that provides opportunities for collaboration with other research programs and objectives of the United States Government in cooperation with commercial suppliers, users, and developers.

(Pub. L. 111-267, title V, §502, Oct. 11, 2010, 124 Stat. 2823.)

#### §18353. Maintenance of the United States segment and assurance of continued operations of the International Space Station.

#### (a) In general

The Administrator shall take all actions necessary to ensure the safe and effective operation, maintenance, and maximum utilization of the United States segment of the ISS through at least September 30, 2020.

#### (b) Vehicle and component review

#### (1) In general

In carrying out subsection (a), the Administrator shall, as soon as is practicable after October 11, 2010, carry out a comprehensive assessment of the essential modules, operational systems and components, structural elements, and permanent scientific equipment on board or planned for delivery and installation aboard the ISS, including both United States and international partner elements, for purposes of identifying the spare or replacement modules, systems and components, elements, and equipment that are required to ensure complete, effective, and safe functioning and full scientific utilization of the ISS through September 30, 2020.

#### (2) Data

In carrying out the assessment, the Administrator shall assemble any existing data, and provide for the development of any data or analysis not currently available, that is necessary for purposes of the assessment.

#### (c) Reports

#### (1) Report on assessment

## (A) Report required

Not later than 90 days after October 11, 2010, the Administrator shall submit to the appropriate committees of Congress a report on the assessment required by subsection (b).

#### **(B) Elements**

The report required by this paragraph shall include, at minimum, the following:

(i) A description of the spare or replacement modules, systems and components, elements, and equipment identified pursuant to the assessment that are currently produced, in inventory, or on order, a description of the state of their readiness, and a schedule for their delivery to the ISS (including the planned transportation means for such delivery), including for each such module, system or component, element, or equipment a description of—

(I) its specifications, including size, weight, and necessary configuration for launch and delivery to the ISS;

(II) its function;

(III) its location; and

(IV) its criticality for ISS system integrity.

(ii) A description of the spare or replacement modules, systems and components, elements, and equipment identified pursuant to the assessment that are not currently produced, in inventory, or on order, including for each such module, system or component, element, or equipment a description of—

(I) its specifications, including size, weight, and necessary configuration for launch and delivery to the ISS;

 $\left( II\right)$  its function;

(III) its location;

 $(\mathrm{IV})$  its criticality for ISS system integrity; and

(V) the anticipated cost and schedule for its design, procurement, manufacture, and delivery to the ISS.

(iii) A detailed summary of the delivery schedule and associated delivery vehicle requirements necessary to transport all spare and replacement elements considered essential for the ongoing and sustained functionality of all critical systems of the ISS, both in and of themselves and as an element of an integrated, mutually dependent essential capability, including an assessment of the current schedule for delivery, the availability of delivery vehicles to meet that schedule, and the likelihood of meeting that schedule through such vehicles.

## (2) GAO report

#### (A) Report required

Not later than 90 days after the submittal to Congress under paragraph (1) of the assessment required by subsection (b), the Comptroller General of the United States shall submit to the appropriate committees of Congress a report on the assessment. The report shall set forth an evaluation of the assessment by the Comptroller General, including an evaluation of the accuracy and level of confidence in the findings of the assessment.

#### (B) Cooperation with GAO

The Administrator shall provide for the monitoring and participation of the Comptroller General in the assessment in a manner that permits the Comptroller General to prepare and submit the report required by subparagraph (A).

#### (d) Utilization of research facilities and capabilities

Utilization of research facilities and capabilities aboard the ISS (other than exploration-related research and technology development facilities and capabilities, and associated ground support and logistics), shall be planned, managed, and supported as provided in section 18354 of this title. Exploration-related research and technology development facilities, capabilities, and associated ground support and logistics shall be planned, managed, and supported by the appropriate NASA organizations and officials in a manner that does not interfere with other activities under section 18354 of this title.

# (e) Space Shuttle mission to ISS

# (1) Space Shuttle mission

The Administrator shall fly the Launch-On-Need Shuttle mission currently designated in the Shuttle Flight Manifest dated February 28, 2010, to the ISS in fiscal year 2011, but no earlier than June 1, 2011, unless required earlier by an operations contingency, and pending the results of the assessment required by paragraph (2) and the determination under paragraph (3)(A).

#### (2) Assessment of safe means of return

The Administrator shall provide for an assessment by the NASA Engineering and Safety Center of the procedures and plans developed to ensure the safety of the Space Shuttle crew, and alternative means of return, in the event the Space Shuttle is damaged or otherwise unable to return safely to Earth.

#### (3) Schedule and payload

The determination of the schedule and payload for the mission authorized by paragraph (1) shall take into account the following:

(A) The supply and logistics delivery requirements of the ISS.

(B) The findings of the study required by paragraph (2).

#### (4) Funds

Amounts authorized to be appropriated by section  $101(2)(B)^1$  shall be available for the mission authorized by paragraph (1).

#### (f) Space Shuttle manifest flight assurance

#### (1) In general

The Administrator shall take all actions necessary to preserve Space Shuttle launch capability through fiscal year 2011 in a manner that enables the launch, at a minimum, of missions and primary payloads in the Shuttle flight manifest as of February 28, 2010.

#### (2) Continuation of contractor support

The Administrator may not terminate any contract that provides the system transitions necessary for shuttle-derived hardware to be used on either the multi-purpose crew vehicle described in section 18323 of this title or the Space Launch System described in section 18322 of this title.

(Pub. L. 111-267, title V, §503, Oct. 11, 2010, 124 Stat. 2823.)

#### References in Text

Section 101(2)(B), referred to in subsec. (e)(4), is Pub. L. 111-267, title I, 101(2)(B), Oct. 11, 2010, 124 Stat. 2809, which is not classified to the Code.

#### §18354. Management of the ISS national laboratory

#### (a) Cooperative agreement with not-for-profit entity for management of national laboratory

#### (1) In general

The Administrator shall provide initial financial assistance and enter into a cooperative agreement with an appropriate organization that is exempt from taxation under section 501(c)(3) of title 26 to manage the activities of the ISS national laboratory in accordance with this section.

## (2) Qualifications

The organization with which the Administrator enters into the cooperative agreement shall develop the capabilities to implement research and development projects utilizing the ISS national laboratory and to otherwise manage the activities of the ISS national laboratory.

#### (3) Prohibition on other activities

The cooperative agreement shall require the organization entering into the agreement to engage exclusively in activities relating to the management of the ISS national laboratory and activities that promote its long term research and development mission as required by this section, without any other organizational objectives or responsibilities on behalf of the organization or any parent organization or other entity.

#### (b) NASA liaison

#### (1) Designation

The Administrator shall designate an official or employee of the Space Operations Mission Directorate of NASA to act as liaison between NASA and the organization with which the Administrator enters into a cooperative agreement under subsection (a) with regard to the management of the ISS national laboratory.

#### (2) Consultation with liaison

The cooperative agreement shall require the organization entering into the agreement to carry out its responsibilities under the agreement in cooperation and consultation with the official or employee designated under paragraph (1).

# (c) Planning and coordination of ISS national laboratory research activities

The Administrator shall provide initial financial assistance to the organization with which the Administrator enters into a cooperative agreement under subsection (a), in order for the organization to initiate the following:

(1) Planning and coordination of the ISS national laboratory research activities.

(2) Development and implementation of guidelines, selection criteria, and flight support requirements for non-NASA scientific utilization of ISS research capabilities and facilities available in United States-owned modules of the ISS or in partner-owned facilities of the ISS allocated to United States utilization by international agreement.

(3) Interaction with and integration of the International Space Station National Laboratory Advisory Committee established under section 70906 of title 51 with the governance of the organization, and review recommendations provided by that Committee regarding agreements with non-NASA departments and agencies of the United States Government, academic institutions and consortia, and commer-

<sup>&</sup>lt;sup>1</sup>See References in Text note below.