

“(C) Analysis of possible alternatives that NASA could employ to divert an object on a likely collision course with Earth.

“(e) PROGRAM REPORT.—The Director of the Office of Science and Technology Policy and the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives, not later than 1 year after the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2017 [Mar. 21, 2017], an initial report that provides—

“(1) recommendations for carrying out the Survey program and an associated proposed budget;

“(2) an analysis of possible options that the Administration could employ to divert an object on a likely collision course with Earth; and

“(3) a description of the status of efforts to coordinate and cooperate with other countries to discover hazardous asteroids and comets, plan a mitigation strategy, and implement that strategy in the event of the discovery of an object on a likely collision course with Earth.

“(f) ANNUAL REPORTS.—After the initial report under subsection (e), the Administrator shall annually transmit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that includes—

“(1) a summary of all activities carried out under subsection (d) since the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2017, including the progress toward achieving 90 percent completion of the survey described in subsection (d); and

“(2) a summary of expenditures for all activities carried out under subsection (d) since the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2017.

“(g) ASSESSMENT.—The Administrator, in collaboration with other relevant Federal agencies, shall carry out a technical and scientific assessment of the capabilities and resources—

“(1) to accelerate the survey described in subsection (d); and

“(2) to expand the Administration’s Near-Earth Object Program to include the detection, tracking, cataloguing, and characterization of potentially hazardous near-Earth objects less than 140 meters in diameter.

“(h) TRANSMITTAL.—Not later than 270 days after the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2017, the Administrator shall transmit the results of the assessment under subsection (g) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.”

§ 71101. Reaffirmation of policy

Congress reaffirms the policy set forth in section 20102(g) of this title (relating to surveying near-Earth asteroids and comets).

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|---|
| 71101 | 42 U.S.C. 17791(a). | Pub. L. 110–422, title VIII, § 801(a), Oct. 15, 2008, 122 Stat. 4803. |

Statutory Notes and Related Subsidiaries

FINDINGS

Pub. L. 110–422, title VIII, § 802, Oct. 15, 2008, 122 Stat. 4803, provided that: “Congress makes the following findings:

“(1) Near-Earth objects pose a serious and credible threat to humankind, as many scientists believe that a major asteroid or comet was responsible for the mass extinction of the majority of the Earth’s species, including the dinosaurs, nearly 65,000,000 years ago.

“(2) Several such near-Earth objects have only been discovered within days of the objects’ closest approach to Earth and recent discoveries of such large objects indicate that many large near-Earth objects remain undiscovered.

“(3) Asteroid and comet collisions rank as one of the most costly natural disasters that can occur.

“(4) The time needed to eliminate or mitigate the threat of a collision of a potentially hazardous near-Earth object with Earth is measured in decades.

“(5) Unlike earthquakes and hurricanes, asteroids and comets can provide adequate collision information, enabling the United States to include both asteroid-collision and comet-collision disaster recovery and disaster avoidance in its public-safety structure.

“(6) Basic information is needed for technical and policy decisionmaking for the United States to create a comprehensive program in order to be ready to eliminate and mitigate the serious and credible threats to humankind posed by potentially hazardous near-Earth asteroids and comets.

“(7) As a first step to eliminate and to mitigate the risk of such collisions, situation and decision analysis processes, as well as procedures and system resources, must be in place well before a collision threat becomes known.”

§ 71102. Requests for information

The Administrator shall issue requests for information on—

(1) a low-cost space mission with the purpose of rendezvousing with, attaching a tracking device,¹ and characterizing the Apophis asteroid; and

(2) a medium-sized space mission with the purpose of detecting near-Earth objects equal to or greater than 140 meters in diameter.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|--|
| 71102 | 42 U.S.C. 17793. | Pub. L. 110–422, title VIII, § 803, Oct. 15, 2008, 122 Stat. 4803. |

§ 71103. Developing policy and recommending responsible Federal agency

Within 2 years after October 15, 2008, the Director of the Office of Science and Technology Policy shall—

(1) develop a policy for notifying Federal agencies and relevant emergency response institutions of an impending near-Earth object threat, if near-term public safety is at risk; and

(2) recommend a Federal agency or agencies to be responsible for—

(A) protecting the United States from a near-Earth object that is expected to collide with Earth; and

(B) implementing a deflection campaign, in consultation with international bodies, should one be necessary.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3439.)

¹So in original. The comma probably should be preceded by “to”.

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|--|
| 71103 | 42 U.S.C. 17794. | Pub. L. 110-422, title VIII, § 804, Oct. 15, 2008, 122 Stat. 4804. |

In the matter before paragraph (1), the date “October 15, 2008” is substituted for “the date of enactment of this Act” to reflect the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2008.

§ 71104. Planetary radar

The Administrator shall maintain a planetary radar that is comparable to the capability provided through the Deep Space Network Goldstone facility of the Administration.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|--|
| 71104 | 42 U.S.C. 17795. | Pub. L. 110-422, title VIII, § 805, Oct. 15, 2008, 122 Stat. 4804. |

CHAPTER 713—COOPERATION FOR SAFETY AMONG SPACEFARING NATIONS

Sec.

71301. Common docking system standard to enable rescue.

71302. Information sharing to avoid physical or radio-frequency interference.

§ 71301. Common docking system standard to enable rescue

In order to maximize the ability to rescue astronauts whose space vehicles have become disabled, the Administrator shall enter into discussions with the appropriate representatives of spacefaring nations who have or plan to have crew transportation systems capable of orbital flight or flight beyond low Earth orbit for the purpose of agreeing on a common docking system standard.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|--|
| 71301 | 42 U.S.C. 17734. | Pub. L. 110-422, title IV, § 407, Oct. 15, 2008, 122 Stat. 4790. |

§ 71302. Information sharing to avoid physical or radio-frequency interference

The Administrator shall, in consultation with other agencies of the Federal Government as the Administrator considers appropriate, initiate discussions with the appropriate representatives of spacefaring nations to determine an appropriate framework under which information intended to promote safe access into outer space, operations in outer space, and return from outer space to Earth free from physical or radio-frequency interference can be shared among the nations.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3440.)

HISTORICAL AND REVISION NOTES

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|------------------------|---------------------------|--|
| 71302 | 42 U.S.C. 17821(b). | Pub. L. 110-422, title XI, § 1102(b), Oct. 15, 2008, 122 Stat. 4808. |

Statutory Notes and Related Subsidiaries

FINDING

Pub. L. 110-422, title XI, § 1102(a), Oct. 15, 2008, 122 Stat. 4808, provided that: “Congress finds that as more countries acquire the capability for launching payloads into outer space, there is an increasing need for a framework under which information intended to promote safe access into outer space, operations in outer space, and return from outer space to Earth free from physical or radio-frequency interference can be shared among those countries.”

Executive Documents

SPACE POLICY DIRECTIVE-3. NATIONAL SPACE TRAFFIC MANAGEMENT POLICY

Space Policy Directive-3, June 18, 2018, 83 F.R. 28969, provided:

Memorandum for the Vice President[,] the Secretary of State[,] the Secretary of Defense[,] the Secretary of Commerce[,] the Secretary of Transportation[,] the Secretary of Homeland Security[,] the Director of National Intelligence[,] the Director of the Office of Management and Budget[,] the Assistant to the President for National Security Affairs[,] the Administrator of the National Aeronautics and Space Administration[,] the Director of the Office of Science and Technology Policy[,] the Deputy Assistant to the President for Homeland Security and Counterterrorism[,] and] the Chairman of the Joint Chiefs of Staff

SECTION 1. *Policy.* For decades, the United States has effectively reaped the benefits of operating in space to enhance our national security, civil, and commercial sectors. Our society now depends on space technologies and space-based capabilities for communications, navigation, weather forecasting, and much more. Given the significance of space activities, the United States considers the continued unfettered access to and freedom to operate in space of vital interest to advance the security, economic prosperity, and scientific knowledge of the Nation.

Today, space is becoming increasingly congested and contested, and that trend presents challenges for the safety, stability, and sustainability of U.S. space operations. Already, the Department of Defense (DoD) tracks over 20,000 objects in space, and that number will increase dramatically as new, more capable sensors come online and are able to detect smaller objects. DoD publishes a catalog of space objects and makes notifications of potential conjunctions (that is, two or more objects coming together at the same or nearly the same point in time and space). As the number of space objects increases, however, this limited traffic management activity and architecture will become inadequate. At the same time, the contested nature of space is increasing the demand for DoD focus on protecting and defending U.S. space assets and interests.

The future space operating environment will also be shaped by a significant increase in the volume and diversity of commercial activity in space. Emerging commercial ventures such as satellite servicing, debris removal, in-space manufacturing, and tourism, as well as new technologies enabling small satellites and very large constellations of satellites, are increasingly outpacing efforts to develop and implement government policies and processes to address these new activities.

To maintain U.S. leadership in space, we must develop a new approach to space traffic management (STM) that addresses current and future operational risks. This new approach must set priorities for space