

AMENDMENT NO. _____ Calendar No. _____

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—116th Cong., 2d Sess.

S. 4827

To authorize the Assistant Secretary of Space Commerce to provide space situational awareness data, information, and services to non-United States Government entities, and for other purposes.

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. WICKER (for himself, Ms. CANTWELL, and Ms. SINEMA)

Viz:

1 Strike all after the enacting clause and insert the fol-
2 lowing:

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Space Preservation
5 and Conjunction Emergency Act of 2020” or the “SPACE
6 Act”.

7 **SEC. 2. SENSE OF CONGRESS.**

8 It is the sense of Congress that—

9 (1) the increasingly congested nature of the
10 space environment requires immediate action to ad-

1 dress the threat of collisions between spacecraft and
2 orbital debris;

3 (2) such collisions threaten the billions of dol-
4 lars of existing United States and allied spacecraft,
5 including the International Space Station, and en-
6 danger the future usability of space;

7 (3) the provision of accurate and timely notice
8 to commercial satellite operators with respect to po-
9 tential conjunctions enhances safety;

10 (4) a 2020 National Academies for Public Ad-
11 ministration study identified the Department of
12 Commerce as the preferred Federal agency to man-
13 age, process, and disseminate space situational
14 awareness data to commercial satellite operators;
15 and

16 (5) given the growing space economy, elevating
17 the Office of Space Commerce within the Depart-
18 ment of Commerce may enhance the ability of the
19 Office of Space Commerce—

20 (A) to promote space safety through future
21 space situational awareness and space traffic
22 management efforts; and

23 (B) to coordinate with other Federal agen-
24 cies and foreign entities.

1 **SEC. 3. DEFINITIONS.**

2 In this Act:

3 (1) CENTER.—The term “Center” means a
4 Center of Excellence for Space Situational Aware-
5 ness established under section 5.

6 (2) INSTITUTION OF HIGHER EDUCATION.—The
7 term “institution of higher education” has the
8 meaning given the term in section 101 of the Higher
9 Education Act of 1965 (20 U.S.C. 1001).

10 (3) ORBITAL DEBRIS.—The term “orbital de-
11bris” means any space object that—

12 (A) remains in orbit; and

13 (B) no longer serves any useful function or
14 purpose.

15 (4) SECRETARY.—The term “Secretary” means
16 the Secretary of Commerce.

17 (5) SPACE OBJECT.—The term “space object”
18 means any object launched into space or created in
19 space by humans.

20 (6) SPACE SITUATIONAL AWARENESS.—The
21 term “space situational awareness” means—

22 (A) the identification and characterization
23 of space objects and orbital debris; and

24 (B) the understanding of the manner in
25 which space objects and orbital debris behave in
26 space.

1 **SEC. 4. SPACE SITUATIONAL AWARENESS DATA, INFORMA-**
2 **TION, AND SERVICES: PROVISION TO NON-**
3 **UNITED STATES GOVERNMENT ENTITIES.**

4 (a) IN GENERAL.—Chapter 507 of title 51, United
5 States Code, is amended by adding at the end the fol-
6 lowing:

7 **“§ 50704. Space situational awareness data, informa-**
8 **tion, and services: provision to non-**
9 **United States Government entities**

10 “(a) SPACE SITUATIONAL AWARENESS PROGRAM.—

11 “(1) REQUIREMENT.—Pursuant to the author-
12 ity provided in section 50702, the Director of Space
13 Commerce, in coordination with appropriate entities
14 within the Department of Commerce and the heads
15 of other relevant Federal agencies—

16 “(A) shall carry out a program to improve
17 the collection, processing, and dissemination of
18 space situational awareness data, information,
19 and services;

20 “(B) subject to paragraph (2), may pro-
21 vide such data, information, and services to 1
22 or more eligible entities described in subsection
23 (b); and

24 “(C) may obtain such data, information,
25 and services from 1 or more such eligible enti-
26 ties.

1 “(2) TYPE OF INFORMATION PROVIDED.—

2 “(A) IN GENERAL.—Data and information
3 provided to eligible entities under paragraph
4 (1)(B) shall be safety-related and unclassified.

5 “(B) NATIONAL SECURITY.—The Sec-
6 retary of Commerce, in consultation with the
7 Secretary of Defense and the heads of other rel-
8 evant Federal agencies, shall develop a policy to
9 determine the type of information that may be
10 provided under paragraph (1) without compro-
11 mising the national security interests of the
12 United States.

13 “(b) ELIGIBLE ENTITY DESCRIBED.—An eligible en-
14 tity described in this subsection is any non-United States
15 Government entity, including—

16 “(1) a State;

17 “(2) a political subdivision of a State;

18 “(3) a United States commercial entity;

19 “(4) the government of a foreign country; and

20 “(5) a foreign commercial entity.

21 “(c) PUBLIC SERVICES.—

22 “(1) IN GENERAL.—The Secretary of Com-
23 merce shall designate a basic level of space situa-
24 tional awareness data, information, and services to
25 be provided at no charge to 1 or more eligible enti-

1 ties described in subsection (b), which shall include
2 public services, free of charge, such as—

3 “(A) a public catalog of tracked space ob-
4 jects;

5 “(B) emergency conjunction notifications;
6 and

7 “(C) any other data or services the Direc-
8 tor of Space Commerce considers appropriate.

9 “(2) LIMITATION.—The Secretary of Commerce
10 may not provide any data or services under para-
11 graph (1)(C) that compete with products offered by
12 United States commercial entities.

13 “(d) ADVANCED SERVICES.—The Secretary of Com-
14 merce may undertake activities to promote the develop-
15 ment of advanced space situational awareness data, infor-
16 mation, and services to foster the growth of a global space
17 safety industry.

18 “(e) PROCEDURES.—The Secretary of Commerce
19 shall establish procedures by which the authority under
20 this section shall be carried out.

21 “(f) IMMUNITY.—The United States, any agency or
22 instrumentality thereof, and any individual, firm, corpora-
23 tion, or other person acting for the United States shall
24 be immune from any suit in any court for any cause of
25 action arising from the provision or receipt of space situa-

1 tional awareness data, information, or services, whether
2 or not provided in accordance with this section, or any
3 related action or omission.

4 **“§ 50705. Authorization of appropriations**

5 “There is authorized to be appropriated to the Sec-
6 retary of Commerce to carry out this chapter \$15,000,000
7 for fiscal year 2021.”.

8 (b) TECHNICAL AND CONFORMING AMENDMENT.—
9 The table of sections for chapter 507 of title 51, United
10 States Code, is amended by inserting after the item relat-
11 ing to section 50703 the following:

“50704. Space situational awareness data, information, and services: provision
to non-United States Government entities.

“50705. Authorization of appropriations.”.

12 **SEC. 5. CENTERS OF EXCELLENCE FOR SPACE SITUA-**
13 **TIONAL AWARENESS.**

14 (a) IN GENERAL.—Subject to appropriations, the
15 Secretary shall award grants to eligible entities to estab-
16 lish 1 or more Centers of Excellence for Space Situational
17 Awareness to advance scientific, technological,
18 transdisciplinary, and policy research in space situational
19 awareness.

20 (b) PURPOSES.—Each Center shall—

21 (1) conduct transdisciplinary research, develop-
22 ment, and demonstration projects related to detect-
23 ing, tracking, identifying, characterizing, modeling,

1 and minimizing space safety, security, and sustain-
2 ability risks to improve—

3 (A) space situational awareness and the
4 development of open-architecture resources for
5 improved space safety, security, and sustain-
6 ability;

7 (B) the unique identification, tracking,
8 classification, prediction, and modeling of or-
9 bital debris and space objects;

10 (C) the monitoring, quantification, assess-
11 ment, modeling, and prediction of space oper-
12 ations and environmental threats and hazards,
13 including in space collisions;

14 (D) peer exchange and documentation of
15 evidence-based practices, policies, laws, and reg-
16 ulations related to orbital debris mitigation and
17 remediation; and

18 (E) sharing, modeling, and curation of
19 data related to orbital debris, space objects, and
20 the environment of orbital debris and space ob-
21 jects;

22 (2) conduct policy research related to space
23 safety, security, and sustainability so as to improve
24 sharing of common data and legal standards related
25 to orbital debris;

1 (3) leverage non-Federal sources of support to
2 improve space situational awareness and minimize
3 space safety, security, and sustainability risks; and

4 (4) draw on commercial capabilities and data,
5 as appropriate.

6 (c) ELIGIBLE ENTITIES.—

7 (1) IN GENERAL.—To be eligible for a grant
8 under this section, an entity shall be a consortium
9 led by—

10 (A) an institution of higher education; or

11 (B) a nonprofit organization.

12 (2) MEMBERSHIP OF CONSORTIUM.—The con-
13 sortium referred to in paragraph (1) may include 1
14 or more—

15 (A) commercial entities;

16 (B) Federal laboratories, including Depart-
17 ment of Defense research laboratories; and

18 (C) other institutions of higher education
19 or nonprofit organizations.

20 (d) CONSIDERATIONS.—In awarding grants under
21 this section, the Secretary shall consider, at a minimum—

22 (1) the potential of a proposed Center—

23 (A) to improve the science and technology
24 of space situational awareness; and

1 (B) to reduce the amount of space safety,
2 security, and sustainability risks; and

3 (2) the commitment of financial support, ad-
4 vice, participation, and other contributions from
5 non-Federal sources.

6 (e) GRANT PERIOD.—A grant awarded under this
7 section shall be awarded for a period of 5 years.

8 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
9 authorized to be appropriated to carry out this section
10 \$20,000,000.