

NASA Technology:

# Advance. Accelerate. Foster.

---

Greg Stover

ACTING ASSOCIATE ADMINISTRATOR,  
SPACE TECHNOLOGY MISSION DIRECTORATE

June 2, 2026

# NASA Space Technology

UNLOCKING THE NEAR-IMPOSSIBLE FOR NASA AND THE NATION



**ADVANCE** technologies beyond the cutting edge to accomplish NASA's most ambitious missions



**ACCELERATE** a vibrant and competitive space economy by fueling breakthrough ideas and strategically embracing risk



**FOSTER** collaboration with a robust U.S. aerospace community to ensure American leadership

# The Unique Role of Technology Development at NASA

## TECHNOLOGY SCOUTING

---

NASA's VC-like tech scouting and strategic investment arm — identifying breakthrough technologies and areas of market-driven development to leverage for maximum mission impact

## FORWARD-LEANING R&D ENGINE

---

NASA's internal innovation lab and tech incubator — driving advances beyond the cutting edge while maintaining core workforce competencies and critical agency leadership in technology areas of national priority

## A CAPABILITY PROVING GROUND

---

NASA's infusion on-ramp — validating capability performance in mission-like contexts to bridge the gap between tech demonstration and an operational ecosystem while reducing risk of adoption for NASA programs



# Space Technology Investments



 Autonomy

 Precision Landing

 PNT

 Dust

 Habitation

 Power Infrastructure

 Mobility

 ISRU

 Robotics

 Communications

 Excavation & Construction

 RHU Survive the Night

# Breakthrough Technologies

## Space Transportation

Advanced propulsion

Cryogenic fluid  
management

Nuclear Propulsion

Lunar propellant

## Space-to-Surface Access

SFL1 Altitude 28 m

Deceleration systems

Guidance and  
navigation systems

Landing systems and  
environments

SFL3 Altitude 28 m

Entry modeling and  
instrumentation

## Surface Infrastructure

Advanced power

Environments and  
Dust mitigation

Surface  
sustainability and  
logistics

ISRU

Commercial  
radioisotope power  
systems

## In-Space Infrastructure

Communications,  
position, navigation,  
and timing

Small spacecraft and  
distributed systems

In-space servicing,  
assembly, and  
manufacturing

## Cross-Cutting Capabilities

Advanced materials,  
structures, and  
manufacturing

Avionics

# Acceleration Pathways



**Flight Opportunities**



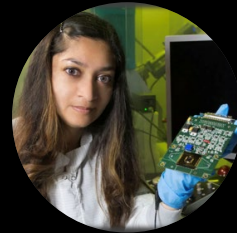
**NASA Innovative Advanced Concepts (NIAC)**



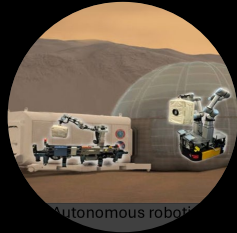
**Space Tech Research Grants (STRG)**



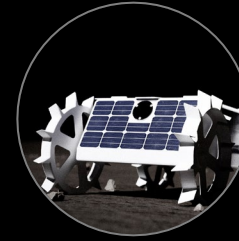
**Independent Research & Development (IRAD)**



**Early Career Initiative (ECI)**



**Prizes, Challenges & Crowdsourcing (PCC)**



**Tipping Points**



**Announcements of Collaborative Opportunities (ACO)**



**Small Business Innovation Research (SBIR)/ Small Business Technology Transfer (STTR) Program**



**Technology Transfer**

# Maturing Technologies Through Flight



Blue Origin's Mark 1



Interlune's Parabolic Flight Experiments

An increased cadence of flights to the Moon provides new opportunities for maturing STMD technologies.

STMD will optimize its flight strategy to:

- Utilize rideshare capacity on flights to Earth's orbit, cislunar space, and the lunar surface
- De-risk technologies for operational use through a variety of commercial flight test regimes

**A rapid, risk-tolerant technology development approach allows STMD to quickly identify flight-ready payloads for available space on CLPS demonstrations and other lunar missions.**



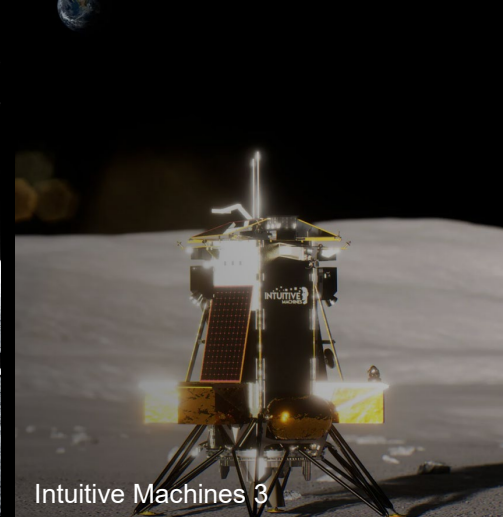
Firefly's Blue Ghost



Astrobotic's Xodiac Suborbital Lander



Astrobotic's Griffin-1



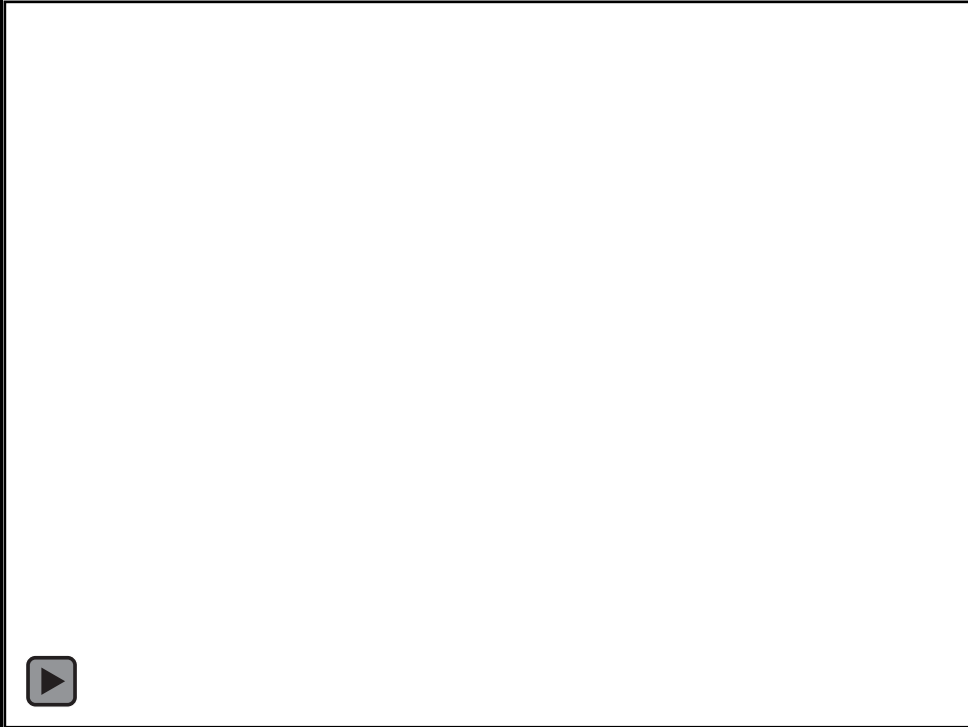
Intuitive Machines 3



Momentum Vigoride Orbital Service Vehicle

# Upcoming Lunar Demonstrations

Stereo Cameras for Lunar Plume-Surface Studies  
(SCALPSS)



Blue Origin Blue Moon Mark 1  
2026

PALETTE Parabolic Reflector  
Radiator (PRR) for LuSEE-Night



Firefly CS-3 Mission  
2026

Hazard Detection LIDAR  
*Tested through Flight Opportunities*

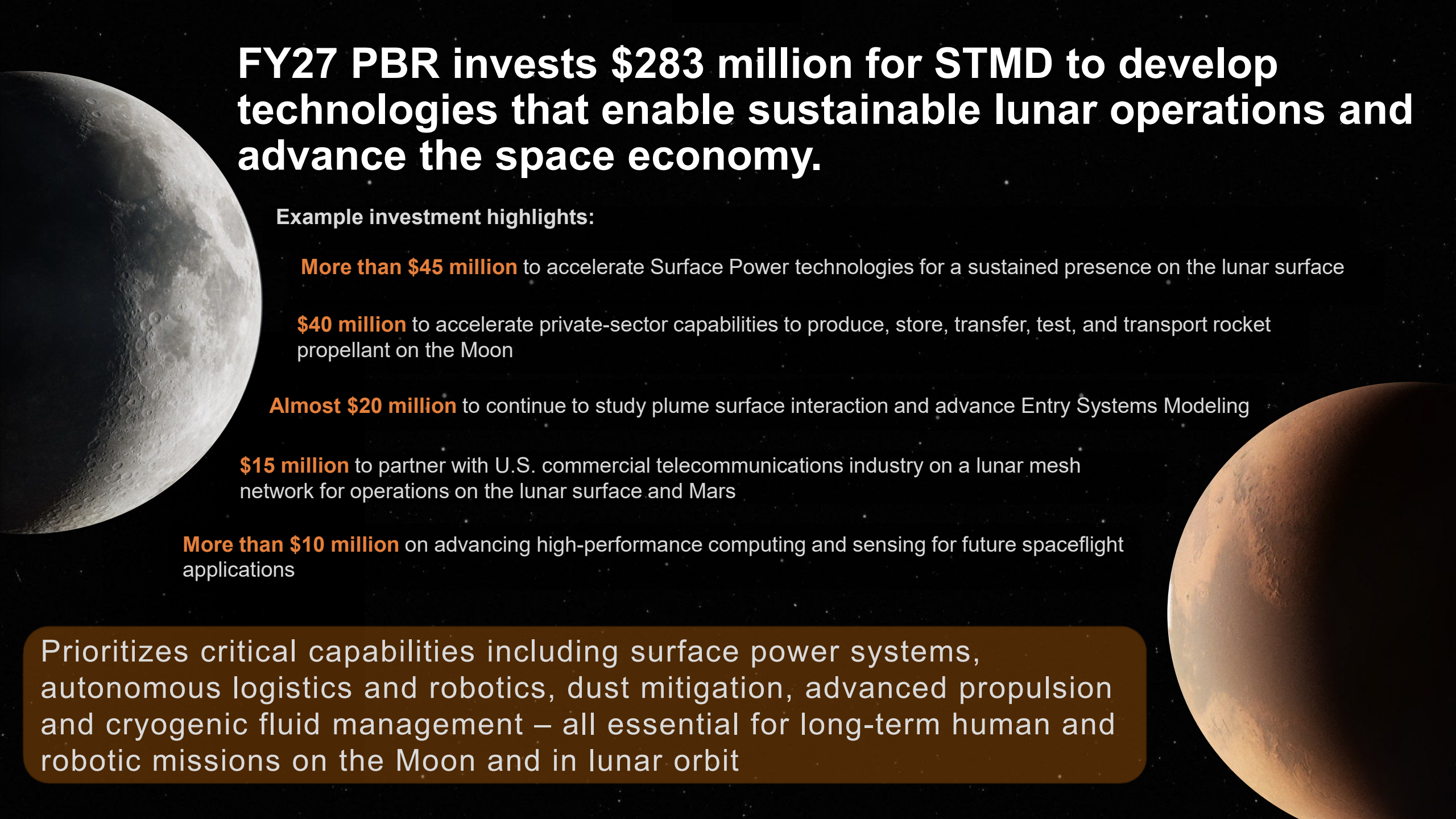


Astrobotic Griffin 1  
2026

Space Science & Technology  
Evaluation Facility (SSTEF1)  
*Tipping Point Award to Aegis Aerospace*



Intuitive Machines 3  
2026



# FY27 PBR invests \$283 million for STMD to develop technologies that enable sustainable lunar operations and advance the space economy.

## Example investment highlights:

**More than \$45 million** to accelerate Surface Power technologies for a sustained presence on the lunar surface

**\$40 million** to accelerate private-sector capabilities to produce, store, transfer, test, and transport rocket propellant on the Moon

**Almost \$20 million** to continue to study plume surface interaction and advance Entry Systems Modeling

**\$15 million** to partner with U.S. commercial telecommunications industry on a lunar mesh network for operations on the lunar surface and Mars

**More than \$10 million** on advancing high-performance computing and sensing for future spaceflight applications

Prioritizes critical capabilities including surface power systems, autonomous logistics and robotics, dust mitigation, advanced propulsion and cryogenic fluid management – all essential for long-term human and robotic missions on the Moon and in lunar orbit



Exploring the secrets  
of the universe for  
the benefit of all.

[nasa.gov](https://nasa.gov)