## 110TH CONGRESS 1ST SESSION H.R.3737

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

### IN THE HOUSE OF REPRESENTATIVES

#### October 3, 2007

Mr. FORTUÑO (for himself, Mr. ROHRABACHER, Mr. RANGEL, Mr. HINCHEY, Mr. MARIO DIAZ-BALART of Florida, Mr. BURTON of Indiana, Mr. WALSH of New York, Mrs. LOWEY, Mr. ORTIZ, Ms. BORDALLO, Mr. WELLER of Illinois, Ms. ROS-LEHTINEN, and Mr. LINCOLN DIAZ-BALART of Florida) introduced the following bill; which was referred to the Committee on Science and Technology

# 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 The Congress finds the following:
- 5 (1) Arecibo Observatory is the world's largest 6 single-aperture telescope. It has been recognized as 7 an Electrical Engineering Milestone by the Institute
- 8 of Electrical and Electronics Engineers and as a Me-

chanical Engineering Landmark by the American
 Society of Mechanical Engineers. Its visitor center
 draws 120,000 visitors each year.

4 (2) Arecibo radio astronomy led to the first dis5 covery of planets outside our own solar system, the
6 first discovery of a binary pulsar (resulting in a
7 Nobel Prize), and the first detailed three-dimen8 sional mapping of how galaxies are distributed in the
9 universe.

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

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

(5) Congress has mandated that the National
Aeronautics and Space Administration detect, track,
catalogue, and characterize near-Earth asteroids and
comets in order to provide warning and mitigation of
the potential hazard of such near-Earth objects to
the Earth. By being on the forefront of basic research involving Near-Earth Objects, Space Weath-

er, and Global Climate Change, the Arecibo Observ atory is an outstanding resource to Congress and to
 the American People.

4 (6) The efforts taken to date by the National 5 Aeronautics and Space Administration and the Na-6 tional Science Foundation for detecting and charac-7 terizing the hazards of Earth orbit-crossing aster-8 oids and comets are not sufficient to the threat 9 posed by such objects to cause widespread destruc-10 tion and loss of life.

11 (7) The general welfare and security of the 12 United States require that the unique competence of 13 the National Aeronautics and Space Administration 14 in science and engineering systems be directed to de-15 tecting, tracking, cataloging, and characterizing 16 near-Earth asteroids and comets. The Arecibo Ob-17 servatory is an invaluable and unique asset in warn-18 ing and mitigating potential hazards posed by near-19 Earth objects.

### 20 SEC. 2. CONTINUATION OF OPERATION.

21 The Director of the National Science Foundation22 shall—

(1) ensure that the Arecibo Observatory is fullyfunded to continue its research on Earth's

ionosphere, continue its research in radio astronomy, 1 2 and continue research on the solar system; and 3 (2) coordinate with the Administrator of the National Aeronautics and Space Administration to 4 ensure that the capabilities of the Arecibo Observ-5 6 atory continue to be available for National Aero-7 nautics and Space Administration research in characterizing and mitigating Near Earth Objects, and 8 9 other research as needed.

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