

#### 115TH CONGRESS 2D SESSION

# H. R. 6226

To direct the Secretary of Commerce to provide for civil space situational awareness services and information, and for other purposes.

#### IN THE HOUSE OF REPRESENTATIVES

June 26, 2018

Mr. Smith of Texas (for himself, Mr. Bera, Mr. Babin, Mr. Perlmutter, Mr. Lucas, Mr. Rohrabacher, Mr. Hultgren, Mr. Posey, Mr. Knight, Mr. Abraham, Mr. Webster of Florida, Mr. Biggs, Mr. Dunn, Mr. Higgins of Louisiana, Mrs. Lesko, and Mr. Weber of Texas) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on the Budget, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

# A BILL

To direct the Secretary of Commerce to provide for civil space situational awareness services and information, and for other purposes.

- 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 "American Space Situa-
- 5 tional Awareness and Framework for Entity Management
- 6 Act" or the "American Space SAFE Management Act".

#### 1 SEC. 2. DEFINITIONS.

- 2 In this Act:
- 3 (1) Appropriate committees of con-
- 4 GRESS.—The term "appropriate committees of Con-
- 5 gress" means the Committee on Science, Space, and
- 6 Technology of the House of Representatives and the
- 7 Committee on Commerce, Science, and Transpor-
- 8 tation of the Senate.
- 9 (2) NASA.—The term "NASA" means the Na-
- tional Aeronautics and Space Administration.
- 11 SEC. 3. NATIONAL CIVIL SPACE SITUATIONAL AWARENESS
- 12 AND SPACE TRAFFIC MANAGEMENT SCIENCE
- 13 AND TECHNOLOGY PLAN.
- 14 (a) Policy.—It is the policy of the United States to
- 15 encourage the coordination of public and private sector
- 16 science and technology activities to improve space situa-
- 17 tional awareness and space traffic management.
- 18 (b) Plan.—Not later than 180 days after the date
- 19 of enactment of this Act, the Administrator of NASA, in
- 20 consultation with other Federal departments and agencies,
- 21 as appropriate, shall develop and submit to the appro-
- 22 priate committees of Congress a national civil space situa-
- 23 tional awareness and space traffic management science
- 24 and technology plan.
- (c) Purpose.—The Plan developed under subsection
- 26 (b) shall carry out the policy set forth under subsection

- 1 (a) by identifying and prioritizing civil space situational
- 2 awareness and space traffic management research and de-
- 3 velopment activities in support of the activities to be con-
- 4 ducted pursuant to sections 4 and 5.
- 5 (d) CONTENTS.—The plan developed under sub-
- 6 section (b) shall include recommendations—
- 7 (1) to improve coordination among Federal de-
- 8 partments and agencies on civil space situational
- 9 awareness and space traffic management research
- and development;
- 11 (2) to promote and facilitate private investment
- in civil space situational awareness and space traffic
- management research and development;
- 14 (3) to identify current and project future pri-
- vate investment in civil space situational awareness
- and space traffic management research and develop-
- ment;
- 18 (4) to work proactively with the private sector
- to avoid competing with, disincentivizing, or other-
- wise discouraging private sector research and devel-
- 21 opment investment; and
- 22 (5) to prioritize Federal Government invest-
- 23 ments in civil space situational awareness and space
- traffic management research and development to
- occur over a 5-year funding period.

- 1 (e) AVAILABILITY.—The Administrator shall ensure
- 2 that the plan developed under subsection (b), and any up-
- 3 dates to such plan, are made available on a publicly acces-
- 4 sible website and published in the Federal Register.
- 5 (f) UPDATED PLAN.—Every 5 years, the Adminis-
- 6 trator shall update the plan and submit the updated plan
- 7 to the appropriate committees of Congress.
- 8 (g) Annual Budget.—In submitting each annual
- 9 budget request to Congress, the President shall identify
- 10 activities to implement the plan.
- 11 (h) CENTER FOR CIVIL SPACE SITUATIONAL AWARE-
- 12 NESS AND SPACE TRAFFIC MANAGEMENT SCIENCE AND
- 13 TECHNOLOGY EXCELLENCE.—
- 14 (1) Establishment.—The Administrator of
- 15 NASA shall establish, through a competitive process,
- 16 a Center for Civil Space Situational Awareness and
- 17 Space Traffic Management Science and Technology
- 18 Excellence at a United States academic institution
- or institutions.
- 20 (2) Purpose.—The purpose of the Center es-
- 21 tablished under paragraph (1), taking into account
- 22 the plan established in this section, shall be to de-
- velop, lead, and promote research that furthers civil
- space situational awareness, space traffic coordina-
- 25 tion, and space traffic management.

1 (3) Funding.—NASA shall devote not less
2 than \$2,000,000 to carry out this subsection for
3 each of fiscal years 2019 through 2023, subject to
4 the availability of appropriations, to come from
5 amounts made available for NASA. This subsection
6 shall be carried out using funds otherwise appro7 priated by law after the date of enactment of this
8 Act.

#### 9 SEC. 4. CIVIL SPACE SITUATIONAL AWARENESS PROGRAM.

10 (a) FINDINGS.—Congress finds that—

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- (1) commercial activity in space is accelerating and the United States has a growing commercial space market;
- (2) the number of launches and satellites in orbit will grow significantly in the near future, increasing the number of objects, satellites, and debris, and the risk of collisions; and
- 18 (3) responsible space operations has large impli-19 cations for the sustainability of space activities, and 20 in turn the prosperity and national security of the 21 United States.
- 22 (b) Policy.—It is the policy of the United States to 23 establish and maintain a civil space situational awareness 24 program that provides the public space situational aware-25 ness information and services in order to facilitate a safe

- 1 operational environment. The Program established under
- 2 subsection (c) shall facilitate and promote opportunities
- 3 for United States private sector providers of space situa-
- 4 tional awareness data, information, and services to partici-
- 5 pate in and contribute to the Program. The Program shall
- 6 promote broad participation from both domestic and inter-
- 7 national spacecraft operators.
- 8 (c) Establishment.—No later than 1 year after the
- 9 date of enactment of this Act, the Secretary of Commerce
- 10 shall establish a civil space situational awareness program
- 11 (in this section, referred to as the "Program") to provide
- 12 space situational awareness services and information to,
- 13 and obtain space situational awareness data and informa-
- 14 tion from, eligible entities described under subsection (e),
- 15 in accordance with this section.
- 16 (d) Consultation.—In developing the Program, the
- 17 Secretary of Commerce shall consult with—
- 18 (1) other Federal departments and agencies, as
- 19 the Secretary considers appropriate; and
- 20 (2) the United States private sector and aca-
- 21 demia.
- 22 (e) Eligible Entities.—The Secretary may provide
- 23 services and information under the Program to, and may
- 24 obtain data and information from, an entity, including any
- 25 of the following:

1	(1) A State.
2	(2) A political subdivision of a State.
3	(3) A United States commercial entity.
4	(4) The government of a foreign country.
5	(5) A foreign commercial entity.
6	(f) User Fees.—
7	(1) No fee for basic set.—In providing
8	space situational awareness services and information
9	under the Program, the Secretary shall provide a
10	basic set of such services and information, as deter-
11	mined by the Secretary, without charging a user fee.
12	(2) Additional services and informa-
13	TION.—The Secretary is authorized to charge a rea-
14	sonable user fee for any additional space situational
15	awareness services and information not provided
16	under paragraph (1).
17	(3) STATUTORY CONSTRUCTION.—Nothing in
18	this subsection shall be construed to preclude private
19	sector entities from charging a user fee for providing
20	space situational awareness services and informa-
21	tion.
22	(g) QUALITY OF SERVICES AND INFORMATION.—The
23	Program shall provide space situational awareness services
24	and information that are as good as or better than the

services and information provided pursuant to section

- 1 2274 of title 10, United States Code, as determined by
- 2 the Secretary.
- 3 (h) Space Situational Awareness Data
- 4 Testbed.—In carrying out the Program, the Secretary
- 5 shall provide for a space situational awareness data
- 6 testbed to facilitate innovation in the use of space situa-
- 7 tional awareness data to support space situational aware-
- 8 ness services that may be provided by the Federal Govern-
- 9 ment or the private sector. The testbed shall allow the
- 10 public to access such space situational awareness data, in-
- 11 cluding United States Government data, as the Secretary
- 12 considers appropriate. The Secretary shall place condi-
- 13 tions on such data in consultation with appropriate Fed-
- 14 eral departments and agencies to protect United States
- 15 national security and foreign policy interests.
- 16 (i) Promoting Private Sector Solutions.—The
- 17 Secretary shall facilitate and promote opportunities for
- 18 United States private sector providers of space situational
- 19 awareness data, information, and services to participate
- 20 in and contribute to the Program.
- 21 (j) Role of NASA.—In carrying out the Program,
- 22 the Secretary of Commerce may use, on a reimbursable
- 23 basis and to the greatest extent practicable, NASA's exist-
- 24 ing infrastructure, workforce, and experience relating to
- 25 space situational awareness, including conjunction assess-

- 1 ments that NASA provides for NASA robotic and crewed
- 2 operations.
- 3 (k) IMMUNITY.—The United States, any agencies and
- 4 instrumentalities thereof, including the Department of
- 5 Commerce and NASA, and any individuals, firms, cor-
- 6 porations, and other persons acting for the United States,
- 7 shall be immune from any suit in any court for any cause
- 8 of action arising from the provision or receipt of space
- 9 situational awareness services or information, whether or
- 10 not provided in accordance with this section, or any re-
- 11 lated action or omission.
- 12 (l) Quarterly Briefing.—The Department of
- 13 Commerce and NASA shall brief the appropriate commit-
- 14 tees of Congress quarterly, beginning on the date that is
- 15 3 months after the date of enactment of this Act, on the
- 16 status of, and all progress, changes, and other develop-
- 17 ments related to, carrying out the Program.
- 18 (m) Program Users.—The Secretary shall, to the
- 19 maximum extent feasible and as soon as is practicable
- 20 after the establishment of the Program, engage with and
- 21 solicit feedback from stakeholders that are contributors to
- 22 or recipients of space situational awareness services and
- 23 information under the Program in order to, at a minimum,
- 24 receive practical information on the effectiveness of the

- 1 Program and receive recommendations on how to improve
- 2 the Program.
- 3 (n) Statutory Construction.—Nothing in this
- 4 section may be construed to modify any other authorities
- 5 for the Federal Government to provide space situational
- 6 awareness services and information to the public.
- 7 (o) Funding.—The Secretary shall devote no less
- 8 than \$20,000,000 to carry out this section for each of fis-
- 9 cal years 2019 through 2023, subject to the availability
- 10 of appropriations, to come from amounts made available
- 11 for the Office of the Secretary. This section shall be car-
- 12 ried out using funds otherwise appropriated by law after
- 13 the date of enactment of this Act.
- 14 SEC. 5. SPACE TRAFFIC MANAGEMENT FRAMEWORK.
- 15 (a) FINDINGS.—Congress finds the following:
- 16 (1) The United States has the capability to rap-
- idly develop voluntary civil space traffic coordination
- 18 guidelines, practices, and standards.
- 19 (2) It is in the national interest that the United
- 20 States leads the world in the development of vol-
- 21 untary civil space traffic coordination guidelines,
- practices, and standards in cooperation with the pri-
- vate sector in the United States.
- 24 (3) The United States should promote the
- 25 international adoption of such civil space traffic co-

1	ordination guidelines, practices, and standards devel-
2	oped in the United States.
3	(4) Establishing voluntary civil space traffic co-
4	ordination guidelines, practices, and standards is an
5	important first step in developing a comprehensive
6	space traffic management framework.
7	(b) Policy.—It is the policy of the United States to
8	timely develop voluntary civil space traffic coordination
9	guidelines, practices, and standards to ensure a safe oper-
10	ational environment.
11	(c) Voluntary Civil Space Traffic Coordina-
12	TION GUIDELINES, PRACTICES, AND STANDARDS.—
13	(1) In General.—The Secretary of Commerce
14	shall, in consultation with appropriate governmental
15	and nongovernmental entities, promote the develop-
16	ment of voluntary civil space traffic coordination
17	guidelines, practices, and standards to ensure a safe
18	operational environment.
19	(2) Guidelines.—
20	(A) In general.—Not later than 1 year
21	after the date of the enactment of this Act, the
22	Secretary of Commerce shall publish voluntary
23	civil space traffic coordination guidelines. Such
24	guidelines shall be developed in consultation

with other relevant Federal agencies, domestic

- private entities (including entities in the commercial sector and institutions of higher education (as such term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001))).
  - (B) PUBLIC COMMENT.—To facilitate and assure ample opportunity for input from domestic private entities specified in subparagraph (A), during the period in which the development of the guidelines under such subparagraph occurs, the Secretary of Commerce shall allow for a public comment period to identify key issues, trends, and needs that should be addressed during the period of that development.
  - (C) USE OF GUIDELINES.—Federal agencies operating spacecraft shall, to the extent practicable and taking into account the national security interests of the United States in operating such spacecraft, follow the guidelines issued under subparagraph (A).

### (d) Pilot Program.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary of Commerce shall establish a civil space traffic coordination pilot program under which the Sec-

- retary will, using the guidelines, practices, and standards developed under subsection (c) to the greatest extent practicable, facilitate communication, coordination, negotiation, and resolution among domestic and international civil spacecraft operators (including governmental and private entities operating such spacecraft) for the purposes of improving the safety of spaceflight. The Secretary shall, to the greatest extent practicable, incentivize participation in the pilot program. Nothing in the preceding sentence shall be construed as requiring a private entity to participate in such pilot program.
  - (2) Public comment.—Before establishing the pilot program under this subsection, the Secretary of Commerce shall publish information about the program's details in the Federal Register and allow for public comment for a reasonable period that ends before the date of such establishment.
  - (3) DURATION.—The authority to carry out the pilot program under this subsection shall terminate on the date that is 5 years after the pilot program under paragraph (1) is established.
  - (4) PILOT PROGRAM PARTICIPANTS.—The Secretary shall, to the maximum extent feasible and as soon as is practicable after the date on which the

- pilot program is established under paragraph (1), engage with and solicit feedback from pilot program participants, in order to, at minimum, receive practical information on the effectiveness of the pilot program and receive recommendations on how to improve the pilot program.
  - (5) Funding.—The Secretary of Commerce shall devote no less than \$5,000,000 for each of fiscal years 2019 through 2023 to carry out this subsection, subject to the availability of appropriations, to come from amounts made available for the Office of the Secretary. This subsection shall be carried out using funds otherwise appropriated by law after the date of enactment of this Act.

## (e) Reports.—

(1) Space traffic coordination stand-ARDS.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Commerce shall submit to the appropriate committees of Congress a report on the role the Department of Commerce, including the National Institute of Standards and Technology, will have in the development of civil space traffic coordination standards for purposes of promoting innovation and the competitiveness of the United States.

- 1 (2) Report on Next Steps for space traf2 Fic management framework.—Beginning not
  3 later than 1 year after the date of the enactment of
  4 this Act and every 2 years thereafter, the Secretary
  5 of Commerce shall submit to the appropriate com6 mittees of Congress a report on, for the period cov7 ered by the report—
  - (A) the state of domestic and international civil space traffic management, including voluntary or legally binding guidelines, practices, and standards; and
  - (B) the Secretary's recommendations on what steps should be taken by the United States to facilitate further development and adoption of the guidelines, practices, and standards developed under subsection (c) and coordination carried out pursuant to subsection (d).

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