I

107TH CONGRESS
1ST SESSION

H. R. 2659

To amend title 10, United States Code, to enhance science and technology planning and budgeting by the Air Force, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 26, 2001

Mr. HALL of Ohio (for himself, Mr. BOEHLERT, Mrs. TAUSCHER, Mr. HOBSON, and Mr. BOYD) introduced the following bill; which was referred to the Committee on Armed Services

---

A BILL

To amend title 10, United States Code, to enhance science and technology planning and budgeting by the Air Force, 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 ''Air Force Science and Technology for the 21st Century Act of 2001''.

SEC. 2. FINDINGS.

Congress finds the following:

(1) The development of science and technology has been a core mission of the Air Force since its inception as an independent service.

(2) From fiscal year 1989 to fiscal year 2001, spending on Air Force science and technology programs dropped significantly, from $2,720,000,000 to $1,460,000,000 when measured in constant fiscal year 2001 dollars and from 2.2 percent to 1.7 percent when measured as a percentage of the total obligational authority of the Air Force.

(3) In recent years, the focus of Air Force science and technology has shifted to include a smaller percentage of long-term, revolutionary projects with the promise of significant payoff and a higher percentage of short-term projects with the possibility only of incremental technology advances.

(4) The steep decline over the last decade in spending on Air Force science and technology programs and the absence of long-term science and technology planning are the result of factors including:

(A) The Air Force organization has not included, at a sufficiently high level, a single official with clear responsibility for advocating the development of science and technology.

(B) The science and technology program has had inadequate visibility at the highest levels of Air Force decisionmaking.

(C) The Air Force does not have a planning process that clearly links long-term warfighting requirements with planning for science and technology development within the budget planning process.

(D) The methodologies used to determine the overall budgetary requirements for Air Force science and technology programs and to prioritize among those programs are ineffective.

(5) The decline in Air Force science and technology development will likely diminish national security in the future, because important technologies may be unavailable to be incorporated into weapon systems.

(6) In recent years, Congress has made efforts to reverse the decline in Air Force science and technology development by appropriating greater amounts for such development than requested in the budget submitted by the President.

(7) The Air Force is in the process of making fundamental changes in how it makes budgetary and nonbudgetary policy decisions with respect to its

science and technology development programs and how it carries out those programs.

(8) The Air Force has made a significant effort over the past two years to increase the emphasis on science and technology development by senior-level decisionmakers through the use of science and technology summits, applied technology councils, and a new advocacy process for science and technology.

(9) The Secretary of the Air Force has designated the commander of the Air Force Materiel Command with the grade of general as the budget advocate for science and technology programs.

(10) The Secretary of the Air Force has implemented a new planning process for science and technology development that is linked to the Air Force Strategic Plan.

(11) The Air Force is, in a good faith effort, conducting a comprehensive review of the long-term challenges and short-term objectives of the Air Force science and technology programs, as specified in section 252 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted by Public Law 106–398; 114 Stat. 1654A–46).

(12) Despite the recent Air Force efforts, additional measures are needed to ensure that advocacy

for Air Force science and technology development is at its highest and that planning and technology investment prioritization is at its best.

SEC. 3. SCIENCE AND TECHNOLOGY INVESTMENT AND DEVELOPMENT PLANNING.

(a) SENSE OF CONGRESS.—It is the sense of Congress that the Secretary of the Air Force should carry out each of the following:

(1) Continue and improve efforts to ensure that—

(A) the Air Force science and technology community is represented, and the recommendations of that community are considered, at all levels of program planning and budgetary decisionmaking within the Air Force;

(B) advocacy for science and technology development is institutionalized across all levels of Air Force management in a manner that is not dependent on individuals; and

(C) the value of Air Force science and technology development is made increasingly apparent to the warfighters, by linking the needs of those warfighters with decisions on science and technology development.

(2) Complete and adopt the policy directive that provides for changes in how the Air Force makes budgetary and nonbudgetary decisions with respect to its science and technology development programs and how it carries out those programs.

(3) At least once every five years, conduct a review of the long-term challenges and short-term objectives of the Air Force science and technology programs that is consistent with the review specified in section 252 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted by Public Law 106–398; 114 Stat. 1654A–46).

(4) Ensure that development and science and technology planning and investment activities are carried out for future space warfighting systems and for future nonspace warfighting systems in an integrated manner.

(b) REINSTATEMENT OF DEVELOPMENT PLANNING.—(1) The Secretary of the Air Force shall reinstate and implement a revised development planning process that provides for each of the following:

(A) Coordinating the needs of Air Force warfighters with decisions on science and technology development.

(B) Giving input into the establishment of priorities among science and technology programs.

(C) Analyzing Air Force capability options for the allocation of Air Force resources.

(D) Developing concepts for technology, warfighting systems, and operations with which the Air Force can achieve its critical future goals.

(E) Evaluating concepts for systems and operations that leverage technology across Air Force organizational boundaries.

(F) Ensuring that a ''system-of-systems'' approach is used in carrying out the various Air Force capability planning exercises.

(G) Utilizing existing analysis capabilities within the Air Force product centers in a collaborative and integrated manner.

(2) Not later than one year after the date of the enactment of this Act, the Secretary of the Air Force shall submit to Congress a report on the implementation of the planning process required by paragraph (1).

(3) There are authorized to be appropriated to carry out paragraph (1) $20,000,000 for each fiscal year beginning with fiscal year 2002.

SEC. 4. STUDY AND REPORT ON EFFECTIVENESS OF AIR FORCE SCIENCE AND TECHNOLOGY PROGRAM CHANGES.

(a) REQUIREMENT.—The Secretary of the Air Force, in cooperation with the National Research Council of the National Academy of Sciences, shall carry out a study to determine how the changes to the Air Force science and technology program implemented during the past two years affect the future capabilities of the Air Force.

(b) MATTERS STUDIED.—(1) The study shall independently review and assess whether such changes as a whole are sufficient to ensure the following:

(A) The concerns about the management of the science and technology program that have been raised by the Congress, the Defense Science Board, the Air Force Science Advisory Board, and the Air Force Association have been adequately addressed.

(B) Appropriate and sufficient technology is available to ensure the military superiority of the United States and counter future high-risk threats.

(C) The science and technology investments are balanced to meet the near-, mid-, and long-term needs of the Air Force.

(D) Technologies are made available that can be used to respond flexibly and quickly to a wide range of future threats.

(E) The Air Force organizational structure provides for a sufficiently senior level, effective advocate of science and technology to ensure an on-going presence of the science and technology community during the budget and planning process.

(2) In addition, the study shall independently assess the specific changes as follows:

(A) Whether the biannual science and technology summits provide sufficient visibility into, and understanding and appreciation of, the value of the science and technology program to the senior level of Air Force budget and policy decisionmakers.

(B) Whether the Applied Technology Councils are effective in contributing the input of all levels beneath the senior leadership into the coordination, focus, and content of the science and technology program.

(C) Whether the designation of the Commander of the Air Force Materiel Command as the science and technology budget advocate is effective to assure that an adequate budget top line is set.

(D) Whether the revised development planning process is effective to aid in the coordination of the needs of the Air Force warfighters with decisions on science and technology investments and the estab-

lishment of priorities among different science and technology programs.

(E) Whether the implementation of section 252 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted into law by Public Law 106–398; 114 Stat. 1654A–46) is effective to identify the basis for the appropriate science and technology program top line and investment portfolio.

(c) REPORT.—Not later than 60 days after the date on which the study required by subsection (a) is completed, the Secretary of the Air Force shall submit to Congress the results of the study.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $950,000.

SEC. 5. GRADE OF DEPUTY ASSISTANT SECRETARY.

It is the sense of Congress that the Deputy Assistant Secretary of the Air Force, Science, Technology, and Engineering, shall be paid at the highest rate of basic pay payable for a member of the Senior Executive Service.

○