Bringing the Universe Into View Since 1959
OSAM Technologies and Capabilities Overview

KEY TECHNOLOGIES

- Servicing
- Inspection
- Rendezvous
- Relocation
- Refueling
- Replenishment
- Replacement
- Repair
- Maintenance
- Augmentation
- Assembly
- Manufacturing
- Mining

ENABLED CAPABILITIES
Earth Science Protecting Our Future

NASA satellites monitor environmental data and support the U.S. Department of Agriculture, farmers, and livestock.
Planetary Science, Instrument and Spacecraft Development

Sample Analysis at Mars (SAM)

Mars Organic Molecule Analyzer (MOMA)

Dragonfly
Development and Advancement of Lunar Instrumentation (DALI)

- Submillimeter Solar Observation Lunar Volatiles Experiment (SSOLVE)
- Characterization of Regolith and Trace Economic Resources (CRATER)
- Bulk Elemental Composition Analyzer (BECA)
- Potassium-Argon Laser Experiment (KArLE)
- Lunar Environment Monitoring Station (LEMS)
NASA Provided Lunar Payload (NPLP)

- Surface and Exosphere Alterations by Landers
- PROSPECT Ion-Trap Mass Spectrometer (PITMS) for Lunar Surface Volatiles
- Development of NASA Provided Lunar Payload: Fluxgate Magnetometer
- Low-frequency Radio Observations from the Near Side Lunar Surface
Wallops Flight Facility Resources
Emerging Technologies

3D Printed Electronics and Nanoscale Offset Printing

Quantum Sensors: Space-based atom interferometer

Quantum Communications

Integrated Photonics

AI & Machine Learning

TeraFLOP computing
Terabit communication

Exoplanet spectrograph

Potential Wildfires in a MODIS Scene
MARYLAND TO MOON
Exploration at Goddard Space Flight Center

Goddard Contributions

$2B

1,819.6

Contractors & civil servants

In work

Goddard Exploration Touches
43 US States and Territories

100+ companies

Communications & Navigation
45%

Satellite Servicing
13%

Heliophysics
09%

Instrument Development
04%

Space Science Mission Operations
04%

Earth & Planetary
23%

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09%

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Communications & Navigation
45%
For more information, please visit our web site:
www.nasa.gov/goddard