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116TH CONGRESS
2D SESSION

H. R. 6388

To direct the National Space Council to develop a strategy to ensure the United States remains the preeminent space power in the face of growing global competition.

IN THE HOUSE OF REPRESENTATIVES

MARCH 25, 2020

Ms. HOULAHAN (for herself and Mr. WEBER of Texas) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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A BILL

To direct the National Space Council to develop a strategy to ensure the United States remains the preeminent space power in the face of growing global competition.

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 ''Space Technology Advancement Report (STAR) Act of 2020''.

SEC. 2. FINDINGS.

Congress finds the following:

(1) As stated in the United States-China Economic and Security Commission's 2019 Report to

Congress, the United States retains many advantages over the People's Republic of China (PRC) in space, including—

(A) the organization and technical expertise of its space program;

(B) NASA's national capabilities for human spaceflight and exploration;

(C) its vibrant commercial space sector;

(D) its long history of space leadership; and

(E) many international partnerships.

(2) The PRC seeks to establish a leading position in the economic and military use of outer space and views space as critical to its future security and economic interests.

(3) The PRC's national-level commitment to establishing itself as a global space leader harms United States interests and threatens to undermine many of the advantages the United States has worked so long to establish.

(4) For over 60 years, the United States has led the world in space exploration and human space flight through a robust national program that ensures NASA develops and maintains critical spaceflight systems to enable this leadership, includ-

ing the Apollo program's Saturn V rocket, the Space Shuttle, the International Space Station and the Space Launch System and Orion today.

(5) A 2019 Defense Intelligence Agency noted in its ''Challenges to U.S. Security in Space'' report that the PRC was developing a national super-heavy lift rocket comparable to NASA's Space Launch System.

(6) The United States space program and commercial space sector risks being hollowed out by the PRC's plans to attain leadership in key technologies.

(7) It is in the economic and security interest of the United States to remain the global leader in space power.

(8) A recent report by the Air Force Research Laboratory and the Defense Innovation Unit found that China's strategy to bolster its domestic space industry includes a global program of theft and other misappropriation of intellectual property, direct integration of state-owned entities and their technology with commercial start-ups, the use of front companies to invest in United States space companies, vertical control of supply chains, and predatory pricing.

(9) The United States Congress passed the Wolf Amendment as part of the Fiscal Year 2012 Consolidated and Further Continuing Appropriations Act (Public Law 112–55) and every year thereafter in response to the nefarious and offensive nature of Chinese activities in the space industry.

SEC. 3. REPORT.

(a) REQUIREMENT FOR REPORT.—Not later than 1 year after the date of enactment of this Act, and updated each year thereafter, the National Space Council shall submit to the appropriate congressional committees an interagency assessment of the United States ability to effectively compete with foreign space programs and in the emerging commercial space economy.

(b) CONTENT OF REPORT.—The report must include, at minimum, the following:

(1) United States national space program human exploration and spaceflight capabilities relative to PRC national programs.

(2) An assessment of—

(A) the viability of extraction of space-based precious minerals, onsite exploitation of space-based natural resources, and utilization of space-based solar power;

(B) a comparative assessment of the PRC's programs related to these issues; and

(C) an assessment of any potential terrestrial or space environmental impacts of space-based solar power.

(3) An assessment of United States strategic interests in or related to cislunar space.

(4) A comparative assessment of future United States space launch capabilities and those of the PRC.

(5) The extent of foreign investment in the United States commercial space sector, especially in venture capital and other private equity investments that seek to work with the United States Government.

(6) The steps by which NASA, the Department of Defense, and other United States Federal agencies conduct the necessary due diligence and security reviews prior to investing in private space entities that may have received funding from foreign investment.

(7) Current steps the United States Government is taking to protect its domestic space industry from Chinese influence.

(8) An assessment of the U.S. Department of Defense's current ability to guarantee the protection of commercial communications and navigation in space from the PRC's growing counterspace capabilities, and any actions required to improve this capability.

(9) An assessment of how the PRC's activities are impacting the United States commercial space industry's competitiveness and United States national security, including—

(A) Chinese theft of United States intellectual property through technology transfer requirements or otherwise; and

(B) Chinese efforts to seize control of critical elements of the United States space industry supply chain and United States space industry companies or sister companies with shared leadership; and government cybersecurity capabilities.

(10) An assessment of Chinese efforts to pursue cooperative agreements with other nations to advance space development.

(11) Recommendations to Congress including—

(A) any legislative action to address Chinese threats to the United States national space

programs as well as domestic commercial launch and satellite industries;

(B) how the United States Government can best utilize existing Federal entities to investigate and prevent potentially harmful Chinese investment in the United States commercial space industry;

(C) how the United States Government can bolster domestic investment in space traffic management (STM) to ensure the United States space industry seizes and retains leadership status in STM services, standards, and best practices; and

(D) how the United States Government can bolster domestic investment in critical United States space industry technologies.

(c) FORM.—The report required under subsection (a) shall be submitted in unclassified form, but may include a classified annex.

SEC. 4. STRATEGY.

(a) REQUIREMENT FOR STRATEGY.—Not later than 1 year after the submission of the report required in section 3, the President, in consultation with the National Space Council, shall develop and submit to the appropriate congressional committees a strategy to ensure the United

States can effectively compete with other national space programs, maintain dominance in the emerging commercial space economy, and has market, regulatory, and other means available to address unfair competition from the PRC based on the findings in the report required in section 3.

(b) CONTENT OF STRATEGY.—The strategy should include, at minimum, the following:

(1) A long-term plan for developing the economic potential of space, including but not limited to the industries and sectors detailed in section 3 (b)(1)(A).

(2) A plan to ensure the United States leads the creation of international standards for interoperable commercial space capabilities, including but not limited to the creation of a space commodities exchange.

(3) A plan to streamline and strengthen United States cooperation with allies and partners in space.

(4) An interagency strategy that includes but is not limited to NASA, the Department of Defense, Department of Transportation, Federal Aviation Administration, Department of Commerce, Department of State, and Department of Energy to defend

United States supply chains and manufacturing capacity critical to competitiveness in space.

(5) A plan to ensure the Department of Defense has the legal and other authorities required to protect United States economic and security interests in space.

(6) A plan to streamline and strengthen United States cooperation with international allies and partners in space.

(c) FORM.—The strategy required under subsection (a) shall be submitted in unclassified form, but may include a classified annex.

SEC. 5. DEFINITIONS.

In this section, the following definitions apply:

(1) APPROPRIATE CONGRESSIONAL COMMITTEES OF CONGRESS.—The term ''appropriate congressional committees'' means—

(A) the Committee on Armed Services, the Committee on Foreign Relations, and the Committee on Commerce, Science, and Transportation of the Senate; and

(B) the Committee on Armed Services, the Committee on Foreign Affairs, and the Committee on Science, Space, and Technology of the House of Representatives.

(2) PRC.—The term ''PRC'' means the ''People's Republic of China''.

(3) SPACE COMMODITIES.—The term ''space commodities'' means all commodities to be defined by the Space Commodities Exchange for trading thereon, including but not limited to—

(A) raw materials;

(B) processed goods, such as rare earth minerals;

(C) services, such as services in Low Earth Orbit or cislunar orbit for energy storage, launch, in-orbit refueling, satellite imagery, telecommunications, and debris removal;

(D) financial derivatives, such as supply and risk transfer hedges; and

(E) financial indexes, such as an index for commodities used in Low Earth Orbit or cislunar orbit.

(4) SPACE COMMODITIES EXCHANGE.—The term ''Space Commodities Exchange'' means an exchange licensed under the Commodity Exchange Act of 1936 as amended (7 U.S.C. 1), or another suitable Federal market regulatory scheme that serves to enhance trading of commodities produced by,

used in, or derived or indexed to activities of the space economy.

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