

108TH CONGRESS  
2D SESSION

# H. R. 3752

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.

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## IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 3, 2004

Mr. ROHRABACHER (for himself, Mr. BOEHLERT, Mr. HALL, Mr. GORDON, and Mr. LAMPSON) introduced the following bill; which was referred to the Committee on Science

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## A BILL

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”.

1 **SEC. 2. FINDINGS.**

2 The Congress finds that—

3 (1) the goal of opening space to the American  
4 people and their private commercial, scientific, and  
5 cultural enterprises should guide Federal space in-  
6 vestments, policies, and regulations;

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

12 (3) space transportation is inherently risky;

13 (4) a critical area of responsibility for the Of-  
14 fice of the Associate Administrator for Commercial  
15 Space Transportation is to regulate the emerging  
16 commercial human space flight industry; and

17 (5) the public interest is served by creating a  
18 clear legal and regulatory regime for commercial  
19 human space flight.

20 **SEC. 3. AMENDMENTS.**

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

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

25 (2) in subsection (a)(4)—

26 (A) by striking “satellite”; and

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

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

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

9 (2) by inserting after paragraph (1) the fol-  
10 lowing new paragraph:

11 “(2) ‘crew’ means any employee of a licensee or  
12 transferee, or of a contractor or subcontractor of a  
13 licensee or transferee, who performs activities in the  
14 course of that employment directly relating to the  
15 launch, reentry, or other operation of or in a launch  
16 vehicle or reentry vehicle that carries human  
17 beings.”;

18 (3) in paragraph (4), as so redesignated by  
19 paragraph (1) of this subsection, by inserting “,  
20 crew, or space flight participant” after “any pay-  
21 load”;

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

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

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

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

9 (7) in paragraph (13), as so redesignated by  
10 paragraph (1) of this subsection, by inserting “crew,  
11 or space flight participants,” after “and its pay-  
12 load,”;

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

17 (9) by inserting after paragraph (16), as so re-  
18 designated by paragraph (1) of this subsection, the  
19 following new paragraph:

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

23 (10) by inserting after paragraph (18), as so  
24 redesignated by paragraph (1) of this subsection, the  
25 following new paragraphs:

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

5           “(20) ‘suborbital trajectory’ means the inten-  
6           tional flight path of a launch vehicle, reentry vehicle,  
7           or any portion thereof, whose vacuum instantaneous  
8           impact point does not leave the surface of the  
9           Earth.”; and

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

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

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

16           (C) by adding at the end the following new  
17           subparagraph:

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

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

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

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

6           (A) by striking “LICENSE REQUIREMENT.—A  
7 license issued or transferred under this chapter” and  
8 inserting “REQUIREMENT.—A license issued or  
9 transferred under this chapter, or a permit,”; and

10           (B) by inserting after paragraph (4) the fol-  
11 lowing:

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

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

17           (5) The section heading of section 70105 of title 49,  
18 United States Code, is amended by striking “LICENSE AP-  
19 PPLICATIONS” and inserting “APPLICATIONS”, and the  
20 item relating to that section in the table of sections for  
21 chapter 701 of title 49, United States Code, is amended  
22 accordingly.

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

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

3 (B) in paragraph (1), by striking “subsection  
4 (b)(2)(D)” both places it appears and inserting  
5 “subsection (c)(2)(D)”; and

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

8 (7) Section 70105 of title 49, United States Code,  
9 is amended by redesignating subsections (b) and (c) as  
10 subsections (c) and (d), respectively, and by inserting after  
11 subsection (a) the following new subsection:

12 “(b) EXPERIMENTAL PERMITS.—(1) A person may  
13 apply to the Secretary of Transportation for an experi-  
14 mental permit under this subsection in the form and man-  
15 ner the Secretary prescribes. Consistent with the public  
16 health and safety, safety of property, and national security  
17 and foreign policy interests of the United States, the Sec-  
18 retary, not later than 90 days after receiving an applica-  
19 tion pursuant to this subsection, shall issue a permit if  
20 the Secretary decides in writing that the applicant com-  
21 plies, and will continue to comply, with this chapter and  
22 regulations prescribed under this chapter. The Secretary  
23 shall inform the applicant of any pending issue and action  
24 required to resolve the issue if the Secretary has not made  
25 a decision not later than 60 days after receiving an appli-

1 cation. The Secretary shall transmit to the Committee on  
2 Science of the House of Representatives and Committee  
3 on Commerce, Science, and Transportation of the Senate  
4 a written notice not later than 15 days after any occur-  
5 rence when a permit is not issued within the deadline es-  
6 tablished by this subsection.

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

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

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

20               “(A) research and development to test new de-  
21 sign concepts, new equipment, or new operating  
22 techniques;

23               “(B) showing compliance with requirements as  
24 part of the process for obtaining a license under this  
25 chapter; or

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

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

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

8           “(B) specify the modifications that may be  
9           made to the suborbital rocket without changing the  
10          design to an extent that would invalidate the permit.

11          “(6) Permits shall not be transferable.

12          “(7) A permit may not be issued for, and a permit  
13          that has already been issued shall cease to be valid for,  
14          a particular design for a reusable suborbital rocket after  
15          a license has been issued for the launch or reentry of a  
16          rocket of that design.

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

20          “(9) For the purposes of sections 70106, 70107,  
21          70108, 70109, 70110, 70112, 70115, 70116, 70117, and  
22          70121 of this chapter—

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

24                  “(B) the holder of a permit shall be considered  
25          a licensee;

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

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

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

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

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

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

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

23          (12) Section 70105(c)(3) of title 49, United States  
24 Code, as so redesignated by paragraph (7) of this sub-  
25 section, is amended—

1 (A) by striking “, including the requirement to  
2 obtain a license,”; and

3 (B) by adding at the end the following: “Noth-  
4 ing in this paragraph shall be construed to allow the  
5 launch or reentry of a launch vehicle or a reentry ve-  
6 hicle without a license or permit if a human being  
7 will be on board.”.

8 (13) Section 70105(c) of title 49, United States  
9 Code, as so redesignated by paragraph (7) of this sub-  
10 section, is amended by adding at the end the following  
11 new paragraphs:

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

14 “(A) the crew has received training and has  
15 satisfied medical or other standards specified in the  
16 license or permit in accordance with regulations pro-  
17 mulgated by the Secretary; and

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

21 “(5) The holder of a license or a permit under this  
22 chapter may launch or reenter a space flight participant  
23 only if—

24 “(A) in accordance with regulations promul-  
25 gated by the Secretary, the holder of the license or

1 permit has informed the space flight participant in  
2 writing about the risks of the launch or reentry, in-  
3 cluding the safety record of the launch or reentry ve-  
4 hicle type, and the space flight participant has pro-  
5 vided written informed consent to participation in  
6 the launch or reentry; and

7 “(B) the holder of the license or permit and  
8 space flight participant have complied with all re-  
9 quirements of the laws of the United States related  
10 to launching or reentering a space flight partici-  
11 pant.”.

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

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

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

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

23 (16) Section 70110(a)(1) of title 49, United States  
24 Code, is amended by striking “70105(a)” and inserting  
25 “70105”.

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

3 (A) by inserting “crew, space flight partici-  
4 pants,” after “its contractors, subcontractors,”; and

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

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

9 (A) by inserting “crew, space flight partici-  
10 pants,” after “transferee, contractors, subcontrac-  
11 tors,”; and

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

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

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

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

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

4           “(1) such sums as may be necessary for fiscal  
5 year 2005;

6           “(2) such sums as may be necessary for fiscal  
7 year 2006; and

8           “(3) such sums as may be necessary for fiscal  
9 year 2007.”.

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

13       “(c) AMENDMENTS.—Not later than 12 months after  
14 the date of enactment of the Commercial Space Launch  
15 Amendments Act of 2004, the Secretary shall publish pro-  
16 posed regulations to carry out that Act, including regula-  
17 tions relating to crew, space flight participants, and per-  
18 mits for launch or reentry of reusable suborbital rockets.  
19 Not later than 18 months after such date of enactment,  
20 the Secretary shall issue final regulations.

21       “(d) EFFECTIVE DATE.—(1) Licenses for the launch  
22 or reentry of launch vehicles or reentry vehicles with  
23 human beings on board and permits may be issued by the  
24 Secretary prior to the issuance of the regulations de-  
25 scribed in subsection (c).

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

6       “(3) Notwithstanding paragraphs (1) and (2), no li-  
7 censes for the launch or reentry of launch vehicles or re-  
8 entry vehicles with human beings on board or permits may  
9 be issued starting three years after the date of enactment  
10 of the Commercial Space Launch Amendments Act of  
11 2004 unless the final regulations described in subsection  
12 (c) have been issued.”.

13 **SEC. 4. STUDY ON THE GRADUAL ELIMINATION OF COM-**  
14 **MERCIAL SPACE TRANSPORTATION LIABIL-**  
15 **ITY RISK SHARING REGIME.**

16       Not later than 60 days after the date of enactment  
17 of this Act, the Secretary of Transportation shall enter  
18 into an appropriate arrangement with the National Acad-  
19 emy of Public Administration to conduct a study of how  
20 best to gradually eliminate the liability risk sharing regime  
21 in the United States for commercial space transportation  
22 under section 70113 of title 49, United States Code. The  
23 study shall assess methods by which the liability risk shar-  
24 ing regime could be eliminated by 2008 or as soon as pos-  
25 sible thereafter and the impact those methods would be

1 likely to have on the commercial space transportation in-  
2 dustry. The methods examined shall include incremental  
3 approaches.

4 **SEC. 5. TECHNICAL AMENDMENT.**

5       Section 102(c) of the Commercial Space Act of 1998  
6 is repealed.

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