

108TH CONGRESS
2^D SESSION

H. R. 3752

IN THE SENATE OF THE UNITED STATES

MARCH 8, 2004

Received; read twice and referred to the Committee on Commerce, Science,
and Transportation

AN ACT

To promote the development of the emerging commercial human space flight industry, to extend the liability indemnification regime for the commercial space transportation industry, to authorize appropriations for the Office of the Associate Administrator for Commercial Space Transportation, 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 “Commercial Space
5 Launch Amendments Act of 2004”.

6 **SEC. 2. FINDINGS.**

7 The Congress finds that—

8 (1) the goal of opening space to the American
9 people and their private commercial, scientific, and
10 cultural enterprises should guide Federal space in-
11 vestments, policies, and regulations;

12 (2) private industry has begun to develop com-
13 mercial launch vehicles capable of carrying human
14 beings into space, and greater private investment in
15 these efforts will stimulate the Nation’s commercial
16 space transportation industry as a whole;

17 (3) space transportation is inherently risky;

18 (4) a critical area of responsibility for the Of-
19 fice of the Associate Administrator for Commercial
20 Space Transportation is to regulate the emerging
21 commercial human space flight industry; and

22 (5) the public interest is served by creating a
23 clear legal and regulatory regime for commercial
24 human space flight.

1 **SEC. 3. AMENDMENTS.**

2 (a) FINDINGS AND PURPOSES.—Section 70101 of
3 title 49, United States Code, is amended—

4 (1) in subsection (a)(3), by inserting “human
5 space flight,” after “microgravity research,”; and

6 (2) in subsection (a)(4)—

7 (A) by striking “satellite”; and

8 (B) by striking “services now available
9 from” and inserting “capabilities of”.

10 (b) DEFINITIONS.—Section 70102 of title 49, United
11 States Code, is amended—

12 (1) by redesignating paragraphs (2) through
13 (17) as paragraphs (3), (4), (5), (6), (7), (8), (9),
14 (10), (12), (13), (14), (15), (16), (18), (21), and
15 (22), respectively;

16 (2) by inserting after paragraph (1) the fol-
17 lowing new paragraph:

18 “(2) ‘crew’ means any employee of a licensee or
19 transferee, or of a contractor or subcontractor of a
20 licensee or transferee, who performs activities in the
21 course of that employment directly relating to the
22 launch, reentry, or other operation of or in a launch
23 vehicle or reentry vehicle that carries human
24 beings.”;

25 (3) in paragraph (4), as so redesignated by
26 paragraph (1) of this subsection, by inserting “,

1 crew, or space flight participant” after “any pay-
2 load”;

3 (4) in paragraph (6)(A), as so redesignated by
4 paragraph (1) of this subsection, by striking “and
5 payload” and inserting “, payload, crew (including
6 crew training), or space flight participant”;

7 (5) in paragraph (8)(A), as so redesignated by
8 paragraph (1) of this subsection, by inserting “or
9 human beings” after “place a payload”;

10 (6) by inserting after paragraph (10), as so re-
11 designated by paragraph (1) of this subsection, the
12 following new paragraph:

13 “(11) ‘permit’ means an experimental permit
14 issued under section 70105.”.

15 (7) in paragraph (13), as so redesignated by
16 paragraph (1) of this subsection, by inserting “crew,
17 or space flight participants,” after “and its pay-
18 load,”;

19 (8) in paragraph (14)(A), as so redesignated by
20 paragraph (1) of this subsection, by striking “and
21 its payload” inserting “and payload, crew (including
22 crew training), or space flight participant”;

23 (9) by inserting after paragraph (16), as so re-
24 designated by paragraph (1) of this subsection, the
25 following new paragraph:

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

4 (10) by inserting after paragraph (18), as so
5 redesignated by paragraph (1) of this subsection, the
6 following new paragraphs:

7 “(19) ‘suborbital rocket’ means a rocket-pro-
8 pelled vehicle intended for flight on a suborbital tra-
9 jectory whose thrust is greater than its lift for the
10 majority of the powered portion of its flight.

11 “(20) ‘suborbital trajectory’ means the inten-
12 tional flight path of a launch vehicle, reentry vehicle,
13 or any portion thereof, whose vacuum instantaneous
14 impact point does not leave the surface of the
15 Earth.”; and

16 (11) in paragraph (21), as so redesignated by
17 paragraph (1) of this subsection—

18 (A) by striking “or” at the end of subpara-
19 graph (C);

20 (B) by striking the period at the end of
21 subparagraph (D) and inserting “; or”; and

22 (C) by adding at the end the following new
23 subparagraph:

24 “(E) crew or space flight participants.”.

1 (c) COMMERCIAL HUMAN SPACE FLIGHT.—(1) Sec-
2 tion 70103(a) of title 49, United States Code, is amended
3 by inserting “, through the Associate Administrator for
4 Commercial Space Transportation,” after “Secretary of
5 Transportation”.

6 (2) Section 70103(b)(1) of title 49, United States
7 Code, is amended by inserting “, including those involving
8 space flight participants” after “private sector”.

9 (3) Section 70104(a) of title 49, United States Code,
10 is amended—

11 (A) by striking “LICENSE REQUIREMENT.—A
12 license issued or transferred under this chapter” and
13 inserting “REQUIREMENT.—A license issued or
14 transferred under this chapter, or a permit,”; and

15 (B) by inserting after paragraph (4) the fol-
16 lowing:

17 “Notwithstanding this subsection, a permit shall not au-
18 thorize a person to operate a launch site or reentry site.”.

19 (4) Section 70104(b) of title 49, United States Code,
20 is amended by inserting “or permit” after “holder of a
21 license”.

22 (5) The section heading of section 70105 of title 49,
23 United States Code, is amended by striking “**License**
24 **applications**” and inserting “**Applications**”, and
25 the item relating to that section in the table of sections

1 for chapter 701 of title 49, United States Code, is amend-
2 ed accordingly.

3 (6) Section 70105(a) of title 49, United States Code,
4 is amended—

5 (A) by striking “APPLICATIONS.—” and insert-
6 ing “LICENSES.—”;

7 (B) in paragraph (1), by striking “subsection
8 (b)(2)(D)” both places it appears and inserting
9 “subsection (c)(2)(D)”; and

10 (C) in paragraph (2), by inserting “, including
11 crews,” after “or personnel”.

12 (7) Section 70105 of title 49, United States Code,
13 is amended by redesignating subsections (b) and (c) as
14 subsections (c) and (d), respectively, and by inserting after
15 subsection (a) the following new subsection:

16 “(b) EXPERIMENTAL PERMITS.—(1) A person may
17 apply to the Secretary of Transportation for an experi-
18 mental permit under this subsection in the form and man-
19 ner the Secretary prescribes. Consistent with the public
20 health and safety, safety of property, and national security
21 and foreign policy interests of the United States, the Sec-
22 retary, not later than 90 days after receiving an applica-
23 tion pursuant to this subsection, shall issue a permit if
24 the Secretary decides in writing that the applicant com-
25 plies, and will continue to comply, with this chapter and

1 regulations prescribed under this chapter. The Secretary
2 shall inform the applicant of any pending issue and action
3 required to resolve the issue if the Secretary has not made
4 a decision not later than 60 days after receiving an appli-
5 cation. The Secretary shall transmit to the Committee on
6 Science of the House of Representatives and Committee
7 on Commerce, Science, and Transportation of the Senate
8 a written notice not later than 15 days after any occur-
9 rence when a permit is not issued within the deadline es-
10 tablished by this subsection.

11 “(2) In carrying out paragraph (1), the Secretary
12 may establish procedures for safety approvals of launch
13 vehicles, reentry vehicles, safety systems, processes, serv-
14 ices, or personnel, including crews, that may be used in
15 conducting commercial space launch or reentry activities
16 pursuant to a permit.

17 “(3) In order to encourage the development of a com-
18 mercial space flight industry, the Secretary, to the great-
19 est extent practicable, shall when issuing permits use the
20 authority granted under subsection (c)(2)(C).

21 “(4) The Secretary may issue a permit only for reus-
22 able suborbital rockets that will be launched or reentered
23 solely for—

1 “(A) research and development to test new de-
2 sign concepts, new equipment, or new operating
3 techniques;

4 “(B) showing compliance with requirements as
5 part of the process for obtaining a license under this
6 chapter; or

7 “(C) crew training prior to obtaining a license
8 for a launch or reentry using the design of the rock-
9 et for which the permit would be issued.

10 “(5) Permits issued under this subsection shall—

11 “(A) authorize an unlimited number of launches
12 and reentries for a particular suborbital rocket de-
13 sign for the uses described in paragraph (4); and

14 “(B) specify the modifications that may be
15 made to the suborbital rocket without changing the
16 design to an extent that would invalidate the permit.

17 “(6) Permits shall not be transferable.

18 “(7) A permit may not be issued for, and a permit
19 that has already been issued shall cease to be valid for,
20 a particular design for a reusable suborbital rocket after
21 a license has been issued for the launch or reentry of a
22 rocket of that design.

23 “(8) No person may operate a reusable suborbital
24 rocket under a permit for carrying any property or human
25 being for compensation or hire.

1 “(9) For the purposes of sections 70106, 70107,
2 70108, 70109, 70110, 70112, 70115, 70116, 70117, and
3 70121 of this chapter—

4 “(A) a permit shall be considered a license;

5 “(B) the holder of a permit shall be considered
6 a licensee;

7 “(C) a vehicle operating under a permit shall be
8 considered to be licensed; and

9 “(D) the issuance of a permit shall be consid-
10 ered licensing.

11 This paragraph shall not be construed to allow the trans-
12 fer of a permit.”.

13 (8) Section 70105(c)(1) of title 49, United States
14 Code, as so redesignated by paragraph (7) of this sub-
15 section, is amended by inserting “or permit” after “for
16 a license”.

17 (9) Section 70105(c)(2)(B) of title 49, United States
18 Code, as so redesignated by paragraph (7) of this sub-
19 section, is amended by striking “an additional require-
20 ment” and inserting “any additional requirement”.

21 (10) Section 70105(c)(2)(C) of title 49, United
22 States Code, as so redesignated by paragraph (7) of this
23 subsection, is amended by inserting “or permit” after “for
24 a license”.

1 (11) Section 70105(c)(2)(D) of title 49, United
2 States Code, as so redesignated by paragraph (7) of this
3 subsection, is amended by inserting “or permit” after “for
4 a license”.

5 (12) Section 70105(c)(3) of title 49, United States
6 Code, as so redesignated by paragraph (7) of this sub-
7 section, is amended by adding at the end the following:
8 “Nothing in this paragraph shall be construed to allow
9 the launch or reentry of a launch vehicle or a reentry vehi-
10 cle without a license or permit if a human being will be
11 on board.”.

12 (13) Section 70105(e) of title 49, United States
13 Code, as so redesignated by paragraph (7) of this sub-
14 section, is amended by adding at the end the following
15 new paragraphs:

16 “(4) The holder of a license or a permit under this
17 chapter may launch or reenter crew only if—

18 “(A) the crew has received training and has
19 satisfied medical or other standards specified in the
20 license or permit in accordance with regulations pro-
21 mulgated by the Secretary; and

22 “(B) the holder of the license or permit and
23 crew have complied with all requirements of the laws
24 of the United States that apply to crew.

1 “(5) The holder of a license or a permit under this
2 chapter may launch or reenter a space flight participant
3 only if—

4 “(A) in accordance with regulations promul-
5 gated by the Secretary, the holder of the license or
6 permit has informed the space flight participant in
7 writing about the risks of the launch or reentry, in-
8 cluding the safety record of the launch or reentry ve-
9 hicle type, and the space flight participant has pro-
10 vided written informed consent to participation in
11 the launch or reentry; and

12 “(B) the holder of the license or permit and
13 space flight participant have complied with all re-
14 quirements of the laws of the United States related
15 to launching or reentering a space flight partici-
16 pant.”.

17 (14) Section 70105(d) of title 49, United States
18 Code, as so redesignated by paragraph (7) of this sub-
19 section, is amended by inserting “or permit” after “of a
20 license”.

21 (15) Section 70106(a) of title 49, United States
22 Code, is amended—

23 (A) by inserting “at a site used for crew train-
24 ing,” after “assemble a launch vehicle or reentry ve-
25 hicle,”; and

1 (B) by striking “section 70104(c)” and insert-
2 ing “sections 70104(c) and 70105(c)(4)”.

3 (16) Section 70110(a)(1) of title 49, United States
4 Code, is amended by striking “70105(a)” and inserting
5 “70105”.

6 (17) Section 70112(b)(1) of title 49, United States
7 Code, is amended—

8 (A) by inserting “space flight participants,”
9 after “its contractors, subcontractors,”;

10 (B) by inserting “or by space flight partici-
11 pants,” after “its own employees”; and

12 (C) by adding at the end the following: “The
13 requirement for space flight participants to make a
14 reciprocal waiver of claims with the licensee or
15 transferee shall expire 3 years after the first licensed
16 launch of a launch vehicle carrying a space flight
17 participant.”.

18 (18) Section 70112(b)(2) of title 49, United States
19 Code, is amended—

20 (A) by inserting “crew, space flight partici-
21 pants,” after “transferee, contractors, subcontrac-
22 tors,”; and

23 (B) by inserting “or by space flight partici-
24 pants,” after “its own employees”.

1 (19) Section 70113(a)(1) of title 49, United States
2 Code, is amended by inserting “but not against a space
3 flight participant,” after “subcontractor of a customer,”.

4 (20) Section 70113(f) of title 49, United States Code,
5 is amended by striking “December 31, 2004.” and insert-
6 ing “December 31, 2007. This section does not apply to
7 permits.”.

8 (21) Section 70115(b)(1)(D)(i) of title 49, United
9 States Code, is amended by inserting “crew training site,”
10 after “site of a launch vehicle or reentry vehicle,”.

11 (22) Section 70119 of title 49, United States Code,
12 is amended by striking paragraphs (1) and (2) and insert-
13 ing the following:

14 “(1) \$11,776,000 for fiscal year 2005;

15 “(2) \$11,776,000 for fiscal year 2006; and

16 “(3) \$11,776,000 for fiscal year 2007.”.

17 (23) Section 70120 of title 49, United States Code,
18 is amended by adding at the end the following new sub-
19 sections:

20 “(c) AMENDMENTS.—Not later than 12 months after
21 the date of enactment of the Commercial Space Launch
22 Amendments Act of 2004, the Secretary shall publish pro-
23 posed regulations to carry out that Act, including regula-
24 tions relating to crew, space flight participants, and per-
25 mits for launch or reentry of reusable suborbital rockets.

1 Not later than 18 months after such date of enactment,
2 the Secretary shall issue final regulations.

3 “(d) EFFECTIVE DATE.—(1) Licenses for the launch
4 or reentry of launch vehicles or reentry vehicles with
5 human beings on board and permits may be issued by the
6 Secretary prior to the issuance of the regulations de-
7 scribed in subsection (c).

8 “(2) As soon as practicable after the date of enact-
9 ment of the Commercial Space Launch Amendments Act
10 of 2004, the Secretary shall issue guidelines or advisory
11 circulars to guide the implementation of that Act until
12 regulations are issued.

13 “(3) Notwithstanding paragraphs (1) and (2), no li-
14 censes for the launch or reentry of launch vehicles or re-
15 entry vehicles with human beings on board or permits may
16 be issued starting three years after the date of enactment
17 of the Commercial Space Launch Amendments Act of
18 2004 unless the final regulations described in subsection
19 (c) have been issued.”.

20 **SEC. 4. STUDY ON THE GRADUAL ELIMINATION OF COM-**
21 **MERCIAL SPACE TRANSPORTATION LIABIL-**
22 **ITY RISK SHARING REGIME.**

23 Not later than 60 days after the date of enactment
24 of this Act, the Secretary of Transportation shall enter
25 into an appropriate arrangement with the National Acad-

1 emy of Public Administration to conduct a study of how
2 best to gradually eliminate the liability risk sharing regime
3 in the United States for commercial space transportation
4 under section 70113 of title 49, United States Code. The
5 study shall assess methods by which the liability risk shar-
6 ing regime could be eliminated by 2008 or as soon as pos-
7 sible thereafter and the impact those methods would be
8 likely to have on the commercial space transportation in-
9 dustry. The methods examined shall include incremental
10 approaches.

11 **SEC. 5. TECHNICAL AMENDMENT.**

12 Section 102(c) of the Commercial Space Act of 1998
13 is repealed.

Passed the House of Representatives March 4,
2004.

Attest:

JEFF TRANDAHL,
Clerk.