

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40504	42 U.S.C. 2487e.	Pub. L. 102-588, title VI, § 606, Nov. 4, 1992, 106 Stat. 5131.

§ 40505. Establishment of emergency medical service telemedicine capability

The Administrator, the Administrator of the Federal Emergency Management Agency, the Director of the Office of Foreign Disaster Assistance, and the Surgeon General of the United States shall jointly create and maintain an international telemedicine satellite consultation capability to support emergency medical services in disaster-stricken areas.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3389.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40505	42 U.S.C. 2487f.	Pub. L. 102-588, title VI, § 607, Nov. 4, 1992, 106 Stat. 5131; Pub. L. 109-295, title VI, § 612(c), Oct. 4, 2006, 120 Stat. 1410.

The words “Office of Foreign Disaster Assistance” are substituted for “Office of Foreign Disaster” to correct an error in the law.

CHAPTER 407—ENVIRONMENTALLY FRIENDLY AIRCRAFT

- Sec. 40701. Research and development initiative.
- 40702. Additional research and development initiative.
- 40703. Research alignment.
- 40704. Research program on perceived impact of sonic booms.

§ 40701. Research and development initiative

The Administrator may establish an initiative with the objective of developing, and demonstrating in a relevant environment, technologies to enable the following commercial aircraft performance characteristics:

(1) NOISE LEVELS.—Noise levels on takeoff and on airport approach and landing that do not exceed ambient noise levels in the absence of flight operations in the vicinity of airports from which such commercial aircraft would normally operate.

(2) ENERGY CONSUMPTION.—Twenty-five percent reduction in the energy required for medium- to long-range flights, compared to aircraft in commercial service as of December 30, 2005.

(3) EMISSIONS.—Nitrogen oxides on take-off and landing that are significantly reduced, without adversely affecting hydrocarbons and smoke, relative to aircraft in commercial service as of December 30, 2005.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3390.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40701	42 U.S.C. 16722(a).	Pub. L. 109-155, title IV, § 422(a), Dec. 30, 2005, 119 Stat. 2924.

In paragraphs (2) and (3), 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).

§ 40702. Additional research and development initiative

The Administrator shall establish an initiative involving the Administration, universities, industry, and other research organizations as appropriate, of research, development, and demonstration, in a relevant environment, of technologies to enable the following commercial aircraft performance characteristics:

(1) NOISE LEVELS.—Noise levels on takeoff and on airport approach and landing that do not exceed ambient noise levels in the absence of flight operations in the vicinity of airports from which such commercial aircraft would normally operate, without increasing energy consumption or nitrogen oxide emissions compared to aircraft in commercial service as of October 15, 2008.

(2) GREENHOUSE GAS EMISSIONS.—Significant reductions in greenhouse gas emissions compared to aircraft in commercial services as of October 15, 2008.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3390.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40702	42 U.S.C. 17721.	Pub. L. 110-422, title III, § 302, Oct. 15, 2008, 122 Stat. 4786.

In paragraphs (1) and (2), 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 (Public Law 110-422, 122 Stat. 4779).

§ 40703. Research alignment

In addition to pursuing the research and development initiative described in section 40702 of this title, the Administrator shall, to the maximum extent practicable within available funding, align the fundamental aeronautics research program to address high priority technology challenges of the National Academies’ Decadal Survey of Civil Aeronautics, and shall work to increase the degree of involvement of external organizations, and especially of universities, in the fundamental aeronautics research program.

(Pub. L. 111-314, § 3, Dec. 18, 2010, 124 Stat. 3390.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40703	42 U.S.C. 17722.	Pub. L. 110-422, title III, § 303, Oct. 15, 2008, 122 Stat. 4787.

§ 40704. Research program on perceived impact of sonic booms

(a) ESTABLISHMENT.—The Administrator shall establish a cooperative research program with industry, including the conduct of flight demonstrations in a relevant environment, to collect data on the perceived impact of sonic

booms. The data could enable the promulgation of appropriate standards for overland commercial supersonic flight operations.

(b) **COORDINATION.**—The Administrator shall ensure that sonic boom research is coordinated as appropriate with the Administrator of the Federal Aviation Administration, and as appropriate make use of the expertise of the Partnership for Air Transportation Noise and Emissions Reduction Center of Excellence sponsored by the Administration and the Federal Aviation Administration.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3391.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40704(a)	42 U.S.C. 17723(b).	Pub. L. 110–422, title III, § 304(b), (c), Oct. 15, 2008, 122 Stat. 4787.
40704(b)	42 U.S.C. 17723(c).	

PURPOSE

Pub. L. 110–422, title III, § 304(a), Oct. 15, 2008, 122 Stat. 4787, provided that: “The ability to fly commercial aircraft over land at supersonic speeds without adverse impacts on the environment or on local communities would open new markets and enable new transportation capabilities. In order to have the basis for establishing appropriate sonic boom standards for such flight operations, a research program is needed to assess the impact in a relevant environment of commercial supersonic flight operations.”

CHAPTER 409—MISCELLANEOUS

Sec.

40901. Science, Space, and Technology Education Trust Fund.
40902. National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund.
40903. Experimental Program to Stimulate Competitive Research—merit grant competition requirements.
40904. Microgravity research.
40905. Program to expand distance learning in rural underserved areas.
40906. Equal access to the Administration’s education programs.
40907. Museums.
40908. Continuation of certain education programs.
40909. Compliance with title IX of Education Amendments of 1972.

NASA’S CONTRIBUTION TO EDUCATION

Pub. L. 111–358, title II, § 202, Jan. 4, 2011, 124 Stat. 3993, provided that:

“(a) **SENSE OF CONGRESS.**—It is the sense of Congress that NASA [National Aeronautics and Space Administration] is uniquely positioned to interest students in science, technology, engineering, and mathematics, not only by the example it sets, but through its education programs.

“(b) **EDUCATIONAL PROGRAM GOALS.**—NASA shall develop and maintain educational programs—

“(1) to carry out and support research based programs and activities designed to increase student interest and participation in STEM, including students from minority and underrepresented groups;

“(2) to improve public literacy in STEM;

“(3) that employ proven strategies and methods for improving student learning and teaching in STEM;

“(4) to provide curriculum support materials and other resources that—

“(A) are designed to be integrated with comprehensive STEM education;

“(B) are aligned with national science education standards;

“(C) promote the adoption and implementation of high-quality education practices that build toward college and career-readiness; and

“(5) to create and support opportunities for enhanced and ongoing professional development for teachers using best practices that improve the STEM content and knowledge of the teachers, including through programs linking STEM teachers with STEM educators at the higher education level.” [For definition of “STEM” as used in section 202 of Pub. L. 111–358, set out above, see section 2 of Pub. L. 111–358, set out as a note under section 6621 of Title 42, The Public Health and Welfare.]

REPORTS

Pub. L. 109–155, title I, § 102, Dec. 30, 2005, 119 Stat. 2905, provided that:

“(a) **NATIONAL AWARENESS CAMPAIGN.**—

“(1) **IN GENERAL.**—The Administrator [of the National Aeronautics and Space Administration] shall implement, beginning not later than May 1, 2006, a national awareness campaign through various media, including print, radio, television, and the Internet, to articulate missions, publicize recent accomplishments, and facilitate efforts to encourage young Americans to enter the fields of science, mathematics, and engineering to help maintain United States leadership in those fields.

“(2) **REPORTS.**—(A) Not later than April 1, 2006, the Administrator shall transmit a plan to the Committee on Science [now Committee on Science, Space, and Technology] of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate describing the activities that will be undertaken as part of the national awareness campaign required by paragraph (1) and the expected cost of those activities. NASA [National Aeronautics and Space Administration] may undertake activities as part of the national awareness campaign prior to the transmittal of the plan required by this subparagraph, but the plan shall include a description of any activities undertaken prior to the transmittal and the estimated cost of those activities.

“(B) Not later than three years after the date of enactment of this Act [Dec. 30, 2005], the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate an assessment of the impact of the national awareness campaign.

“(b) **BUDGET INFORMATION.**—Not later than April 30, 2006, the Administrator shall transmit to the Committee on Science [now Committee on Science, Space, and Technology] of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report describing—

“(1) the expected cost of the Crew Exploration Vehicle through fiscal year 2020, based on the public specifications for that development contract; and

“(2) the expected budgets for each fiscal year through 2020 for human spaceflight, aeronautics, space science, and earth science—

“(A) first assuming inflationary growth for the budget of NASA as a whole and including costs for the Crew Exploration Vehicle as projected under paragraph (1); and

“(B) then assuming inflationary growth for the budget of NASA as a whole and including at least two cost estimates for the Crew Exploration Vehicle that are higher than those projected under paragraph (1), based on NASA’s past experience with cost increases for similar programs, along with a description of the reasons for selecting the cost estimates used for the calculations under this subparagraph and the confidence level for each of the cost estimates used in this section.

“(c) **SPACE COMMUNICATIONS PLAN.**—

“(1) **PLAN.**—The Administrator shall develop a plan, in consultation with relevant Federal agencies, for