

110TH CONGRESS  
2D SESSION

# S. 2862

To provide for National Science Foundation and National Aeronautics and Space Administration utilization of the Arecibo Observatory.

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## IN THE SENATE OF THE UNITED STATES

APRIL 15, 2008

Mr. REID (for Mrs. CLINTON) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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## A BILL

To provide for National Science Foundation and National Aeronautics and Space Administration utilization of the Arecibo Observatory.

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. FINDINGS.**

4 Congress finds the following:

5 (1) The Arecibo Observatory is the world's larg-  
6 est single-aperture telescope. It has been recognized  
7 as an Electrical Engineering Milestone by the Insti-  
8 tute of Electrical and Electronics Engineers and as  
9 a Mechanical Engineering Landmark by the Amer-

1        ican Society of Mechanical Engineers. Its visitor  
2        center draws 120,000 visitors each year.

3            (2) The Arecibo Observatory radio astronomy  
4        led to the first discovery of planets outside our own  
5        solar system, the first discovery of a binary pulsar  
6        (resulting in a Nobel Prize), and the first detailed  
7        three-dimensional mapping of how galaxies are dis-  
8        tributed in the universe.

9            (3) The Arecibo Observatory's planetary radar  
10       has unique abilities worldwide for research on our  
11       solar system, including near-Earth asteroids. Be-  
12       sides their scientific importance, near-Earth aster-  
13       oids may be both a significant hazard to Earth and  
14       a potential source of future resources.

15           (4) The Arecibo Observatory is a leading  
16       United States laboratory for research on Earth's  
17       ionosphere.

18           (5) Congress has mandated that the National  
19       Aeronautics and Space Administration detect, track,  
20       catalogue, and characterize near-Earth asteroids and  
21       comets in order to provide warning and mitigation of  
22       the potential hazard of such near-Earth objects to  
23       the Earth. By being on the forefront of basic re-  
24       search involving near-Earth objects, space weather,  
25       and global climate change, the Arecibo Observatory

1 is an outstanding resource to Congress and to the  
2 American People.

3 (6) The efforts taken to date by the National  
4 Aeronautics and Space Administration and the Na-  
5 tional Science Foundation for detecting and charac-  
6 terizing the hazards of Earth orbit-crossing aster-  
7 oids and comets are not sufficient to the threat  
8 posed by such objects to cause widespread destruc-  
9 tion and loss of life.

10 (7) The general welfare and security of the  
11 United States require that the unique competence of  
12 the National Aeronautics and Space Administration  
13 in science and engineering systems be directed to de-  
14 tecting, tracking, cataloging, and characterizing  
15 near-Earth asteroids and comets. The Arecibo Ob-  
16 servatory is an invaluable and unique asset in warn-  
17 ing and mitigating potential hazards posed by near-  
18 Earth objects.

19 **SEC. 2. CONTINUATION OF OPERATION.**

20 The Director of the National Science Foundation  
21 shall—

22 (1) ensure that the Arecibo Observatory is fully  
23 funded to continue—

24 (A) its research on Earth's ionosphere;

25 (B) its research in radio astronomy; and

1 (C) research on the solar system; and  
2 (2) coordinate with the Administrator of the  
3 National Aeronautics and Space Administration to  
4 ensure that the capabilities of the Arecibo Observ-  
5 atory continue to be available for National Aero-  
6 nautics and Space Administration research in char-  
7 acterizing and mitigating near-Earth objects, and  
8 other research as needed.

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