

General determines that the appointment of a special counsel is in the public interest.

Mr. GORTON. I object to further proceedings on this bill at this time.

The PRESIDING OFFICER. The bill will be placed on the calendar.

AUTHORIZING TESTIMONY BY SENATE EMPLOYEE

Mr. GORTON. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of S. Res. 162 submitted earlier today by Senators LOTT and DASCHLE.

The PRESIDING OFFICER. The clerk will report the bill by title.

The legislative clerk read as follows:

A resolution (S. Res. 162) to authorize the testimony of employee of the Senate in *State of New Mexico v. Felix Lucero Chavez*.

There being no objection, the Senate proceeded to consider the resolution.

Mr. GORTON. Mr. President, I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, the motion to reconsider be laid upon the table, and that any statements relating to the resolution be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 162) was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

S. RES. 162

Whereas, in the case of *State of New Mexico v. Felix Lucero Chavez*, No. CR 4646-99, pending in the Metropolitan Court for Bernalillo County, New Mexico, a subpoena has been served on Kristen Ludecke, an employee of the Senate;

Whereas, by the privileges of the Senate of the United States and Rule XI of the Standing Rules of the Senate, no evidence under the control or in the possession of the Senate may, by the judicial process, be taken from such control or possession but by permission of the Senate;

Whereas, when it appears that evidence under the control or in the possession of the Senate may promote the administration of justice, the Senate will take such action as will promote the ends of justice consistently with the privileges of the Senate: Now, therefore, be it

Resolved, That Kristen Ludecke is authorized to testify in the case of *State of New Mexico v. Felix Lucero Chavez*, except concerning matters for which a privilege should be asserted.

Mr. LOTT. Mr. President, this resolution concerns a request for testimony in a criminal action brought by the State of New Mexico against a resident of Bernalillo County. The State charges that, during an attempt by the Bernalillo County Sheriff's Department and juvenile probation office to execute a bench warrant for the arrest of a juvenile, as part of a law enforcement program called "Operation Night Light," the defendant created a public disturbance and obstructed the Sheriff's deputies.

An employee on Senator BINGAMAN's staff, Kristen Ludecke, was accompanying the Senator the night of this

incident on a ride-along with the Sheriff's Department to observe the Operation Night Light program. The Sheriff's Department is requesting that Ms. Ludecke testify at the hearing in this case, scheduled for August 2, about what she observed during the ride-along.

This resolution would accordingly authorize Ms. Ludecke to testify in this matter.

FEDERAL RESEARCH INVESTMENT ACT

Mr. GORTON. Mr. President, I ask unanimous consent that the Senate now proceed to the consideration of Calendar No. 205, S. 296.

The PRESIDING OFFICER. The clerk will report the bill by title.

The legislative clerk read as follows:

A bill (S. 296) to provide for continuation of the Federal research investment in a fiscally sustainable way, and for other purposes, which had been reported from the Committee on Commerce, Science, and Transportation, with amendments, as follows:

(The parts of the bill intended to be stricken are shown in boldface brackets and the parts of the bill intended to be inserted are shown in italic.)

S. 296

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 "Federal Research Investment Act".

SEC. 2. GENERAL FINDINGS REGARDING FEDERAL INVESTMENT IN RESEARCH.

(a) VALUE OF RESEARCH AND DEVELOPMENT.—The Congress makes the following findings with respect to the value of research and development to the United States:

(1) Federal investment in research has resulted in the development of technology that saved lives in the United States and around the world.

(2) Research and development investment across all Federal agencies has been effective in creating technology that has enhanced the American quality of life.

(3) The Federal investment in research and development conducted or underwritten by both military and civilian agencies has produced benefits that have been felt in both the private and public sector.

(4) Discoveries across the spectrum of scientific inquiry have the potential to raise the standard of living and the quality of life for all Americans.

(5) Science, engineering, and technology play a critical role in shaping the modern world.

(6) Studies show that about half of all United States post-World War II economic growth is a direct result of technical innovation; and science, engineering, and technology contribute to the creation of new goods and services, new jobs and new capital.

(7) Technical innovation is the principal driving force behind the long-term economic growth and increased standards of living of the world's modern industrial societies. Other nations are well aware of the pivotal role of science, engineering, and technology, and they are seeking to exploit it wherever possible to advance their own global competitiveness.

(8) Federal programs for investment in research, which lead to technological innova-

tion and result in economic growth, should be structured to address current funding disparities and develop enhanced capability in States and regions that currently under-participate in the national science and technology enterprise.

(b) STATUS OF THE FEDERAL INVESTMENT.—The Congress makes the following findings with respect to the status of the Federal investment in research and development activities:

(1) Federal investment of approximately 13 to 14 percent of the Federal discretionary budget in research and development over the past 11 years has resulted in a doubling of the nominal amount of Federal funding.

(2) Fiscal realities now challenge Congress to steer the Federal government's role in science, engineering, and technology in a manner that ensures a prudent use of limited public resources. There is both a long-term problem—addressing the ever-increasing level of mandatory spending—and a near-term challenge—apportioning a dwindling amount of discretionary funding to an increasing range of targets in science, engineering, and technology. This confluence of increased national dependency on technology, increased targets of opportunity, and decreased fiscal flexibility has created a problem of national urgency. Many indicators show that more funding for science, engineering, and technology is needed but, even with increased funding, priorities must be established among different programs. The United States cannot afford the luxury of fully funding all deserving programs.

(3) Current projections of Federal research funding show a downward trend.

SEC. 3. SPECIAL FINDINGS REGARDING HEALTH-RELATED RESEARCH.

The Congress makes the following findings with respect to health-related research:

(1) HEALTH AND ECONOMIC BENEFITS PROVIDED BY HEALTH-RELATED RESEARCH.—*Because of health-related research, cures for many debilitating and fatal diseases have been discovered and deployed. At present, the medical research community is on the cusp of creating cures for a number of leading diseases and their associated burdens. In particular, medical research has the potential to develop treatments that can help manage the escalating costs associated with the aging of the United States population.*

(2) FUNDING OF HEALTH-RELATED RESEARCH.—*Many studies have recognized that clinical and basic science are in a state of crisis because of a failure of resources to meet the opportunity. Consequently, health-related research has emerged as a national priority and has been given significantly increased funding by Congress in fiscal year 1999. In order to continue addressing this urgent national need, the pattern of substantial budgetary expansion begun in fiscal year 1999 should be maintained.*

(3) INTERDISCIPLINARY NATURE OF HEALTH-RELATED RESEARCH.—*Because all fields of science and engineering are interdependent, full realization of the nation's historic investment in health will depend on major advances both in the biomedical sciences and in other science and engineering disciplines. Hence, the vitality of all disciplines must be preserved, even as special considerations are given to the health research field.*

[SEC. 4.] SEC. 4. ADDITIONAL FINDINGS REGARDING THE LINK BETWEEN THE RESEARCH PROCESS AND USEFUL TECHNOLOGY.

The Congress makes the following findings:

(1) FLOW OF SCIENCE, ENGINEERING, AND TECHNOLOGY.—The process of science, engineering, and technology involves many steps. The present Federal science, engineering, and technology structure reinforces the increasingly artificial distinctions between basic and applied activities. The result too often is a set of discrete programs that each

support a narrow phase of research or development and are not coordinated with one another. The government should maximize its investment by encouraging the progression of science, engineering, and technology from the earliest stages of research up to a pre-commercialization stage, through funding agencies and vehicles appropriate for each stage. This creates a flow of technology, subject to merit review at each stage, so that promising technology is not lost in a bureaucratic maze.

(2) EXCELLENCE IN THE AMERICAN RESEARCH INFRASTRUCTURE.—Federal investment in science, engineering, and technology programs must foster a close relationship between research and education. Investment in research at the university level creates more than simply world-class research. It creates world-class researchers as well. The Federal strategy must continue to reflect this commitment to a strong geographically-diverse research infrastructure. Furthermore, the United States must find ways to extend the excellence of its university system to primary and secondary educational institutions and to better utilize the community college system to prepare many students for vocational opportunities in an increasingly technical workplace.

(3) COMMITMENT TO A BROAD RANGE OF RESEARCH INITIATIVES.—An increasingly common theme in many recent technical breakthroughs has been the importance of revolutionary innovations that were sparked by overlapping of research disciplines. The United States must continue to encourage this trend by providing and encouraging opportunities for interdisciplinary projects that foster collaboration among fields of research.

(4) PARTNERSHIPS AMONG INDUSTRY, UNIVERSITIES, AND FEDERAL LABORATORIES.—Each of these contributors to the national science and technology delivery system has special talents and abilities that complement the others. In addition, each has a central mission that must provide their focus and each has limited resources. The nation's investment in science, engineering, and technology can be optimized by seeking opportunities for leveraging the resources and talents of these three major players through partnerships that do not distort the missions of each partner. For that reason, Federal dollars are wisely spent forming such partnerships.

[SEC. 4.] SEC. 5. MAINTENANCE OF FEDERAL RESEARCH EFFORT; GUIDING PRINCIPLES.

(a) MAINTAINING UNITED STATES LEADERSHIP IN SCIENCE, ENGINEERING, AND TECHNOLOGY.—It is imperative for the United States to nurture its superb resources in science, engineering, and technology carefully in order to maintain its own globally competitive position.

(b) GUIDING PRINCIPLES.—Federal research and development programs should be conducted in accordance with the following guiding principles:

(1) GOOD SCIENCE.—Federal science, engineering, and technology programs include both knowledge-driven science together with its applications, and mission-driven, science-based requirements. In general, both types of programs must be focused, peer- and merit-reviewed, and not unnecessarily duplicative, although the details of these attributes must vary with different program objectives.

(2) FISCAL ACCOUNTABILITY.—The Congress must exercise oversight to ensure that programs funded with scarce Federal dollars are well managed. The United States cannot tolerate waste of money through inefficient management techniques, whether by government agencies, by contractors, or by Congress itself. Fiscal resources would be better utilized if program and project funding levels

were predictable across several years to enable better project planning; a benefit of such predictability would be that agencies and Congress can better exercise oversight responsibilities through comparisons of a project's and program's progress against carefully planned milestones.

(3) PROGRAM EFFECTIVENESS.—The United States needs to make sure that government programs achieve their goals. As the Congress crafts science, engineering, and technology legislation, it must include a process for gauging program effectiveness, selecting criteria based on sound scientific judgment and avoiding unnecessary bureaucracy. The Congress should also avoid the trap of measuring the effectiveness of a broad science, engineering, and technology program by passing judgment on individual projects. Lastly, the Congress must recognize that a negative result in a well-conceived and executed project or program may still be critically important to the funding agency.

(4) CRITERIA FOR GOVERNMENT FUNDING.—Program selection for Federal funding should continue to reflect the nation's 2 traditional research and development priorities: (A) basic, scientific, and technological research that represents investments in the nation's long-term future scientific and technological capacity, for which government has traditionally served as the principle resource; and (B) mission research investments, that is, investments in research that derive from necessary public functions, such as defense, health, education, environmental protection, and raising the standard of living, which may include pre-commercial, pre-competitive engineering research and technology development. Additionally, government funding should not compete with or displace the short-term, market-driven, and typically more specific nature of private-sector funding. Government funding should be restricted to pre-competitive activities, leaving competitive activities solely for the private sector. As a rule, the government should not invest in commercial technology that is in the product development stage, very close to the broad commercial marketplace, except to meet a specific agency goal. When the government provides funding for any science, engineering, and technology investment program, it must take reasonable steps to ensure that the potential benefits derived from the program will accrue broadly.

[SEC. 5.] SEC. 6. POLICY STATEMENT.

[(a) POLICY.—This Act is intended—

[(1) to encourage, as an overall goal, the doubling of the annual authorized amount of Federal funding for basic scientific, medical, and pre-competitive engineering research over the 11-year period following the date of enactment of this Act;

[(2) to invest in the future of the United States and the people of the United States by expanding the research activities referred to in paragraph (1);

[(3) to enhance the quality of life for all people of the United States;

[(4) to guarantee the leadership of the United States in science, engineering, medicine, and technology; and

[(5) to ensure that the opportunity and the support for undertaking good science is widely available throughout the States by supporting a geographically-diverse research and development enterprise.]

(a) POLICY.— This Act is intended to—

(1) assure a base level of Federal funding for basic scientific, biomedical, and pre-competitive engineering research, with this base level defined as a doubling of Federal basic research funding over the 11 year period following the date of enactment of this Act;

(2) invest in the future economic growth of the United States by expanding the research activities referred to in paragraph (1);

(3) enhance the quality of life and health for all people of the United States through expanded support for health-related research;

(4) allow for accelerated growth of agencies such as the National Institutes of Health to meet critical national needs;

(5) guarantee the leadership of the United States in science, engineering, medicine, and technology; and

(6) ensure that the opportunity and the support for undertaking good science is widely available throughout the United States by supporting a geographically-diverse research and development enterprise.

(b) AGENCIES COVERED.—The agencies intended to be covered to the extent that they are engaged in science, engineering, and technology activities for basic scientific, medical, or pre-competitive engineering research by this Act are—

(1) the National Institutes of Health, within the Department of Health and Human Services;

(2) the National Science Foundation;

(3) the National Institute for Standards and Technology, within the Department of Commerce;

(4) the National Aeronautics and Space Administration;

(5) the National Oceanic and Atmospheric Administration, within the Department of Commerce;

(6) the Centers for Disease Control, within the Department of Health and Human Services;

(7) the Department of Energy (to the extent that it is not engaged in defense-related activities);

(8) the Department of Agriculture;

(9) the Department of Transportation;

(10) the Department of the Interior;

(11) the Department of Veterans Affairs;

(12) the Smithsonian Institution;

(13) the Department of Education;

(14) the Environmental Protection Agency; and

(15) the [Federal] Food and Drug Administration, within the Department of Health and Human Services.

[(c) CURRENT INVESTMENT.—The investment in civilian research and development efforts for fiscal year 1998 was 2.1 percent of the overall Federal budget.]

[(d) (c) DAMAGE TO RESEARCH INFRASTRUCTURE.—A continued trend of funding appropriations equal to or lower than current budgetary levels will lead to permanent damage to the United States research infrastructure. This could threaten American dominance of high-technology industrial leadership.

[(e) INCREASE FUNDING.—In order to maintain and enhance the economic strength of the United States in the world market, funding levels for fundamental, scientific, and pre-competitive engineering research should be increased to equal approximately 2.6 percent of the total annual budget.

[(f) (d) FUTURE FISCAL YEAR ALLOCATIONS.—

(1) GOALS.—The long-term strategy for research and development funding under this section would be achieved by a steady 2.5 percent annual increase above the rate of inflation throughout a 11-year period.

(2) INFLATION ASSUMPTION.—The authorizations contained in paragraph (3) assume that the rate of inflation for each year will be 3 percent.

(3) AUTHORIZATION.—There are authorized to be appropriated for civilian research and development in the agencies listed in subsection (b)—

(A) \$39,790,000,000 for fiscal year 2000;

(B) \$41,980,000,000 for fiscal year 2001;

- (C) \$42,290,000,000 for fiscal year 2002;
 (D) \$46,720,000,000 for fiscal year 2003;
 (E) [\$49,290,000,000] \$44,290,000,000 for fiscal year 2004;
 (F) \$52,000,000,000 for fiscal year 2005;
 (G) \$54,870,000,000 for fiscal year 2006;
 (H) \$57,880,000,000 for fiscal year 2007;
 (I) \$61,070,000,000 for fiscal year 2008;
 (J) \$64,420,000,000 for fiscal year 2009; and
 (K) \$67,970,000,000 for fiscal year 2010.

(4) ACCELERATION TO MEET NATIONAL NEEDS.—

(A) IN GENERAL.—If the amount appropriated for any fiscal year to an agency for the purposes stated in paragraph (3) increases by more than 8 percent over the amount appropriated to it for those purposes for the preceding fiscal year, then the amounts authorized by paragraph (3) for subsequent fiscal years for that agency and other agencies shall be determined under subparagraphs (B) and (C).

(B) EXCLUSION OF AGENCY IN DETERMINING OTHER AGENCY AMOUNTS FOR NEXT FISCAL YEAR.—For the next fiscal year after a fiscal year described in subparagraph (A), the amount authorized to be appropriated to other agencies under paragraph (3) shall be determined by excluding the agency described in subparagraph (A). Any amount that would, but for this subparagraph, be authorized to be appropriated to that agency shall not be appropriated.

(C) RESUMPTION OF REGULAR TREATMENT.—Notwithstanding subparagraph (B), an agency may not be excluded from the determination of the amount authorized to be appropriated under paragraph (3) for a fiscal year following a fiscal year for which the sum of the amounts appropriated to that agency for fiscal year 2000 and all subsequent fiscal years for the purposes described in paragraph (3) does not exceed the sum of—

- (i) the amount appropriated to that agency for such purposes for fiscal year 2000; and
 (ii) the amounts that would have been appropriated for such purposes for subsequent fiscal years if the goal described in paragraph (1) had been met (and not exceeded) with respect to that agency's funding.

(D) NO LIMITATION ON OTHER FUNDING.—Nothing in this paragraph limits the amount that may be appropriated to any agency for the purposes described in paragraph (3).

[(g)] (e) CONFORMANCE WITH BUDGETARY CAPS.—Notwithstanding any other provision of law, no funds may be made available under this Act in a manner that does not conform with the discretionary spending caps provided in the most recently adopted concurrent resolution on the budget or threatens the economic stability of the annual budget.

[(h)] (f) BALANCED RESEARCH PORTFOLIO.—Because of the interdependent nature of the scientific and engineering disciplines, the aggregate funding levels authorized by the section assume that the Federal research portfolio will be well-balanced among the various scientific and engineering disciplines, and geographically dispersed throughout the States.

[SEC. 6.] SEC. 7. PRESIDENT'S ANNUAL BUDGET REQUEST.

The President of the United States shall, in coordination with the President's annual budget request, include a report that parallels Congress' commitment to support Federally-funded research and development by providing—

- (1) a detailed summary of the total level of funding for research and development programs throughout all civilian agencies;
 (2) a focused strategy that reflects the funding projections of this Act for each future fiscal year until 2010, including specific targets for each agency that funds civilian research and development;
 (3) an analysis which details funding levels across Federal agencies by methodology of funding, including grant agreements, pro-

urement contracts, and cooperative agreements (within the meaning given those terms in chapter 63 of title 31, United States Code); and

(4) specific proposals for infrastructure development and research and development capacity building in States with less concentrated research and development resources in order to create a nationwide research and development community.

[SEC. 7.] SEC. 8. COMPREHENSIVE ACCOUNTABILITY STUDY FOR FEDERALLY-FUNDED RESEARCH.

(a) STUDY.—The Director of the Office of Science and Technology Policy, in consultation with the Director of the Office of Management and Budget, shall enter into agreement with the National Academy of Sciences for the Academy to conduct a comprehensive study to develop methods for evaluating Federally-funded research and development programs. This study shall—

(1) recommend processes to determine an acceptable level of success for Federally-funded research and development programs by—

(A) describing the research process in the various scientific and engineering disciplines;

(B) describing in the different sciences what measures and what criteria each community uses to evaluate the success or failure of a program, and on what time scales these measures are considered reliable—both for exploratory long-range work and for short-range goals; and

(C) recommending how these measures may be adapted for use by the Federal government to evaluate Federally-funded research and development programs;

(2) assess the extent to which agencies incorporate independent merit-based review into the formulation of the strategic plans of funding agencies and if the quantity or quality of this type of input is unsatisfactory;

(3) recommend mechanisms for identifying Federally-funded research and development programs which are unsuccessful or unproductive;

(4) evaluate the extent to which independent, merit-based evaluation of Federally-funded research and development programs and projects achieves the goal of eliminating unsuccessful or unproductive programs and projects; and

(5) investigate and report on the validity of using quantitative performance goals for aspects of programs which relate to administrative management of the program and for which such goals would be appropriate, including aspects related to—

(A) administrative burden on contractors and recipients of financial assistance awards;

(B) administrative burdens on external participants in independent, merit-based evaluations;

(C) cost and schedule control for construction projects funded by the program;

(D) the ratio of overhead costs of the program relative to the amounts expended through the program for equipment and direct funding of research; and

(E) the timeliness of program responses to requests for funding, participation, or equipment use.

(6) examine the extent to which program selection for Federal funding across all agencies exemplifies our nation's historical research and development priorities—

(A) basic, scientific, and technological research in the long-term future scientific and technological capacity of the nation; and

(B) mission research derived from a high-priority public function.

(b) ALTERNATIVE FORMS FOR PERFORMANCE GOALS.—Not later than 6 months after transmitting the report under subsection (a) to Congress, the Director of the Office of Man-

agement and Budget, after public notice, public comment, and approval by the Director of the Office of Science and Technology Policy and in consultation with the National Science and Technology Council shall promulgate one or more alternative forms for performance goals under section 1115(b)(10)(B) of title 31, United States Code, based on the recommendations of the study under subsection (a) of this section. The head of each agency containing a program activity that is a research and development program may apply an alternative form promulgated under this section for a performance goal to such a program activity without further authorization by the Director of the Office of Management and Budget.

(c) STRATEGIC PLANS.—Not later than one year after promulgation of the alternative performance goals in subsection (b) of this section, the head of each agency carrying out research and development activities, upon updating or revising a strategic plan under subsection 306(b) of title 5, United States Code, shall describe the current and future use of methods for determining an acceptable level of success as recommended by the study under subsection (a).

(d) DEFINITIONS.—In this section:

(1) **DIRECTOR.**—The term "Director" means the Director of the Office of Science and Technology Policy.

(2) **PROGRAM ACTIVITY.**—The term "program activity" has the meaning given that term by section 1115(f)(6) of title 31, United States Code.

(3) **INDEPENDENT MERIT-BASED EVALUATION.**—The term "independent merit-based evaluation" means review of the scientific or technical quality of research or development, conducted by experts who are chosen for their knowledge of scientific and technical fields relevant to the evaluation and who—

(A) in the case of the review of a program activity, do not derive long-term support from the program activity; or

(B) in the case of the review of a project proposal, are not seeking funds in competition with the proposal.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out the study required by subsection (a) \$600,000 for the 18-month period beginning October 1, 2000.

[SEC. 8.] SEC. 9. PERFORMANCE ASSESSMENT PROGRAM FOR FEDERALLY-FUNDED RESEARCH.

(a) IN GENERAL.—Chapter 11 of title 31, United States Code, is amended by adding at the end thereof the following:

"§ 1120. Accountability for research and development programs

"(a) IDENTIFICATION OF UNSUCCESSFUL PROGRAMS.—Based upon program performance reports for each fiscal year submitted to the President under section 1116, the Director of the Office of Management and Budget shall identify the civilian research and development program activities, or components thereof, which do not meet an acceptable level of success as defined in section 1115(b)(1)(B). Not later than 30 days after the submission of the reports under section 1116, the Director shall furnish a copy of a report listing the program activities or component identified under this subsection to the President and the Congress.

"(b) ACCOUNTABILITY IF NO IMPROVEMENT SHOWN.—For each program activity or component that is identified by the Director under subsection (a) as being below the acceptable level of success for 2 fiscal years in a row, the head of the agency shall no later than 30 days after the Director submits the second report so identifying the program, submit to the appropriate congressional committees of jurisdiction:

“(1) a concise statement of the steps necessary to—

“(A) bring such program into compliance with performance goals; or

“(B) terminate such program should compliance efforts fail; and

“(2) any legislative changes needed to put the steps contained in such statement into effect.”.

(b) CONFORMING AMENDMENTS.—

(1) The chapter analysis for chapter 11 of title 31, United States Code, is amended by adding at the end thereof the following:

“1120. Accountability for research and development programs”.

(2) Section 1115(f) of title 31, United States Code, is amended by striking “through 1119,” and inserting “through 1120”.

There being no objection, the Senate proceeded to consider the bill.

Mr. GORTON. Mr. President, I ask unanimous consent that the committee amendments be agreed to.

The committee amendments were agreed to.

AMENDMENT NO. 1349

(Purpose: To provide minor technical changes)

Mr. GORTON. Mr. President, I send an amendment to the desk on behalf of Senator FRIST and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

The Senator from Washington [Mr. GORTON], for Mr. FRIST, for himself and Mr. ROCKEFELLER, proposes an amendment numbered 1349.

On page 15, line 15, strike “\$42,290,000,000” and insert “\$44,290,000,000”.

On page 15, line 17, strike “\$44,290,000,000” and insert “\$49,290,000,000”.

Mr. GORTON. Mr. President, I ask unanimous consent that the amendment be agreed to, the bill be read the third time, and passed, the motion to reconsider be laid upon the table, and that any statements relating to the bill appear in the RECORD.

The PRESIDING OFFICER. Without objection it is so ordered.

The amendment (No. 1349) was agreed to.

The bill (S. 296), as amended, was read the third time and passed, as follows:

S. 296

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 “Federal Research Investment Act”.

SEC. 2. GENERAL FINDINGS REGARDING FEDERAL INVESTMENT IN RESEARCH.

(a) VALUE OF RESEARCH AND DEVELOPMENT.—The Congress makes the following findings with respect to the value of research and development to the United States:

(1) Federal investment in research has resulted in the development of technology that saved lives in the United States and around the world.

(2) Research and development investment across all Federal agencies has been effective in creating technology that has enhanced the American quality of life.

(3) The Federal investment in research and development conducted or underwritten by both military and civilian agencies has pro-

duced benefits that have been felt in both the private and public sector.

(4) Discoveries across the spectrum of scientific inquiry have the potential to raise the standard of living and the quality of life for all Americans.

(5) Science, engineering, and technology play a critical role in shaping the modern world.

(6) Studies show that about half of all United States post-World War II economic growth is a direct result of technical innovation; and science, engineering, and technology contribute to the creation of new goods and services, new jobs and new capital.

(7) Technical innovation is the principal driving force behind the long-term economic growth and increased standards of living of the world’s modern industrial societies. Other nations are well aware of the pivotal role of science, engineering, and technology, and they are seeking to exploit it wherever possible to advance their own global competitiveness.

(8) Federal programs for investment in research, which lead to technological innovation and result in economic growth, should be structured to address current funding disparities and develop enhanced capability in States and regions that currently underparticipate in the national science and technology enterprise.

(b) STATUS OF THE FEDERAL INVESTMENT.—The Congress makes the following findings with respect to the status of the Federal Investment in research and development activities:

(1) Federal investment of approximately 13 to 14 percent of the Federal discretionary budget in research and development over the past 11 years has resulted in a doubling of the nominal amount of Federal funding.

(2) Fiscal realities now challenge Congress to steer the Federal government’s role in science, engineering, and technology in a manner that ensures a prudent use of limited public resources. There is both a long-term problem—addressing the ever-increasing level of mandatory spending—and a near-term challenge—apportioning a dwindling amount of discretionary funding to an increasing range of targets in science, engineering, and technology. This confluence of increased national dependency on technology, increased targets of opportunity, and decreased fiscal flexibility has created a problem of national urgency. Many indicators show that more funding for science, engineering, and technology is needed but, even with increased funding, priorities must be established among different programs. The United States cannot afford the luxury of fully funding all deserving programs.

(3) Current projections of Federal research funding show a downward trend.

SEC. 3. SPECIAL FINDINGS REGARDING HEALTH-RELATED RESEARCH.

The Congress makes the following findings with respect to health-related research:

(1) HEALTH AND ECONOMIC BENEFITS PROVIDED BY HEALTH-RELATED RESEARCH.—Because of health-related research, cures for many debilitating and fatal diseases have been discovered and deployed. At present, the medical research community is on the cusp of creating cures for a number of leading diseases and their associated burdens. In particular, medical research has the potential to develop treatments that can help manage the escalating costs associated with the aging of the United States population.

(2) FUNDING OF HEALTH-RELATED RESEARCH.—Many studies have recognized that clinical and basic science are in a state of crisis because of a failure of resources to meet the opportunity. Consequently, health-related research has emerged as a national priority and has been given significantly in-

creased funding by Congress in fiscal year 1999. In order to continue addressing this urgent national need, the pattern of substantial budgetary expansion begun in fiscal year 1999 should be maintained.

(3) INTERDISCIPLINARY NATURE OF HEALTH-RELATED RESEARCH.—Because all fields of science and engineering are interdependent, full realization of the nation’s historic investment in health will depend on major advances both in the biomedical sciences and in other science and engineering disciplines. Hence, the vitality of all disciplines must be preserved, even as special considerations are given to the health research field.

SEC. 4. ADDITIONAL FINDINGS REGARDING THE LINK BETWEEN THE RESEARCH PROCESS AND USEFUL TECHNOLOGY.

The Congress makes the following findings:

(1) FLOW OF SCIENCE, ENGINEERING, AND TECHNOLOGY.—The process of science, engineering, and technology involves many steps. The present Federal science, engineering, and technology structure reinforces the increasingly artificial distinctions between basic and applied activities. The result too often is a set of discrete programs that each support a narrow phase of research or development and are not coordinated with one another. The government should maximize its investment by encouraging the progression of science, engineering, and technology from the earliest stages of research up to a pre-commercialization stage, through funding agencies and vehicles appropriate for each stage. This creates a flow of technology, subject to merit review at each stage, so that promising technology is not lost in a bureaucratic maze.

(2) EXCELLENCE IN THE AMERICAN RESEARCH INFRASTRUCTURE.—Federal investment in science, engineering, and technology programs must foster a close relationship between research and education. Investment in research at the university level creates more than simply world-class research. It creates world-class researchers as well. The Federal strategy must continue to reflect this commitment to a strong geographically-diverse research infrastructure. Furthermore, the United States must find ways to extend the excellence of its university system to primary and secondary educational institutions and to better utilize the community college system to prepare many students for vocational opportunities in an increasingly technical workplace.

(3) COMMITMENT TO A BROAD RANGE OF RESEARCH INITIATIVES.—An increasingly common theme in many recent technical breakthroughs has been the importance of revolutionary innovations that were sparked by overlapping of research disciplines. The United States must continue to encourage this trend by providing and encouraging opportunities for interdisciplinary projects that foster collaboration among fields of research.

(4) PARTNERSHIPS AMONG INDUSTRY, UNIVERSITIES, AND FEDERAL LABORATORIES.—Each of these contributors to the national science and technology delivery system has special talents and abilities that complement the others. In addition, each has a central mission that must provide their focus and each has limited resources. The nation’s investment in science, engineering, and technology can be optimized by seeking opportunities for leveraging the resources and talents of these three major players through partnerships that do not distort the missions of each partner. For that reason, Federal dollars are wisely spent forming such partnerships.

SEC. 5. MAINTENANCE OF FEDERAL RESEARCH EFFORT; GUIDING PRINCIPLES.

(a) MAINTAINING UNITED STATES LEADERSHIP IN SCIENCE, ENGINEERING, AND TECHNOLOGY.—It is imperative for the United States to nurture its superb resources in science, engineering, and technology carefully in order to maintain its own globally competitive position.

(b) GUIDING PRINCIPLES.—Federal research and development programs should be conducted in accordance with the following guiding principles:

(1) GOOD SCIENCE.—Federal science, engineering, and technology programs include both knowledge-driven science together with its applications, and mission-driven, science-based requirements. In general, both types of programs must be focused, peer- and merit-reviewed, and not unnecessarily duplicative, although the details of these attributes must vary with different program objectives.

(2) FISCAL ACCOUNTABILITY.—The Congress must exercise oversight to ensure that programs funded with scarce Federal dollars are well managed. The United States cannot tolerate waste of money through inefficient management techniques, whether by government agencies, by contractors, or by Congress itself. Fiscal resources would be better utilized if program and project funding levels were predictable across several years to enable better project planning; a benefit of such predictability would be that agencies and Congress can better exercise oversight responsibilities through comparisons of a project's and program's progress against carefully planned milestones.

(3) PROGRAM EFFECTIVENESS.—The United States needs to make sure that government programs achieve their goals. As the Congress crafts science, engineering, and technology legislation, it must include a process for gauging program effectiveness, selecting criteria based on sound scientific judgment and avoiding unnecessary bureaucracy. The Congress should also avoid the trap of measuring the effectiveness of a broad science, engineering, and technology program by passing judgment on individual projects. Lastly, the Congress must recognize that a negative result in a well-conceived and executed project or program may still be critically important to the funding agency.

(4) CRITERIA FOR GOVERNMENT FUNDING.—Program selection for Federal funding should continue to reflect the nation's 2 traditional research and development priorities: (A) basic, scientific, and technological research that represents investments in the nation's long-term future scientific and technological capacity, for which government has traditionally served as the principle resource; and (B) mission research investments, that is, investments in research that derive from necessary public functions, such as defense, health, education, environmental protection, and raising the standard of living, which may include pre-commercial, pre-competitive engineering research and technology development. Additionally, government funding should not compete with or displace the short-term, market-driven, and typically more specific nature of private-sector funding. Government funding should be restricted to pre-competitive activities, leaving competitive activities solely for the private sector. As a rule, the government should not invest in commercial technology that is in the product development stage, very close to the broad commercial marketplace, except to meet a specific agency goal. When the government provides funding for any science, engineering, and technology investment program, it must take reasonable steps to ensure that the potential benefits derived from the program will accrue broadly.

SEC. 6. POLICY STATEMENT.

(a) POLICY.—This Act is intended to—

(1) assure a base level of Federal funding for basic scientific, biomedical, and pre-competitive engineering research, with this base level defined as a doubling of Federal basic research funding over the 11 year period following the date of enactment of this Act;

(2) invest in the future economic growth of the United States by expanding the research activities referred to in paragraph (1);

(3) enhance the quality of life and health for all people of the United States through expanded support for health-related research;

(4) allow for accelerated growth of agencies such as the National Institutes of Health to meet critical national needs;

(5) guarantee the leadership of the United States in science, engineering, medicine, and technology; and

(6) ensure that the opportunity and the support for undertaking good science is widely available throughout the United States by supporting a geographically-diverse research and development enterprise.

(b) AGENCIES COVERED.—The agencies intended to be covered to the extent that they are engaged in science, engineering, and technology activities for basic scientific, medical, or pre-competitive engineering research by this Act are—

(1) the National Institutes of Health, within the Department of Health and Human Services;

(2) the National Science Foundation;

(3) the National Institute for Standards and Technology, within the Department of Commerce;

(4) the National Aeronautics and Space Administration;

(5) the National Oceanic and Atmospheric Administration, within the Department of Commerce;

(6) the Centers for Disease Control, within the Department of Health and Human Services;

(7) the Department of Energy (to the extent that it is not engaged in defense-related activities);

(8) the Department of Agriculture;

(9) the Department of Transportation;

(10) the Department of the Interior;

(11) the Department of Veterans Affairs;

(12) the Smithsonian Institution;

(13) the Department of Education;

(14) the Environmental Protection Agency; and

(15) the Food and Drug Administration, within the Department of Health and Human Services.

(c) DAMAGE TO RESEARCH INFRASTRUCTURE.—A continued trend of funding appropriations equal to or lower than current budgetary levels will lead to permanent damage to the United States research infrastructure. This could threaten American dominance of high-technology industrial leadership.

(d) FUTURE FISCAL YEAR ALLOCATIONS.—

(1) GOALS.—The long-term strategy for research and development funding under this section would be achieved by a steady 2.5 percent annual increase above the rate of inflation throughout a 11-year period.

(2) INFLATION ASSUMPTION.—The authorizations contained in paragraph (3) assume that the rate of inflation for each year will be 3 percent.

(3) AUTHORIZATION.—There are authorized to be appropriated for civilian research and development in the agencies listed in subsection (b)—

(A) \$39,790,000,000 for fiscal year 2000;

(B) \$41,980,000,000 for fiscal year 2001;

(C) \$44,290,000,000 for fiscal year 2002;

(D) \$46,720,000,000 for fiscal year 2003;

(E) \$49,290,000,000 for fiscal year 2004;

(F) \$52,000,000,000 for fiscal year 2005;

(G) \$54,870,000,000 for fiscal year 2006;

(H) \$57,880,000,000 for fiscal year 2007;

(I) \$61,070,000,000 for fiscal year 2008;

(J) \$64,420,000,000 for fiscal year 2009; and

(K) \$67,970,000,000 for fiscal year 2010.

(4) ACCELERATION TO MEET NATIONAL NEEDS.—

(A) IN GENERAL.—If the amount appropriated for any fiscal year to an agency for the purposes stated in paragraph (3) increases by more than 8 percent over the amount appropriated to it for those purposes for the preceding fiscal year, then the amounts authorized by paragraph (3) for subsequent fiscal years for that agency and other agencies shall be determined under subparagraphs (B) and (C).

(B) EXCLUSION OF AGENCY IN DETERMINING OTHER AGENCY AMOUNTS FOR NEXT FISCAL YEAR.—For the next fiscal year after a fiscal year described in subparagraph (A), the amount authorized to be appropriated to other agencies under paragraph (3) shall be determined by excluding the agency described in subparagraph (A). Any amount that would, but for this subparagraph, be authorized to be appropriated to that agency shall not be appropriated.

(C) RESUMPTION OF REGULAR TREATMENT.—Notwithstanding subparagraph (B), an agency may not be excluded from the determination of the amount authorized to be appropriated under paragraph (3) for a fiscal year following a fiscal year for which the sum of the amounts appropriated to that agency for fiscal year 2000 and all subsequent fiscal years for the purposes described in paragraph (3) does not exceed the sum of—

(i) the amount appropriated to that agency for such purposes for fiscal year 2000; and

(ii) the amounts that would have been appropriated for such purposes for subsequent fiscal years if the goal described in paragraph (1) had been met (and not exceeded) with respect to that agency's funding.

(D) NO LIMITATION ON OTHER FUNDING.—Nothing in this paragraph limits the amount that may be appropriated to any agency for the purposes described in paragraph (3).

(e) CONFORMANCE WITH BUDGETARY CAPS.—Notwithstanding any other provision of law, no funds may be made available under this Act in a manner that does not conform with the discretionary spending caps provided in the most recently adopted concurrent resolution on the budget or threatens the economic stability of the annual budget.

(f) BALANCED RESEARCH PORTFOLIO.—Because of the interdependent nature of the scientific and engineering disciplines, the aggregate funding levels authorized by the section assume that the Federal research portfolio will be well-balanced among the various scientific and engineering disciplines, and geographically dispersed throughout the States.

SEC. 7. PRESIDENT'S ANNUAL BUDGET REQUEST.

The President of the United States shall, in coordination with the President's annual budget request, include a report that parallels Congress' commitment to support federally-funded research and development by providing—

(1) a detailed summary of the total level of funding for research and development programs throughout all civilian agencies;

(2) a focused strategy that reflects the funding projections of this Act for each future fiscal year until 2010, including specific targets for each agency that funds civilian research and development;

(3) an analysis which details funding levels across Federal agencies by methodology of funding, including grant agreements, procurement contracts, and cooperative agreements (within the meaning given those

terms in chapter 63 of title 31, United States Code; and

(4) specific proposals for infrastructure development and research and development capacity building in States with less concentrated research and development resources in order to create a nationwide research and development community.

SEC. 8. COMPREHENSIVE ACCOUNTABILITY STUDY FOR FEDERALLY-FUNDED RESEARCH.

(a) **STUDY.**—The Director of the Office of Science and Technology Policy, in consultation with the Director of the Office of Management and Budget, shall enter into agreement with the National Academy of Sciences for the Academy to conduct a comprehensive study to develop methods for evaluating federally-funded research and development programs. This study shall—

(1) recommend processes to determine an acceptable level of success for federally-funded research and development programs by—

(A) describing the research process in the various scientific and engineering disciplines;

(B) describing in the different sciences what measures and what criteria each community uses to evaluate the success or failure of a program, and on what time scales these measures are considered reliable—both for exploratory long-range work and for short-range goals; and

(C) recommending how these measures may be adapted for use by the Federal government to evaluate federally-funded research and development programs;

(2) assess the extent to which agencies incorporate independent merit-based review into the formulation of the strategic plans of funding agencies and if the quantity or quality of this type of input is unsatisfactory;

(3) recommend mechanisms for identifying federally-funded research and development programs which are unsuccessful or unproductive;

(4) evaluate the extent to which independent, merit-based evaluation of federally-funded research and development programs and projects achieves the goal of eliminating unsuccessful or unproductive programs and projects; and

(5) investigate and report on the validity of using quantitative performance goals for aspects of programs which relate to administrative management of the program and for which such goals would be appropriate, including aspects related to—

(A) administrative burden on contractors and recipients of financial assistance awards;

(B) administrative burdens on external participants in independent, merit-based evaluations;

(C) cost and schedule control for construction projects funded by the program;

(D) the ratio of overhead costs of the program relative to the amounts expended through the program for equipment and direct funding of research; and

(E) the timeliness of program responses to requests for funding, participation, or equipment use.

(6) examine the extent to which program selection for Federal funding across all agencies exemplifies our nation's historical research and development priorities—

(A) basic, scientific, and technological research in the long-term future scientific and technological capacity of the nation; and

(B) mission research derived from a high-priority public function.

(b) **ALTERNATIVE FORMS FOR PERFORMANCE GOALS.**—Not later than 6 months after transmitting the report under subsection (a) to Congress, the Director of the Office of Management and Budget, after public notice, public comment, and approval by the Director of the Office of Science and Technology

Policy and in consultation with the National Science and Technology Council shall promulgate one or more alternative forms for performance goals under section 1115(b)(10)(B) of title 31, United States Code, based on the recommendations of the study under subsection (a) of this section. The head of each agency containing a program activity that is a research and development program may apply an alternative form promulgated under this section for a performance goal to such a program activity without further authorization by the Director of the Office of Management and Budget.

(c) **STRATEGIC PLANS.**—Not later than one year after promulgation of the alternative performance goals in subsection (b) of this section, the head of each agency carrying out research and development activities, upon updating or revising a strategic plan under subsection 306(b) of title 5, United States Code, shall describe the current and future use of methods for determining an acceptable level of success as recommended by the study under subsection (a).

(d) **DEFINITIONS.**—In this section:

(1) **DIRECTOR.**—The term "Director" means the Director of the Office of Science and Technology Policy.

(2) **PROGRAM ACTIVITY.**—The term "program activity" has the meaning given that term by section 1115(f)(6) of title 31, United States Code.

(3) **INDEPENDENT MERIT-BASED EVALUATION.**—The term "independent merit-based evaluation" means review of the scientific or technical quality of research or development, conducted by experts who are chosen for their knowledge of scientific and technical fields relevant to the evaluation and who—

(A) in the case of the review of a program activity, do not derive long-term support from the program activity; or

(B) in the case of the review of a project proposal, are not seeking funds in competition with the proposal.

(e) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out the study required by subsection (a) \$600,000 for the 18-month period beginning October 1, 2000.

SEC. 9. EFFECTIVE PERFORMANCE ASSESSMENT PROGRAM FOR FEDERALLY-FUNDED RESEARCH.

(a) **IN GENERAL.**—Chapter 11 of title 31, United States Code, is amended by adding at the end thereof the following:

"§ 1120. Accountability for research and development programs

"(a) IDENTIFICATION OF UNSUCCESSFUL PROGRAMS.—Based upon program performance reports for each fiscal year submitted to the President under section 1116, the Director of the Office of Management and Budget shall identify the civilian research and development program activities, or components thereof, which do not meet an acceptable level of success as defined in section 1115(b)(1)(B). Not later than 30 days after the submission of the reports under section 1116, the Director shall furnish a copy of a report listing the program activities or component identified under this subsection to the President and the Congress.

"(b) ACCOUNTABILITY IF NO IMPROVEMENT SHOWN.—For each program activity or component that is identified by the Director under subsection (a) as being below the acceptable level of success for 2 fiscal years in a row, the head of the agency shall no later than 30 days after the Director submits the second report so identifying the program, submit to the appropriate congressional committees of jurisdiction:

"(1) a concise statement of the steps necessary to—

"(A) bring such program into compliance with performance goals; or

"(B) terminate such program should compliance efforts fail; and

"(2) any legislative changes needed to put the steps contained in such statement into effect."

(b) **CONFORMING AMENDMENTS.**—

(1) The chapter analysis for chapter 11 of title 31, United States Code, is amended by adding at the end thereof the following:

"1120. Accountability for research and development programs"

(2) Section 1115(f) of title 31, United States Code, is amended by striking "through 1119," and inserting "through 1120".

DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS ACT, 2000—Resumed

AMENDMENTS NOS. 1350 THROUGH 1353, EN BLOC

Mr. GORTON. Mr. President, I ask unanimous consent that four amendments at the desk to S. 1217 be agreed to, and that the motion to reconsider be laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendments (Nos. 1350 through 1353) were agreed to, as follows:

AMENDMENT NO. 1350

(Purpose: To make technical corrections)

On page 21, line 16, delete "\$3,131,895,000" and insert in lieu thereof: "\$3,121,774,000".

On page 66, line 20, delete "\$469,000" and insert in lieu thereof: "\$9,652,000".

On page 66, line 20, delete "\$3,370,000" and insert in lieu thereof: "\$6,751,000".

AMENDMENT NO. 1351

(Purpose: To restore funding for United States Sentencing Commission)

On page 21, line 16, strike "\$3,151,895,000" and insert "\$3,146,895,000".

On page 71, line 22, strike "\$4,743,000" and insert "\$9,743,000".

Mr. LEAHY. Mr. President, I am delighted that the Senate has agreed to my amendment to restore funding for the United States Sentencing Commission. I am pleased that Senator KENNEDY joined me as a cosponsor of this amendment in support of the Commission.

Our amendment to S. 1217 transfers \$5 million from the Bureau of Prisons account to the U.S. Sentencing Commission account. As a result, the Commission will be funded at \$9,743,000 for FY 2000 instead of the current level of only \$4,743,000. This new funding is an increase of \$300,000 compared to the Commission's FY 1999 appropriation of \$9,487,000 but still substantially below the President's request of \$10,800,000 for the Commission.

I understand the Chairman and Ranking Member of the Commerce, Justice, State Appropriations Subcommittee reduced funding for the Commission in part because of their frustration over the vacancy of all seven Commission members since October 31, 1998. I share that frustration, but I am happy to report that the President announced last month his intent to nominate seven highly-qualified individuals to serve as Members of