

7-18

114TH CONGRESS
1ST SESSION

S. _____

To update the Commercial Space Launch Act by amending title 51, United States Code, to promote competitiveness of the U.S. commercial space sector, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. CRUZ (for himself, Mr. NELSON, Mr. PETERS, Mr. RUBIO, and Mr. GARDNER) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To update the Commercial Space Launch Act by amending title 51, United States Code, to promote competitiveness of the U.S. commercial space sector, 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 "U.S. Commercial
5 Space Launch Competitiveness Act".

6 **SEC. 2. REFERENCES TO TITLE 51, UNITED STATES CODE.**

7 Except as otherwise expressly provided, wherever in
8 this Act an amendment or repeal is expressed in terms

1 of an amendment to, or repeal of, a section or other provi-
2 sion, the reference shall be considered to be made to a
3 section or other provision of title 51, United States Code.

4 **SEC. 3. LIABILITY INSURANCE AND FINANCIAL RESPONSI-**
5 **BILITY REQUIREMENTS.**

6 (a) SENSE OF CONGRESS.—It is the sense of Con-
7 gress that it is in the public interest to update the method-
8 ology used to calculate the maximum probable loss from
9 claims under section 50914 of title 51, United States
10 Code, with a validated risk profile approach in order to
11 consistently compute valid and reasonable maximum prob-
12 able loss values.

13 (b) IMPLEMENTATION.—Not later than September
14 30, 2015, the Secretary of Transportation, in consultation
15 with the commercial space sector and insurance providers,
16 shall—

17 (1) evaluate and, if necessary, develop a plan to
18 update the methodology used to calculate the max-
19 imum probable loss from claims under section 50914
20 of title 51, United States Code;

21 (2) in evaluating or developing a plan under
22 paragraph (1)—

23 (A) ensure that the Federal Government is
24 not exposed to greater costs than intended and
25 that launch companies are not required to pur-

1 chase more insurance coverage than necessary;
2 and

3 (B) consider the impact of the cost to both
4 the industry and the Government of imple-
5 menting an updated methodology; and

6 (3) submit the evaluation, and any plan, to the
7 Committee on Commerce, Science, and Transpor-
8 tation of the Senate and the Committee on Science,
9 Space, and Technology of the House of Representa-
10 tives.

11 **SEC. 4. LAUNCH LIABILITY EXTENSION.**

12 Section 50915(f) is amended by striking “December
13 31, 2016” and inserting “December 31, 2020”.

14 **SEC. 5. COMMERCIAL SPACE LAUNCH LICENSING AND EX-**
15 **PERIMENTAL PERMITS.**

16 Section 50906 is amended—

17 (1) in subsection (d), by striking “launched or
18 reentered” and inserting “launched or reentered
19 under that permit”;

20 (2) by amending subsection (d)(1) to read as
21 follows:

22 “(1) research and development to test design
23 concepts, equipment, or operating techniques;”;

24 (3) in subsection (d)(3) by striking “prior to
25 obtaining a license”;

1 (4) in subsection (e)(1) by striking “suborbital
2 rocket design” and inserting “suborbital rocket or
3 suborbital rocket design”; and

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

6 “(g) The Secretary may issue a permit under this sec-
7 tion notwithstanding any license issued under this chapter.
8 The issuance of a license under this chapter may not inval-
9 idate a permit issued under this section.”.

10 **SEC. 6. LICENSING REPORT.**

11 Not later than 120 days after the date of enactment
12 of this Act, the Secretary of Transportation shall submit
13 to the Committee on Commerce, Science, and Transpor-
14 tation of the Senate and the Committee on Science, Space,
15 and Technology of the House of Representatives a report
16 on approaches for streamlining the licensing and permit-
17 ting process of launch vehicles, reentry vehicles, or compo-
18 nents of launch or reentry vehicles, to enable non-launch
19 flight operations related to space transportation. The re-
20 port shall include approaches to improve efficiency, reduce
21 unnecessary costs, resolve inconsistencies, remove duplica-
22 tion, and minimize unwarranted constraints.

23 **SEC. 7. SPACE AUTHORITY.**

24 (a) **IN GENERAL.**—Not later than 120 days after the
25 date of enactment of this Act, the Director of the Office

1 of Science and Technology Policy, in consultation with the
2 Secretary of State, the Secretary of Transportation, the
3 Administrator of the National Aeronautics and Space Ad-
4 ministration, the heads of other relevant Federal agencies,
5 and the commercial space sector, shall—

6 (1) assess current, and proposed near-term,
7 commercial non-governmental activities conducted in
8 space;

9 (2) identify appropriate oversight authorities
10 for the activities described in paragraph (1);

11 (3) recommend an oversight approach that
12 would prioritize safety, utilize existing authorities,
13 minimize burdens, promote the U.S. commercial
14 space sector, and meet the United States' obligations
15 under international treaties; and

16 (4) submit to the Committee on Commerce,
17 Science, and Transportation of the Senate and the
18 Committee on Science, Space, and Technology of the
19 House of Representatives a report on the assessment
20 and recommended approaches.

21 (b) EXCEPTION.—Nothing in this section shall apply
22 to the activities of the ISS national laboratory as described
23 in section 504 of the National Aeronautics and Space Ad-
24 ministration Authorization Act of 2010 (42 U.S.C.

1 18354), including any research or development projects
2 utilizing the ISS national laboratory.

3 **SEC. 8. SPACE SURVEILLANCE AND SITUATIONAL AWARE-**
4 **NESS DATA.**

5 Not later than 120 days after the date of enactment
6 of this Act, the Secretary of Transportation in concur-
7 rence with the Secretary of Defense shall—

8 (1) in consultation with the heads of other rel-
9 evant Federal agencies, study the feasibility of proc-
10 essing and releasing safety-related space situational
11 awareness data and information to any entity con-
12 sistent with national security interests and public
13 safety obligations of the United States; and

14 (2) submit a report on the feasibility study to
15 the Committee on Commerce, Science, and Trans-
16 portation of the Senate and the Committee on
17 Science, Space, and Technology of the House of
18 Representatives.

19 **SEC. 9. EXTENSION OF CERTAIN SAFETY REGULATION RE-**
20 **QUIREMENTS.**

21 (a) **EXTENSION OF CERTAIN SAFETY REGULATION**
22 **REQUIREMENTS.**—Section 50905(c)(3) is amended by
23 striking “Beginning on October 1, 2015” and inserting
24 “Beginning on October 1, 2020”.

1 (b) CONSTRUCTION.—Section 50905(c) is amended
2 by adding at the end the following:

3 “(5) Nothing in this subsection shall be con-
4 strued to limit the authority of the Secretary to dis-
5 cuss potential regulatory approaches with the com-
6 mercial space sector, including observations, find-
7 ings, and recommendations from the Commercial
8 Space Transportation Advisory Committee, prior to
9 the issuance of a notice of proposed rulemaking.”.

10 (c) REPORT.—Not later than 270 days after the date
11 of enactment of this Act, the Secretary of Transportation,
12 in consultation with the commercial space sector, including
13 the Commercial Space Transportation Advisory Com-
14 mittee, shall submit to the Committee on Commerce,
15 Science, and Transportation of the Senate and the Com-
16 mittee on Science, Space, and Technology of the House
17 of Representative a report specifying key industry metrics
18 that might indicate readiness of the commercial space sec-
19 tor and the Department of Transportation to transition
20 to a regulatory approach under section 50905(c)(3) of title
21 51, United States Code, that considers space flight partici-
22 pant, government astronaut, and crew safety.

23 (d) BIENNIAL REPORT.—Beginning on December 31,
24 2016, and biennially thereafter, the Secretary of Trans-
25 portation, in consultation and coordination with the com-

1 mercial space sector, including the Commercial Space
2 Transportation Advisory Committee, shall submit to the
3 Committee on Commerce, Science, and Transportation of
4 the Senate and the Committee on Science, Space, and
5 Technology of the House of Representatives a report that
6 identifies the activities, described in subsections (c) and
7 (d) of section 50905 of title 51, United States Code, most
8 appropriate for regulatory action, if any, and a proposed
9 transition plan for such regulations.

10 **SEC. 10. INDUSTRY VOLUNTARY CONSENSUS STANDARDS.**

11 (a) **INDUSTRY VOLUNTARY CONSENSUS STAND-**
12 **ARDS.**—Section 50905(c), as amended in section 9 of this
13 Act, is further amended by adding at the end the fol-
14 lowing:

15 “(6) The Secretary shall continue to work with
16 the commercial space sector, including the Commer-
17 cial Space Transportation Advisory Committee, to
18 facilitate the development of voluntary consensus
19 standards based on recommended best practices to
20 improve the safety of crew, government astronauts,
21 and space flight participants as the commercial
22 space sector continues to mature.”.

23 (b) **BIENNIAL REPORT.**—Beginning on December 31,
24 2016, and biennially thereafter, the Secretary of Trans-
25 portation, in consultation and coordination with the com-

1 mercial space sector, including the Commercial Space
2 Transportation Advisory Committee, shall submit to the
3 Committee on Commerce, Science, and Transportation of
4 the Senate and the Committee on Science, Space, and
5 Technology of the House of Representatives a report de-
6 tailing progress on the development of industry voluntary
7 consensus standards under section 50905(c)(6) of title 51,
8 United States Code.

9 **SEC. 11. GOVERNMENT ASTRONAUTS.**

10 (a) FINDINGS AND PURPOSE.—Section 50901(15) is
11 amended by inserting “, government astronauts,” after
12 “crew” each place it appears.

13 (b) DEFINITION OF GOVERNMENT ASTRONAUT.—
14 Section 50902 is amended—

15 (1) by redesignating paragraphs (4) through
16 (22) as paragraphs (7) through (25), respectively;
17 and

18 (2) by inserting after paragraph (3) the fol-
19 lowing:

20 “(4) ‘*government astronaut*’ means an individual
21 who—

22 “(A) is either—

23 “(i) an employee of the United States
24 Government, including the uniformed serv-
25 ices, engaged in the performance of a Fed-

1 eral function under authority of law or an
2 Executive act; or

3 “(ii) an international partner astro-
4 naut;

5 “(B) is identified by the Administrator of
6 the National Aeronautics and Space Adminis-
7 tration;

8 “(C) is carried within a launch vehicle or
9 reentry vehicle; and

10 “(D) may perform or may not perform ac-
11 tivities directly relating to the launch, reentry,
12 or other operation of the launch vehicle or re-
13 entry vehicle.

14 “(5) ‘international partner astronaut’ means an
15 individual designated under Article 11 of the Inter-
16 national Space Station Intergovernmental Agree-
17 ment, by a partner to that agreement other than the
18 United States, as qualified to serve as an Inter-
19 national Space Station crew member.

20 “(6) ‘International Space Station Intergovern-
21 mental Agreement’ means the Agreement Con-
22 cerning Cooperation on the International Space Sta-
23 tion, signed at Washington January 29, 1998 (TIAS
24 12927).”.

1 (c) DEFINITION OF LAUNCH.—Paragraph (7) of sec-
2 tion 50902, as redesignated, is amended by striking “and
3 any payload, crew, or space flight participant” and insert-
4 ing “and any payload or human being”.

5 (d) DEFINITION OF LAUNCH SERVICES.—Paragraph
6 (9) of section 50902, as redesignated, is amended by strik-
7 ing “payload, crew (including crew training), or space
8 flight participant” and inserting “payload, crew (including
9 crew training), government astronaut, or space flight par-
10 ticipant”.

11 (e) DEFINITION OF REENTER AND REENTRY.—Para-
12 graph (16) of section 50902, as redesignated, is amended
13 by striking “and its payload, crew, or space flight partici-
14 pants, if any,” and inserting “and its payload or human
15 beings, if any,”.

16 (f) DEFINITION OF REENTRY SERVICES.—Paragraph
17 (17) of section 50902, as redesignated, is amended by
18 striking “payload, crew (including crew training), or space
19 flight participant, if any,” and inserting “payload, crew
20 (including crew training), government astronaut, or space
21 flight participant, if any,”.

22 (g) DEFINITION OF SPACE FLIGHT PARTICIPANT.—
23 Paragraph (20) of section 50902, as redesignated, is
24 amended to read as follows:

1 “(20) ‘space flight participant’ means an indi-
2 vidual, who is not crew or a government astronaut,
3 carried within a launch vehicle or reentry vehicle.”.

4 (h) DEFINITION OF THIRD PARTY.—Paragraph
5 (24)(E) of section 50902, as redesignated, is amended by
6 inserting “, government astronauts,” after “crew”.

7 (i) RESTRICTIONS ON LAUNCHES, OPERATIONS, AND
8 REENTRIES; SINGLE LICENSE OR PERMIT.—Section
9 50904(d) is amended by striking “activities involving crew
10 or space flight participants” and inserting “activities in-
11 volving crew, government astronauts, or space flight par-
12 ticipants”.

13 (j) LICENSE APPLICATIONS AND REQUIREMENTS;
14 APPLICATIONS.—Section 50905 is amended—

15 (1) in subsection (a)(2), by striking “crews and
16 space flight participants” and inserting “crew, gov-
17 ernment astronauts, and space flight participants”;

18 (2) in subsection (b)(2)(D), by striking “crew
19 or space flight participants” and inserting “crew,
20 government astronauts, or space flight participants”;
21 and

22 (3) in subsection (c)—

23 (A) in paragraph (1), by striking “crew
24 and space flight participants” and inserting

1 “crew, government astronauts, and space flight
2 participants”; and

3 (B) in paragraph (2), by striking “to crew
4 or space flight participants” each place it ap-
5 pears and inserting “to crew, government astro-
6 nauts, or space flight participants”.

7 (k) MONITORING ACTIVITIES.—Section 50907(a) is
8 amended by striking “crew or space flight participant
9 training” and inserting “crew, government astronaut, or
10 space flight participant training”.

11 (l) ADDITIONAL SUSPENSIONS.—Section
12 50908(d)(1) is amended by striking “to crew or space
13 flight participants” each place it appears and inserting “to
14 any human being”.

15 (m) ENFORCEMENT AND PENALTY.—Section
16 50917(b)(1)(D)(i) is amended by striking “crew or space
17 flight participant training site,” and inserting “crew, gov-
18 ernment astronaut, or space flight participant training
19 site,”.

20 (n) RELATIONSHIP TO OTHER EXECUTIVE AGEN-
21 CIES, LAWS, AND INTERNATIONAL OBLIGATIONS; NON-
22 APPLICATION.—Section 50919(g) is amended to read as
23 follows:

24 “(g) NONAPPLICATION.—

1 “(1) IN GENERAL.—This chapter does not
2 apply to—

3 “(A) a launch, reentry, operation of a
4 launch vehicle or reentry vehicle, operation of a
5 launch site or reentry site, or other space activ-
6 ity the Government carries out for the Govern-
7 ment; or

8 “(B) planning or policies related to the
9 launch, reentry, operation, or activity under
10 subparagraph (A).

11 “(2) RULE OF CONSTRUCTION.—The following
12 activities are not space activities the Government
13 carries out for the Government under paragraph (1):

14 “(A) A government astronaut being carried
15 within a launch vehicle or reentry vehicle under
16 this chapter.

17 “(B) A government astronaut performing
18 activities directly relating to the launch, re-
19 entry, or other operation of the launch vehicle
20 or reentry vehicle under this chapter.”.

21 (o) RULE OF CONSTRUCTION.—Nothing in this Act,
22 or the amendments made by this Act, may be construed
23 to modify or affect any law relating to astronauts.

1 **SEC. 12. STREAMLINE COMMERCIAL SPACE LAUNCH AC-**
2 **TIVITIES.**

3 (a) SENSE OF CONGRESS.—It is the sense of Con-
4 gress that eliminating duplicative requirements and ap-
5 provals for commercial launch and reentry operations will
6 promote and encourage the development of the commercial
7 space sector.

8 (b) REAFFIRMATION OF POLICY.—Congress reaf-
9 firms that the Secretary of Transportation, in overseeing
10 and coordinating commercial launch and reentry oper-
11 ations, should—

12 (1) promote commercial space launches and re-
13 entries by the private sector;

14 (2) facilitate Government, State, and private
15 sector involvement in enhancing U.S. launch sites
16 and facilities;

17 (3) protect public health and safety, safety of
18 property, national security interests, and foreign pol-
19 icy interests of the United States; and

20 (4) consult with the head of another executive
21 agency, including the Secretary of Defense or the
22 Administrator of the National Aeronautics and
23 Space Administration, as necessary to provide con-
24 sistent application of licensing requirements under
25 chapter 509 of title 51, United States Code.

26 (c) REQUIREMENTS.—

1 (1) IN GENERAL.—The Secretary of Transpor-
2 tation under section 50918 of title 51, United States
3 Code, and subject to section 50905(b)(2)(C) of that
4 title, shall consult with the Secretary of Defense, the
5 Administrator of the National Aeronautics and
6 Space Administration, and the heads of other execu-
7 tive agencies, as appropriate—

8 (A) to identify all requirements that are
9 imposed to protect the public health and safety,
10 safety of property, national security interests,
11 and foreign policy interests of the United States
12 relevant to any commercial launch of a launch
13 vehicle or commercial reentry of a reentry vehi-
14 cle; and

15 (B) to evaluate the requirements identified
16 in subparagraph (A) and, in coordination with
17 the licensee or transferee and the heads of the
18 relevant executive agencies—

19 (i) determine whether the satisfaction
20 of a requirement of one agency could result
21 in the satisfaction of a requirement of an-
22 other agency; and

23 (ii) resolve any inconsistencies and re-
24 move any outmoded or duplicative require-
25 ments or approvals of the Federal Govern-

1 ment relevant to any commercial launch of
2 a launch vehicle or commercial reentry of
3 a reentry vehicle.

4 (2) REPORTS.—Not later than 180 days after
5 the date of enactment of this Act, and annually
6 thereafter until the Secretary of Transportation de-
7 termines no outmoded or duplicative requirements or
8 approvals of the Federal Government exist, the Sec-
9 retary of Transportation, in consultation with the
10 Secretary of Defense, the Administrator of the Na-
11 tional Aeronautics and Space Administration, the
12 commercial space sector, and the heads of other ex-
13 ecutive agencies, as appropriate, shall submit to the
14 Committee on Commerce, Science, and Transpor-
15 tation of the Senate, the Committee on Science,
16 Space, and Technology of the House of Representa-
17 tives, and the congressional defense committees a re-
18 port that includes the following:

19 (A) A description of the process for the ap-
20 plication for and approval of a permit or license
21 under chapter 509 of title 51, United States
22 Code, for the commercial launch of a launch ve-
23 hicle or commercial reentry of a reentry vehicle,
24 including the identification of—

1 (i) any unique requirements for oper-
2 ating on a United States Government
3 launch site, reentry site, or launch prop-
4 erty; and

5 (ii) any inconsistent, outmoded, or du-
6 plicative requirements or approvals.

7 (B) A description of current efforts, if any,
8 to coordinate and work across executive agen-
9 cies to define interagency processes and proce-
10 dures for sharing information, avoiding duplica-
11 tion of effort, and resolving common agency re-
12 quirements.

13 (C) Recommendations for legislation that
14 may further—

15 (i) streamline requirements in order
16 to improve efficiency, reduce unnecessary
17 costs, resolve inconsistencies, remove dupli-
18 cation, and minimize unwarranted con-
19 straints; and

20 (ii) consolidate or modify require-
21 ments across affected agencies into a sin-
22 gle application set that satisfies the re-
23 quirements identified in paragraph (1)(A).

24 (3) DEFINITIONS.—For purposes of this sub-
25 section—

1 (A) any applicable definitions set forth in
2 section 50902 of title 51, United States Code,
3 shall apply;

4 (B) the terms “launch”, “reenter”, and
5 “reentry” include landing of a launch vehicle or
6 reentry vehicle; and

7 (C) the terms “United States Government
8 launch site” and “United States Government
9 reentry site” include any necessary facility, at
10 that location, that is commercially operated on
11 United States Government property.

12 **SEC. 13. OPERATION AND UTILIZATION OF THE ISS.**

13 (a) SENSE OF CONGRESS.—It is the sense of Con-
14 gress that—

15 (1) maximum utilization of partnerships, sci-
16 entific research, commercial applications, and explo-
17 ration test bed capabilities of the ISS is essential to
18 ensuring the greatest return on investments made by
19 the United States and its international partners in
20 the development, assembly, and operations of that
21 unique facility; and

22 (2) every effort should be made to ensure that
23 decisions regarding the service life of the ISS are
24 based on the station’s projected capability to con-

1 time providing effective and productive research and
2 exploration test bed capabilities.

3 (b) CONTINUATION OF THE INTERNATIONAL SPACE
4 STATION.—

5 (1) IN GENERAL.—Section 501 of the National
6 Aeronautics and Space Administration Authorization
7 Act of 2010 (42 U.S.C. 18351) is amended—

8 (A) in the heading, by striking
9 **“THROUGH 2020”**; and

10 (B) in subsection (a), by striking “through
11 at least 2020” and inserting “through at least
12 2024”.

13 (2) MAINTENANCE OF THE UNITED STATES
14 SEGMENT AND ASSURANCE OF CONTINUED OPER-
15 ATIONS OF THE INTERNATIONAL SPACE STATION.—
16 Section 503 of the National Aeronautics and Space
17 Administration Authorization Act of 2010 (42
18 U.S.C. 18353) is amended—

19 (A) in subsection (a), by striking “through
20 at least September 30, 2020” and inserting
21 “through at least September 30, 2024”; and

22 (B) in subsection (b)(1), by striking “In
23 carrying out subsection (a), the Administrator”
24 and inserting “The Administrator”.

1 (3) RESEARCH CAPACITY ALLOCATION AND IN-
2 TEGRATION OF RESEARCH PAYLOADS.—Section
3 504(d) of the National Aeronautics and Space Ad-
4 ministration Authorization Act of 2010 (42 U.S.C.
5 18354(d)) is amended by striking “September 30,
6 2020” each place it appears and inserting “at least
7 September 30, 2024”.

8 (4) MAINTAINING USE THROUGH AT LEAST
9 2024.—Section 70907 is amended to read as follows:
10 **“§ 70907. Maintaining use through at least 2024**

11 “(a) POLICY.—The Administrator shall take all nec-
12 essary steps to ensure that the International Space Sta-
13 tion remains a viable and productive facility capable of po-
14 tential United States utilization through at least Sep-
15 tember 30, 2024.

16 “(b) NASA ACTIONS.—In furtherance of the policy
17 under subsection (a), the Administrator shall ensure, to
18 the extent practicable, that the International Space Sta-
19 tion, as a designated national laboratory—

20 “(1) remains viable as an element of overall ex-
21 ploration and partnership strategies and approaches;

22 “(2) is considered for use by all NASA mission
23 directorates, as appropriate, for technically appro-
24 priate scientific data gathering or technology risk re-
25 duction demonstrations; and

1 “(3) remains an effective, functional vehicle
2 providing research and test bed capabilities for the
3 United States through at least September 30,
4 2024.”.

5 (5) TECHNICAL AND CONFORMING AMEND-
6 MENTS.—

7 (A) TABLE OF CONTENTS OF 2010 ACT.—

8 The item relating to section 501 in the table of
9 contents in section 1(b) of the National Aero-
10 nautics and Space Administration Authorization
11 Act of 2010 (124 Stat. 2806) is amended by
12 striking “through 2020”.

13 (B) TABLE OF CONTENTS OF CHAPTER
14 709.—The table of contents for chapter 709 is
15 amended by amending the item relating to sec-
16 tion 70907 to read as follows:

“70907. Maintaining use through at least 2024.”.