



LASER WEEKLY NEWSLETTER



The second lunar lander mission by Intuitive Machines, IM-2, is scheduled for launch on February 26 aboard a SpaceX Falcon 9 from Kennedy Space Centre. The mission will deliver NASA and commercial payloads to the moon, with a landing attempt at Mons Mouton on March 6 or 7, depending on the launch date.

The IM-2 lander, Athena, carries NASA's PRIME-1 payload, designed to drill and analyse subsurface volatiles, particularly water ice. Additional instruments include a laser retroreflector and various commercial payloads, such as the Micro Nova Hopper "Grace," which will test hopping technology for traversing lunar craters. Nokia's 4G/LTE system and a small rover named Yaoki are also on board, alongside a data centre from Lonestar Data Holdings and thermal protection technologies from Columbia Sportswear.

Rideshare payloads include NASA's Lunar Trailblazer, which will map lunar water distribution, Astro Forge's Odin spacecraft for asteroid exploration, and Epic Aerospace's Chimera orbital transfer vehicle. The mission builds upon lessons from the IM-1 landing, with improvements to navigation and altimeter systems to ensure a successful landing.

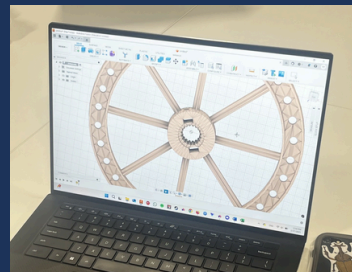
The IM-2 mission serves as an inspiring example of the collaboration between commercial and governmental space agencies. It highlights the importance of innovative technologies, such as lunar hoppers and communication networks, which will play a crucial role in future space exploration.

The iterative improvements made from IM-1 demonstrate the significance of learning from past missions and refining designs to increase mission success. As aspiring space professionals, this mission provides valuable insights into real-world space engineering, project management, and the expanding role of private companies in shaping the future of lunar and interplanetary exploration. Engaging with such missions can motivate students to explore opportunities in space research, robotics, and commercial space industries.



Section written by: Elyazia Alghool

The 'Cube' team, a sub-team of the CubeSat competition team, have now put in a 3D printing order for a crucial component, and compiled a list of all remaining parts needed to bring their vision to life. Here is a look at what they are working on.



The Unity Rise Rocketry Team have now submitted their CDR, an essential step in the competition. Test prints have been completed and all CAD models are finalised. They are now diving into their manufacturing phase, transforming their design into reality. We wish them luck as the competition inches closer.

A personal project for a laser harp is underway. The prototype is coming together and a talented harpist has been found to play the completed instrument.

Upcoming Events:

LASER Showcase at Science Fair: Saturday 8th of March, Victoria Gallery and Museum

Big Game Potluck social with Coding Society: Friday, Date TBC

LASER Team Photos: Wednesday 2pm, Guild of Students. Team leaders in white, team members in blue

Materials Selection and Processes Workshop: Wednesday, Date TBC

Skyrora Trip: Week 7

'Take the best that exists and make it better. If it doesn't exist, design it.' -Henry Royce