(Original Signature of Member)

114TH CONGRESS 1ST SESSION



To facilitate a pro-growth environment for the developing commercial space industry by encouraging private sector investment and creating more stable and predictable regulatory conditions, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. McCARTHY (for himself, Mr. SMITH of Texas, and Mr. PALAZZO) introduced the following bill; which was referred to the Committee on

A BILL

- To facilitate a pro-growth environment for the developing commercial space industry by encouraging private sector investment and creating more stable and predictable regulatory conditions, 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 "Spurring Private Aero-
- 5 space Competitiveness and Entrepreneurship Act of 2015"
- 6 or the "SPACE Act of 2015".

1 SEC. 2. CONSENSUS STANDARDS.

2 Section 50905(c) of title 51, United States Code, is
3 amended—

4 (1) by striking paragraph (3);

5 (2) by redesignating paragraph (4) as para6 graph (8); and

7 (3) by inserting after paragraph (2) the fol-8 lowing:

9 "(3) INTERIM INDUSTRY VOLUNTARY CON-SENSUS STANDARDS REPORT.—The Secretary, in 10 11 consultation with the Commercial Space Transpor-12 tation Advisory Committee, or its successor organi-13 zation, shall provide a report to the Committee on 14 Science, Space, and Technology of the House of 15 Representatives and the Committee on Commerce, 16 Science, and Transportation of the Senate on the 17 progress of the commercial space transportation in-18 dustry in developing voluntary consensus standards 19 or any other construction that promotes best prac-20 tices to improve the industry. Such report shall in-21 clude, at a minimum—

22 "(A) any voluntary industry consensus
23 standards or any other construction that have
24 been accepted by the industry at large;

25 "(B) the identification of areas that have
26 the potential to become voluntary industry con050715.345.xml (60164711)

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1	sensus standards or another potential construc-
2	tion that are currently under consideration by
3	the industry at large;
4	"(C) an assessment from the Secretary on
5	the general progress of the industry in adopting
6	voluntary consensus standards or any other
7	construction;
8	"(D) lessons learned about voluntary in-
9	dustry consensus standards or any other con-
10	struction, best practices, and commercial space
11	launch operations;
12	"(E) any lessons learned associated with
13	the development, potential application, and ac-
14	ceptance of voluntary industry consensus stand-
15	ards or any other construction, best practices,
16	and commercial space launch operations; and
17	"(F) recommendations, findings, or obser-
18	vations from the Commercial Space Transpor-
19	tation Advisory Committee, or its successor or-
20	ganization, on the progress of the industry in
21	developing industry consensus standards or any
22	other construction.
22	This constant with the communister and start in the i

This report, with the appropriate updates in the intervening periods, shall be transmitted to such committees no later than December 31, 2016, December

31, 2018, and December 31, 2020. Each report shall
 describe and assess the progress achieved as of 6
 months prior to the specified transmittal date.

4 "(4) INTERIM REPORT ON KNOWLEDGE AND OPERATIONAL EXPERIENCE.—The Secretary shall 5 6 provide a report to the Committee on Science, 7 Space, and Technology of the House of Representa-8 tives and the Committee on Commerce, Science, and 9 Transportation of the of the Senate on the status of 10 the knowledge and operational experience acquired 11 by the industry while providing flight services for 12 compensation or hire to support the development of 13 a safety framework. Interim reports shall by trans-14 mitted to such committees no later than December 15 31, 2018, and December 31, 2020. Each report shall 16 describe and assess the progress achieved as of 6 17 months prior to the specified transmittal date.

18 "(5) INDEPENDENT REVIEW.—No later than 19 December 31, 2021, an independent, private systems 20 engineering and technical assistance organization or 21 standards development organization contracted by 22 the Secretary shall provide to the Committee on 23 Science, Space, and Technology of the House of 24 Representatives and the Committee on Commerce, 25 Science, and Transportation of the Senate an assess-

ment of the readiness of the commercial space indus try and the Federal Government to transition to a
 safety framework that may include regulations. As
 part of the review, the contracted organization shall
 evaluate—

6 "(A) the progress of the commercial space 7 industry in adopting industry voluntary stand-8 ards or any other construction as reported by 9 the Secretary in the interim assessments in-10 cluded in reports provided under paragraph (4); 11 and

"(B) the knowledge and operational experience obtained by the commercial space industry
while providing services for compensation or
hire as reported by the Secretary in the interim
knowledge and operational reports provided
under paragraph (4).

18 "(6) LEARNING PERIOD.—Beginning on De-19 cember 31, 2023, the Secretary may propose regula-20 tions under this subsection without regard to para-21 graph (2)(C) and (D). The development of any such 22 regulations shall take into consideration the evolving 23 standards of the commercial space flight industry as 24 identified through the reports published under para-25 graphs (3) and (4).

1 "(7) COMMUNICATION AND TRANSPARENCY.— 2 Nothing in this subsection shall be construed to limit 3 the authority of the Secretary of Transportation to 4 discuss potential approaches, potential performance 5 standards, or any other topic related to this sub-6 section with the commercial space industry including 7 observations, findings, and recommendations from 8 the Commercial Space Transportation Advisory 9 Committee, or its successor organization, prior to 10 the issuance of a notice of proposed rulemaking. 11 Such discussions shall not be construed to permit 12 the Secretary to promulgate industry regulations ex-13 cept as otherwise provided in this section.".

14 SEC. 3. INTERNATIONAL LAUNCH COMPETITIVENESS.

15 (a) PURPOSE.—The purpose of this section is to provide for updating the methodology used to calculate the 16 17 maximum probable loss from claims under section 50914 of title 51, United States Code, with a validated risk pro-18 19 file approach to provide reasonable maximum probable loss values associated with potential third party losses 20 21 from commercially licensed launches. An appropriately up-22 dated methodology will help ensure that the Federal Gov-23 ernment is not exposed to greater financial risks than in-24 tended and that launch companies are not required to pur-25 chase more insurance coverage than necessary.

1 (b) MAXIMUM PROBABLE LOSS PLAN.—Not later 2 than 180 days after the date of enactment of this Act, 3 the Secretary of Transportation shall provide to the Com-4 mittee on Science, Space, and Technology of the House 5 of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a plan to up-6 7 date the methodology used to calculate maximum probable 8 loss from claims under section 50914 of title 51, United 9 States Code, through the use of a validated risk profile 10 approach. Such plan shall include, at a minimum—

(1) an evaluation of the reasonableness of the
current single casualty estimate and, if needed, the
steps the Secretary will take to update such estimate;

15 (2) an evaluation, in consultation with the Ad-16 ministrator of the National Aeronautics and Space 17 Administration and the heads of other relevant exec-18 utive agencies, of the reasonableness of the dollar 19 value of the insurance requirement required by the 20 Secretary for launch providers to cover damage to 21 Government property resulting from a commercially 22 licensed space launch activity, and recommendations 23 as to a reasonable calculation if, as determined by 24 the Secretary, the current statutory threshold is in-25 sufficient;

(3) a schedule of when updates to the method ology and calculations for the totality of the Max imum Probable Loss will be implemented, and a de tailed explanation of any changes to the current cal culation; and

6 (4) consideration of the impact of the cost of its 7 implementation on the licensing process, both in 8 terms of the cost to industry of collecting and pro-9 viding the requisite data and cost to the Government 10 of analyzing the data.

(c) INDEPENDENT ASSESSMENT.—Not later than
270 days after transmittal of the plan under subsection
(b), the Comptroller General shall provide to the Committee on Science, Space, and Technology of the House
of Representatives and the Committee on Commerce,
Science, and Transportation of the Senate an assessment
of—

18 (1) the conclusions and analysis provided by the
19 Secretary of Transportation in the plan required
20 under subsection (b);

(2) the implementation schedule proposed bythe Secretary in such plan;

23 (3) the suitability of the plan for implementa-24 tion; and

(4) any further actions needed to implement the
 plan or otherwise accomplish the purpose of this sec tion.

4 (d) LAUNCH LIABILITY EXTENSION.—Section
5 50915(f) of title 51, United States Code, is amended by
6 striking "December 31, 2016" and inserting "December
7 31, 2023".

8 SEC. 4. LAUNCH LICENSE FLEXIBILITY.

9 Section 50906 of title 51, United States Code, is
10 amended—

(1) in subsection (d), by striking "launched or
reentered" and inserting "launched or reentered
under that permit";

14 (2) by amending subsection (d)(1) to read as15 follows:

"(1) research and development to test design
concepts, equipment, or operating techniques;";

18 (3) in subsection (d)(3), by striking "prior to19 obtaining a license";

20 (4) in subsection (e)(1), by striking "suborbital
21 rocket design" and inserting "suborbital rocket or
22 rocket design"; and

23 (5) by amending subsection (g) to read as fol-24 lows:

"(g) The Secretary may issue a permit under this sec tion notwithstanding any license issued under this chapter.
 The issuance of a license under this chapter shall not in validate a permit under this section.".
 SEC. 5. GOVERNMENT ASTRONAUTS.

6 (a) DEFINITIONS.—Section 50902 of title 51, United
7 States Code, is amended—

8 (1) by redesignating paragraphs (4) through
9 (22) as paragraphs (5) through (23), respectively;

10 (2) by inserting after paragraph (3) the fol-11 lowing new paragraph:

"(4) 'government astronaut' means an individual designated as such by the Administrator of
the National Aeronautics and Space Administration,
pursuant requirements established by the Administrator, who—

17 "(A) is an employee of—

18 "(i) the United States Government,
19 including the United States Armed Forces;
20 or

21 "(ii) a foreign government that is a
22 party to the Intergovernmental Agreement
23 Among the Government of Canada, Gov24 ernments of Member States of the Euro25 pean Space Agency, the Government of

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1	Japan, the Government of the Russian
2	Federation, and the Government of the
3	United States of America Concerning Co-
4	operation on the Civil International Space
5	Station, signed on January 29, 1998; and
6	"(B) is carried within a launch vehicle or
7	reentry vehicle in the course of his or her em-
8	ployment, which may include performance of ac-
9	tivities directly relating to the launch, reentry,
10	or other operation of the launch vehicle or re-
11	entry vehicle.";
12	(3) in paragraph (5) , as so redesignated by
13	paragraph (1) of this subsection, by inserting "gov-
14	ernment astronaut," after "crew,";
15	(4) in paragraph $(7)(A)$, as so redesignated by
16	paragraph (1) of this subsection, by inserting "gov-
17	ernment astronaut," after "(including crew train-
18	ing),'';
19	(5) in paragraph (14) , as so redesignated by
20	paragraph (1) of this subsection, by inserting "gov-
21	ernment astronauts," after "crew,";
22	(6) in paragraph $(15)(A)$, as so redesignated by
23	paragraph (1) of this subsection, by inserting "gov-
24	ernment astronaut," after "(including crew train-
25	ing),";

1 (7) by amending paragraph (18), as so redesig-2 nated by paragraph (1) of this subsection, to read 3 as follows: "(18) 'space flight participant' means an indi-4 5 vidual, who is not crew or a government astronaut, 6 carried within a launch vehicle or reentry vehicle."; 7 and 8 (8) in paragraph (22)(E), as so redesignated by 9 paragraph (1) of this subsection, by inserting ", gov-10 ernment astronauts," after "crew".

(b) RESTRICTIONS ON LAUNCHES, OPERATIONS, AND
REENTRIES; SINGLE LICENSE OR PERMIT.—Section
50904(d) of title 51, United States Code, is amended by
inserting ", government astronauts," after "crew".

(c) LICENSE APPLICATIONS AND REQUIREMENTS;
APPLICATIONS.—Section 50905 of title 51, United States
Code, is amended—

18 (1) in subsection (a)(2), by striking "crews and 19 space flight participants" and inserting "crew, gov-20 ernment astronauts, and space flight participants"; 21 (2) in subsection (b)(2)(D), by inserting ", gov-22 ernment astronauts," after "crew"; and 23 (3) in subsection (c)— 24 (A) in paragraph (1), by inserting ", government astronauts," after "crew"; and 25

(B) in paragraph (2), by striking "to crew
 or space flight participants" each place it appears and inserting "to crew, government astro nauts, or space flight participants".

(d) MONITORING ACTIVITIES.—Section 50907(a) of
title 51, United States Code, is amended by striking "crew
or space flight participant training" and inserting "crew,
government astronaut, or space flight participant training".

10 (e) ADDITIONAL SUSPENSIONS.—Section
11 50908(d)(1) of title 51, United States Code, is amended
12 by striking "to crew or space flight participants" each
13 place it appears and inserting "to crew, government astro14 nauts, or space flight participants".

15 SEC. 6. INDEMNIFICATION FOR SPACE FLIGHT PARTICI16 PANTS.

17 Chapter 509 of title 51, United States Code, is18 amended—

19 (1) in section 50914(a)(4), by adding at the20 end the following:

21 "(E) space flight participants."; and
22 (2) in section 50915(a)(1)—
23 (A) by striking "or a contractor" and in-

24 serting "a contractor"; and

1 (B) by striking "but not against" and in-2 serting "or".

3 SEC. 7. FEDERAL JURISDICTION.

4 Section 50914 of title 51, United States Code, is
5 amended by adding at the end the following:

6 "(g) FEDERAL JURISDICTION.—Any action or tort 7 arising from a licensed launch or reentry shall be the sole 8 jurisdiction of the Federal courts and shall be decided 9 under Federal law.".

10 SEC. 8. CROSS-WAIVERS.

11 Section 50914(b)(1) of title 51, United States Code, is amended to read as follows: "(1) A launch or reentry 12 license issued or transferred under this chapter shall con-13 tain a provision requiring the licensee or transferee to 14 15 make a reciprocal waiver of claims with its contractors, subcontractors, and customers, the contractors and sub-16 17 contractors of the customers, and any space flight participants, involved in launch services or reentry services or 18 participating in a flight under which each party to the 19 20 waiver agrees to be responsible for property damage or 21 loss it or they sustain, or for personal injury to, death 22 of, or property damage or loss sustained by its own em-23 ployees resulting from an activity carried out under the 24 applicable license.".

1 SEC. 9. ORBITAL TRAFFIC MANAGEMENT.

2 (a) SENSE OF CONGRESS.—It is the sense of the Con-3 gress that, as none currently exists, there may be a need for a framework that addresses space traffic management 4 5 of United States Government assets and United States private sector assets to minimize the proliferation of debris 6 7 and decrease the congestion of the orbital environment. 8 (b) STUDY REQUIRED.—Not later than 90 days after 9 the date of enactment of this Act, the Administrator of the National Aeronautics and Space Administration shall 10 11 enter into an arrangement with an independent, private systems engineering and technical assistance organization 12 13 to study frameworks for the management of space traffic 14 and orbital activities. The study shall include the following: 15

16 (1) An assessment of current regulations, Gov17 ernment best practices, and industry standards that
18 apply to space traffic management and orbital debris
19 mitigation.

20 (2) An assessment of current statutory author21 ity granted to the Federal Communications Commis22 sion, the Federal Aviation Administration, and the
23 National Oceanic and Atmospheric Administration
24 and how those agencies utilize and coordinate those
25 authorities.

1	(3) A review of all space traffic management
2	and orbital debris requirements under treaties and
3	other international agreements to which the United
4	States is a signatory, and other nonbinding inter-
5	national arrangements in which the United States
6	participates, and the manner in which the Federal
7	Government complies with those requirements.
8	(4) An assessment of existing Federal Govern-
9	ment assets used to conduct space traffic manage-
10	ment and space situational awareness.
11	(5) An assessment of the risk associated with
12	smallsats as well as any necessary Government co-
13	ordination for their launch and utilization.
14	(6) An assessment of existing private sector in-
15	formation sharing activities associated with space
16	situational awareness and space traffic management.
17	(7) Recommendations related to the framework
18	for the protection of the health, safety, and welfare
19	of the public and economic vitality of the space in-
20	dustry.
21	(c) Report to Congress.—Not later than 1 year
22	after the date of enactment of this Act, the Administrator
23	shall provide to the Committee on Science, Space, and
24	

mittee on Commerce, Science, and Transportation of the
 Senate the report required in subsection (b).

3 (d) DEPARTMENT OF DEFENSE AUTHORITIES.—
4 Congress recognizes the vital and unique role played by
5 the Department of Defense in protecting national security
6 assets in space. Nothing in this section shall be construed
7 to amend authorities granted to the Department of De8 fense to safeguard the national security.

9 SEC. 10. STATE COMMERCIAL LAUNCH FACILITIES.

10 It is the Sense of Congress that State involvement, development, ownership, and operation of launch facilities 11 12 can help enable growth of the Nation's commercial suborbital and orbital space endeavors and support both com-13 mercial and Government space programs. It is further the 14 15 sense of Congress that State launch facilities and the people and property within the affected launch areas of those 16 17 State facilities are subject to risks if the commercial launch vehicle fails or experiences an anomaly. To ensure 18 19 the success of the commercial launch industry and the 20safety of the people and property in the affected launch 21 areas, it is the further sense of Congress that States and 22 State launch facilities should seek to take proper measures 23 to secure their investments and the safety of third parties 24 from potential damages that could be suffered from commercial launch activities. 25