

**MSFC Communications Plan
Blue Ghost Mission 2
NET 2026 Launch**

Background:

Blue Ghost Mission 2 (CS-3) is Firefly Aerospace’s second lunar delivery mission under NASA’s Commercial Lunar Payload Services (CLPS) initiative. This mission will send two spacecraft—the Blue Ghost lander and the Elytra orbital vehicle—to deliver payloads to lunar orbit and to the surface of the Moon’s far side. Unlike previous CLPS missions, Blue Ghost 2 targets one of the most scientifically valuable and technically challenging regions of the Moon: the farside—an area naturally shielded from Earth’s radio signals, making it ideal for deep space science and astronomy.

After launch, Elytra will deploy ESA’s Lunar Pathfinder into orbit before relaying communications between Earth and the lander. Blue Ghost will then descend to the surface and support at least 10 days of science operations. This mission includes a mix of NASA, international, and commercial payloads designed to expand our understanding of the Moon and help prepare for future human exploration under Artemis.

For NASA’s Planetary Missions Program Office (PMPO), Blue Ghost 2 represents a major milestone in pushing science farther from Earth than ever before. PMPO manages LuSEE-Night (Lunar Surface Electromagnetics Experiment at Night), a radio science instrument—the first operational radio telescope intended to work from the Moon’s farside. LuSEE-Night will operate during the lunar night, using ultra-sensitive instruments to detect faint radio signals from the “cosmic Dark Ages,” the time before stars and galaxies formed, helping scientists learn more about how the early universe evolved.

PMPO also supported Firefly’s first Blue Ghost mission by managing several NASA science payloads delivered to the Moon’s near side. That mission laid the foundation for future CLPS deliveries by demonstrating how science-focused payloads can be successfully integrated and delivered through commercial partnerships. With Blue Ghost 2, PMPO continues to lead the way in managing innovative payloads for frontier science.

Blue Ghost 2 is led by Firefly Aerospace with support from international partners including the European Space Agency (ESA) and payload providers from around the world. In addition to NASA instruments like LuSEE-Night, the mission will carry a variety of

commercial and international science investigations, demonstrating how collaborative lunar missions can deliver cutting-edge science and expand global access to space.

Key Timeline Items:

- Launch: NET 2026
- Landing: Approximately 45 days after launch
- Surface Operations: Minimum of 10 days
- LuSEE-Night Activation: Shortly after landing

Marshall Target Audiences:

- Local Huntsville media
- NASA Marshall employees
- Regional STEM educators and outreach partners
- General public and space enthusiasts
- Social media followers (Twitter/X, Instagram, Facebook)

Blue Ghost Mission 2 Key Messages:

- Blue Ghost 2 is a critical step in expanding commercial lunar delivery and international cooperation on the Moon.
- The mission enables scientific discoveries on the Moon's far side, a region shielded from Earth's radio noise.
- NASA payload LuSEE-Night will pioneer low-frequency radio astronomy from the lunar surface, unlocking clues about the cosmic "Dark Ages."

Supporting NASA Marshall Messages

- LuSEE-Night is a collaboration between NASA's Science Mission Directorate and the Department of Energy's (DOE) Brookhaven National Laboratory, demonstrating NASA's commitment to scientific innovation in partnership with federal and commercial collaborators. It is managed by the Planetary Missions Program Office at NASA Marshall.
- Robotic missions like Blue Ghost pave the way for Artemis and future human exploration by providing insight into lunar science and enabling sustainable exploration.
- NASA Marshall plays a vital role in payload integration and advancing technologies for lunar missions under CLPS.

Media and Social Media Activities/Events

(Dates TBD based on finalized launch schedule — placeholders below assume 6–9 months before launch)

Tactic	Detailed Description	Scheduled Date
Media Day	Coordinate with Firefly and NASA HQ for media access to Blue Ghost and LuSEE-Night integration photos (KSC or Firefly facility).	~3 months pre-launch
Media Interview	Interview with LuSEE-Night payload manager, Mike Selby.	~1 month pre-launch
NASA News Conference	Participate in mission overview briefing with Firefly, NASA HQ, and partners.	~1 month pre-launch
News Release	Issue press release highlighting LuSEE-Night’s goals and Marshall’s role.	Launch minus 2 weeks
Social Media Campaign	Post original content about LuSEE-Night using social media channels. Countdown graphics and “Why the far side?” explainer posts. “From Earth to Moon” Graphic Timeline – tells the story from development to launch.	Begin ~6 weeks pre-launch
Day of Launch	Amplify NASA HQ and Firefly coverage across all social media channels.	Launch Day
Post-Landing Update	Share images and updates when LuSEE-Night begins science operations.	Within 48 hrs. of landing (or when data returns)

Exhibits & Outreach

Activity	Detailed Description	Scheduled Date
PMPO Outreach Exhibit	Highlight Blue Ghost 2 and LuSEE-Night at Kennedy Space Center Visitor Center during launch week. To include – Stephanie Henry, Daniel Horton, and other volunteers from PMPO	Launch minus 1 week

USSRC Exhibit/Signage	Work with U.S. Space & Rocket Center to feature Blue Ghost and LuSEE-Night visuals. “Moon After Dark” – Planetarium show about lunar science focused on the far side.	Launch minus 1 week
STEM Education	Develop educator kits and digital classroom resources on lunar radio science.	Pre-launch

Employee Communications

Tactic	Detailed Description	Date
SharePoint Banner	Post internal launch info and NASA TV links on MSFC SharePoint website.	Launch minus 1 week
Marshall Star Features	Publish article on LuSEE-Night and Marshall’s role. Include Q&A with Mike Selby – “Why the far side?”	2 weeks pre-launch
Launch Day Coverage	Push HQ launch article via Marshall Star; include watch options.	Launch Day
Center-wide TV	Display countdown and mission facts.	Begin 1 week pre-launch