

111TH CONGRESS  
1ST SESSION

# H. R. 3853

To provide for the establishment of Commercial Space Transportation Cooperative Research and Development Centers of Excellence, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 20, 2009

Ms. KOSMAS (for herself and Mr. POSEY) introduced the following bill; which was referred to the Committee on Science and Technology

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## A BILL

To provide for the establishment of Commercial Space Transportation Cooperative Research and Development Centers of Excellence, 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 Transportation Cooperative Research and Development  
6 Centers of Excellence Act of 2009”.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

1           (1) ADMINISTRATOR.—The term “Adminis-  
2           trator” means the Administrator of the National  
3           Aeronautics and Space Administration.

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

8   **SEC. 3. CENTERS.**

9           The Administrator shall make grants to consortia of  
10          2 or more institutions of higher education, at least 1 of  
11          which shall be located within 100 miles of an active com-  
12          mercial spaceport, to establish and operate Commercial  
13          Space Transportation Cooperative Research and Develop-  
14          ment Centers of Excellence.

15   **SEC. 4. FUNCTIONS.**

16          (a) ENHANCED DEVELOPMENT.—The Centers estab-  
17          lished under section 3 shall leverage the resources of the  
18          National Aeronautics and Space Administration, aca-  
19          demia, and industry through public-private partnerships  
20          to enhance the development of commercial space transpor-  
21          tation through research and development activities in the  
22          following areas:

23                  (1) Space transportation policy analysis.

24                  (2) Spaceport safety, including range system  
25          development, testing, simulation, and qualification,

1 and spaceport instrumentation, technologies, and  
2 processes.

3 (3) Spaceflight passenger and crew training and  
4 qualification.

5 (4) Spaceflight biomedical countermeasures.

6 (5) Aerospace workforce technical training and  
7 certification.

8 (6) Space vehicle design, including materials  
9 and engineering research and development, launch  
10 vehicle flight safety analysis, and design of pas-  
11 senger-carrying spaceflight vehicles to maximize  
12 safety and functionality.

13 (7) Space weather interactions with space  
14 transportation systems.

15 (8) Aviation and space transportation system  
16 convergence planning and analysis.

17 (b) ASSISTANCE.—The Centers established under  
18 section 3 shall provide educational, technical, and analyt-  
19 ical assistance to the National Aeronautics and Space Ad-  
20 ministration and other Federal agencies with research and  
21 development and operational responsibilities that have ap-  
22 plicability to commercial space transportation.

23 **SEC. 5. PROGRAM IMPLEMENTATION.**

24 (a) APPLICATION.—Any institution of higher edu-  
25 cation interested in receiving a grant under this Act shall

1 submit to the Administrator an application in such form  
2 and containing such information as the Administrator may  
3 require.

4 (b) SELECTION CRITERIA.—The Administrator shall  
5 select recipients of grants under this Act on the basis of  
6 the following criteria:

7 (1) Demonstrated research and development ca-  
8 pabilities necessary for carrying out the program.

9 (2) The extent to which the members of the  
10 consortium seeking a grant have established space  
11 transportation or aerospace research and develop-  
12 ment programs.

13 (3) The demonstrated ability of the applicant to  
14 disseminate results of commercial space transpor-  
15 tation research and development widely to appro-  
16 priate stakeholders.

17 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

18 Such sums as may be necessary for each of the fiscal  
19 years 2010 through 2012 are authorized to be appro-  
20 priated to the Administrator to carry out this Act. No  
21 more than 5 percent of the funds appropriated under this  
22 section for a fiscal year may be used by the Administrator  
23 to cover administrative costs associated with the imple-

- 1 mentation and maintenance of the program established
- 2 under this Act.

