to Enable Manufacturing In Space for Earth
- NLRA 2022-3: In-Space Production Applications: Tissue Engineering and Biomanufacturing
- ISS National Lab Sustainability Challenge: Beyond Plastics
- NSF/CASIS 2022 Collaboration on Tissue Engineering and Mechanobiology on the ISS to Benefit Life on Earth
- NLRA 2022-5: Technology Advancement and Applied Research Leveraging the ISS National Lab (Cycle 1)
- NSF/CASIS 2022 Collaboration on Transport Phenomena Research on the ISS to Benefit Life on Earth
- NLRA 2022-6: In-space Production Applications: Advanced Materials and Manufacturing
- NLRA 2022-7: Leveraging the ISS National Lab to Enable Digital Engagement For K-12 and Higher Education

Solicitations released in FY22 with project selection expected in FY23:

- NLRA 2022-5: Technology Advancement and Applied Research Leveraging the ISS National Lab (Cycle 2)
- NLRA 2023-1: Technology Advancement and Applied Research Leveraging the ISS National Lab

B. ISS National Lab Commercial Facilities

Institution	ISS Commercial Facilities	Type	Location
Aegis Aerospace Inc.	• MISSE Flight Facility	• On Station	• External
BioServe Space Technologies	• Space Automated Bioproduct Lab (SABL) • Space Automated Laboratory Incubator (SALI)	• On Station • On Station	• Internal • Internal
Craig Technologies	• Space Station Integrated Kinetic Launcher for Orbital Payload Systems (SSIKLOPS)* • Flight Test Platform (FTP)	• On Station • Launch on Demand	• External • External
HNu Photonics, LLC	• Mobile SpaceLab	• Launch on Demand	• Internal
LaMont Aerospace	• STaARS-EF-1	• On Station	• Internal
Nanoracks, LLC	• Nanoracks Mainframe Alpha (Nanode) • Nanoracks CubeSat Deployer (NRCSD) • Nanoracks External Platform (NREP) • Nanoracks Plate Reader • Nanoracks Kaber MicroSat Deployer (Kaber) • BISHOP Airlock • Nanoracks BlackBox	• On Station • On Station • On Station • On Station • On Station • On Station • Launch on Demand	• Internal • External • External • Internal • External • External • Internal
ProXops, LLC	• Faraday Research Facility	• Launch on Demand	• Internal
Redwire Space	• Additive Manufacturing Facility (AMF)	• On Station	• Internal
Rhodium Scientific	• Rhodium Science Chambers	• Launch on Demand	• Internal
SEOPS, LLC	• SlingShot	• Launch on Demand	• External
Space Tango	• TangoLab • Powered Ascent Utility Locker (PAUL)	• On Station • Launch on Demand	• Internal • Internal
Techshot	• ADvanced Space Experiment Processor (ADSEP) • Multi-use Variable-gravity Platform • BioFabrication Facility (BFF)	• Launch on Demand • On Station • On Station	• Internal • Internal • Internal
Teledyne Brown Engineering	• Multi-User System for Earth Sensing (MUSES)	• On Station	• External

*Management of facility transferred from NASA

C. Peer-Reviewed Journal Publications and Books

1. Ali RH, Kashefi AK, Gorman AC, et al. Automated Identification of Astronauts on Board the International Space Station: A Case Study in Space Archaeology. Acta Astronautica. 2022;200:262–69.
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18. Kim M, Waddell KA, Sunderland PB, et al. Spherical gas-fueled cool diffusion flames. Proc Combust Inst. 2022;In Press.
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D. ISS National Lab on the Map