



## THE NEED FOR A COORDINATED TIME STANDARD

The Artemis program represents a new era of U.S. space exploration, which will involve partnerships between the National Aeronautics and Space Administration (NASA), commercial space companies, and international entities. These partnerships require careful coordination to ensure safe operations as we establish a sustained lunar presence.

Standard timing systems are vital for navigation on Earth and in space. While we synchronize time on Earth using Coordinated Universal Time (UTC), the Moon and other celestial bodies need their own timing system due to differences in gravity, distance from Earth, and other factors. Thus, creating and adopting a celestial time standard will be necessary to advance scientific research, support navigation, and enable increasingly complex activities on the Moon, Mars, and beyond.

## CELESTIAL TIME STANDARDIZATION ACT

The Celestial Time Standardization Act would improve interoperability in space exploration and further establish U.S. leadership on the international stage. This bill directs NASA to:

- ☾ Lead the development of celestial time standardization, including the study, definition, and implementation of a coordinated lunar time.
- ☾ Coordinate with the Departments of Commerce, Defense, State, and Transportation and consult with private sector, academic, and international standards-setting entities.
- ☾ Submit a report to Congress within two years of enactment describing a strategy for celestial time standardization.