

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

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.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Space Technology Ad-
5 vancement Report (STAR) Act of 2020”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

8 (1) As stated in the United States-China Eco-
9 nomic and Security Commission’s 2019 Report to

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

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

6 (B) NASA’s national capabilities for
7 human spaceflight and exploration;

8 (C) its vibrant commercial space sector;

9 (D) its long history of space leadership;

10 and

11 (E) many international partnerships.

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

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

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

1 ing the Apollo program’s Saturn V rocket, the Space
2 Shuttle, the International Space Station and the
3 Space Launch System and Orion today.

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

9 (6) The United States space program and com-
10 mercial space sector risks being hollowed out by the
11 PRC’s plans to attain leadership in key technologies.

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

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

1 (9) The United States Congress passed the
2 Wolf Amendment as part of the Fiscal Year 2012
3 Consolidated and Further Continuing Appropria-
4 tions Act (Public Law 112–55) and every year there-
5 after in response to the nefarious and offensive na-
6 ture of Chinese activities in the space industry.

7 **SEC. 3. REPORT.**

8 (a) **REQUIREMENT FOR REPORT.**—Not later than 1
9 year after the date of enactment of this Act, and updated
10 each year thereafter, the National Space Council shall sub-
11 mit to the appropriate congressional committees an inter-
12 agency assessment of the United States ability to effec-
13 tively compete with foreign space programs and in the
14 emerging commercial space economy.

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

17 (1) United States national space program
18 human exploration and spaceflight capabilities rel-
19 ative to PRC national programs.

20 (2) An assessment of—

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

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

3 (C) an assessment of any potential terres-
4 trial or space environmental impacts of space-
5 based solar power.

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

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

11 (5) The extent of foreign investment in the
12 United States commercial space sector, especially in
13 venture capital and other private equity investments
14 that seek to work with the United States Govern-
15 ment.

16 (6) The steps by which NASA, the Department
17 of Defense, and other United States Federal agen-
18 cies conduct the necessary due diligence and security
19 reviews prior to investing in private space entities
20 that may have received funding from foreign invest-
21 ment.

22 (7) Current steps the United States Govern-
23 ment is taking to protect its domestic space industry
24 from Chinese influence.

1 (8) An assessment of the U.S. Department of
2 Defense’s current ability to guarantee the protection
3 of commercial communications and navigation in
4 space from the PRC’s growing counterspace capa-
5 bilities, and any actions required to improve this ca-
6 pability.

7 (9) An assessment of how the PRC’s activities
8 are impacting the United States commercial space
9 industry’s competitiveness and United States na-
10 tional security, including—

11 (A) Chinese theft of United States intellec-
12 tual property through technology transfer re-
13 quirements or otherwise; and

14 (B) Chinese efforts to seize control of crit-
15 ical elements of the United States space indus-
16 try supply chain and United States space indus-
17 try companies or sister companies with shared
18 leadership; and government cybersecurity capa-
19 bilities.

20 (10) An assessment of Chinese efforts to pursue
21 cooperative agreements with other nations to ad-
22 vance space development.

23 (11) Recommendations to Congress including—

24 (A) any legislative action to address Chi-
25 nese threats to the United States national space

1 programs as well as domestic commercial
2 launch and satellite industries;

3 (B) how the United States Government
4 can best utilize existing Federal entities to in-
5 vestigate and prevent potentially harmful Chi-
6 nese investment in the United States commer-
7 cial space industry;

8 (C) how the United States Government can
9 bolster domestic investment in space traffic
10 management (STM) to ensure the United
11 States space industry seizes and retains leader-
12 ship status in STM services, standards, and
13 best practices; and

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

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

20 **SEC. 4. STRATEGY.**

21 (a) REQUIREMENT FOR STRATEGY.—Not later than
22 1 year after the submission of the report required in sec-
23 tion 3, the President, in consultation with the National
24 Space Council, shall develop and submit to the appropriate
25 congressional committees a strategy to ensure the United

1 States can effectively compete with other national space
2 programs, maintain dominance in the emerging commer-
3 cial space economy, and has market, regulatory, and other
4 means available to address unfair competition from the
5 PRC based on the findings in the report required in sec-
6 tion 3.

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

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

13 (2) A plan to ensure the United States leads
14 the creation of international standards for interoper-
15 able commercial space capabilities, including but not
16 limited to the creation of a space commodities ex-
17 change.

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

20 (4) An interagency strategy that includes but is
21 not limited to NASA, the Department of Defense,
22 Department of Transportation, Federal Aviation Ad-
23 ministration, Department of Commerce, Department
24 of State, and Department of Energy to defend

1 United States supply chains and manufacturing ca-
2 pacity critical to competitiveness in space.

3 (5) A plan to ensure the Department of De-
4 fense has the legal and other authorities required to
5 protect United States economic and security inter-
6 ests in space.

7 (6) A plan to streamline and strengthen United
8 States cooperation with international allies and part-
9 ners in space.

10 (c) FORM.—The strategy required under subsection
11 (a) shall be submitted in unclassified form, but may in-
12 clude a classified annex.

13 **SEC. 5. DEFINITIONS.**

14 In this section, the following definitions apply:

15 (1) APPROPRIATE CONGRESSIONAL COMMIT-
16 TEES OF CONGRESS.—The term “appropriate con-
17 gressional committees” means—

18 (A) the Committee on Armed Services, the
19 Committee on Foreign Relations, and the Com-
20 mittee on Commerce, Science, and Transpor-
21 tation of the Senate; and

22 (B) the Committee on Armed Services, the
23 Committee on Foreign Affairs, and the Com-
24 mittee on Science, Space, and Technology of
25 the House of Representatives.

1 (2) PRC.—The term “PRC” means the “Peo-
2 ple’s Republic of China”.

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

7 (A) raw materials;

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

10 (C) services, such as services in Low Earth
11 Orbit or cislunar orbit for energy storage,
12 launch, in-orbit refueling, satellite imagery, tele-
13 communications, and debris removal;

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

16 (E) financial indexes, such as an index for
17 commodities used in Low Earth Orbit or cis-
18 lunar orbit.

19 (4) SPACE COMMODITIES EXCHANGE.—The
20 term “Space Commodities Exchange” means an ex-
21 change licensed under the Commodity Exchange Act
22 of 1936 as amended (7 U.S.C. 1), or another suit-
23 able Federal market regulatory scheme that serves
24 to enhance trading of commodities produced by,

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

