

nologies 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).	

Statutory Notes and Related Subsidiaries

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.

Statutory Notes and Related Subsidiaries

CYBERSECURITY IN STEM PROGRAMS OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Pub. L. 116–283, div. H, title XCIV, § 9406, Jan. 1, 2021, 134 Stat. 4812, provided that: “In carrying out any STEM education program of the National Aeronautics and Space Administration (referred to in this section as ‘NASA’), including a program of the Office of STEM Engagement, the Administrator of NASA shall, to the maximum extent practicable, encourage the inclusion of cybersecurity education opportunities in such program.”

NASA INTERNSHIP AND FELLOWSHIP OPPORTUNITIES

Pub. L. 115–303, § 3, Dec. 11, 2018, 132 Stat. 4399, provided that: “Not later than October 1, 2018, the Administrator of the National Aeronautics and Space Administration (in this section referred to as ‘NASA’) shall institute a process to encourage the recruitment of qualified candidates who are women or individuals who are underrepresented in the fields of science, technology, engineering, and mathematics (STEM) and computer science for internships and fellowships at NASA with relevance to the aerospace sector and related fields.”

EDUCATION AND OUTREACH

Pub. L. 115–10, title VIII, § 824, Mar. 21, 2017, 131 Stat. 64, provided that:

“(a) SENSE OF CONGRESS.—It is the sense of Congress that—

“(1) United States competitiveness in the 21st century requires engaging the science, technology, engineering, and mathematics (referred to in this section as ‘STEM’) talent in all States;

“(2) the [National Aeronautics and Space] Administration is uniquely positioned to educate and inspire students and the broader public on STEM subjects and careers;

“(3) the Administration’s Education and Communication Offices, Mission Directorates, and Centers have been effective in delivering educational content because of the strong engagement of Administration scientists and engineers in the Administration’s education and outreach activities;

“(4) the Administration’s education and outreach programs, including the Experimental Program to Stimulate Competitive Research (EPSCoR) and the Space Grant College and Fellowship Program, reflect the Administration’s successful commitment to growing and diversifying the national science and engineering workforce; and

“(5) in order to grow and diversify the Nation’s engineering workforce, it is vital for the Administration to bolster programs, such as High Schools United with NASA to Create Hardware (HUNCH) program, that conduct outreach activities to underserved rural communities, vocational schools, and tribal colleges and universities and encourage new participation in the STEM workforce.

“(b) CONTINUATION OF EDUCATION AND OUTREACH ACTIVITIES AND PROGRAMS.—

“(1) IN GENERAL.—The Administrator [of the National Aeronautics and Space Administration] shall continue engagement with the public and education opportunities for students via all the Administration’s mission directorates to the maximum extent practicable.

“(2) REPORT.—Not later than 60 days after the date of enactment of this Act [Mar. 21, 2017], the Administrator shall submit to the appropriate committees of Congress [Committee on Commerce, Science, and Transportation of the Senate and Committee on Science, Space, and Technology of the House of Representatives] a report on the Administration’s near-term outreach plans for advancing space law education.”

INSPIRING THE NEXT SPACE PIONEERS, INNOVATORS, RESEARCHERS, AND EXPLORERS (INSPIRE) WOMEN

Pub. L. 115–7, Feb. 28, 2017, 131 Stat. 13, provided that:

“SECTION 1. SHORT TITLE.

“This Act may be cited as the ‘Inspiring the Next Space Pioneers, Innovators, Researchers, and Explorers (INSPIRE) Women Act’.

“SEC. 2. FINDINGS.

“The Congress finds that—

“(1) NASA GIRLS and NASA BOYS are virtual mentoring programs using commercially available video chat programs to pair National Aeronautics and Space Administration mentors with young students anywhere in the country. NASA GIRLS and NASA BOYS give young students the opportunity to interact and learn from real engineers, scientists, and technologists.

“(2) The Aspire to Inspire (A2I) program engages young girls to present science, technology, engineering, and mathematics (STEM) career opportunities through the real lives and jobs of early career women at NASA.

“(3) The Summer Institute in Science, Technology, Engineering, and Research (SISTER) program at the Goddard Space Flight Center is designed to increase awareness of, and provide an opportunity for, female middle school students to be exposed to and explore nontraditional career fields with Goddard Space Flight Center women engineers, mathematicians, scientists, technicians, and researchers.

“SEC. 3. SUPPORTING WOMEN’S INVOLVEMENT IN THE FIELDS OF AEROSPACE AND SPACE EXPLORATION.

“The Administrator of the National Aeronautics and Space Administration shall encourage women and girls

to study science, technology, engineering, and mathematics, pursue careers in aerospace, and further advance the Nation’s space science and exploration efforts through support of the following initiatives:

“(1) NASA GIRLS and NASA BOYS.

“(2) Aspire to Inspire.

“(3) Summer Institute in Science, Technology, Engineering, and Research.

“SEC. 4. PLAN.

“Not later than 90 days after the date of enactment of this Act [Feb. 28, 2017], the Administrator shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a plan for how NASA can best facilitate and support both current and retired astronauts, scientists, engineers, and innovators, including early career female astronauts, scientists, engineers, and innovators, to engage with K–12 female STEM students and inspire the next generation of women to consider participating in the fields of science, technology, engineering, and mathematics and to pursue careers in aerospace. This plan shall—

“(1) report on existing activities with current and retired NASA astronauts, scientists, engineers, and innovators;

“(2) identify how NASA could best leverage existing authorities to facilitate and support current and retired astronaut, scientist, engineer, and innovator participation in NASA outreach efforts;

“(3) propose and describe a program specific to retired astronauts, scientists, engineers, and innovators; and

“(4) identify any additional authorities necessary to institute such a program.”

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 updating NASA’s space communications architecture for both low-Earth orbital operations and deep space exploration so that it is capable of meeting NASA’s needs over the next 20 years. The plan shall include life-cycle cost estimates, milestones, estimated performance capabilities, and 5-year funding profiles. The plan shall also include an estimate of the amounts of any reimbursements NASA is likely to receive from other Federal agencies during the expected life of the upgrades described in the plan. At a minimum, the plan shall include a description of the following:

“(A) Projected Deep Space Network requirements for the next 20 years, including those in support of human space exploration missions.

“(B) Upgrades needed to support Deep Space Network requirements.

“(C) Cost estimates for the maintenance of existing Deep Space Network capabilities.

“(D) Cost estimates and schedules for the upgrades described in subparagraph (B).

“(E) Projected Tracking and Data Relay Satellite System requirements for the next 20 years, including those in support of other relevant Federal agencies.

“(F) Cost and schedule estimates to maintain and upgrade the Tracking and Data Relay Satellite System to meet projected requirements.

“(2) CONSULTATIONS.—The Administrator shall consult with other relevant Federal agencies in developing the plan under this subsection.

“(3) SCHEDULE.—The Administrator shall transmit the plan under this subsection 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 not later than February 17, 2007.

“(d) JOINT DARK ENERGY MISSION.—The Administrator and the Director of the Department of Energy Office of Science shall jointly 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, not later than July 15, 2006, a report on plans for a Joint Dark Energy Mission. The report shall include the amount of funds each agency intends to expend on the Joint Dark Energy Mission for each of the fiscal years 2007 through 2011, and any specific milestones for the development and launch of the Mission.

“(e) OFFICE OF SCIENCE AND TECHNOLOGY POLICY.—

“(1) STUDY.—As part of ongoing efforts to coordinate research and development across the Federal agencies, the Director of the Office of Science and Technology Policy shall conduct a study to determine—

“(A) if any research and development programs of NASA are unnecessarily duplicating aspects of programs of other Federal agencies; and

“(B) if any research and development programs of NASA are neglecting any topics of national interest that are related to the mission of NASA.

“(2) REPORT.—Not later than one year after the date of enactment of this Act [Dec. 30, 2005], the Director of the Office of Science and Technology Policy 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 that—

“(A) describes the results of the study under paragraph (1);

“(B) lists the research and development programs of Federal agencies other than NASA that were reviewed as part of the study, which shall include any program supporting research and development in an area related to the programs of NASA, and the most recent budget figures for those programs of other agencies;

“(C) recommends any changes to the research and development programs of NASA that should be made in response to the findings of the study required by paragraph (1); and

“(D) describes mechanisms the Office of Science and Technology Policy will use to ensure adequate coordination between NASA and Federal agencies that operate related programs.

“(3) CONTRACT.—The Director of the Office of Science and Technology Policy may contract with a nongovernmental entity to conduct the study required by paragraph (1).”

REVIEW OF MUST PROGRAM

Pub. L. 109–155, title VI, §617, Dec. 30, 2005, 119 Stat. 2934, provided that: “Not later than 60 days after the date of enactment of this Act [Dec. 30, 2005], the Administrator [of the National Aeronautics and Space Administration] shall transmit a report to Congress on the legal status of the Motivating Undergraduates in Science and Technology program. If the report concludes that the program is in compliance with the laws

of the United States, NASA [National Aeronautics and Space Administration] shall implement the program, as planned in the July 5, 2005, NASA Research Announcement.”

DENIAL OF FINANCIAL ASSISTANCE TO CAMPUS DISRUPTERS

Pub. L. 92-304, §6, May 19, 1972, 86 Stat. 161, provided generally that any institution of higher education deny for a two-year period payment under programs authorized by the National Aeronautics and Space Act of 1958 (see 51 U.S.C. 20101 et seq.) to any individual attending or employed by such institution who has been convicted of any crime committed after May 19, 1972, which involved the use of force, disruption or seizure of property to prevent officers or students from engaging in their duties or pursuing their studies. Similar provisions were contained in the following prior appropriation acts:

- Pub. L. 92-68, §6, Aug. 6, 1971, 85 Stat. 177.
- Pub. L. 91-303, §6, July 2, 1970, 84 Stat. 372.
- Pub. L. 91-119, §7, Nov. 18, 1969, 83 Stat. 201.

§ 40901. Science, Space, and Technology Education Trust Fund

There is appropriated, by transfer from funds appropriated in the Department of Housing and Urban Development—Independent Agencies Appropriations Act, 1989 (Public Law 100-404, 102 Stat. 1014), for “Construction of facilities”, the sum of \$15,000,000 to the “Science, Space, and Technology Education Trust Fund”, which is hereby established in the Treasury of the United States. The Secretary of the Treasury shall invest these funds in the United States Treasury special issue securities, and interest shall be credited to the Trust Fund on a quarterly basis. Such interest shall be available for the purpose of making grants for programs directed at improving science, space, and technology education in the United States. The Administrator, after consultation with the Director of the National Science Foundation, shall review applications made for such grants and determine the distribution of available funds on a competitive basis. Grants shall be made available to any awardee only to the extent that the awardee provides matching funds from non-Federal sources to carry out the program for which grants from this Trust Fund are made. Of the funds made available by this Trust Fund, \$250,000 shall be disbursed each calendar quarter to the Challenger Center for Space Science Education. The Administrator shall submit to Congress an annual report on the grants made pursuant to this section.

(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)
40901	42 U.S.C. 2467.	Pub. L. 100-404, title II, (par. under heading “Science, Space, and Technology Education Trust Fund”, at 102 Stat. 1028), Aug. 19, 1988, 102 Stat. 1028; Pub. L. 103-327, title III, Sept. 28, 1994, 108 Stat. 2328.

In the first sentence, the words “the Department of Housing and Urban Development—Independent Agencies Appropriations Act, 1989 (Public Law 100-404, 102 Stat. 1014)” are substituted for “this Act” to clarify the reference.

In the second sentence, the words “of the Treasury” are inserted after “the Secretary” for clarity.

In the sixth sentence, the word “hereafter”, which appeared after “each calendar quarter”, is omitted as unnecessary.

§ 40902. National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund

(a) ESTABLISHMENT.—There is established in the Treasury of the United States, in tribute to the dedicated crew of the Space Shuttle Challenger, a trust fund to be known as the National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund (hereafter in this section referred to as the “Trust Fund”). The Trust Fund shall consist of amounts which may from time to time, at the discretion of the Administrator, be transferred from the National Aeronautics and Space Administration Gifts and Donations Trust Fund.

(b) INVESTMENT OF TRUST FUND.—The Administrator shall direct the Secretary of the Treasury to invest and reinvest funds in the Trust Fund in public debt securities with maturities suitable for the needs of the Trust Fund, and bearing interest at rates determined by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States of comparable maturities. Interest earned shall be credited to the Trust Fund.

(c) PURPOSE.—Income accruing from the Trust Fund principal shall be used to create the National Aeronautics and Space Administration Endeavor Teacher Fellowship Program, to the extent provided in advance in appropriation Acts. The Administrator is authorized to use such funds to award fellowships to selected United States nationals who are undergraduate students pursuing a course of study leading to certified teaching degrees in elementary education or in secondary education in mathematics, science, or technology disciplines. Awards shall be made pursuant to standards established for the fellowship program by the Administrator.

(d) AVAILABILITY OF FUNDS.—The interest accruing from the National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund principal shall be available in fiscal year 2012 for the purpose of the Endeavor Science Teacher Certificate Program.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3391; Pub. L. 112-55, div. B, title III, Nov. 18, 2011, 125 Stat. 626.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
40902	42 U.S.C. 2467a.	Pub. L. 102-195, §20, Dec. 9, 1991, 105 Stat. 1615.

In subsection (a), the words “The Trust Fund shall consist of amounts” are substituted for “The Trust Fund shall consist of gifts and donations accepted by the National Aeronautics and Space Administration pursuant to section 208 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2476b), as well as other amounts” because the Administration’s authority to accept gifts or donations under section 208 of the National Aeronautics and Space Act of 1958 terminated 5 years after October 30, 1987.