

§ 40113. Airspace systems research

(a) OBJECTIVE.—The Airspace Systems Research program shall pursue research and development to enable revolutionary improvements to and modernization of the National Airspace System, as well as to enable the introduction of new systems for vehicles that can take advantage of an improved, modern air transportation system.

(b) ALIGNMENT.—Not later than 1 year after December 30, 2005, the Administrator shall align the projects of the Airspace Systems Research program so that they directly support the objectives of the Joint Planning and Development Office's Next Generation Air Transportation System Integrated Plan.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3380.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40113	42 U.S.C. 16723.	Pub. L. 109-155, title IV, § 423, Dec. 30, 2005, 119 Stat. 2925.

In subsection (b), the date “December 30, 2005” 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 2005 (Public Law 109-155, 119 Stat. 2895).

Statutory Notes and Related Subsidiaries

UNMANNED AIRCRAFT SYSTEMS

Pub. L. 117-167, div. B, title VII, § 10832, Aug. 9, 2022, 136 Stat. 1748, provided that:

“(a) UNMANNED AIRCRAFT SYSTEMS OPERATION PROGRAM.—The Administrator [of the National Aeronautics and Space Administration] shall—

“(1) research and test capabilities and concepts, including unmanned aircraft systems communications, for integrating unmanned aircraft systems into the national airspace system;

“(2) leverage the partnership NASA [National Aeronautics and Space Administration] has with industry focused on the advancement of technologies for future air traffic management systems for unmanned aircraft systems; and

“(3) continue to leverage the research and testing portfolio of NASA to inform the integration of unmanned aircraft systems into the national airspace system, consistent with public safety and national security objectives.

“(b) SENSE OF CONGRESS ON COORDINATION WITH FEDERAL AVIATION ADMINISTRATION.—It is the sense of Congress that—

“(1) NASA should continue—

“(A) to coordinate with the Federal Aviation Administration on research on air traffic management systems for unmanned aircraft systems; and

“(B) to assist the Federal Aviation Administration in the integration of air traffic management systems for unmanned aircraft systems into the national airspace system; and

“(2) the test ranges (as defined in section 44801 of title 49, United States Code) should continue to be leveraged for research on—

“(A) air traffic management systems for unmanned aircraft systems; and

“(B) the integration of such systems into the national airspace system.”

[For definition of “unmanned aircraft system” as used in section 10832 of Pub. L. 117-167, set out above, see section 10802 of Pub. L. 117-167, set out as a Definitions note under section 10101 of this title.]

§ 40114. Aviation safety and security research

(a) OBJECTIVE.—The Aviation Safety and Security Research program shall pursue research and development activities that directly address the safety and security needs of the National Airspace System and the aircraft that fly in it. The program shall develop prevention, intervention, and mitigation technologies aimed at causal, contributory, or circumstantial factors of aviation accidents.

(b) ALIGNMENT.—Not later than 1 year after December 30, 2005, the Administrator shall align the projects of the Aviation Safety and Security Research program so that they directly support the objectives of the Joint Planning and Development Office's Next Generation Air Transportation System Integrated Plan.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3380.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40114	42 U.S.C. 16724.	Pub. L. 109-155, title IV, § 424, Dec. 30, 2005, 119 Stat. 2926.

In subsection (b), the date “December 30, 2005” 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 2005 (Public Law 109-155, 119 Stat. 2895).

§ 40115. Aviation weather research

The Administrator may carry out a program of collaborative research with the National Oceanic and Atmospheric Administration on convective weather events, with the goal of significantly improving the reliability of 2-hour to 6-hour aviation weather forecasts.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3381.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40115	42 U.S.C. 16725.	Pub. L. 109-155, title IV, § 425, Dec. 30, 2005, 119 Stat. 2926.

§ 40116. University-based Centers for Research on Aviation Training

(a) IN GENERAL.—The Administrator shall award grants to institutions of higher education (or consortia thereof) to establish one or more Centers for Research on Aviation Training under cooperative agreements with appropriate Administration Centers.

(b) PURPOSE.—The purpose of the Centers for Research on Aviation Training shall be to investigate the impact of new technologies and procedures, particularly those related to the aircraft flight deck and to the air traffic management functions, on training requirements for pilots and air traffic controllers.

(c) APPLICATION.—An institution of higher education (or a consortium of such institutions) seeking funding under this section shall submit an application to the Administrator at such time, in such manner, and containing such information as the Administrator may require, including, at a minimum, a 5-year research plan.

(d) AWARD DURATION.—An award made by the Administrator under this section shall be for a period of 5 years and may be renewed on the basis of—

- (1) satisfactory performance in meeting the goals of the research plan proposed in the application submitted under subsection (c); and
- (2) other requirements as specified by the Administrator.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3381.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40116	42 U.S.C. 16727.	Pub. L. 109–155, title IV, § 427, Dec. 30, 2005, 119 Stat. 2926; Pub. L. 110–422, title III, § 308, Oct. 15, 2008, 122 Stat. 4788.

In subsection (b), the words “Centers for Research on Aviation Training” are substituted for “Centers” for clarity. There are references to both “Centers for Research on Aviation Training” and “Administration Centers” in subsection (a).

In subsection (d)(1), the words “proposed in the application submitted under subsection (c)” are substituted for “proposed by the Center in its application under subsection (c)” for clarity. Under section (c), applications are filed by an institution of higher education (or a consortium of such institutions) seeking funding, and not by the Center for which such funding is sought.

SUBCHAPTER III—SCHOLARSHIPS

§ 40131. Aeronautics scholarships

(a) ESTABLISHMENT.—The Administrator shall establish a program of scholarships for full-time graduate students who are United States citizens and are enrolled in, or have been accepted by and have indicated their intention to enroll in, accredited Masters degree programs in aeronautical engineering or equivalent programs at institutions of higher education. Each such scholarship shall cover the costs of room, board, tuition, and fees, and may be provided for a maximum of 2 years.

(b) IMPLEMENTATION.—Not later than 180 days after December 30, 2005, the Administrator shall publish regulations governing the scholarship program under this section.

(c) COOPERATIVE TRAINING OPPORTUNITIES.—Students who have been awarded a scholarship under this section shall have the opportunity for paid employment at one of the Administration Centers engaged in aeronautics research and development during the summer prior to the first year of the student’s Masters program, and between the first and second year, if applicable.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3381.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40131	42 U.S.C. 16741.	Pub. L. 109–155, title IV, § 431, Dec. 30, 2005, 119 Stat. 2927.

In subsection (b), the date “December 30, 2005” 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 2005 (Public Law 109–155, 119 Stat. 2895).

SUBCHAPTER IV—DATA REQUESTS

§ 40141. Aviation data requests

The Administrator shall make available upon request satellite imagery and aerial photography of remote terrain that the Administration owns at the time of the request to the Administrator of the Federal Aviation Administration or the Director of the Five Star Medallion Program, to assist and train pilots in navigating challenging topographical features of such terrain.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3382.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40141	42 U.S.C. 16751.	Pub. L. 109–155, title IV, § 441, Dec. 30, 2005, 119 Stat. 2927.

CHAPTER 403—NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

- Sec. 40301. Purposes.
- 40302. Definitions.
- 40303. National space grant college and fellowship program.
- 40304. Grants or contracts.
- 40305. Specific national needs.
- 40306. Space grant college and space grant regional consortium.
- 40307. Space grant fellowship program.
- 40308. Space grant review panel.
- 40309. Availability of other Federal personnel and data.
- 40310. Designation or award to be on competitive basis.
- 40311. Continuing emphasis.

§ 40301. Purposes

The purposes of this chapter are to—

- (1) increase the understanding, assessment, development, and utilization of space resources by promoting a strong educational base, responsive research and training activities, and broad and prompt dissemination of knowledge and techniques;
- (2) utilize the abilities and talents of the universities of the Nation to support and contribute to the exploration and development of the resources and opportunities afforded by the space environment;
- (3) encourage and support, within the university community of the Nation, the existence of interdisciplinary and multidisciplinary programs of space research that—
 - (A) engage in integrated activities of training, research, and public service;
 - (B) have cooperative programs with industry; and
 - (C) are coordinated with the overall program of the Administration;
- (4) encourage and support the existence of consortia, made up of university and industry members, in order to advance the exploration and development of space resources in cases in which national objectives can be better fulfilled through such consortia than through the programs of single universities;
- (5) encourage and support Federal funding for graduate fellowships in fields related to space; and