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(Original Signature of Member)

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.

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## IN THE HOUSE OF REPRESENTATIVES

Mr. SMITH of Texas introduced the following bill; which was referred to the Committee on \_\_\_\_\_

## 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”.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

1           (1) APPROPRIATE COMMITTEES OF CON-  
2       GRESS.—The term “appropriate committees of Con-  
3       gress” means the Committee on Science, Space, and  
4       Technology of the House of Representatives and the  
5       Committee on Commerce, Science, and Transpor-  
6       tation of the Senate.

7           (2) NASA.—The term “NASA” means the Na-  
8       tional Aeronautics and Space Administration.

9       **SEC. 3. NATIONAL CIVIL SPACE SITUATIONAL AWARENESS**  
10                           **AND SPACE TRAFFIC MANAGEMENT SCIENCE**  
11                           **AND TECHNOLOGY PLAN.**

12       (a) POLICY.—It is the policy of the United States to  
13       encourage the coordination of public and private sector  
14       science and technology activities to improve space situa-  
15       tional awareness and space traffic management.

16       (b) PLAN.—Not later than 180 days after the date  
17       of enactment of this Act, the Administrator of NASA, in  
18       consultation with other Federal departments and agencies,  
19       as appropriate, shall develop and submit to the appro-  
20       priate committees of Congress a national civil space situa-  
21       tional awareness and space traffic management science  
22       and technology plan.

23       (c) PURPOSE.—The Plan developed under subsection  
24       (b) shall carry out the policy set forth under subsection  
25       (a) by identifying and prioritizing civil space situational

1 awareness and space traffic management research and de-  
2 velopment activities in support of the activities to be con-  
3 ducted pursuant to sections 4 and 5.

4 (d) CONTENTS.—The plan developed under sub-  
5 section (b) shall include recommendations—

6 (1) to improve coordination among Federal de-  
7 partments and agencies on civil space situational  
8 awareness and space traffic management research  
9 and development;

10 (2) to promote and facilitate private investment  
11 in civil space situational awareness and space traffic  
12 management research and development;

13 (3) to identify current and project future pri-  
14 vate investment in civil space situational awareness  
15 and space traffic management research and develop-  
16 ment;

17 (4) to work proactively with the private sector  
18 to avoid competing with, disincentivizing, or other-  
19 wise discouraging private sector research and devel-  
20 opment investment; and

21 (5) to prioritize Federal Government invest-  
22 ments in civil space situational awareness and space  
23 traffic management research and development to  
24 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  
19 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-  
23 velop, lead, and promote research that furthers civil  
24 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 appro-  
7 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—

11           (1) commercial activity in space is accelerating  
12 and the United States has a growing commercial  
13 space market;

14           (2) the number of launches and satellites in  
15 orbit will grow significantly in the near future, in-  
16 creasing the number of objects, satellites, and de-  
17bris, 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  
25 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-  
17 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,  
22 practices, and standards in cooperation with the pri-  
23 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  
25 with other relevant Federal agencies, domestic

1 private entities (including entities in the com-  
2 mercial sector and institutions of higher edu-  
3 cation (as such term is defined in section 101  
4 of the Higher Education Act of 1965 (20  
5 U.S.C. 1001))).

6 (B) PUBLIC COMMENT.—To facilitate and  
7 assure ample opportunity for input from domes-  
8 tic private entities specified in subparagraph  
9 (A), during the period in which the development  
10 of the guidelines under such subparagraph oc-  
11 curs, the Secretary of Commerce shall allow for  
12 a public comment period to identify key issues,  
13 trends, and needs that should be addressed dur-  
14 ing the period of that development.

15 (C) USE OF GUIDELINES.—Federal agen-  
16 cies operating spacecraft shall, to the extent  
17 practicable and taking into account the national  
18 security interests of the United States in oper-  
19 ating such spacecraft, follow the guidelines  
20 issued under subparagraph (A).

21 (d) PILOT PROGRAM.—

22 (1) IN GENERAL.—Not later than 18 months  
23 after the date of enactment of this Act, the Sec-  
24 retary of Commerce shall establish a civil space traf-  
25 fic coordination pilot program under which the Sec-

1       retary will, using the guidelines, practices, and  
2       standards developed under subsection (c) to the  
3       greatest extent practicable, facilitate communication,  
4       coordination, negotiation, and resolution among do-  
5       mestic and international civil spacecraft operators  
6       (including governmental and private entities oper-  
7       ating such spacecraft) for the purposes of improving  
8       the safety of spaceflight. The Secretary shall, to the  
9       greatest extent practicable, incentivize participation  
10      in the pilot program. Nothing in the preceding sen-  
11      tence shall be construed as requiring a private entity  
12      to participate in such pilot program.

13      (2) PUBLIC COMMENT.—Before establishing the  
14      pilot program under this subsection, the Secretary of  
15      Commerce shall publish information about the pro-  
16      gram's details in the Federal Register and allow for  
17      public comment for a reasonable period that ends  
18      before the date of such establishment.

19      (3) DURATION.—The authority to carry out the  
20      pilot program under this subsection shall terminate  
21      on the date that is 5 years after the pilot program  
22      under paragraph (1) is established.

23      (4) PILOT PROGRAM PARTICIPANTS.—The Sec-  
24      retary shall, to the maximum extent feasible and as  
25      soon as is practicable after the date on which the

1 pilot program is established under paragraph (1),  
2 engage with and solicit feedback from pilot program  
3 participants, in order to, at minimum, receive prac-  
4 tical information on the effectiveness of the pilot  
5 program and receive recommendations on how to im-  
6 prove the pilot program.

7 (5) FUNDING.—The Secretary of Commerce  
8 shall devote no less than \$5,000,000 for each of fis-  
9 cal years 2019 through 2023 to carry out this sub-  
10 section, subject to the availability of appropriations,  
11 to come from amounts made available for the Office  
12 of the Secretary. This subsection shall be carried out  
13 using funds otherwise appropriated by law after the  
14 date of enactment of this Act.

15 (e) REPORTS.—

16 (1) SPACE TRAFFIC COORDINATION STAND-  
17 ARDS.—Not later than 180 days after the date of  
18 the enactment of this Act, the Secretary of Com-  
19 merce shall submit to the appropriate committees of  
20 Congress a report on the role the Department of  
21 Commerce, including the National Institute of  
22 Standards and Technology, will have in the develop-  
23 ment of civil space traffic coordination standards for  
24 purposes of promoting innovation and the competi-  
25 tiveness of the United States.

1           (2) REPORT ON NEXT STEPS FOR SPACE TRAF-  
2       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 com-  
6       mittees of Congress a report on, for the period cov-  
7       ered by the report—

8           (A) the state of domestic and international  
9       civil space traffic management, including vol-  
10      untary or legally binding guidelines, practices,  
11      and standards; and

12          (B) the Secretary's recommendations on  
13      what steps should be taken by the United  
14      States to facilitate further development and  
15      adoption of the guidelines, practices, and stand-  
16      ards developed under subsection (c) and coordi-  
17      nation carried out pursuant to subsection (d).

