

National Research Council's Earth Science Decadal Survey within the scope of the funds authorized for the Earth Science Mission Directorate.

(Pub. L. 111-267, title VII, § 704, Oct. 11, 2010, 124 Stat. 2831.)

**§ 18374. Instrument test-beds and venture class missions**

The Administrator shall pursue innovative ways to fly instrument-level payloads for early demonstration or as co-manifested payloads. The Congress encourages the use of the ISS as an accessible platform for the conduct of such activities. Additionally, in order to address the cost and schedule challenges associated with large flight systems, NASA should pursue smaller systems where practicable and warranted.

(Pub. L. 111-267, title VII, § 706, Oct. 11, 2010, 124 Stat. 2831.)

SUBCHAPTER VII—SPACE SCIENCE

**§ 18381. Technology development**

The Administrator shall ensure that the Science Mission Directorate maintains a long term technology development program for space and Earth science. This effort should be coordinated with an overall Agency technology investment approach, as authorized in section 905 of this Act.

(Pub. L. 111-267, title VIII, § 801, Oct. 11, 2010, 124 Stat. 2832.)

REFERENCES IN TEXT

Section 905 of this Act, referred to in text, is Pub. L. 111-267, title IX, § 905, Oct. 11, 2010, 124 Stat. 2836, which is not classified to the Code.

**§ 18382. Suborbital research activities**

**(a) In general**

The report of the National Academy of Sciences, Revitalizing NASA's Suborbital Program: Advancing Science, Driving Innovation and Developing Workforce, found that suborbital science missions were absolutely critical to building an aerospace workforce capable of meeting the needs of current and future human and robotic space exploration.

**(b) Management**

The Administrator shall designate an officer or employee of the Science Mission Directorate to act as the responsible official for all Suborbital Research in the Science Mission Directorate. The designee shall be responsible for the development of short- and long term strategic plans for maintaining, renewing and extending suborbital facilities and capabilities, monitoring progress towards goals in the plans, and be responsible for integration of suborbital activities and workforce development within the agency, thereby ensuring the long term recognition of their combined value to the directorate, to NASA, and to the Nation.

**(c) Establishment of Suborbital Research Program**

The Administrator shall establish a Suborbital Research Program within the Science

Mission Directorate that shall include the use of sounding rockets, aircraft, high altitude balloons, suborbital reusable launch vehicles, and commercial launch vehicles to advance science and train the next generation of scientists and engineers in systems engineering and systems integration which are vital to maintaining critical skills in the aerospace workforce. The program shall integrate existing suborbital research programs with orbital missions at the discretion of the designated officer or employee and shall emphasize the participation of undergraduate and graduate students and post-doctoral researchers when formulating announcements of opportunity.

**(d) Report**

The Administrator shall report to the appropriate committees of Congress on the number and type of suborbital missions conducted in each fiscal year and the number of undergraduate and graduate students participating in the missions. The report shall be made annually for each fiscal year under this section.

**(e) Authorization**

There are authorized to be appropriated to the Administrator such sums as may be necessary to carry out this section.

(Pub. L. 111-267, title VIII, § 802, Oct. 11, 2010, 124 Stat. 2832.)

**§ 18383. In-space servicing**

The Administrator shall continue to take all necessary steps to ensure that provisions are made for in-space or human-class servicing and repair of all future observatory-class scientific spacecraft intended to be deployed in Earth-orbit or at a Lagrangian point to the extent practicable and appropriate. The Administrator should ensure that agency investments and future capabilities for space technology, robotics, and human space flight take the ability to service and repair these spacecraft into account, where appropriate, and incorporate such capabilities into design and operational plans.

(Pub. L. 111-267, title VIII, § 804, Oct. 11, 2010, 124 Stat. 2833.)

**§ 18384. Decadal results**

NASA shall take into account the current decadal surveys from the National Academies' Space Studies Board when submitting the President's budget request to the Congress.

(Pub. L. 111-267, title VIII, § 805, Oct. 11, 2010, 124 Stat. 2833.)

**§ 18385. On-going restoration of radioisotope thermoelectric generator material production**

**(a) Findings**

The Congress finds the following:

(1) The United States has led the world in the scientific exploration of space for nearly 50 years.

(2) Missions such as Viking, Voyager, Cassini, and New Horizons have greatly expanded knowledge of our solar system and planetary characteristics and evolution.