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103D CONGRESS
1ST SESSION

H. R. 2193

To authorize appropriations to the National Aeronautics and Space Administration for fiscal years 1994 and 1995 for aeronautical research and technology, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 19, 1993

Mr. VALENTINE (for himself and Mr. LEWIS of Florida) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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A BILL

To authorize appropriations to the National Aeronautics and Space Administration for fiscal years 1994 and 1995 for aeronautical research and technology, 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 ''NASA Aeronautics Research and Technology Act of 1993''.

SEC. 2. FINDINGS.

The Congress finds that—

(1) the aerospace industry makes a major contribution to the economy of the United States, accounting for the largest positive trade balance of any United States industry (more than $28,000,000,000 in 1992), and providing over 1,000,000 high-value jobs;

(2) the international market share of the United States aerospace industry has steadily eroded due to competition from foreign consortia that receive substantial direct subsidies from their governments;

(3) the United States aerospace industry is further negatively impacted by reduced investment in national defense;

(4) the continued competitiveness of the United States aerospace industry can be significantly aided by an enhanced Federal investment in technology base research and development in aeronautics;

(5) maintaining state-of-the-art experimental facilities is a key element of Federal investment in aeronautics research and development;

(6) the long-term contribution of advances in aeronautics to the economy and society will rely on a continued commitment to pioneering research and development such as the National Aero-Space Plane; and

(7) the National Aero-Space Plane program should explore the possibility of collaboration with other nations for opportunities that would offer unique programmatic benefits without compromising the strategic advantage to the United States.

SEC. 3. PURPOSES.

The purposes of this Act are—

(1) to enhance the continued competitiveness of the United States aerospace industry through Federal support of technology base research and development;

(2) to enhance the contribution of aeronautics to the Nation's quality of life through research and development that will improve air safety, reduce noise, and reduce environmental damage;

(3) to continue the needed modernization of the Nation's aeronautics research and development facilities;

(4) to ensure the long-term contribution of aeronautics to the Nation by advancing the state-of-knowledge and the frontiers of technology; and

(5) to promote the effective transfer of technologies from federally funded work at the National Aeronautics and Space Administration to United States manufacturers.

SEC. 4. DEFINITION.

For purposes of this Act, the term ''independent organization'' means an organization that does not receive significant funding or support from the National Aeronautics and Space Administration, other than under sections 5, 6, and 8.

SEC. 5. INDEPENDENT PERFORMANCE REVIEW.

(a) PLAN.—The Administrator shall provide for the development of a plan establishing criteria, procedures, and milestones for the evaluation, by an independent organization, of advances made in fundamental aeronautics research and development and the progress made by the aeronautics programs of the National Aeronautics and Space Administration in achieving their goals. Such plan shall be developed by an independent organization in consultation with the Administrator. The plan shall also describe criteria and procedures for terminating National Aeronautics and Space Administration programs that are not making acceptable progress toward their goals. The Administrator shall submit a report describing such plan to the Congress within 6 months after the date of the enactment of this Act.

(b) ANNUAL REPORT.—Beginning in the first year after submission of the plan under subsection (a), at the time of the President's annual budget request to Congress, the Administrator shall submit to the Congress an annual

report on the results of an evaluation, conducted by an independent organization, of the progress made by the National Aeronautics and Space Administration in advancing aeronautics and achieving the goals of aeronautics programs. Such evaluation shall be conducted using the criteria, procedures, and milestones established under the plan required by subsection (a).

SEC. 6. TECHNOLOGY TRANSFER REVIEW.

(a) PLAN.—The Administrator shall provide for the development of a plan establishing criteria and procedures for the evaluation, by an independent organization, of the effectiveness of technology transfer from the National Aeronautics and Space Administration's aeronautics programs to industry and other public organizations. Such plan shall be developed by an independent organization in consultation with the Administrator. The plan shall include clear, quantitative measures of the success of such technology transfer activities. The Administrator shall submit a report describing such plan to the Congress within 6 months after the date of the enactment of this Act.

(b) ANNUAL REPORT.—Beginning in the first year after submission of the plan under subsection (a), at the time of the President's annual budget request to Congress, the Administrator shall submit to the Congress an annual report on the results of an evaluation, conducted by an

independent organization, of the effectiveness of the National Aeronautics and Space Administration's technology transfer programs. Such evaluation shall be conducted using the criteria and procedures established under the plan required by subsection (a).

SEC. 7. JOINT AERONAUTICAL RESEARCH AND DEVELOPMENT PROGRAM.

(a) ESTABLISHMENT.—The Administrator and the heads of other appropriate Federal agencies shall jointly establish a program for the purpose of conducting research on aeronautical technologies that enhance United States competitiveness. Such program shall include—

(1) research on next-generation wind tunnel and advanced wind tunnel instrumentation technology;

(2) research on advanced engine materials, engine concepts, and testing of propulsion systems or components of the high-speed civil transport research program;

(3) advanced general aviation research;

(4) advanced rotorcraft research; and

(5) advanced hypersonic aeronautical research.

(b) CONTRACTS AND GRANTS.—Contracts and grants entered into under the program established under subsection (a) shall be administered using procedures devel-

oped jointly by the Administrator and the heads of the other Federal agencies involved in the program. These procedures should include an integrated acquisition policy for contract and grant requirements and for technical data rights that are not an impediment to joint programs among the National Aeronautics and Space Administration, the other Federal agencies involved in the program, and industry.

(c) ELEMENTS OF PROGRAM.—The program established under subsection under subsection (a) shall include—

(1) selected programs that jointly enhance public and private aeronautical technology development;

(2) an opportunity for private contractors to be involved in such technology research and development; and

(3) the transfer of Government-developed technologies to the private sector to promote economic strength and competitiveness.

SEC. 8. NATIONAL AERO-SPACE PLANE.

(a) FINDINGS.—The Congress finds that—

(1) hypersonic flight will be critical to the continued contribution of aeronautics to the economic and strategic interests of the United States in the early twenty-first century;

(2) the data obtained through rocket-based hypersonic flight experiments will not, by themselves, reduce risk sufficiently to allow the development of a single-stage-to-orbit, air-breathing plane; and

(3) a single-stage hypersonic research plane is critical to the successful exploration of the hypersonic flight regime and the timely realization of a single-stage-to-orbit, air-breathing plane.

(b) HYPERSONIC RESEARCH PLANE ASSESSMENT.—The Administrator shall conduct a study, through an independent organization, of strategies that would optimize the next phase of the National Aero-Space Plane program by integrating with the rocket-based hypersonic flight experiments the development, in the shortest possible time frame, of a single-stage hypersonic research plane capable of speeds in the Mach 10 to Mach 15 range or greater, with the objective of providing data that would accelerate the ultimate development of a single-stage-to-orbit, air breathing plane. The Administrator shall report the results of the study to Congress no later than 6 months after the date of the enactment of this Act.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

(a) RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the National Aeronautics and Space Administration for ''Research and Develop-

ment'', for Aeronautics Research and Technology Programs—

(1) for Research Operations Support, $143,500,000 for fiscal year 1994, and $148,300,000 for fiscal year 1995;

(2) for Research and Technology Base activities, $448,300,000 for fiscal year 1994, and $433,900,000 for fiscal year 1995;

(3) for High-Speed Research, $187,200,000 for fiscal year 1994, and $236,300,000 for fiscal year 1995;

(4) for Advanced Subsonic Technology, $101,300,000 for fiscal year 1994, and $128,500,000 for fiscal year 1995, of which $5,000,000 for fiscal year 1994 and $13,000,000 for fiscal year 1995 shall be for Short-Haul Aircraft, $30,200,000 for fiscal year 1994 and $30,500,000 for fiscal year 1995 shall be for Noise Reduction, and $11,500,000 for fiscal year 1994 and $13,000,000 for fiscal year 1995 shall be for Technology Integration for Reducing Environmental Pollution;

(5) for Other Systems Technology Programs, $140,400,000 for fiscal year 1994, and $168,000,000 for fiscal year 1995; and

(6) for the National Aero-Space Plane Program, $80,000,000 for fiscal year 1994, and $80,000,000 for fiscal year 1995.

(b) CONSTRUCTION OF FACILITIES.—There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 1994, for ''Construction of Facilities'', including land acquisition, for—

(1) Phase I Facility Studies, Requirements Definition, Design, and Modification and Construction of National Aeronautics Facilities, Various Locations, $74,000,000;

(2) Modifications for Composite Technology Center, Lewis Research Center, $27,000,000;

(3) National Transonic Facility Productivity Enhancement, Langley Research Center, $60,000,000;

(4) Performance Improvements in 11-Foot Wind Tunnel, Ames Research Center, $20,000,000;

(5) Rehabilitation of Control Systems, National Full-Scale Aerodynamics Complex, Ames Research Center, $2,100,000;

(6) Upgrade of Outdoor Aerodynamic Research Facility, Ames Research Center, $3,900,000; and

(7) Modernization of the Unitary Plan Wind Tunnel Complex, Ames Research Center, $25,000,000.

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