

(2) shall incorporate any such missions into the human exploration roadmap under section 432 of the National Aeronautics and Space Administration Transition Authorization Act of 2017.

(b) COST-EFFECTIVENESS.—In order to maximize the cost-effectiveness of the long-term space exploration and utilization activities of the United States, the Administrator shall take all necessary steps, including engaging international, academic, and industry partners, to ensure that activities in the Administration’s human space exploration program balance how those activities might also help meet the requirements of future exploration and utilization activities leading to human habitation on the surface of Mars.

(c) COMPLETION.—Within budgetary considerations, once an exploration-related project enters its development phase, the Administrator shall seek, to the maximum extent practicable, to complete that project without undue delays.

(d) INTERNATIONAL PARTICIPATION.—In order to achieve the goal of successfully conducting a crewed mission to the surface of Mars, the President may invite the United States partners in the ISS program and other nations, as appropriate, to participate in an international initiative under the leadership of the United States.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3431; Pub. L. 115–10, title IV, §414, Mar. 21, 2017, 131 Stat. 34.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70504	42 U.S.C. 17731.	Pub. L. 110–422, title IV, §403, Oct. 15, 2008, 122 Stat. 4789.

REFERENCES IN TEXT

Section 432 of the National Aeronautics and Space Administration Transition Authorization Act of 2017, referred to in subsec. (a)(2), is section 432 of Pub. L. 115–10, which is set out in a note under section 20302 of this title.

AMENDMENTS

2017—Pub. L. 115–10 amended section generally. Prior to amendment, text read as follows: “In order to maximize the cost-effectiveness of the long-term exploration and utilization activities of the United States, the Administrator shall take all necessary steps, including engaging international partners, to ensure that activities in its lunar exploration program shall be designed and implemented in a manner that gives strong consideration to how those activities might also help meet the requirements of future exploration and utilization activities beyond the Moon. The timetable of the lunar phase of the long-term international exploration initiative shall be determined by the availability of funding. However, once an exploration-related project enters its development phase, the Administrator shall seek, to the maximum extent practicable, to complete that project without undue delays.”

§ 70505. Lunar outpost

(a) ESTABLISHMENT.—As the Administration works toward the establishment of a lunar outpost, the Administration shall make no plans that would require a lunar outpost to be occupied to maintain its viability. Any such outpost

shall be operable as a human-tended facility capable of remote or autonomous operation for extended periods.

(b) DESIGNATION.—The United States portion of the first human-tended outpost established on the surface of the Moon shall be designated the “Neil A. Armstrong Lunar Outpost”.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70505(a)	42 U.S.C. 17732(a).	Pub. L. 110–422, title IV, §404(a), (b), Oct. 15, 2008, 122 Stat. 4789.
70505(b)	42 U.S.C. 17732(b).	

§ 70506. Exploration technology research

The Administrator shall carry out a program of long-term exploration-related technology research and development, including such things as in-space propulsion, power systems, life support, and advanced avionics, that is not tied to specific flight projects. The program shall have the funding goal of ensuring that the technology research and development can be completed in a timely manner in order to support the safe, successful, and sustainable exploration of the solar system. In addition, in order to ensure that the broadest range of innovative concepts and technologies are captured, the long-term technology program shall have the goal of having a significant portion of its funding available for external grants and contracts with universities, research institutions, and industry.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70506	42 U.S.C. 17733(b).	Pub. L. 110–422, title IV, §405(b), Oct. 15, 2008, 122 Stat. 4789.

PURPOSE

Pub. L. 110–422, title IV, §405(a), Oct. 15, 2008, 122 Stat. 4789, provided that: “A robust program of long-term exploration-related technology research and development will be essential for the success and sustainability of any enduring initiative of human and robotic exploration of the solar system.”

INNOVATIVE TECHNOLOGIES FOR HUMAN SPACE FLIGHT

Pub. L. 106–391, title III, §313, Oct. 30, 2000, 114 Stat. 1594, provided that:

“(a) ESTABLISHMENT OF PROGRAM.—In order to promote a ‘faster, cheaper, better’ approach to the human exploration and development of space, the Administrator [of the National Aeronautics and Space Administration] shall establish a Human Space Flight Innovative Technologies program of ground-based and space-based research and development in innovative technologies. The program shall be part of the Technology and Commercialization program.

“(b) AWARDS.—At least 75 percent of the amount appropriated for Technology and Commercialization under section 101(b)(4) [114 Stat. 1581] for any fiscal year shall be awarded through broadly distributed announcements of opportunity that solicit proposals from educational institutions, industry, nonprofit institutions, National Aeronautics and Space Administration Centers, the Jet Propulsion Laboratory, other Federal agencies, and other interested organizations, and that

allow partnerships among any combination of those entities, with evaluation, prioritization, and recommendations made by external peer review panels.

“(c) PLAN.—The Administrator shall provide to the Committee on Science [now Committee on Science, Space, and Technology] of the House of Representatives and to the Committee on Commerce, Science, and Transportation of the Senate, not later than December 1, 2000, a plan to implement the program established under subsection (a).”

§ 70507. Technology development

The Administrator shall establish an intra-Directorate long-term technology development program for space and Earth science within the Science Mission Directorate for the development of new technology. The program shall be independent of the flight projects under development. The Administration shall have a goal of funding the intra-Directorate technology development program at a level of 5 percent of the total Science Mission Directorate annual budget. The program shall be structured to include competitively awarded grants and contracts.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Table with 3 columns: Revised Section, Source (U.S. Code), Source (Statutes at Large). Row 1: 70507, 42 U.S.C. 17741, Pub. L. 110–422, title V, §501, Oct. 15, 2008, 122 Stat. 4791.

§ 70508. Robotic or human servicing of spacecraft

The Administrator shall take all necessary steps to ensure that provision is made in the design and construction of all future observatory-class scientific spacecraft intended to be deployed in Earth orbit or at a Lagrangian point in space for robotic or human servicing and repair to the extent practicable and appropriate.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL AND REVISION NOTES

Table with 3 columns: Revised Section, Source (U.S. Code), Source (Statutes at Large). Row 1: 70508, 42 U.S.C. 17742, Pub. L. 110–422, title V, §502, Oct. 15, 2008, 122 Stat. 4791.

CHAPTER 707—HUMAN SPACE FLIGHT INDEPENDENT INVESTIGATION COMMISSION

Table listing sections 70701 through 70710 with their respective titles: Definitions, Establishment of Commission, Tasks of Commission, Composition of Commission, Powers of Commission, Public meetings, information, and hearings, Staff of Commission, Compensation and travel expenses, Security clearances for Commission members and staff, Reporting requirements and termination.

§ 70701. Definitions

In this chapter:

(1) COMMISSION.—The term “Commission” means a Commission established under this chapter.

(2) INCIDENT.—The term “incident” means either an accident or a deliberate act.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL AND REVISION NOTES

Table with 3 columns: Revised Section, Source (U.S. Code), Source (Statutes at Large). Row 1: 70701, 42 U.S.C. 16841, Pub. L. 109–155, title VIII, §821, Dec. 30, 2005, 119 Stat. 2941.

§ 70702. Establishment of Commission

(a) ESTABLISHMENT.—The President shall establish an independent, nonpartisan Commission within the executive branch to investigate any incident that results in the loss of—

- (1) a space shuttle;
(2) the International Space Station or its operational viability;

(3) any other orbital or suborbital space vehicle carrying humans that is—

- (A) owned by the Federal Government; or
(B) being used pursuant to a contract or Space Act Agreement with the Federal Government for carrying a government astronaut or a researcher funded by the Federal Government; or

(4) a crew member or passenger of any space vehicle described in this subsection.

(b) DEADLINE FOR ESTABLISHMENT.—The President shall establish a Commission within 7 days after an incident specified in subsection (a).

(c) DEFINITIONS.—In this section:

(1) GOVERNMENT ASTRONAUT.—The term “government astronaut” has the meaning given the term in section 50902.

(2) SPACE ACT AGREEMENT.—The term “Space Act Agreement” means an agreement entered into by the Administration pursuant to its other transactions authority under section 20113(e).

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3432; Pub. L. 115–10, title VIII, §838, Mar. 21, 2017, 131 Stat. 71.)

HISTORICAL AND REVISION NOTES

Table with 3 columns: Revised Section, Source (U.S. Code), Source (Statutes at Large). Row 1: 70702, 42 U.S.C. 16842, Pub. L. 109–155, title VIII, §822, Dec. 30, 2005, 119 Stat. 2941.

AMENDMENTS

2017—Subsec. (a)(3). Pub. L. 115–10, §838(1), amended par. (3) generally. Prior to amendment, par. (3) read as follows: “any other United States space vehicle carrying humans that is owned by the Federal Government or that is being used pursuant to a contract with the Federal Government; or”.

Subsec. (c). Pub. L. 115–10, §838(2), added subsec. (c).

§ 70703. Tasks of Commission

A Commission established pursuant to this chapter shall, to the extent possible, undertake the following tasks:

- (1) INVESTIGATION.—Investigate the incident.
(2) CAUSE.—Determine the cause of the incident.

(3) CONTRIBUTING FACTORS.—Identify all contributing factors to the cause of the incident.

(4) RECOMMENDATIONS.—Make recommendations for corrective actions.

(5) ADDITIONAL FINDINGS OR RECOMMENDATIONS.—Provide any additional findings or recommendations.