

Public Law 102-588  
102d Congress

## An Act

To authorize appropriations to the National Aeronautics and Space Administration for research and development, space flight, control and data communications, construction of facilities, research and program management, and Inspector General, and for other purposes.

Nov. 4, 1992  
[H.R. 6135]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE.**

This Act may be cited as the "National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993".

National  
Aeronautics and  
Space  
Administration  
Authorization  
Act, Fiscal Year  
1993.

**TITLE I—AUTHORIZATION OF APPROPRIATIONS****SEC. 101. FINDINGS.**

Congress finds that—

(1) investments in research and development are directly linked to long-term productivity and economic growth;

(2) as a major driver of advanced technology, the space program can play a major role in the Nation's reinvestment in civilian research and development;

(3) in addition to carrying out the Nation's goals in science and exploration, the space program makes a significant and direct contribution to the national employment base and, through the development of advanced technologies, will contribute to sustaining a healthy employment base and economy in the future;

(4) the long-term health of the United States space program is critically dependent on maintaining a stable and continuously evolving core program of science, space transportation, space exploration, space technology, and space applications;

(5) such a core program must be based on a realistic projection of resources that will be available and, in the near term, should not exceed inflationary growth;

(6) in addition to carrying out a core space program, international leadership, technological advancement, and expanded scientific knowledge will be enhanced by an expanded space program based on special initiatives in science, exploration, space transportation, space technology, and space applications;

(7) the Nation's space program can provide a productive environment for utilizing the skills of scientists and engineers formerly involved in the Nation's defense sector;

(8) civil space activities of the United States, whether made possible by, or in response to, Cold War strategic competition with the Soviet Union, must, in an era of declining political conflict, mature as instruments of United States foreign policy, and grow to support the national interest during the post-Cold War era;

(9) the national interest is furthered by trade and cooperation among friendly nations, and to the extent the former Soviet republics have shown themselves willing and capable of fostering a friendship with the United States, the national interest is furthered through trade and cooperation of mutual advantage between the United States and the former Soviet republics in civil aerospace, space science, and space exploration;

(10) a vigorous and coordinated effort by the United States and other spacefaring nations is needed to minimize the growth of orbital debris, and space activities should be conducted in a manner that minimizes the likelihood of additional orbital debris creation;

(11) the aerospace industry, rooted in aeronautics, is a major positive contributor to United States international influence and competitiveness;

(12) aeronautical research and development sustains our leadership in air transport and military aviation worldwide; and

(13) the National Aero-Space Plane is a core technology for any national aerospace policy and will permit the United States to maintain a worldwide competitive posture into the future.

#### SEC. 102. FISCAL YEAR 1993 AUTHORIZATION OF APPROPRIATIONS.

(a) RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the National Aeronautics and Space Administration to become available October 1, 1992, for "Research and Development" for the following programs:

(1) Space Station Freedom, \$2,100,000,000.

(2) Space Transportation Capability Development, \$733,700,000, of which \$30,000,000 is authorized for the development of the Space Transportation Main Engine.

(3) Physics and Astronomy, \$1,096,000,000, of which \$22,000,000 is authorized for the Shuttle Test of Relativity Experiment.

(4) Life Sciences, \$153,700,000, of which \$2,000,000 is authorized for cooperative life science activities on the Space Station Mir. None of the funds appropriated pursuant to this Act shall be used for the Search for Extraterrestrial Intelligence (SETI).

(5) Planetary Exploration, \$472,200,000, of which \$10,000,000 is authorized for Magellan mission operations.

(6) Earth Science and Applications, \$838,500,000.

(7) Materials Processing in Space, \$155,300,000.

(8) Communications, \$4,600,000.

(9) Information Systems, \$40,700,000, of which \$8,500,000 is authorized for the enhancement of existing visualization and mass storage capacity in support of earth and space science flight projects.

(10) Space Science Research Operations Support, \$91,000,000.

(11) Commercial Programs, \$156,600,000.

(12) Aeronautical Research and Technology, \$885,200,000, of which \$89,900,000 is authorized for High-Speed Research.

(13) Transatmospheric Research and Technology, \$45,000,000.

(14) Space Research and Technology, \$308,500,000, of which \$5,000,000 is authorized for carrying out a program of component technology development, validation, and demonstration directed at reducing the cost and improving the capabilities and reliability of commercial launch vehicles.

(15) Space Exploration, \$15,900,000.

(16) Safety, Reliability, and Quality Assurance, \$32,500,000.

(17) Academic Programs, \$71,400,000.

(18) Tracking and Data Advanced Systems, \$23,200,000.

(b) SPACE FLIGHT, CONTROL, AND DATA COMMUNICATIONS.—There are authorized to be appropriated to the National Aeronautics and Space Administration to become available October 1, 1992, for "Space Flight, Control, and Data Communications" for the following programs:

(1) Space Shuttle Production and Operational Capability, \$1,315,800,000, of which \$315,000,000 is authorized for the Advanced Solid Rocket Motor Program.

(2) Space Transportation Enhancement, \$7,000,000, for assessment of the mission need and cost justification of providing for the incremental improvement in the Space Shuttle fleet, including—

(A) the extension of on-orbit duration;

(B) the development of unmanned Shuttle capabilities;

(C) the increase in lift performance; and

(D) the enhancement of existent Shuttle flight reliability.

(3) Space Shuttle Operations, \$3,085,200,000.

(4) Launch Services, \$207,500,000.

(5) Space and Ground Network, Communications, and Data Systems, \$903,500,000.

(c) CONSTRUCTION OF FACILITIES.—There are authorized to be appropriated to the National Aeronautics and Space Administration to become available October 1, 1992, for "Construction of Facilities", including land acquisition, as follows:

(1) Construction of Space Station Processing Facility, Kennedy Space Center, \$24,000,000.

(2) Modifications for Payload Operations, Integration Center, Marshall Space Flight Center, \$1,800,000.

(3) Replacement of Aircraft Operations Support Facilities, Johnson Space Center, \$1,600,000.

(4) Modification of Electrical and Mechanical System, Utility Annex, Kennedy Space Center, \$4,400,000.

(5) Rehabilitation of Explosive Safe Area-60 High Bays Support System, Kennedy Space Center, \$2,000,000.

(6) Rehabilitation of LC-39 Area Fire Alarm Reporting System, Kennedy Space Center, \$4,300,000.

(7) Replacement of Boiler House Components, Michoud Assembly Facility, \$2,300,000.

(8) Restoration of High Pressure Gas Facility, Stennis Space Center, \$6,800,000.

(9) Rehabilitation of Crawlerway, Kennedy Space Center, \$2,000,000.

(10) Rehabilitation of Information and Electronic Systems Laboratory, Marshall Space Flight Center, \$5,000,000.

(11) Rehabilitation and Expansion of Communications Duct Banks, Kennedy Space Center, \$1,500,000.

(12) Replacement of Central Plant Chilled Water Equipment, Johnson Space Center, \$4,000,000.

(13) Restoration of Underground Communications Distribution System, Stennis Space Center, \$2,200,000.

(14) Restoration/Modernization of Electrical Distribution System, Goddard Space Flight Center, \$4,500,000.

(15) Modernization of Unitary Plan Wind Tunnel Complex, Ames Research Center, \$8,000,000.

(16) Modifications to 14- by 22-foot Subsonic Wind Tunnel, Langley Research Center, \$2,200,000.

(17) Repair and Modernization of the 12-foot Pressure Wind Tunnel, Ames Research Center, \$21,400,000.

(18) Rehabilitation of Icing Research Tunnel, Lewis Research Center, \$2,700,000.

(19) Modernization of 16-foot Transonic Tunnel, Langley Research Center, \$3,600,000.

(20) Rehabilitation of Central Air System, Lewis Research Center, \$12,200,000.

(21) Construction of 34-meter Multifrequency Antenna, Canberra, Australia, Jet Propulsion Laboratory, \$15,600,000.

(22) Construction of 34-meter Multifrequency Antenna, Madrid, Spain, Jet Propulsion Laboratory, \$16,200,000.

(23) Restoration and Modernization of Infrared Telescope Facility, Mauna Kea, Hawaii, \$2,000,000.

(24) Construction of Earth Observing System Data Information System Facility, Goddard Space Flight Center, \$22,300,000.

(25) Construction of Advanced Solid Rocket Motor Facilities (various locations), \$165,000,000.

(26) Repair of facilities at various locations, not in excess of \$1,000,000 per project, \$31,900,000.

(27) Rehabilitation and modification of facilities at various locations, not in excess of \$1,000,000 per project, \$34,000,000.

(28) Minor construction of new facilities and additions to existing facilities at various locations, not in excess of \$750,000 per project, \$14,000,000.

(29) Environmental Compliance and Restoration Program, \$40,000,000.

(30) Facility Planning and Design, \$26,700,000.

Notwithstanding paragraphs (1) through (30), the total amount authorized to be appropriated under this subsection shall not exceed \$479,200,000.

(d) **RESEARCH AND PROGRAM MANAGEMENT.**—There are authorized to be appropriated to the National Aeronautics and Space Administration to become available October 1, 1992, for "Research and Program Management" \$1,654,000,000.

(e) **INSPECTOR GENERAL.**—There are authorized to be appropriated to the National Aeronautics and Space Administration to become available October 1, 1992, for "Inspector General" \$15,900,000.

(f) **REPORTS ON NEW LAUNCH SYSTEM AND EXPENDABLE LAUNCH VEHICLES.**—(1) Within 180 days after the date of enactment of this Act, the Administrator of the National Aeronautics and Space Administration (hereinafter referred to as the "Administrator") shall submit to Congress a report setting forth requirements for a New Launch System, including—

(A) a comparison of the New Launch System to existing launch systems in terms of cost, operability, safety, resilience and robustness, and ability to compete in the world launch market;

(B) a cost/benefits analysis and 10-year life cycle cost estimate of the New Launch System, including development costs to be borne by each participating agency, and expected operating costs;

(C) a payload traffic model, including commercial and both civil government and military payloads in production as of the date of enactment of this Act, those approved by Congress as of the date of enactment of this Act, and those expected to be requested of Congress;

(D) a technology development plan, including—

(i) a summary of high-risk technologies that will lower life-cycle costs;

(ii) specific benchmarks which can validate the achievement of such technological goals at discrete programmatic milestones during the development phase of the program; and

(iii) an indication of how the accomplishment of technological milestones will relate to the achievement of overall system performance during the operational phase;

(E) an implementation plan describing how the New Launch System will be phased into operational usage at the National Launch Ranges and the overlap with existing systems at those Ranges; and

(F) a detailed comparison, including specific cost, payload, and risk assessments, of the New Launch System to other potential launch technologies, whose services could be procured in a commercial manner by the National Aeronautics and Space Administration.

(2) Within 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a report on possible steps to improve the efficiency and availability of United States expendable launch vehicles, including Scout, Delta, Atlas, and Titan, through modernization of facilities, infrastructure improvements, improved management, new or modified procedures, and otherwise.

(g) EARTH OBSERVING SYSTEM.—(1) The Administrator shall carry out an Earth Observing System program that addresses the highest priority international climate change research goals as defined by the Committee on Earth and Environmental Sciences and the Intergovernmental Panel on Climate Change.

42 USC 2451  
note.

(2)(A) Within 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a plan which will ensure that the highest priority measurements are maintained on schedule to the greatest extent practicable while lower priority measurements are deferred, deleted, or obtained through other means.

(B) Within 90 days after the date of enactment of this Act, the Core System of the Earth Observing System Data and Information System, the Administrator shall submit to Congress a Development Plan which—

(i) identifies the highest risk elements of the development effort and the key advanced technologies required to significantly increase scientific productivity;



(ii) provides a plan for the development of one or more prototype systems for use in reducing the development risk of critical system elements and obtaining feedback for scientific users;

(iii) provides a plan for research into key advanced technologies;

(iv) identifies sufficient resources for carrying out the Development Plan; and

(v) identifies how the Earth Observing System Data Information System will connect to and utilize other federally-supported research networks, including the National Research and Education Network.

(h) **REPORT ON SPACE TRANSPORTATION ENHANCEMENT.**—By September 30, 1993, the Administrator shall submit to Congress a full report outlining the specific actions recommended under subsection (b)(2).

## TITLE II—GENERAL PROVISIONS

### SEC. 201. USE OF FUNDS FOR CERTAIN ITEMS AND GRANTS.

(a) **AUTHORIZED USES.**—Appropriations authorized under this Act for “Research and Development” and “Space Flight, Control, and Data Communications” may be used for—

(1) any items of a capital nature (other than acquisition of land) which may be required at locations other than installations of the National Aeronautics and Space Administration for the performance of research and development contracts; and

(2) grants to nonprofit institutions of higher education, or to nonprofit organizations whose primary purpose is the conduct of scientific research, for purchase or construction of additional research facilities.

(b) **VESTING OF TITLE; GRANT CONDITIONS.**—Title to facilities described in subsection (a)(2) shall be vested in the United States unless the Administrator determines that the national program of aeronautical and space activities will best be served by vesting title in the grantee institution or organization. Each grant under subsection (a)(2) shall be made under such conditions as the Administrator shall determine to be required to ensure that the United States will receive therefrom benefits adequate to justify the making of that grant.

(c) **LIMITATION.**—None of the funds appropriated for “Research and Development” and “Space Flight, Control, and Data Communications” pursuant to this Act may be used in accordance with this section for the construction of any facility, the estimated cost of which, including collateral equipment, exceeds \$750,000 unless the Administrator has notified the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives of the nature, location, and estimated cost of such facility.

### SEC. 202. AVAILABILITY OF APPROPRIATED AMOUNTS.

Appropriations authorized under this Act for “Research and Development”, for “Space Flight, Control, and Data Communications”, or for “Construction of Facilities” may remain available until expended. Contracts may be entered into under “Inspector General” and “Research and Program Management” for training,

investigations, and costs associated with personnel relocation and for other services provided during the fiscal year following the fiscal year in which funds are appropriated.

#### SEC. 203. LIMITED USE OF FUNDS.

(a) **USE FOR SCIENTIFIC CONSULTATIONS OR EXTRAORDINARY EXPENSES.**—Appropriations authorized under this Act for “Research and Development” may be used, but not to exceed \$35,000, for scientific consultations or extraordinary expenses upon the approval or authority of the Administrator, and the Administrator’s determination shall be final and conclusive upon the accounting officers of the Government.

(b) **USE FOR FACILITIES.**—(1) Appropriations authorized under this Act for “Research and Development” and “Space Flight, Control, and Data Communications” may be used for the construction of new facilities and additions to, repair of, rehabilitation of, or modification of existing facilities, except that the cost of each such project, including collateral equipment, shall not exceed \$200,000.

(2) Appropriations authorized under this Act for “Research and Development” and “Space Flight, Control, and Data Communications” may be used for unforeseen programmatic facility project needs, except that the cost of each such project, including collateral equipment, shall not exceed \$750,000.

(3) Appropriations authorized under this Act for “Research and Development” may be used for repair, rehabilitation, or modification of facilities controlled by the General Services Administration, except that the cost of each project, including collateral equipment, shall not exceed \$500,000.

#### SEC. 204. REPROGRAMMING FOR TRANSATMOSPHERIC RESEARCH AND TECHNOLOGY.

The Administrator may reprogram up to \$45,000,000 of the amount authorized for “Research and Development” for fiscal year 1993 to use for the purposes described in section 102(a)(13). No such funds may be obligated until a period of 30 days has passed after the Administrator has notified the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives of such reprogramming.

#### SEC. 205. REPROGRAMMING FOR CONSTRUCTION OF FACILITIES.

Appropriations authorized under this Act for “Construction of Facilities”—

(1) in the discretion of the Administrator or the Administrator’s designee, may be varied upward by 10 percent; or

(2) following a report by the Administrator or the Administrator’s designee to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives on the circumstances of such action, may be varied upward by 25 percent, to meet unusual cost variations.

The total amount authorized to be appropriated for “Construction of Facilities” shall not be increased as a result of actions authorized under paragraphs (1) and (2).

**SEC. 206. SPECIAL REPROGRAMMING AUTHORITY FOR CONSTRUCTION OF FACILITIES.**

Where the Administrator determines that new developments or scientific or engineering changes in the national program of aeronautical and space activities have occurred; and that such changes require the use of additional funds for the purposes of construction, expansion, or modification of facilities at any location; and that deferral of such action until the enactment of the next authorization Act would be inconsistent with the interest of the Nation in aeronautical and space activities; the Administrator may transfer not to exceed one-half of 1 percent of the funds appropriated pursuant to section 102 (a) and (b) to the "Construction of Facilities" appropriation for such purposes. The Administrator may also use up to \$10,000,000 of the amounts authorized under section 102(c) for such purposes. The funds so made available pursuant to this section may be expended to acquire, construct, convert, rehabilitate, or install permanent or temporary public works, including land acquisition, site preparation, appurtenances, utilities, and equipment. No such funds may be obligated until a period of thirty days has passed after the Administrator or the Administrator's designee has transmitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a written report describing the nature of the construction, its cost, and the reasons therefor.

Reports.

**SEC. 207. CONSIDERATION BY COMMITTEES.**

Notwithstanding any other provision of this Act—

(1) no amount appropriated pursuant to this Act may be used for any program deleted by the Congress from requests as originally made to either the Committee on Commerce, Science, and Transportation of the Senate or the Committee on Science, Space, and Technology of the House of Representatives;

(2) no amount appropriated pursuant to this Act may be used for any program in excess of the amount actually authorized for that particular program by section 102 (a), (b), and (d); and

(3) no amount appropriated pursuant to this Act may be used for any program which has not been presented to either such committee,

unless a period of 30 days has passed after the receipt, by each such committee, of notice given by the Administrator or the Administrator's designee containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such proposed action. The National Aeronautics and Space Administration shall keep the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives fully and currently informed with respect to all activities and responsibilities within the jurisdiction of those committees. Any Federal department, agency, or independent establishment shall furnish any information requested by either committee relating to any such activity or responsibility.



**SEC. 208. LIMITATION ON OBLIGATION OF UNAUTHORIZED APPROPRIATIONS.**

Not later than 30 days after the later of the date of enactment of an Act making appropriations to the National Aeronautics and Space Administration for fiscal year 1993 or the date of enactment of this Act, the Administrator shall submit a report to Congress and to the Comptroller General which specifies—

Reports.

(1) the portion of such appropriations which are for programs, projects, or activities not specifically authorized under this Act, or which are in excess of amounts authorized for the relevant program, project, or activity under this Act; and

(2) the portion of such appropriations which are specifically authorized under this Act.

**SEC. 209. GEOGRAPHICAL DISTRIBUTION.**42 USC 2459  
note.

It is the sense of the Congress that it is in the national interest that consideration be given to geographical distribution of Federal research funds whenever feasible, and that the National Aeronautics and Space Administration should explore ways and means of distributing its research and development funds whenever feasible.

**SEC. 210. TRANSMISSION OF BUDGET ESTIMATES.**42 USC 2473  
note.

The Administrator shall, at the time of submission of the President's annual budget, transmit to the Congress—

(1) a five-year budget detailing the estimated development costs for each individual program under the jurisdiction of the National Aeronautics and Space Administration for which development costs are expected to exceed \$200,000,000; and

(2) an estimate of the life-cycle costs associated with each such program.

**SEC. 211. COMMERCIAL SPACE LAUNCH ACT AUTHORIZATION.**

Section 24 of the Commercial Space Launch Act (49 App. U.S.C. 2623) is amended—

(1) by striking "1992" and all that follows through "(2)" and inserting in lieu thereof "1993."; and

(2) by adding at the end the following: "There are authorized to be appropriated to the Secretary for fiscal year 1993 \$4,900,000 to carry out this Act. The Secretary may not collect any user fees for any regulatory or other services conducted pursuant to this Act, unless specifically authorized by this Act."

**SEC. 212. NATIONAL SPACE COUNCIL AUTHORIZATION.**42 USC 2471  
note.

There are authorized to be appropriated to carry out the activities of the National Space Council established by section 501 of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1989 (42 U.S.C. 2471), \$1,598,000 for fiscal year 1993, of which not more than \$1,000 shall be available for official reception and representation expenses. The National Space Council shall reimburse other agencies for not less than one-half of the personnel compensation costs of individuals detailed to it.

**SEC. 213. OFFICE OF SPACE COMMERCE AUTHORIZATION.**

There are authorized to be appropriated to the Secretary of Commerce for the Office of Space Commerce \$515,000 for fiscal year 1993.

**SEC. 214. LAUNCH TECHNOLOGY STUDIES.**

(a) **REPORT ON SINGLE STAGE ROCKET TECHNOLOGY FLIGHT TEST PROGRAM.**—Not later than 45 days following completion of the Strategic Defense Initiative Organization's Single Stage Rocket Technology flight test program, the Administrator shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives providing an independent analysis of the program and the potential application of this launch technology to the civil space program.

(b) **NATIONAL AEROSPACE TRANSPORTATION TECHNOLOGY PLAN.**—Not later than 180 days after the date of enactment of this Act, the National Space Council, in consultation with the Administrator, shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a national aerospace transportation technology plan. The plan shall consider—

(1) the needs of the National Aeronautics and Space Administration and other agencies for a hypersonic research flight vehicle, including the National Aerospace Plan; and

(2) the relationship between the National Aerospace Plane and the supersonic High Speed Civil Transport, the Single Stage Rocket Technology Program, nuclear propulsion concepts, and other proposed aeronautical and space transportation technology concepts.

**SEC. 215. SPACE AGENCY FORUM ON INTERNATIONAL SPACE YEAR.**

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

(1) it is in the national interest that the Space Agency Forum on International Space Year (in this section referred to as "SAFISY") maintain its facilitating role in the coordination of current and planned complementary Earth and space science research findings so as to maximize scientific return;

(2) the initiative for multilateral scientific cooperation among space agencies and international scientific organizations undertaken by SAFISY should continue beyond 1992, the International Space Year; and

(3) the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration should pursue implementation of proposals for long-term multilateral scientific cooperation developed during the International Space Year, notably those contained in the report of the second Pacific ISY Conference.

(b) **REPORT TO CONGRESS.**—At the earliest practicable date, but not later than September 1, 1993, the National Aeronautics and Space Administration shall submit to Congress its plan for continuing SAFISY activities, with particular reference to planned coordination of current and future complementary Earth and space science research findings, and other acts of multilateral scientific cooperation.

**SEC. 216. CRAFT/CASSINI MISSION.**

Section 103(a)(1)(S) of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991 (Public Law 101-611; 104 Stat. 3192), is repealed.

**SEC. 217. COMPUTER NETWORKS.**

Section 3 of the National Science Foundation Act of 1950 (42 U.S.C. 1862) is amended by adding at the end the following new subsection:

“(g) In carrying out subsection (a)(4), the Foundation is authorized to foster and support access by the research and education communities to computer networks which may be used substantially for purposes in addition to research and education in the sciences and engineering, if the additional uses will tend to increase the overall capabilities of the networks to support such research and education activities.”.

**SEC. 218. SPACE COOPERATION WITH THE FORMER SOVIET REPUBLICS.**

15 USC 5801  
note.

(a) **REPORT TO CONGRESS.**—Within one year after the date of enactment of this Act, the President shall submit to Congress a report describing—

(1) the opportunities for increased space related trade with the independent states of the former Soviet Union;

(2) a technology procurement plan for identifying and evaluating all unique space hardware, space technology, and space services available to the United States from the independent states of the former Soviet Union, specifically including those technologies the National Aeronautics and Space Administration has identified as high priority in its Space Research and Technology Integrated Technology Plan.

(3) the trade missions carried out pursuant to subsection (c), including the private participation and the results of such missions;

(4) the offices and accounts of the National Aeronautics and Space Administration to which expenses for either cooperative activities or procurement actions, involving the independent states of the former Soviet Union, are charged;

(5) any barriers, regulatory or practical, that inhibit space-related trade between the United States and the independent states of the former Soviet Union, including such barriers in either the United States or the independent states; and

(6) any anticompetitive issues raised by a potential acquisition.

(b) **NOTIFICATION TO CONGRESS.**—If any United States Government agency denies a request for a license or other approval that may be necessary to conduct discussions on space-related matters with the independent states of the former Soviet Union, that agency shall immediately notify the Speaker of the House of Representatives and President of the Senate. Each such notification shall include a statement of the reasons for the denial.

(c) **ROLE OF THE OFFICE OF SPACE COMMERCE.**—The Office of Space Commerce of the Department of Commerce is authorized and encouraged to conduct trade missions to appropriate independent states of the former Soviet Union for the purpose of familiarizing United States aerospace industry representatives with space hardware, space technologies, and space services that may be available from the independent states, and with the business practices and overall business climate in the independent states. The Office of Space Commerce shall also advise the Administrator as to the impact on United States industry of each potential acquisition of space hardware, space technology, or space services from the

independent states of the former Soviet Union, specifically including any anticompetitive issues the Office may observe.

**SEC. 219. USE OF DOMESTIC PRODUCTS.**

(a) **COMPLIANCE WITH BUY AMERICAN ACT.**—(1) Except as provided in paragraph (2), the head of each agency which conducts procurements shall ensure that such procurements are conducted in compliance with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a through 10c, popularly known as the “Buy American Act”).

(2) This subsection shall apply only to procurements made for which—

(A) amounts are authorized by this Act to be made available; and

(B) solicitations for bids are issued after the date of enactment of this Act.

Reports.

(3) The Administrator, before January 1, 1994, shall report to Congress on procurements covered by this subsection of products that are not domestic products.

(b) **INAPPLICABILITY IN CASE OF VIOLATION OF INTERNATIONAL AGREEMENT.**—This section shall not apply to the extent that the United States Trade Representative determines that an award under this section would be in violation of the General Agreement on Tariffs and Trade or an international agreement to which the United States is a party.

(c) **DEFINITIONS.**—For the purposes of this section, the term “domestic product” means a product—

(1) that is manufactured or produced in the United States; and

(2) at least 50 percent of the cost of the articles, materials, or supplies of which are mined, produced, or manufactured in the United States.

42 USC 2473d.

**SEC. 220. USE OF ABANDONED AND UNDERUTILIZED BUILDINGS, GROUNDS, AND FACILITIES.**

(a) **GENERAL RULE.**—In meeting the needs of the National Aeronautics and Space Administration for additional facilities, the Administrator shall investigate the use of abandoned and underutilized buildings, grounds, and facilities in depressed communities that can be converted to National Aeronautics and Space Administration facilities and shall prioritize such uses where cost effective, as determined by the Administrator.

(b) **DEFINITION.**—For purposes of this section, the term “depressed communities” means rural and urban communities that are relatively depressed, in terms of age of housing, extent of poverty, growth of per capita income, extent of unemployment, job lag, or surplus labor.

**SEC. 221. STUDY OF USES OF TECHNICAL INFORMATION.**

The Administrator shall undertake a study of the extent to which technical information developed by the National Aeronautics and Space Administration, by itself or in cooperation with industry, academic, or other government partners or contractors, is brought to market by foreign aerospace firms or their subcontractors more quickly than by United States companies. The Administrator shall report the results of such study to Congress no later than October 1, 1993.

Reports.

**SEC. 222. INSTITUTE FOR AVIATION WEATHER PREDICTION.**

The Administrator of the National Oceanic and Atmospheric Administration shall establish an Institute for Aviation Weather Prediction. The Institute shall provide forecasts, weather warnings, and other weather services to the United States aviation community. The Institute shall expand upon the activities of the aviation unit currently at the National Severe Storms Forecast Center in Kansas City, Missouri, and shall be established in the Kansas City Missouri area. The Administrator of the National Oceanic and Atmospheric Administration shall provide a full and fair opportunity for employees at the National Severe Storms Center to assume comparable duties and responsibilities within the Institute.

Establishment.  
15 USC 313b.

Missouri.

**TITLE III—EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH ON SPACE AND AERONAUTICS****SEC. 301. SHORT TITLE.**

This title may be cited as the "Experimental Program to Stimulate Competitive Research on Space and Aeronautics Act".

Experimental  
Program to  
Stimulate  
Competitive  
Research on  
Space and  
Aeronautics Act.  
42 USC 2467b  
note.

**SEC. 302. FINDINGS.**

Congress finds that—

(1) the report of the Advisory Committee on the Future of the United States Space Program has provided a framework within which a consensus on the goals of the space program can be developed;

(2) the National Aeronautics and Space Administration's space science and applications, aeronautical research and technology, and space research and technology programs will serve as the fulcrum for future initiatives by the United States in civil space and aviation;

(3) colleges and universities in many States are currently not able to compete successfully for research grants awarded by the National Aeronautics and Space Administration through its space science and applications, aeronautical research and technology, and space research and technology programs;

(4) balanced programs of space science and applications, aeronautical research and technology, and space research and technology should include initiatives designed to foster competitive research capacity in all geographic areas of the Nation; and

(5) by strengthening the competitive research capacity in those geographic areas of the Nation which are not currently fully competitive, the education and training of scientists and engineers important to the future of the United States civil space and aviation programs will be fostered.

42 USC 2467b  
note.

**SEC. 303. POLICY.**

It is the policy of the United States that—

(1) the Administrator, in planning for national programs in space science and applications, aeronautical research, space flight, and exploration, should ensure the resilience of the space and aeronautics research infrastructure;

(2) a stable and balanced program of space science and applications, aeronautical research and technology, and space research and technology should include programs to assure

42 USC 2467b  
note.



that geographic areas of the United States that currently do not successfully participate in competitive space and aeronautical research activities are enabled to become more competitive; and

(3) programs to improve competitive capabilities should be a part of the research and the educational activities of the National Aeronautics and Space Administration.

Grants.  
42 USC 2467b.

#### SEC. 304. REQUIREMENTS.

(a) **COMPETITION.**—Making use of the existing infrastructure established in eligible States by the National Science Foundation, the Administrator shall conduct a merit grant competition among the eligible States in areas of research important to the mission of the National Aeronautics and Space Administration. With respect to a grant application by an eligible State, the Administrator shall consider—

(1) the application's merit and relevance to the mission of the National Aeronautics and Space Administration;

(2) the potential for the grant to serve as a catalyst to enhance the ability of researchers in the State to become more competitive for regular National Aeronautics and Space Administration funding;

(3) the potential for the grant to improve the environment for science, mathematics, and engineering education in the State; and

(4) the need to assure the maximum distribution of grants among eligible States, consistent with merit.

(b) **SUPPLEMENTAL GRANTS.**—The Administrator shall endeavor, where appropriate, to supplement grants made under subsection (a) with such grants for fellowships, traineeships, equipment, or instrumentation as are available.

(c) **ELIGIBLE STATES DEFINED.**—In this section, the term "eligible State" means a State designated by the Administrator as eligible to compete in the Foundation's Experimental Program to Stimulate Competitive Research.

42 USC 2467b  
note.

#### SEC. 305. AUTHORIZATION OF APPROPRIATIONS.

In carrying out the programs listed in section 102(a), the Administrator should ensure that up to \$10,000,000 from the appropriations authorized for "Research and Development", for fiscal year 1993 are also used for purposes of establishing and developing an Experimental Program to Stimulate Competitive Research on Space and Aeronautics.

### TITLE IV—HIGH RISK RESEARCH AND DEVELOPMENT CONTRACT ADMINISTRATION

#### SEC. 401. ACQUISITION POLICY ASSESSMENT.

(a) **ASSESSMENT.**—Within 180 days after the date of enactment of this Act, the Administrator, in coordination as necessary with the Office of Federal Procurement Policy and the Federal Acquisition Regulation Council, shall carry out an assessment of the allocation of risk between the National Aeronautics and Space Administration and its contractors for future research and development contracts in order to identify options for allocating risk for correction of defects in materials and workmanship or other failures to conform to contract requirements.

(b) **CONTENTS.**—In carrying out the assessment required by subsection (a), the Administrator shall consider—

(1) technical uncertainty, market dynamics, and equity to both the National Aeronautics and Space Administration and the contractor community;

(2) the use of positive fee incentives reflecting the level of cost, schedule, and performance risk accepted by the contractor;

(3) the use of negative fee incentives, including provisions providing for less than full cost recovery for work determined to be defective in materials or workmanship or which otherwise fail to conform to contract requirements;

(4) the appropriate use of rollovers;

(5) the appropriate use of retroactive award fee adjustments;

(6) the appropriate use of value engineering;

(7) the use of warranties to ensure that the end product or a specified subproduct of a contract meets the performance requirements of a contract;

(8) the recovery of costs for the replacement or correction of articles which are defective in materials or workmanship, or which otherwise fail to conform to contract requirements; and

(9) the appropriate use of performance-based contracting.

#### **SEC. 402. PROMULGATION OF REGULATIONS.**

Within one hundred and eighty days after the completion of the acquisition policy assessment required by section 401, the Administrator, in coordination as necessary with the Office of Federal Procurement Policy, consistent with section 15 of the Office of Federal Procurement Policy Act (41 U.S.C. 413), and the Federal Acquisition Regulation Council, shall initiate a rulemaking proceeding under section 22 of such Act (41 U.S.C. 418b), on the administration of research and development contracts which propose specific changes to National Aeronautics and Space Administration Procurement Regulations and, as necessary, Federal Acquisition Regulations to consider implementing the recommendations of the assessment required by section 401, as well as—

(1) the establishment of policies and procedures for the use of performance-based contracts, incorporating positive and/or negative fee incentives to the maximum extent practicable; and

(2) the establishment of policies and procedures—

(A) for limiting the use of clauses of the Federal Acquisition Regulations which otherwise obligate the Government to pay the cost of correction of defects in materials and workmanship and work which otherwise fails to conform to contract requirements, and eliminating the use of such clauses where the defect or failure is within the control of the contractor; and

(B) to provide for less than full cost recovery for work determined to be defective in materials and workmanship or which otherwise fails to conform to contract requirements.

#### **SEC. 403. DEFINITIONS.**

For the purposes of this title—

(1) the term "performance-based contracting" means structuring all aspects of an acquisition around the purpose of the work to be performed as opposed to either the manner by which the work is to be performed or broad statements of work;

(2) the term "positive fee incentive" means that element of the potential total remuneration that a contractor may receive for contract performance over and above the allowable costs;

(3) the term "negative fee incentive" means a rebate payable to the National Aeronautics and Space Administration by a contracting party whose deliverable item or service is not in conformance with contract requirements or is otherwise deemed to be defective work; and

(4) the term "rollover" means the act of reallocating any positive fee incentives not earned by a contractor due to less than excellent performance to subsequent opportunities for award available in the contract.

#### **TITLE V—COMMERCIAL SPACE COMPETITIVENESS**

15 USC 5801.

##### **SEC. 501. FINDINGS.**

The Congress finds that—

(1) commercial activities of the private sector have substantially contributed to the strength of both the United States space program and the national economy;

(2) a robust United States space transportation capability remains a vital cornerstone of the United States space program;

(3) the availability of commercial launch services is essential for the continued growth of the United States commercial space sector;

(4) a timely extension of the excess third party claims payment provisions of the Commercial Space Launch Act is appropriate and necessary to enable the private sector to continue covering maximum probable liability risks while protecting the private sector from uninsurable levels of liability which could hinder international competitiveness;

(5) a program to demonstrate how recipients of Federal grants can purchase launch services directly from the private sector has the potential to improve the capabilities of the United States commercial launch industry;

(6) improvements and additions to the Nation's space transportation infrastructure contribute to a robust and cost effective space transportation capability for both public sector and private sector users;

(7) private sector use of available Government facilities on a reimbursable basis contributes to a stronger commercial space sector;

(8) the Federal Government should purchase space goods and services which are commercially available, or could be made available commercially in response to a Government procurement request, whenever such goods or services meet Government mission requirements in a cost effective manner;

(9) it is appropriate for the Government to act as an anchor tenant for commercial space development projects which have a reasonable potential to develop non-Federal markets and which meet Federal needs in a cost effective manner; and

(10) the provision of compensation to commercial providers of space goods and services for termination of contracts at the convenience of the Government assists in enabling the private sector to invest in space activities which are initially dependent on Government purchases.

**SEC. 502. DEFINITIONS.**

15 USC 5802.

For the purpose of this title—

(1) the term “agency” means an executive agency as defined by section 105 of title 5, United States Code;

(2) the term “anchor tenancy” means an arrangement in which the United States Government agrees to procure sufficient quantities of a commercial space product or service needed to meet Government mission requirements so that a commercial venture is made viable;

(3) the term “commercial” means having—

(A) private capital at risk, and

(B) primary financial and management responsibility for the activity reside with the private sector;

(4) the term “cost effective” means costing no more than the available alternatives, determined by a comparison of all related direct and indirect costs including, in the case of Government costs, applicable Government labor and overhead costs as well as contractor charges, and taking into account the ability of each alternative to accommodate mission requirements as well as the related factors of risk, reliability, schedule, and technical performance;

(5) the term “launch” means to place, or attempt to place, a launch vehicle and its payload, if any, in a suborbital trajectory, in Earth orbit in outer space, or otherwise in outer space;

(6) the term “launch services” means activities involved in the preparation of a launch vehicle and its payload for launch and the conduct of a launch;

(7) the term “launch support facilities” means facilities located at launch sites or launch ranges that are required to support launch activities, including launch vehicle assembly, launch vehicle operations and control, communications, flight safety functions, and payload operations, control, and processing.

(8) the term “launch vehicle” means any vehicle constructed for the purpose of operating in or placing a payload in, outer space or in suborbital trajectories, and includes components of that vehicle;

(9) the term “payload” means an object which a person undertakes to launch, and includes subcomponents of the launch vehicle specifically designed or adapted for that object;

(10) the term “payload integration services” means activities involved in integrating multiple payloads into a single payload for launch or integrating a payload with a launch vehicle;

(11) the term “space recovery support facilities” means facilities required to support activities related to the recovery of payloads returned from space to a space recovery site, including operations and control, communications, flight safety functions, and payload processing;

(12) the term “space transportation infrastructure” means facilities, associated equipment, and real property, including

launch sites, launch support facilities, space recovery sites, and space recovery support facilities, required to perform launch or space recovery activities;

(13) the term "State" means the several States, the District of Columbia, Puerto Rico, American Samoa, the United States Virgin Islands, Guam, the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States; and

(14) the term "United States" means the States, collectively.

#### **SEC. 503. EXTENSION OF GOVERNMENT PAYMENT OF EXCESS THIRD PARTY CLAIMS.**

Section 16(b)(5) of the Commercial Space Launch Act (49 App. U.S.C. 2615(b)(5)) is amended by striking "the date that is five years following the date of enactment of the Commercial Space Launch Act Amendments of 1988" and inserting in lieu thereof "January 1, 2000".

15 USC 5803.

#### **SEC. 504. LAUNCH VOUCHER DEMONSTRATION PROGRAM.**

(a) **COMMERCIAL SPACE VOUCHER DEMONSTRATION PROGRAM; EFFECTIVE PERIOD.**—The Administrator shall establish a demonstration program to award vouchers for the payment of commercial launch services and payload integration services for the purpose of launching payloads funded by the Office of Commercial Programs within the National Aeronautics and Space Administration to become effective October 1, 1993. Such program shall not be effective after September 30, 1995.

(b) **AWARD OF VOUCHERS.**—The Administrator shall award vouchers under subsection (a) to appropriate individuals as a part of grants administered by the National Aeronautics and Space Administration for the launch of—

- (1) payloads to be placed in suborbital trajectories; and
- (2) small payloads to be placed in orbit.

(c) **ASSUMPTION OF CERTAIN RESPONSIBILITIES.**—In carrying out the demonstration program established under subsection (a), the Administrator, in awarding vouchers, is limited to the launch of payloads funded by the Office of Commercial Programs within the National Aeronautics and Space Administration.

(d) **ASSISTANCE.**—The Administrator may provide voucher award recipients with such assistance, including contract formulation and technical support during the proposal evaluation, as may be necessary, to ensure the purchase of cost effective and reasonably reliable commercial launch services and payload integration services.

(e) **REPORT.**—The Administrator shall conduct an ongoing review of the program established under this section, and shall, not later than January 31, 1995, report to Congress the results of such a review, together with recommendations for further action relating to the program.

15 USC 5804.

#### **SEC. 505. SPACE TRANSPORTATION INFRASTRUCTURE MATCHING GRANTS.**

(a) **DEFINITIONS.**—For the purposes of this section—

(1) the term "commercial space transportation infrastructure development" may include—

- (A) the construction or improvement of space transportation infrastructure within the United States;



(B) the engineering and designing of such space transportation infrastructure; and

(C) technical studies to define how new or enhanced space transportation infrastructure can best meet the needs of the United States commercial space transportation industry;

(2) the term "project" means a project (or separate projects submitted together) for the accomplishment of commercial space transportation infrastructure development, including the combined submission of all projects to be undertaken at a particular site in a fiscal year;

(3) the term "project grant" means a grant of funds by the Secretary to a sponsor for the accomplishment of one or more projects;

(4) the term "public agency" means a State or any agency of a State, a municipality or other political subdivision of a State, or a tax-supported organization;

(5) the term "Secretary" means the Secretary of Transportation; and

(6) the term "sponsor" means any public agency which, either individually or jointly with one or more other such entities, submits to the Secretary, in accordance with this section, an application for financial assistance for commercial space transportation infrastructure development.

(b) ESTABLISHMENT OF GRANT PROGRAM.—In order to ensure the resiliency of the Nation's space transportation infrastructure, the Secretary is authorized to make project grants to sponsors in accordance with this section. There is authorized to be appropriated \$10,000,000 for such grants beginning after September 30, 1992. Such funds shall remain available until expended.

(c) SELECTION OF PROJECTS.—(1) In selecting projects for grants under subsection (b), the Secretary shall consider—

(A) the contribution of the proposed project to industry capabilities which serve Federal space transportation needs;

(B) the extent of industry's financial contribution to the proposed project;

(C) the extent of industry participation in the proposed project;

(D) the positive impact of the proposed project on the international competitiveness of the United States space transportation industry;

(E) the extent of state contributions to the proposed project; and

(F) the impact of the proposed project on launch operations and other activities at Federal launch ranges.

(2) The Secretary shall consult with the Department of Defense, the National Aeronautics and Space Administration, and other appropriate Federal agencies concerning paragraphs (1)(A) and (1)(F).

(3) The Secretary shall give preference to those applications with greater levels of industry financial contributions, all other factors being equal.

(d) SUBMISSION AND APPROVAL OF PROJECT GRANT APPLICATIONS.—(1) Any sponsor of a project may submit to the Secretary a project grant application for one or more projects, in a form containing such information as the Secretary may prescribe, setting forth the project proposed to be undertaken.

(2) No project grant application shall be approved by the Secretary unless the Secretary is satisfied that—

(A) the project will contribute to the purposes of this section;

(B) the project is reasonably consistent with plans (existing at the time of approval of the project) of public agencies which are authorized by the State in which such project is located and which are responsible for the development of the area surrounding the project site;

(C) if the application proposes to use Federal Government property, the specific consent of the appropriate Federal agency head has been obtained;

(D) the project will be completed without undue delay;

(E) the sponsor which submitted the project grant application has the legal authority to engage in the project as proposed; and

(F) all additional requirements prescribed by the Secretary have been met.

(e) ENVIRONMENTAL REQUIREMENTS.—(1) It is declared to be national policy that projects authorized pursuant to this section shall provide for the protection and enhancement of the natural resources and the quality of the environment of the Nation. In implementing this policy, the Secretary shall consult with the Secretary of the Interior and the Administrator of the Environmental Protection Agency with regard to any project included in a project grant application which may have a significant impact on natural resources including, but not limited to, fish and wildlife, natural, scenic, and recreational assets, water and air quality, and other factors affecting the environment, and shall authorize no such project found to have a significant adverse effect unless the Secretary shall render a finding, in writing, following a full and complete review, which shall be a matter of public record, that no feasible and prudent alternative exists and that all reasonable steps have been taken to minimize such adverse effect.

(2)(A) No project grant application may be approved by the Secretary unless the sponsor of the project certifies to the Secretary that there has been afforded the opportunity for public hearing for the purpose of considering the economic, social, and environmental effects of the project and its consistency with the goals of objectives of such planning as had been carried out by the community.

(B) When hearings are held under paragraph (2)(A), the project sponsor shall submit a copy of the transcript to the Secretary.

(3) No project grant application may be approved unless the Governor of the State in which such project is to be located certifies in writing to the Secretary that there is reasonable assurance that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards. In any case where such standards have not been promulgated by the Administrator of the Environmental Protection Agency, certification shall be obtained from such Administrator. Notice of certification or refusal to certify shall be provided within 60 days after the project application has been received by the Secretary.

(4) The Secretary shall condition approval of any such project grant application on compliance during construction and operation with applicable air and water quality standards.

(5) The Secretary is authorized in connection with any project to require a certification from a sponsor that such sponsor will comply with all of the statutory and administrative requirements imposed on such sponsor under this section in connection with such project. Acceptance by the Secretary of a certification from a sponsor may be rescinded by the Secretary at any time. Nothing in this paragraph shall affect or discharge any responsibility or obligation of the Secretary under any other Federal law, including, but not limited to, the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), section 4(f) of the Department of Transportation Act (49 App. U.S.C. 1652), title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), title VIII of the Act of April 11, 1968 (42 U.S.C. 3601 et seq.), and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.).

(f) **ALLOCATION OF PROJECT COSTS.**—(1) The project grant for any project under this section shall not exceed 50 percent of the total cost of such project.

(2) No project grant shall be awarded under this section for any project for which less than 10 percent of the total cost of such project will be borne by the private sector.

#### **SEC. 506. IDENTIFICATION OF LAUNCH SUPPORT FACILITIES.**

15 USC 5805.

(a) **IDENTIFICATION.**—The Administrator and the Secretary of Defense, as appropriate, in coordination with the Secretary of Transportation, shall conduct an inventory and identify all launch support facilities owned by the United States Government. To the extent practicable, the Administrator and the Secretary of Defense shall also identify any launch support facilities which could be made available for use by non-Federal entities on a reimbursable basis without interfering with Federal activities.

(b) **REPORT TO CONGRESS.**—Not later than 1 year after the date of enactment of this Act, the Administrator and the Secretary of Defense each shall submit to Congress a report containing the results of the identification required under subsection (a). Portions of such report may be classified and protected from public disclosure if such classification is necessary to protect national security.

#### **SEC. 507. ANCHOR TENANCY AND TERMINATION LIABILITY.**

15 USC 5806.

(a) **ANCHOR TENANCY CONTRACTS.**—Subject to appropriations, the Administrator or the Administrator of the National Oceanic and Atmospheric Administration may enter into multiyear anchor tenancy contracts for the purchase of a good or service if the appropriate Administrator determines that—

(1) the good or service meets the mission requirements of the National Aeronautics and Space Administration or the National Oceanic and Atmospheric Administration, as appropriate;

(2) the commercially procured good or service is cost effective;

(3) the good or service is procured through a competitive process;

(4) existing or potential customers for the good or service other than the United States Government have been specifically identified;

(5) the long-term viability of the venture is not dependent upon a continued Government market or other nonreimbursable Government support; and

(6) private capital is at risk in the venture.

(b) **TERMINATION LIABILITY.**—(1) Contracts entered into under subsection (a) may provide for the payment of termination liability in the event that the Government terminates such contracts for its convenience.

(2) Contracts that provide for the payment of termination liability, as described in paragraph (1), shall include a fixed schedule of such termination liability payments. Liability under such contracts shall not exceed the total payments which the Government would have made after the date of termination to purchase the good or service if the contract were not terminated.

(3) Subject to appropriations, funds available for such termination liability payments may be used for purchase of the good or service upon successful delivery of the good or service pursuant to the contract. In such case, sufficient funds shall remain available to cover any remaining termination liability.

(c) **LIMITATIONS.**—(1) Contracts entered into under this section shall not exceed 10 years in duration.

(2) Such contracts shall provide for delivery of the good or service on a firm, fixed price basis.

(3) To the extent practicable, reasonable performance specifications shall be used to define technical requirements in such contracts.

(4) In any such contract, the appropriate Administrator shall reserve the right to completely or partially terminate the contract without payment of such termination liability because of the contractor's actual or anticipated failure to perform its contractual obligations.

15 USC 5807.

#### **SEC. 508. USE OF GOVERNMENT FACILITIES.**

(a) **AUTHORITY.**—Federal agencies, including the National Aeronautics and Space Administration and the Department of Defense, may allow non-Federal entities to use their space-related facilities on a reimbursable basis if the Administrator, the Secretary of Defense, or the appropriate agency head determines that—

(1) the facilities will be used to support commercial space activities;

(2) such use can be supported by existing or planned Federal resources;

(3) such use is compatible with Federal activities;

(4) equivalent commercial services are not available on reasonable terms; and

(5) such use is consistent with public safety, national security, and international treaty obligations.

In carrying out paragraph (5), each agency head shall consult with appropriate Federal officials.

(b) **REIMBURSEMENT PAYMENT.**—(1) The reimbursement referred to in subsection (a) may be an amount equal to the direct costs (including salaries of United States civilian and contractor personnel) incurred by the United States as a result of the use of such facilities by the private sector. For the purposes of this paragraph, the term "direct costs" means the actual costs that can be unambiguously associated with such use, and would not be borne by the United States Government in the absence of such use.

(2) The amount of any payment received by the United States for use of facilities under this subsection shall be credited to the

appropriation from which the cost of providing such facilities was paid.

**SEC. 509. PROTECTION OF INFORMATION DEVELOPED UNDER SPACE ACT AGREEMENTS.**

Section 303 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2454) is amended—

- (1) by inserting “(a)” after “SEC. 303”;
- (2) by striking “and (B)” and inserting in lieu thereof “(B)”;
- (3) by inserting “, and (C) information described in subsection (b)” after “national security”; and
- (4) by adding at the end the following new subsection:  
“(b) The Administrator, for a period of up to 5 years after the development of information that results from activities conducted under an agreement entered into under section 203(c)(5) and (6) of this Act, and that would be a trade secret or commercial or financial information that is privileged or confidential under the meaning of section 552(b)(4) of title 5, United States Code, if the information had been obtained from a non-Federal party participating in such an agreement, may provide appropriate protections against the dissemination of such information, including exemption from subchapter II of chapter 5 of title 5, United States Code.”.

**SEC. 510. COMMERCIAL SPACE ACHIEVEMENT AWARD.**

15 USC 5808.

(a) **ESTABLISHMENT.**—There is established a Commercial Space Achievement Award. The award shall consist of a medal, which shall be of such design and materials and bear such inscriptions as determined by the Secretary of Commerce. A cash prize may also be awarded if funding for the prize is available under subsection (d).

(b) **CRITERIA FOR AWARD.**—The Secretary of Commerce shall periodically make, and the Chairman of the National Space Council shall present, awards under this section to individuals, corporations, corporate divisions, or corporate subsidiaries substantially engaged in commercial space activities who in the opinion of the Secretary of Commerce best meet the following criteria:

(1) For corporate entities, at least one-half of the revenues from the space-related activities of the corporation, division, or subsidiary is derived from sources other than the United States Government.

(2) The activities and achievements of the individual, corporation, division, or subsidiary have substantially contributed to the United States gross national product and the stature of United States industry in international markets, with due consideration for both the economic magnitude and the technical quality of the activities and achievements.

(3) The individual, corporation, division, or subsidiary has substantially advanced space technology and space applications directly related to commercial space activities.

(c) **LIMITATIONS.**—No individual or corporate entity may receive an award under this section more than once every 5 years.

(d) **FUNDING FOR AWARD.**—The Secretary of Commerce may seek and accept gifts of money from public and private sources for the purpose of making cash prize awards under this section. Such money may be used only for that purpose, only such money may be used for that purpose, and the Secretary of Commerce



shall make publicly available an itemized list of the sources of such funding.

## TITLE VI—BIOMEDICAL RESEARCH IN SPACE

42 USC 2487.

### SEC. 601. FINDINGS.

The Congress finds that—

(1) the space program can make significant contributions to selected areas of health-related research and should be an integral part of the Nation's health research and development program;

(2) the continuing development of trained scientists and engineers is essential to carrying out an effective and sustained program of biomedical research in space and on the ground;

(3) the establishment and maintenance of an electronically accessible archive of data on space-related biomedical research is essential to advancement of the field;

(4) cooperation with the republics of the former Soviet Union, including use of former Soviet orbital facilities, offers the potential for greatly enhanced biomedical research activities and progress; and

(5) the establishment and maintenance of an international telemedicine consultation satellite capability to support emergency medical service provision can provide an important aid to disaster relief efforts.

42 USC 2487a.

### SEC. 602. BIOMEDICAL RESEARCH JOINT WORKING GROUP.

(a) **ESTABLISHMENT.**—The Administrator and the Director of the National Institutes of Health shall jointly establish a working group to coordinate biomedical research activities in areas where a microgravity environment may contribute to significant progress in the understanding and treatment of diseases and other medical conditions. The joint working group shall formulate joint and complementary programs in such areas of research.

(b) **MEMBERSHIP.**—The joint working group shall include equal representation from the National Aeronautics and Space Administration and the National Institutes of Health, and shall include representation from National Institutes of Health councils, as selected by the Director of the National Institutes of Health, and from the National Aeronautics and Space Administration Advisory Council.

(c) **ANNUAL REPORTING REQUIREMENT.**—The joint working group shall report annually to Congress on its progress in carrying out this section.

(d) **ANNUAL BIOMEDICAL RESEARCH SYMPOSIA.**—The working group shall organize annual symposia on biomedical research described in subsection (a) under the joint sponsorship of the National Aeronautics and Space Administration and the National Institutes of Health.

42 USC 2487b.

### SEC. 603. BIOMEDICAL RESEARCH GRANTS.

(a) **ESTABLISHMENT OF PROGRAM.**—The Administrator and the Director of the National Institutes of Health shall establish a joint program of biomedical research grants in areas described in section 602(a), where such research requires access to a microgravity environment. Such program shall be consistent with actions taken by the joint working group under section 602.

(b) **RESEARCH OPPORTUNITY ANNOUNCEMENTS.**—The grants program established under subsection (a) shall annually issue joint research opportunity announcements under the sponsorship of the National Institutes of Health and the National Aeronautics and Space Administration. Responses to the announcements shall be evaluated by a peer review committee whose members shall be selected by the Director of the National Institutes of Health and the Administrator, and shall include individuals not employed by the National Aeronautics and Space Administration or the National Institutes of Health.

**SEC. 604. BIOMEDICAL RESEARCH FELLOWSHIPS.**

42 USC 2487c.

The Administrator and the Director of the National Institutes of Health shall create a joint program of graduate research fellowships in biomedical research described in section 602(a). Fellowships under such program may provide for participation in approved research conferences and symposia.

**SEC. 605. JOINT FORMER SOVIET UNION STUDIES IN BIOMEDICAL RESEARCH.**

42 USC 2487d.

The Administrator, in consultation with the Director of the National Institutes of Health, shall, as soon as practicable, establish and submit to Congress a plan for the conduct of joint biomedical research activities by the republics of the former Soviet Union and the United States, including the use of the United States Space Shuttle and former Soviet orbital facilities such as the Mir space station.

**SEC. 606. ESTABLISHMENT OF AN ELECTRONIC DATA ARCHIVE.**

42 USC 2487e.

The Administrator shall create and maintain a national electronic data archive for biomedical research data obtained from space-based experiments.

**SEC. 607. ESTABLISHMENT OF EMERGENCY MEDICAL SERVICE TELEMEDICINE CAPABILITY.**

42 USC 2487f.

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

42 USC 2487g.

**SEC. 608. AUTHORIZATION OF APPROPRIATIONS.**

The Administrator should ensure that up to \$3,750,000 from the appropriations authorized for "Research and Development" for fiscal year 1993 are also used to carry out this title.

Approved November 4, 1992.

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**LEGISLATIVE HISTORY—H.R. 6135:****CONGRESSIONAL RECORD**, Vol. 138 (1992):

Oct. 5, considered and passed House.

Oct. 7, considered and passed Senate.

**WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS**, Vol. 28 (1992):

Nov. 4, Presidential statement.