[118H8837]

(Original Signature of Member)

119TH CONGRESS
1ST SESSION

H. R. _____

To require the Administrator of the National Aeronautics and Space Administration to develop celestial time standardization to support future operations and infrastructure on and around the Moon and other celestial bodies other than Earth, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Ms. MCCLELLAN introduced the following bill; which was referred to the Committee on _____

A BILL

To require the Administrator of the National Aeronautics and Space Administration to develop celestial time standardization to support future operations and infrastructure on and around the Moon and other celestial bodies other than Earth, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Celestial Time Standardization Act''.

SEC. 2. CELESTIAL TIME STANDARDIZATION.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) United States leadership of a sustained presence on the Moon and in deep space exploration is important for advancing science, exploration, commercial growth, and international partnership;

(2) the Artemis and Moon to Mars program of the National Aeronautics and Space Administration (NASA) will involve governmental, commercial, academic, and international partners where there is a need for interoperability between systems;

(3) the use of Coordinated Universal Time has challenges when used beyond Earth at other celestial bodies, due to relativistic effects;

(4) the United States should lead in developing time standardization for the Moon and other celestial bodies other than Earth to support interoperability and safe and sustainable operations; and

(5) development of such standardization will advance United States leadership in standards setting for global competitiveness, and will benefit other spacefaring countries and entities.

(b) DEVELOPMENT OF CELESTIAL TIME STANDARDIZATION.—The Administrator of NASA, in consultation

with the Director of the Office of Science and Technology Policy, shall carry out the following:

(1) Enable the development of celestial time standardization, including by leading the study and definition of a coordinated lunar time.

(2) Develop a strategy to implement a coordinated lunar time that would support future operations and infrastructure on and around the Moon.

(3) In carrying out paragraphs (1) and (2)—

(A) coordinate with relevant Federal entities, including the Department of Commerce, the Department of Defense, the Department of State, and the Department of Transportation; and

(B) consult with relevant—

(i) private sector entities;

(ii) academic entities; and

(iii) international standards setting bodies and international partners.

(4) Incorporate the following features of a coordinated lunar time, to the extent practicable, in the development of the strategy developed pursuant to paragraph (2):

(A) Traceability to Coordinated Universal Time.

(B) Accuracy sufficient to support precision navigation and science.

(C) Resilience to loss of contact with Earth.

(D) Scalability to space environments beyond the Earth-Moon system.

(c) BRIEFING.—Not later than two years after the date of the enactment of this Act, the Administrator of NASA shall brief the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the strategy developed pursuant to subsection (b)(2), including relevant plans, timelines, and resources required for the implementation of a coordinated lunar time pursuant to such strategy.