104TH CONGRESS
1ST SESSION

S. 1048

To authorize appropriations for fiscal year 1996 to the National Aeronautics and Space Administration for human space flight; science, aeronautics, and technology; mission support; and Inspector General; and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 18 (legislative day, JULY 10), 1995

Mr. PRESSLER (for himself and Mr. BURNS) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

---

A BILL

To authorize appropriations for fiscal year 1996 to the National Aeronautics and Space Administration for human space flight; science, aeronautics, and technology; mission support; and Inspector General; and for other purposes.

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 1996''.

SEC. 2. DEFINITIONS.

For the purposes of this Act—

(1) the term ''Administrator'' means the Administrator of the National Aeronautics and Space Administration;

(2) the term ''NASA'' means the National Aeronautics and Space Administration; and

(3) the term ''institution of higher education'' has the meaning given such term in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)).

TITLE I—AUTHORIZATION OF APPROPRIATIONS

SEC. 101. HUMAN SPACE FLIGHT.

There are authorized to be appropriated to the National Aeronautics and Space Administration for Human Space Flight the following amounts, to be available October 1, 1995:

(1) Space Station, $1,818,800,000.

(2) Russian Cooperation, $129,200,000.

(3) Space Shuttle, $3,031,800,000.

(4) Payload and Utilization Operations, $293,000,000.

SEC. 102. SCIENCE, AERONAUTICS, AND TECHNOLOGY.

There are authorized to be appropriated to the National Aeronautics and Space Administration for Science,

Aeronautics, and Technology the following amounts, to become available October 1, 1995:

(1) Space Science, $1,958,900,000, of which $48,700,000 shall be allocated to the Stratospheric Observatory for Infrared Astronomy, $15,000,000 shall be allocated to the Space Infrared Telescope Facility, and $30,000,000 shall be allocated to the New Millennium initiative.

(2) Life and Microgravity Sciences and Applications, $507,000,000, of which $3,000,000 shall be allocated for the construction of an addition to the Microgravity Development Laboratory, Marshall Space Flight Center.

(3) Mission to Planet Earth, $1,360,100,000, of which $17,000,000 shall be allocated to the construction of the Earth Systems Science Building, Goddard Space Flight Center.

(4) Aeronautical Research and Technology, $891,300,000, of which $5,400,000 shall be allocated to the modernization of the Unitary Plan Wind Tunnel Complex, Ames Research Center.

(5) Space Access and Technology, $766,600,000, of which at least $70,000,000 shall be allocated to support a shuttle flight for the Shuttle Imaging Radar-C, of which $5,000,000 shall be

used to establish a Rural Technology Transfer and Commercialization Center for the Rocky Mountains and Upper Plains States region, and of which $159,000,000 shall be allocated to the Reusable Launch Vehicle program.

(6) Mission Communication Services, $461,300,000.

(7) Academic Programs, $104,700,000, of which $3,000,000 shall be allocated to support the establishment of an Upper Plains States regional science education and outreach center and of which $1,000,000 shall be allocated to establish a Rural Teacher Resource Center.

SEC. 103. MISSION SUPPORT.

There are authorized to be appropriated to the National Aeronautics and Space Administration for Mission Support the following amounts, to become available October 1, 1995:

(1) Safety, Reliability, and Quality Assurance, $37,600,000.

(2) Space Communication Services, $219,400,000.

(3) Research and Program Management, including personnel and related costs, travel, and research operations support, $2,047,800,000.

(4) Construction of Facilities, including land acquisition, $135,000,000, including the following:

(A) Restoration of Flight Systems Research Laboratory, Ames Research Center;

(B) Restoration of chilled water distribution system, Goddard Space Flight Center;

(C) Replace chillers, various buildings, Jet Propulsion Laboratory;

(D) Rehabilitation of electrical distribution system, White Sands Test Facility, Johnson Space Center;

(E) Replace main substation switchgear and circuit breakers, Johnson Space Center;

(F) Replace 15kv load break switches, Kennedy Space Center;

(G) Rehabilitation of Central Air Equipment Building, Lewis Research Center;

(H) Restoration of high pressure air compressor system, Marshall Space Flight Center;

(I) Restoration of Information and Electronic Systems Laboratory, Marshall Space Flight Center;

(J) Restoration of canal lock, Stennis Space Center;

(K) Restoration of primary electrical distribution system, Wallops Flight Facility;

(L) Repair of facilities at various locations, not in excess of $1,500,000 per project;

(M) Rehabilitation and modification of facilities at various locations, not in excess of $1,500,000 per project;

(N) Minor construction of new facilities and additions to existing facilities at various locations, not in excess of $1,500,000 per project;

(O) Facility planning and design, not otherwise provided for; and

(P) Environmental compliance and restoration.

SEC. 104. INSPECTOR GENERAL.

There are authorized to be appropriated to the National Aeronautics and Space Administration for Inspector General $17,300,000, to become available October 1, 1995.

SEC. 105. OFFICE OF COMMERCIAL SPACE TRANSPORTATION.

There are authorized to be appropriated to the Office of Commercial Space Transportation of the Department of Transportation $7,000,000, to become available October 1, 1995.

TITLE II—LIMITATIONS AND GENERAL PROVISIONS

SEC. 201. SPACE STATION LIMITATION.

The aggregate amount authorized to be appropriated for Space Station and related activities under sections 101, 102, and 103 shall not exceed $2,100,000,000.

SEC. 202. EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH.

Of the amounts appropriated under sections 101 and 102, $6,900,000 are authorized for the Experimental Program to Stimulate Competitive Research in accordance with title III of the National Aeronautics and Space Administration Act, Fiscal Year 1993 (Public Law 102–588; 106 Stat. 5119).

SEC. 203. SPECIAL TECHNOLOGY ENHANCEMENT GRANTS

(a) IN GENERAL.—

(1) GRANTS.—The Administrator shall make up to 4 special technology enhancement grants to areas or States that have not participated fully in the Administration's aeronautical and space programs in order to enable such areas or States to increase their capabilities in technology development, utilization, and transfer in aeronautics, space science, and related areas. At least one such grant shall be made available to a consortium of States, each one of

which has an average population density of less than 12.3 persons per square mile, based on data for 1993 from the Bureau of the Census.

(2) ACTIVITIES.—Grants made under this section shall be available for—

(A) assessment of resources and needs;

(B) development of infrastructure, including incubators and prototype demonstration facilities;

(C) collaborations with industry;

(D) expansion of capabilities in procurement;

(E) development of technology transfer and commercialization support capabilities;

(F) activities to increase participation in the Small Business Innovation Research program and other NASA research, development, and technology utilization and transfer programs;

(G) relevant research of interest to NASA; and

(H) such other activities as the Administrator shall deem appropriate.

(3) SPECIAL CONSIDERATION.—In making grants under this section, the Administrator shall give special consideration to proposals that—

(A) will build upon and expand a developing research and technology base, and

(B) will insure a lasting research and development and technology development and transfer capability.

(b) ELIGIBLE ENTITIES.—Grants under subsection (a)(1) may be made to—

(1) State and local governments;

(2) institutions of higher education; and

(3) organizations with expertise in research and development, technology development, and technology transfer in areas of interest to NASA.

(c) FUNDING OF PROGRAM.—Of the amounts authorized in section 102 for the Space Access and Technology account, $15,000,000 are authorized to be used for grants under subsection (a).

SEC. 204. CLEAR LAKE DEVELOPMENT FACILITY.

The Administrator shall acquire, for no more than $35,000,000, a certain parcel of land, together with existing facilities, located on the site of the property referred to as the Clear Lake Development Facility, Clear Lake, Texas, comprising approximately 13 acres and including

a light manufacturing facility, an avionics development facility, and an assembly and test building which shall be modified for use as a neutral buoyancy laboratory in support of human space flight activities.

SEC. 205. YELLOW CREEK FACILITY.

Notwithstanding any other provision of law or regulation, the National Aeronautics and Space Administration (NASA) shall convey, without reimbursement, to the State of Mississippi, all rights, title, and interest of the United States in the property known as the Yellow Creek Facility and consisting of approximately 1,200 acres near the city of Iuka, Mississippi, including all improvements thereon and any personal property owned by NASA that is currently located on-site and which the State of Mississippi requires to facilitate the transfer: *Provided,* That appropriated funds shall be used to effect this conveyance: *Provided further,* That $10,000,000 in appropriated funds otherwise available to NASA shall be transferred to the State of Mississippi to be used in the transition of the facility: *Provided further,* That each Federal agency with prior contact to the site shall remain responsible for any and all environmental remediation made necessary as a result of its activities on the site: *Provided further,* That in consideration of this conveyance, NASA may require such other terms and conditions as the Administrator

deems appropriate to protect the interests of the United States: *Provided further,* That the conveyance of the site and the transfer of the funds to the State of Mississippi shall occur not later than 30 days after the date of enactment of this Act.

SEC. 206. RADAR REMOTE SENSING SATELLITES.

(a) FINDINGS.—The Congress finds that—

(1) radar satellites represent one of the most important developments in remote sensing satellite technology in recent years;

(2) the ability of radar satellites to provide high-quality Earth imagery regardless of cloud cover and to provide three-dimensional pictures of the Earth's surface when the satellites are flown in combination dramatically enhance conventional optical remote sensing satellite capabilities and usefulness;

(3) the National Aeronautics and Space Administration has developed a unique background and expertise in developing and operating radar satellites as a result of their activities connected with its radar satellites, Shuttle Imaging Radar (SIR)–A, SIR–B, and SIR–C, which has flown twice on the Space Shuttle;

(4) other nations currently have operational radar satellite systems, including Japan and West-

ern Europe, with other spacefaring nations expected to develop such systems in the near future; and

(5) the development of an operational radar satellite program at NASA featuring free-flying satellites and a related ground system is critical to maintain United States leadership in remote sensing satellite technology and is important to our national security and international competitiveness.

(b) POLICY.—It is the policy of the United States that—

(1) NASA should develop and operate a radar satellite program as soon as practicable;

(2) NASA should build on the experience and knowledge gained from its previous radar endeavors;

(3) NASA should work with other Federal agencies and, as appropriate, with other spacefaring nations, in its radar satellite activities; and

(4) NASA should make maximum use of existing National remote sensing assets such as the Landsat system, activities connected with the Mission to Planet Earth, and the data management facilities of the Department of the Interior in all of its radar satellite activities.

(c) PROGRAM REQUIREMENTS.—NASA shall initiate a program to develop and operate a radar satellite pro-

gram. The program shall employ the most advanced radar satellite technology currently available. To the maximum extent possible, all of the data processing, dissemination, and archiving functions shall be performed by the Department of the Interior. The program should be planned in such a way that the data from the radar satellite system is converted into a broad range of informational products with research, commercial, and government applications and any other applications that are in the public interest and to distribute such products over the widest user community that is practicable, including industry, academia, research institutions, local and State governments, and other Federal agencies. The program should coordinate with, and make appropriate use of, other remote sensing satellite programs, such as the Landsat program.

(d) PLAN.—Within 90 days after the enactment of this Act, the Administrator shall submit a detailed plan for implementation of the radar satellite program to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science of the House of Representatives. The plan should include—

(1) the goals and mission of the program;

(2) planned activities for the next 5 years to achieve such goals and mission;

(3) strategies for maximizing the usefulness of the satellite data to the scientific and academic communities, the private sector, all levels of government, and the general public;

(4) concepts for integrating the program with other related NASA activities (such as Mission to Planet Earth), the Landsat program, and other current and emerging remote sensing satellite programs and activities in the Federal government and all other public and private sectors so that the program complements and strengthens such programs and activities and is not duplicative of these efforts;

(5) concepts developed in consultation with Department of the Interior, for processing, archiving, and disseminating the satellite data using, to the maximum extent possible, existing Federal government programs and assets at the Department of the Interior and other Federal agencies;

(6) targets and timetables for undertaking specific activities and actions within the program;

(7) a 5-year budget profile for the program; and

(8) a comparison between the program and the radar satellite programs of other spacefaring na-