109TH CONGRESS
2D SESSION

S. _____

To ensure the United States successfully competes in the 21st century global economy.

IN THE SENATE OF THE UNITED STATES

Mr. DOMENICI (for himself, Mr. BINGAMAN, Mr. ALEXANDER, Ms. MIKULSKI, Mr. LUGAR, Mr. DODD, Mr. OBAMA, Mr. WARNER, Mr. LIEBERMAN, Mr. BOND, Mrs. MURRAY, Mr. BURNS, Mr. BAYH, Mr. CRAIG, Ms. CANTWELL, Mrs. HUTCHISON, Mr. MENENDEZ, Mr. DEWINE, Mr. KOHL, Mr. THOMAS, Mr. KERRY, Mr. SMITH, Mr. NELSON of Florida, Mr. VOINOVICH, Mr. LEAHY, Mr. ALLEN, Mr. AKAKA, Mr. TALENT, Mr. CHAMBLISS, Mr. CORNYN, Mr. DAYTON, Mr. COLEMAN, and Mr. MARTINEZ) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To ensure the United States successfully competes in the 21st century global economy.

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

SECTION 1. SHORT TITLE.

(a) SHORT TITLE.—This Act may be cited as the ''Protecting America's Competitive Edge Through Education and Research Act of 2006'' or the ''PACE-Education Act''.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

TITLE I—10,000 TEACHERS, 10,000,000 MINDS K-12 MATHEMATICS AND SCIENCE EDUCATION

Subtitle A—Education

SEC. 111. DEFINITIONS.

Unless otherwise specified in this subtitle, the terms used in this subtitle have the meanings given the terms in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

CHAPTER 1—MATH AND SCIENCE TEACHERS

SEC. 121. BACCALAUREATE DEGREES IN MATHEMATICS AND SCIENCE WITH TEACHER CERTIFICATION.

(a) GRANTS AUTHORIZED.—From the amounts authorized under subsection (g), the Secretary shall award grants to eligible recipients to enable the eligible recipients to provide integrated courses of study in mathematics, science, or engineering and teacher education, that lead to a baccalaureate degree in mathematics, science, or engineering with concurrent teacher certification.

(b) DEFINITION OF ELIGIBLE RECIPIENT.—In this section, the term ''eligible recipient'' means any depart-

ment of mathematics, science, or engineering of an institution of higher education.

(c) AWARD AND DURATION.—

(1) AWARD.—The Secretary shall award a grant under this section to each eligible recipient that collaborates with a teacher preparation program at an institution of higher education to develop undergraduate degrees in mathematics, science, or engineering with pedagogy education and teacher certification.

(2) DURATION.—The Secretary shall award a grant under this section to each eligible recipient in an amount that is not more than $1,000,000 per year for a period of 5 years.

(d) MATCHING REQUIREMENT.—Each eligible recipient receiving a grant under this section shall provide, from non-Federal sources (provided in cash or in kind), to carry out the activities supported by the grant, an amount that is not less than 25 percent of the amount of the grant for the first year of the grant, not less than 35 percent of the amount of the grant for the second year of the grant, and not less than 50 percent of the amount of the grant for each succeeding fiscal year of the grant.

(e) APPLICATION.—

(1) IN GENERAL.—Each eligible recipient desiring a grant under this section shall submit an application to the Secretary at such time, in such manner, and accompanied by such information as the Secretary may require.

(2) CONTENTS.—Each application submitted pursuant to paragraph (1) shall include—

(A) a description of how the eligible recipient will use grant funds to develop and administer undergraduate degrees in mathematics, science, or engineering with pedagogy education and teacher certification, including a description of proposed high-quality research and laboratory experiences that will be available to students;

(B) a description of how the mathematics, science, or engineering departments will coordinate with a teacher preparation program to carry out the activities authorized under this section;

(C) a resource assessment that describes the resources available to the eligible recipient, the intended use of the grant funds, and the commitment of the resources of the eligible recipient to the activities assisted under this sec-

tion, including financial support, faculty participation, time commitments, and continuation of the activities assisted under the grant when the grant period ends;

(D) an evaluation plan, including measurable objectives and benchmarks for—

(i) improving student retention;

(ii) increasing the percentage of highly qualified mathematics and science teachers; and

(iii) improving kindergarten through grade 12 student academic performance in mathematics and science;

(E) a description of the activities the eligible recipient will conduct to ensure graduates of the program keep informed of the latest developments in the respective fields;

(F) a description of how the eligible recipient will work with local educational agencies in the area in which the eligible recipient is located and, to the extent practicable, with local educational agencies where graduates of the program authorized under this section are employed, to ensure that the activities required under subsection (f)(3) are carried out; and

(G) a description of efforts to encourage applications to the program from underrepresented groups, including women and minority groups.

(f) AUTHORIZED ACTIVITIES.—An eligible recipient shall use the funds received under this section—

(1) to develop and administer teacher education and certification programs with in-depth content education and subject-specific education in pedagogy, leading to baccalaureate degrees in mathematics, science, or engineering with concurrent teacher certification;

(2) to offer high-quality research experiences and training in the use of educational technology; and

(3) to work with local educational agencies in the area in which the eligible recipient is located and, to the extent practicable, with local educational agencies where graduates of the program authorized under this section are employed, to support the new teachers during the initial years of teaching, which may include—

(A) promoting effective teaching skills;

(B) development of skills in educational interventions based on scientifically-based research;

(C) providing opportunities for high-quality teacher mentoring;

(D) providing opportunities for regular professional development;

(E) interdisciplinary collaboration among exemplary teachers, faculty, researchers, and other staff who prepare new teachers; and

(F) allowing time for joint lesson planning and other constructive collaborative activities.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $30,000,000 for fiscal year 2007;

(2) $90,000,000 for fiscal year 2008;

(3) $190,000,000 for fiscal year 2009;

(4) $290,000,000 for fiscal year 2010;

(5) $390,000,000 for fiscal year 2011;

(6) $500,000,000 for fiscal year 2012; and

(7) $500,000,000 for fiscal year 2013.

SEC. 122. MASTER'S DEGREES IN MATHEMATICS AND SCIENCE EDUCATION FOR TEACHERS.

(a) PURPOSES.—The purpose of this section is provide competitive institutional grants for eligible recipients to develop part-time, 3-year master's degree programs in mathematics and science education for teachers in order to enhance the content knowledge and pedagogical skills of teachers.

(b) DEFINITION OF ELIGIBLE RECIPIENT.—In this section, the term ''eligible recipient'' means a mathematics, science, or engineering department of an institution of higher education.

(c) GRANTS AUTHORIZED.—

(1) GRANTS TO ELIGIBLE RECIPIENTS.—From the amounts authorized under subsection (i), the Secretary is authorized to award grants of not more than $1,000,000, on a competitive basis, to eligible recipients to enable the eligible recipients to carry out the authorized activities described in subsection (f).

(2) QUALIFICATION.—In order to qualify for a grant under this section, an eligible recipient shall collaborate with a teacher preparation program of an institution of higher education.

(d) APPLICATION.—To be eligible to receive a grant under this section, an eligible recipient shall submit an application to the Secretary that—

(1) meets the requirements of this section;

(2) includes a description of how the eligible recipient intends to use the grant funds provided under this section;

(3) contains such information and assurances as the Secretary may require;

(4) describes how the eligible recipient will prepare teachers to become more effective mathematics or science teachers;

(5) describes how the eligible recipient will coordinate with a teacher preparation program, and how the activities of the eligible recipient will be consistent with State, local, and other education reform activities that promote student achievement;

(6) describes the resources available to the eligible recipient, the intended use of the grant funds, and the commitment of resources of the eligible recipient to the activities assisted under this section, including financial support, faculty participation, time commitments, and continuation of the activities when the grant period ends;

(7) provides an evaluation plan pursuant to subsection (g);

(8) describes how the eligible recipient will align the proposed master's degree program with challenging student academic achievement standards, and challenging academic content standards, established by the State in which the eligible recipient is located;

(9) describes the activities the eligible recipient will undertake to ensure that local educational agencies in the geographic areas served by the eligible recipient are provided information about the activities carried out with grant funds under this section; and

(10) describes how the eligible recipient will encourage applications to the program from underrepresented groups, including women and minority groups.

(e) PRIORITY.—The Secretary may give priority consideration to applications that demonstrate that the eligible recipient shall—

(1) consult with local educational agencies in developing and administering master's degree programs;

(2) use online technology to allow for flexibility in the pace at which candidates complete the master's degree programs; and

(3) develop innovative efforts aimed at reducing the shortage of master's degree level mathematics or science teachers in low-income urban or rural areas.

(f) AUTHORIZED ACTIVITIES.—An eligible recipient shall use the grant funds received under this section to develop part-time, 3-year master's degree programs in mathematics and science education for teachers, conducted over 3 full-time summer sessions, and alternate weekends during the academic year, as appropriate, which shall include—

(1) developing courses that—

(A) are based on rigorous mathematics and science content and aligned with challenging State academic content standards;

(B) promote effective teaching skills; and

(C) promote understanding of effective instructional strategies for students with special needs, including students with disabilities, students who are limited English proficient, and students who are gifted and talented;

(2) hiring and training professional staff to administer the program;

(3) purchasing equipment for computer and teaching aids;

(4) providing educational instruction for not fewer than 20 teachers per year;

(5) providing stipends to help support the participants in the form of tuition reimbursement and travel expenses; and

(6) creating opportunities for clinical experience and training for teachers through participation with professionals in business, research, and work environments relating to mathematics, science, or engineering, including opportunities for using laboratory equipment.

(g) ANNUAL EVALUATION.—Each eligible recipient shall establish and include in the application submitted pursuant to section (d) an evaluation plan that includes strong performance objectives. The plan shall include objectives and measures for increasing—

(1) the percentage of master's degree level mathematics or science teachers hired by the State in which the eligible recipient is located;

(2) teacher retention;

(3) the percentage of master's degree level mathematics or science teachers serving in high-need schools;

(4) the percentage of master's degree level mathematics or science teachers among underrepresented groups; and

(5) the competencies of program graduates in their respective fields of mathematics or science.

(h) GRADUATE FELLOWSHIPS.—An individual who has received a master's degree in mathematics or science education under a program developed pursuant to this section and who meets the requirements of section 141(b)(2) shall be eligible for a fellowship authorized under such section 141(b)(2).

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $200,000,000 for fiscal year 2007;

(2) $500,000,000 for fiscal year 2008;

(3) $500,000,000 for fiscal year 2009;

(4) $500,000,000 for fiscal year 2010;

(5) $500,000,000 for fiscal year 2011;

(6) $500,000,000 for fiscal year 2012; and

(7) $500,000,000 for fiscal year 2013.

CHAPTER 2—NATIONAL SCIENCE FOUNDATION SCHOLARSHIPS AND FELLOWSHIPS

Subchapter A—National Science Foundation Scholarships for Mathematics and Science Teachers

SEC. 131. PURPOSE.

The purpose of this subchapter is to annually recruit and train 10,000 new mathematics and science teachers by providing scholarships for undergraduate courses of study leading to baccalaureate degrees in mathematics, science, or engineering, with concurrent teacher certification.

SEC. 132. RECRUITING AND TRAINING NEW MATHEMATICS AND SCIENCE TEACHERS.

(a) GRANTS AUTHORIZED.—From the amounts authorized under subsection (g), the Director of the National Science Foundation (referred to in this section as the ''Director'') shall award merit-based undergraduate scholarships to eligible students to assist the eligible students in paying their college education expenses, which shall include tuition, fees, books, supplies, and equipment required for courses of instruction.

(b) DEFINITION OF ELIGIBLE STUDENT.—In this section, the term ''eligible student'' means a student who—

(1) attends an institution of higher education;

(2) is majoring in mathematics, science, or engineering;

(3) is pursuing concurrent certification in teaching; and

(4) demonstrates continued academic achievement and progress, as determined by the Director, toward completion of a baccalaureate degree in mathematics, science, or engineering with concurrent certification in teaching.

(c) AWARDS.—The Director shall award a scholarship under this section to an eligible student in an amount that is not greater than $20,000 per academic year for not more than 4 years of undergraduate study. The amount awarded for each academic year shall not exceed the student's cost of attendance for the academic year.

(d) SERVICE REQUIREMENTS.—

(1) SERVICE REQUIREMENT.—An individual who is awarded a scholarship under this section shall enter into an agreement with the Director under which the individual agrees to be employed for not less than 5 academic years as a full-time mathe-

matics, science, or elementary school teacher in a public elementary school or secondary school, or 4 academic years as a full-time mathematics, science, or elementary school teacher in a public elementary school or secondary school—

(A)(i) in which not less than 40 percent of the children enrolled in the school are from low-income families; or

(ii) designated with a school locale code of 7 or 8, or otherwise designated as a rural school, as determined by the Secretary; and

(B)(i) in which there is a higher percentage of teachers not teaching in the academic subject areas or grade levels in which the teachers were trained to teach; or

(ii) in which there is a high teacher turnover rate or a high percentage of teachers with emergency, provisional, or temporary certification or licenses.

(2) COORDINATION WITH THE SECRETARY OF EDUCATION.—The Director shall coordinate with the Secretary to determine whether an individual who receives a scholarship award under this section is employed as a full-time mathematics, science, or ele-

mentary school teacher in accordance with paragraphs (1), (3), and (4).

(3) FAILURE TO COMPLY.—If an individual who receives a scholarship award under this section fails to comply with the agreement entered into pursuant to paragraph (1), the Director shall take 1 or more of the following actions:

(A) Require the individual to repay all or the applicable portion of the total scholarship amount awarded to the individual under this section.

(B) Impose a fine or penalty in an amount to be determined by the Director.

(4) REGULATIONS.—The Director shall promulgate regulations setting forth the terms of repayment and the criteria to be considered in granting a waiver for the service requirements. Such criteria shall include whether compliance with the service requirements is inequitable and represents undue hardship.

(e) COORDINATION WITH THE SECRETARY OF DEFENSE.—The Director shall coordinate with the Secretary of Defense to ensure members of the Armed Forces are aware of the educational opportunity under this section,

particularly members of the Armed Forces who have training in engineering.

(f) FELLOWSHIPS.—An individual shall be eligible for a fellowship under section 141(b)(1) if the individual—

(1) has received a baccalaureate degree in mathematics, science, or engineering, and concurrent certification in teaching;

(2) has received a scholarship award under this section; and

(3) meets the requirements of section 141(b)(1).

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $50,000,000 for fiscal year 2007;

(2) $100,000,000 for fiscal year 2008;

(3) $150,000,000 for fiscal year 2009;

(4) $170,000,000 for fiscal year 2010;

(5) $170,000,000 for fiscal year 2011;

(6) $170,000,000 for fiscal year 2012; and

(7) $170,000,000 for fiscal year 2013.

Subchapter B—National Science Foundation Fellowships for Mathematics and Science Teachers

SEC. 141. NATIONAL SCIENCE FOUNDATION FELLOWSHIPS FOR MATHEMATICS AND SCIENCE TEACHERS.

(a) FELLOWSHIP AUTHORIZED.—The Director of the National Science Foundation (referred to in this section as the ''Director'') is authorized to award fellowships to individuals, as described in subsection (b), a portion of which shall be used for continuing education and professional development activities.

(b) FELLOWSHIP AWARDS.—The Director shall award the following fellowships:

(1) The Director shall award $10,000 annually for 4 academic years to an individual who meets the following criteria:

(A) The individual has received a baccalaureate degree in mathematics, science, or engineering, and concurrent certification in teaching.

(B) The individual received a scholarship award under section 132.

(C) The individual is employed as a full-time mathematics, science, or elementary school

teacher in a public elementary school or secondary school—

(i)(I) in which not less than 40 percent of the children enrolled in the school are from low-income families; or

(II) designated with a school locale code of 7 or 8, or otherwise designated as a rural school, as determined by the Secretary; and

(ii)(I) in which there is a high percentage of teachers not teaching in the academic subject areas or grade levels in which the teachers were trained to teach; or

(II) in which there is a high teacher turnover rate or a high percentage of teachers with emergency, provisional, or temporary certification or licenses.

(2) The Director shall award $10,000 annually for 5 academic years to an individual who has received a master's degree in mathematics or science education under a program developed pursuant to section 122 and who undertakes increased responsibilities, such as teacher mentoring and other leadership activities.

(c) APPLICATION.—An individual desiring a fellowship under this section shall submit an application to the Director at such time, in such manner, and accompanied by such information as the Director may require. Each application shall include assurances that the individual meets the requirements of the fellowship for which the individual is applying.

(d) COORDINATION.—The Director shall coordinate with the Secretary to determine whether an individual who receives a fellowship under this section meets the requirements of this section.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated—

(1) to carry out subsection (b)(1)—

(A) $5,000,000 for fiscal year 2008;

(B) $15,000,000 for fiscal year 2009;

(C) $30,000,000 for fiscal year 2010;

(D) $45,000,000 for fiscal year 2011;

(E) $45,000,000 for fiscal year 2012; and

(F) $45,000,000 for fiscal year 2013; and

(2) to carry out subsection (b)(2)—

(A) $100,000,000 for fiscal year 2010;

(B) $200,000,000 for fiscal year 2011;

(C) $300,000,000 for fiscal year 2012; and

(D) $400,000,000 for fiscal year 2013.

CHAPTER 3—ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS

SEC. 151. ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS.

(a) PURPOSE.—The purposes of this section are—

(1) to educate an additional 70,000 Advanced Placement (AP) or International Baccalaureate (IB) and 80,000 pre-AP or pre-IB teachers of mathematics and science over the 5 year period beginning with 2007; and

(2) to triple to 1,500,000 the number of students who take AP and IB mathematics and science examinations.

(b) GRANTS AUTHORIZED.—

(1) IN GENERAL.—From the amounts authorized under subsection (i), the Secretary shall award grants, on a competitive basis, to eligible recipients to enable the eligible recipients to carry out the activities authorized in subsection (f).

(2) LIMITATION.—An eligible recipient may not receive more than 1 grant at a time under this section to undertake authorized activities within the same State.

(c) DEFINITIONS.—In this section:

(1) ELIGIBLE RECIPIENT.—The term ''eligible recipient'' means a nonprofit educational entity with expertise in Advanced Placement or International Baccalaureate services.

(2) MASTER TEACHER.—The term ''master teacher'' means a teacher—

(A) with an advanced degree or an advanced certification;

(B) who uses the most effective teaching methods in the teacher's disciplines; and

(C) who has shown demonstrable results of higher student achievement in mathematics or science.

(d) APPLICATION.—

(1) IN GENERAL.—Each eligible recipient desiring a grant under this section shall submit an application to the Secretary at such time, in such manner, and accompanied by such information as the Secretary may require.

(2) CONTENTS.—Each application submitted pursuant to paragraph (1) shall—

(A) describe the need for increased access to Advanced Placement or International Baccalaureate programs in mathematics and science;

(B) provide for the involvement of business and community organizations in the activities to be assisted;

(C) describe the availability of matching funds from non-Federal sources to assist in the activities authorized; and

(D) demonstrate an intent to carry out activities that target local educational agencies—

(i) that serve not fewer than 10,000 children from low-income families;

(ii) for which not less than 20 percent of the children served by the local educational agency are children from low-income families; or

(iii) with a total of less than 600 students in average daily attendance at the schools that are served by the local educational agency and all of those schools are designated with a school locale code of 7 or 8, or otherwise designated as a rural school, as determined by the Secretary.

(e) PRIORITY CONSIDERATION.—The Secretary shall give priority to eligible recipients that submit an application under subsection (d) that demonstrates a pervasive need to expand or develop Advanced Placement or Inter-

national Baccalaureate programs in mathematics and science.

(f) AUTHORIZED ACTIVITIES.—An eligible recipient shall use the grant funds provided under this section for the following activities:

(1) To identify and work with local educational agencies to expand or develop Advanced Placement or International Baccalaureate and pre-Advanced Placement or pre-International Baccalaureate programs in mathematics and science in schools served by the local educational agencies.

(2) To work with the local educational agencies to establish Advanced Placement or International Baccalaureate coordinators in each secondary school served by the local educational agencies.

(3) To ensure master teachers provide training to prepare teachers to teach Advanced Placement or International Baccalaureate courses in mathematics and science, which shall include at a minimum—

(A) week-long summer institutes; and

(B) 2-day seminars in the teachers' disciplines each year for 4 years.

(4) To ensure master teachers provide training to prepare teachers to teach pre-Advanced Placement or pre-International Baccalaureate courses in

mathematics and science, which shall include at a minimum—

(A) a 4-day summer institute; and

(B) 4 days on campus each year for 4 years.

(5) To provide stipends to teachers who satisfactorily complete the Advanced Placement or International Baccalaureate or pre-Advanced Placement or pre-International Baccalaureate training.

(6) To provide a bonus to a teacher who has satisfactorily completed the Advanced Placement or International Baccalaureate or pre-Advanced Placement or pre-International Baccalaureate training for each student of the teacher who passes an Advanced Placement or International Baccalaureate examination in mathematics and science.

(7) To provide test preparation sessions for students taking Advanced Placement or International Baccalaureate examinations in mathematics and science.

(8) To reimburse students half of the cost of the Advanced Placement or International Baccalaureate mathematics and science examination fees.

(9) To provide scholarships to students who pass the Advanced Placement or International Baccalaureate mathematics and science examinations.

(g) EVALUATION AND ACCOUNTABILITY PLAN.—

(1) IN GENERAL.—Each eligible recipient receiving a grant under this section shall develop an evaluation and accountability plan for activities assisted under this section that includes rigorous objectives that measure the impact of activities assisted under this section.

(2) CONTENTS.—The plan developed pursuant to paragraph (1) shall include—

(A) the number of students served by the eligible recipient who are taking pre-Advanced Placement or pre-International Baccalaureate courses in mathematics and science;

(B) the number of students served by the eligible recipient who are taking Advanced Placement or International Baccalaureate courses in mathematics and science;

(C) the number of students served by the eligible recipient who take Advanced Placement or International Baccalaureate mathematics and science examinations;

(D) the number of students served by the eligible recipients who pass Advanced Placement or International Baccalaureate mathematics and science examinations; and

(E) the number of teachers trained in Advanced Placement or International Baccalaureate and pre-Advanced Placement or pre-International Baccalaureate mathematics and science programs.

(h) MATCHING REQUIREMENTS FOR GRANTS.—Each eligible recipient receiving a grant under this section shall provide, from non-Federal sources (in cash or in kind), an amount equal to 100 percent of the amount of the grant for each year of the grant, of which not less than 25 percent shall come from State sources.

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $241,000,000 for fiscal year 2007;

(2) $341,000,000 for fiscal year 2008;

(3) $453,000,000 for fiscal year 2009;

(4) $596,000,000 for fiscal year 2010; and

(5) $731,000,000 for fiscal year 2011.

CHAPTER 4—NATIONAL CLEARINGHOUSE ON MATHEMATICS AND SCIENCE TEACHING MATERIALS

SEC. 161. NATIONAL CLEARINGHOUSE ON MATHEMATICS AND SCIENCE TEACHING MATERIALS.

(a) PURPOSE.—The purpose of the this section is to strengthen the skills of mathematics and science teachers by establishing a national clearinghouse of proven effective kindergarten through grade 12 mathematics and science teaching materials.

(b) EFFECTIVE MATHEMATICS AND SCIENCE TEACHING MATERIALS.—The Secretary is authorized to convene, not later than 1 year after the date of enactment of this Act, a national panel to collect proven effective kindergarten through grade 12 mathematics and science teaching materials, or to support the development of new materials where no effective models exist.

(c) COMPOSITION OF NATIONAL PANEL.—

(1) CONSULTATION.—The Secretary shall appoint members to the panel after consultation with the National Academy of Sciences of the National Academies.

(2) SELECTION.—The Secretary shall ensure that the panel broadly represents scientists, practitioners, educators, representatives from entities with

expertise in education, mathematics, and science, and parents. The Secretary shall ensure that the panel includes the following:

(A) A majority representation of educators and parents directly involved in the kindergarten through grade 12 education process.

(B) Proportionate representation of educators and parents from all demographic areas, including urban, suburban and rural schools.

(C) Proportionate representation of educators and parents from public and private schools.

(3) QUALIFICATIONS OF MEMBERS.—The members of the panel shall be individuals who have substantial knowledge or experience relating to—

(A) education, mathematics, or science policy or programs; or

(B) education, mathematics, or science curricula content development.

(d) AUTHORIZED ACTIVITIES OF NATIONAL PANEL.—The panel shall—

(1) identify proven effective kindergarten through grade 12 mathematics and science teaching materials;

(2) identify the need for new mathematics and science teaching materials, and support the development of such new materials through contracts and cooperative agreements; and

(3) establish a national clearinghouse of information on effective kindergarten through grade 12 mathematics and science teaching materials.

(e) DISSEMINATION.—The Secretary shall disseminate information related to the clearinghouse to State educational agencies, and otherwise make available and accessible to local educational agencies and schools the teaching materials collected by the panel in the form of a searchable online database or Internet web site.

(f) MATHEMATICS AND SCIENCE TEACHING MATERIALS.—

(1) RELIABILITY AND MEASUREMENT.—The kindergarten through grade 12 mathematics and science teaching materials collected under this section shall be—

(A) reliable, valid, and grounded in scientific theory and research in existence as of the date of the collection of materials;

(B) reviewed regularly to assess effectiveness; and

(C) developed in careful consideration of State academic assessments and student academic achievement standards.

(2) STUDENTS WITH DIVERSE LEARNING NEEDS.—The teaching materials shall include relevant materials for students with diverse learning needs, particularly for students with disabilities and students with limited English proficiency.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $20,000,000 for fiscal year 2007 and $20,000,000 for each of the fiscal years 2008 through 2011.

CHAPTER 5—FUTURE AMERICAN-SCIENTIST SCHOLARSHIPS

SEC. 171. FUTURE AMERICAN-SCIENTIST SCHOLARSHIPS.

(a) PURPOSE.—The purpose of this section is to increase the number and percentage of citizens of the United States who earn baccalaureate degrees in mathematics or science (including engineering) by providing 25,000 new competitive merit-based undergraduate scholarships to students who are citizens of the United States, for the purpose of enabling each such student to obtain a baccalaureate degree in mathematics or science at a 4-year institution of higher education.

(b) SCHOLARSHIPS.—

(1) IN GENERAL.—From the amounts authorized under subsection (e), the Secretary shall award the scholarships to eligible students that shall be used by the eligible students to pay for qualifying expenses at the 4-year institution of higher education of the eligible students' choosing.

(2) FUTURE AMERICAN-SCIENTIST SCHOLARSHIPS.—A scholarship awarded under this section shall be called a ''Future American-Scientist Scholarship''.

(c) AMOUNT; DURATION.—

(1) AMOUNT.—A scholarship award under this section shall be in an amount of not more than $20,000 per year.

(2) DURATION OF SCHOLARSHIP.—A scholarship awarded to an eligible student under this section shall be for the number of years necessary for the eligible student to earn a baccalaureate degree in mathematics or science, except that no scholarship under this section shall be awarded for a period of more than 4 years.

(d) DEFINITIONS.—In this section:

(1) ELIGIBLE STUDENT.—The term ''eligible student'' means a student who—

(A) is a citizen of the United States;

(B) is attending a 4-year institution of higher education;

(C) is enrolled, or will be enrolled at the start of the next academic year, in a course of study at an institution of higher education that leads to a baccalaureate degree in mathematics or science;

(D) demonstrates aptitude, as determined by the Secretary, in mathematics or science; or

(E) for each year of a scholarship under this section, demonstrates continued academic achievement and progress, as determined by the Secretary, toward completion of a baccalaureate degree in mathematics or science.

(2) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(3) QUALIFIED EXPENSES.—The term ''qualified expenses'' means the tuition, books, fees, supplies, and equipment required for a course of instruction leading to a baccalaureate degree in mathematics or science at a 4-year institution of higher education of the eligible student's choosing.

(4) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $375,000,000 for fiscal year 2007;

(2) $750,000,000 for fiscal year 2008;

(3) $1,125,000,000 for fiscal year 2009; and

(4) $1,500,000,000 for each of the fiscal years 2010 through 2013.

CHAPTER 6—GRADUATE RESEARCH FELLOWSHIPS

SEC. 181. GRADUATE RESEARCH FELLOWSHIPS IN SCIENTIFIC AREAS OF NATIONAL NEED.

(a) FELLOWSHIPS AUTHORIZED.—From the amounts appropriated under subsection (e), the Secretary shall establish a fellowship program to provide tuition and financial support for eligible students pursuing master's and doctoral degrees in mathematics or science (including engineering) or other areas of national need.

(b) AREAS OF NATIONAL NEED.—The Secretary may establish, on an annual basis, areas of national need important to the mission of the Department of Energy, and may use the areas of national need in determining the specific fields of study to be supported by fellowship awards

under this section. In establishing the areas of national need, the Secretary shall consider the results of the survey conducted under section 1101 of the Energy Policy Act of 2005 (42 U.S.C. 16411).

(c) USE AND AMOUNT OF AWARDS.—A fellowship award under this section shall be—

(1) in an amount that is commensurate with the amount of similar graduate research fellowships awarded by the National Science Foundation; and

(2) used by the eligible student to cover educational expenses and to provide additional financial support.

(d) DEFINITIONS.—In this section:

(1) ELIGIBLE STUDENT.—The term ''eligible student'' means a student who is enrolled in a master's or doctoral degree program in mathematics or science (including engineering) or other areas of national need at an institution of higher education (as defined in section 171).

(2) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated under this section—

(1) $225,000,000 for fiscal year 2007;

(2) $450,000,000 for fiscal year 2008; and

(3) $675,000,000 for each of the fiscal years 2009 through 2013.

Subtitle B—National Science Foundation Early-Career Research Grants

SEC. 191. NATIONAL SCIENCE FOUNDATION EARLY-CAREER RESEARCH GRANTS.

(a) PURPOSE.—It is the purpose of this section to authorize research grants in the National Science Foundation, for early-career scientists and engineers for purposes of pursuing independent research.

(b) DEFINITION OF ELIGIBLE EARLY-CAREER RESEARCHER.—In this section, the term ''eligible early-career researcher'' means an individual who—

(1) completed a doctorate or other terminal degree not more than 10 years before the date of enactment of this Act and has demonstrated promise in the field of science, technology, engineering, or mathematics; or

(2) has an equivalent professional qualification in the field of science, technology, engineering, or mathematics.

(c) GRANT PROGRAM AUTHORIZED.—

(1) IN GENERAL.—The Director of the National Science Foundation shall award not less than 65

grants per year to outstanding eligible early-career researchers to support the work of such researchers in universities, private industry, or federally-funded research and development centers.

(2) APPLICATION.—An eligible early-career researcher who desires to receive a grant under this section shall submit to the Director of the National Science Foundation an application at such time, in such manner, and accompanied by such information as the Director may require.

(3) SPECIAL CONSIDERATION.—In awarding grants under this section, the Director of the National Science Foundation shall give special consideration to eligible early-career researchers who have followed alternative career paths such as working part-time or in non-academic settings, or who have taken a significant career break or other leave of absence.

(4) DURATION AND AMOUNT.—A grant under this section shall be 5 years in duration. An eligible early career-researcher who receives a grant under this section shall receive $100,000 for each year of the grant period.

(5) USE OF FUNDS.—An eligible early career-researcher who receives a grant under this section

shall use the grant funds for basic research in natural sciences, engineering, mathematics, or computer sciences at a university, private industry, or federally-funded research and development center.

(6) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(A) $6,500,000 for fiscal year 2007;

(B) $13,000,000 for fiscal year 2008;

(C) $19,500,000 for fiscal year 2009;

(D) $26,000,000 for fiscal year 2010; and

(E) $32,500,000 for fiscal year 2011.

TITLE II—SOWING THE SEEDS THROUGH SCIENCE AND ENGINEERING RESEARCH

Subtitle A—Office of Science and Technology Policy Matters

SEC. 211. COORDINATION OF SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION PROGRAMS.

(a) NATIONAL GOALS.—

(1) BODY FOR ESTABLISHMENT OF GOALS.—The Director of the Office of Science and Technology Policy shall establish within the President's Committee of Advisors on Science and Technology a

standing subcommittee on education in mathematics, science, and engineering in the Federal Government.

(2) RESPONSIBILITY.—The subcommittee established under this subsection shall—

(A) develop national goals for the support by the Federal Government of education in mathematics, science, and engineering; and

(B) periodically review and update any goals so developed.

(3) PUBLIC COMMENT.—The Director shall enter into an agreement with the National Academy of Sciences or other appropriate scientific organization to seek public comment on the national goals developed under this subsection.

(b) DEPUTY ASSISTANT DIRECTOR FOR SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION PROGRAMS.—

(1) IN GENERAL.—There shall be in the Office of Science and Technology Policy a Deputy Assistant Director of the Office of Science and Technology Policy for Science, Mathematics, and Engineering Education Programs who shall be appointed by the Director of the Office of Science and Technology Policy, acting through the Associate Director for Science of the Office of Science and Technology Pol-

icy, from among individuals having the qualifications specified in paragraph (2).

(2) QUALIFICATIONS FOR APPOINTMENT.—The qualifications of an individual for appointment as Deputy Assistant Director shall include such professional experience and expertise, and such other qualifications, as the Director of the Office of Science and Technology Policy considers appropriate to permit such individual to advise the Director on all matters relating to the education programs of the Executive Branch on mathematics, science, and technology.

(c) RESPONSIBILITY.—The Deputy Assistant Director of the Office of Science and Technology Policy for Science, Mathematics, and Engineering Educations Programs shall ensure effective coordination among the departments, agencies, and elements of the Federal Government in the discharge of the education programs of the Executive Branch on mathematics, science, and technology.

(d) PLAN FOR COORDINATION OF PROGRAMS.—

(1) IN GENERAL.—In carrying out the responsibility described in subsection (c), the Deputy Assistant Director of the Office of Science and Technology Policy for Science, Mathematics, and Engineering

Educations Programs shall develop each year a plan for the coordination of the education programs of the Executive Branch on mathematics, science, and technology during the five fiscal years beginning in the year of such plan.

(2) ELEMENTS.—Each plan developed under this subsection shall include—

(A) mechanisms for the coordination of the education programs of the Executive Branch on mathematics, science, and technology during the five fiscal years beginning in the year of such plan; and

(B) recommendations on funding, by agency, of such education programs during each such fiscal year.

(3) CONSISTENCY WITH NATIONAL GOALS.—Each plan developed under this subsection shall be consistent with the most current national goals for the support by the Federal Government of education in mathematics, science, and engineering developed under subsection (a).

(4) AVAILABILITY TO PUBLIC.—The Director of the Office of Science and Technology Policy shall take appropriate actions to ensure that each plan de-

veloped under this subsection is available to the public.

(e) STAFFING AND OTHER RESOURCES.—The Director of the Office of Science and Technology Policy shall assign the Deputy Assistant Director of the Office of Science and Technology Policy for Science, Mathematics, and Engineering Educations Programs such personnel and other resources as the Director considers appropriate in order to permit the Deputy Assistant Director to carry out the duties of the Deputy Assistant Director under this section.

(f) DEADLINES FOR CERTAIN ACTIONS.—

(1) ESTABLISHMENT OF SUBCOMMITTEE.—The Director of the Office of Science and Technology Policy shall establish the subcommittee required by subsection (a)(1) not later than 30 days after the date of the enactment of this Act.

(2) APPOINTMENT OF DEPUTY ASSISTANT DIRECTOR.—The Director of the Office of Science and Technology Policy, acting through the Associate Director for Science of the Office of Science and Technology Policy, shall make the first appointment to the position of Deputy Assistant Director of the Office of Science and Technology Policy for Science, Mathematics, and Engineering Education Programs

under subsection (b)(1) not later than 60 days after the date of the enactment of this Act.

SEC. 212. NATIONAL COORDINATION OFFICE FOR ADVANCED RESEARCH INSTRUMENTATION AND FACILITIES.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy shall establish within the Office of Science and Technology Policy an office to be known as the ''National Coordination Office for Advanced Research Instrumentation and Facilities''.

(2) HEAD OF OFFICE.—The head of the National Coordination Office for Advanced Research Instrumentation and Facilities shall be the Director of the National Coordination Office for Advanced Research Instrumentation and Facilities, who shall be appointed by the Director of the Office of Science and Technology Policy.

(3) STAFF AND OTHER RESOURCES.—The Director of the Office of Science and Technology Policy shall assign to the National Coordination Office for Advanced Research Instrumentation and Facilities such personnel and other resources as the Director of the Office of Science and Technology Policy con-

siders appropriate in order to permit the National Coordination Office for Advanced Research Instrumentation and Facilities to carry out its duties under this section.

(4) DEADLINE FOR ESTABLISHMENT.—The National Coordination Office for Advanced Research Instrumentation and Facilities shall be established not later than 30 days after the date of the enactment of this Act.

(b) DUTIES.—

(1) IN GENERAL.—The National Coordination Office for Advanced Research Instrumentation and Facilities shall coordinate the award by the departments, agencies, and other elements of the Federal Government of grants for advanced research instrumentation and facilities.

(2) ADVANCED RESEARCH INSTRUMENTATION AND FACILITIES.—

(A) IN GENERAL.—For purposes of this section, advanced research instrumentation and facilities are specially designed and developed instruments or tools (whether of a physical or nonphysical nature) that are available commercially but are overly expensive for design and development under a single research grant.

(B) EXAMPLES.—Examples of advanced research instrumentation and facilities for purposes of this section include the following:

(i) Single, stand-alone instruments or instrument suites.

(ii) Networks.

(iii) Computational modeling applications.

(iv) Computer databases.

(v) Sensor systems.

(vi) Facilities that house ensembles of interrelated instruments.

(vii) Instruments assembled from components.

(3) DISCHARGE OF DUTIES.—The Office shall coordinate the award of grants for advanced research instrumentation and facilities under this section in accordance with the strategic implementation plan developed under subsection (c).

(c) STRATEGIC IMPLEMENTATION PLAN.—

(1) PLAN REQUIRED.—Not later than one year after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall, in consultation with the Director of the Office of Management and Budget, develop a plan for the

award by the departments, agencies, and other elements of the Federal Government of grants for advanced research instrumentation and facilities during the five-year period beginning on the date of the issuance of the plan.

(2) ELEMENTS.—The plan required by paragraph (1) shall include the following:

(A) Criteria applicable to the award of grants for advanced research instrumentation and facilities, including criteria applicable to—

(i) scientific and technical merit;

(ii) the identification of the strategic requirements of the departments, agencies, and other elements of the Federal Government; and

(iii) national science and technology needs.

(B) An assessment of the current and anticipated needs of the departments, agencies, and other elements of the Federal Government for advanced research instrumentation and facilities.

(C) A report to Congress on the proposed allocation of funds, including amounts authorized to be appropriated by subsection (f), by the

departments, agencies, and other elements of the Federal Government for grants for advanced research instrumentation and facilities.

(3) PUBLIC COMMENT.—In developing the plan required by paragraph (1), the Director of the Office of Science and Technology Policy shall enter into an agreement with the National Academy of Sciences, or other similar entity, to secure public comments on the plan.

(d) RECOMMENDATIONS ON AGENCY FUNDING.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy shall, in consultation with the Director of the National Coordination Office for Advanced Research Instrumentation and Facilities, make recommendations each year to the Director of the Office of Management and Budget on the amount of funds to be requested for the departments, agencies, and other elements of the Federal Government for the fiscal year beginning in such year for the award of grants for advanced research instrumentation and facilities.

(2) PURPOSE.—The purpose of the recommendations under paragraph (1) shall be to advise the Director of the Office of Management and Budget on the amounts to be requested in the budg-

et of the President (as submitted to Congress under section 1105 of title 31, United States Code) for each fiscal year for the award of grants for advanced research instrumentation and facilities.

(e) USE OF GRANT AMOUNTS.—Amounts under grants awarded by departments, agencies, and other elements of the Federal Government for advanced research instrumentation and facilities may be used for purposes as follows:

(1) The purchase and installation of instruments.

(2) The commissioning of equipment.

(3) The calibration of instruments.

(4) The acquisition of parts and materials for construction of instruments.

(5) Personnel costs of personnel engaged in the development of instruments.

(6) The operation and maintenance of instruments.

(7) Such other purposes as the Director of the National Coordination Office for Advanced Research Instrumentation and Facilities considers appropriate.

(f) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—In addition to amounts appropriated under Federal law other than this Act, there is authorized to be appropriated for each of fiscal years 2008 through 2012, to carry out this section (including the plan specified in subsection (c))—

(A) $1,000,000 to the Office of Science and Technology Policy;

(B) $150,000,000 to the National Science Foundation;

(C) $87,000,000 to the Department of Defense;

(D) $152,000,000 to the Office of Science of the Department of Energy; and

(E) $117,000,000 to the National Aeronautics and Space Administration.

(2) AVAILABILITY.—The amount authorized to be appropriated by this subsection shall remain available until expended.

SEC. 213. HIGH-RISK, HIGH-PAYOFF RESEARCH.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall, in consultation with the Director of the Office of Management and Budget, establish guidelines to ensure that each Federal re-

search agency allocates not less than 8 percent of the funds available to such agency each fiscal year for basic research for high-risk, high-payoff research.

(b) HIGH-RISK, HIGH-PAYOFF RESEARCH.—For purposes of this section, high-risk, high-payoff research is research that—

(1) has the potential for yielding results with far-ranging or wide-ranging implications; but

(2) is too novel or spans too diverse a range of disciplines to fare well in the traditional peer review process.

(c) GUIDELINE ELEMENTS.—The guidelines required by subsection (a) shall include provisions on the following:

(1) Expedited procedures for the approval of the use of funds for high-risk, high-payoff research.

(2) Annual reports by Federal research agencies on activities relating to high-risk, high-payoff research.

(3) Criteria to establish the duration of funding for high-risk, high-payoff research projects.

(4) Objectives for high-risk, high-payoff research projects.

(5) Such other criteria, objectives, or other matters as the Director of the Office of Science and Technology Policy considers appropriate.

(d) PUBLIC COMMENT.—The Director of the Office of Science and Technology Policy shall enter into an agreement with the National Academy of Sciences, or similar entity, to solicit public comment, through a broad media solicitation, on the guidelines required by subsection (a) before the final issuance of such guidelines.

(e) REVIEW.—The President's Committee of Advisors on Science and Technology shall, not less often than once every two years, conduct a review to determine whether or not Federal research agencies are allocating basic research funds in accordance with the guidelines required by subsection (a).

(f) ANNUAL REPORTS TO CONGRESS.—

(1) REPORTS REQUIRED.—The Director of the Office of Management and Budget shall, in consultation with the Director of the Office of Science and Technology Policy, submit to Congress each year a report on the use by Federal research agencies of basic research funds for high-risk, high-payoff research during the preceding fiscal year.

(2) TIME FOR SUBMITTAL.—The Director of the Office of Management and Budget shall submit the report required by paragraph (1) for a year together with the budget of the President for the fiscal year beginning in such year (as submitted to Con-

gress under section 1105 of title 31, United States Code).

(g) DEFINITIONS.—In this section:

(1) FEDERAL RESEARCH AGENCY.—The term ''Federal research agency'' means a major organizational component of a department or agency of the Federal Government, or other establishment of the Federal Government operating with appropriated funds, that has as its primary purpose the performance of scientific research.

(2) MAJOR ORGANIZATIONAL COMPONENT.—The term ''major organizational component'', with respect to a department, agency, or other establishment of the Federal Government, means a component of the department, agency, or other establishment that is administered by an individual whose rate of basic pay is not less than the rate of basic pay payable under level V of the Executive Schedule under section 5316 of title 5, United States Code.

SEC. 214. PRESIDENT'S INNOVATION AWARD.

(a) AUTHORITY TO AWARD.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy shall, subject to the approval of the President, award each year to one or more individuals an award that recognizes recent in-

novations in science and engineering in the United States.

(2) DESIGNATION.—The award made under this section shall be known as the ''President's Innovation Award''.

(3) PRESENTATION.—The presentation of awards made under this section shall be made by the President.

(b) SELECTION OF RECIPIENTS.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy shall identify recipients of the award under this section from among individuals whose achievements are recognized in the most recent document entitled ''Interagency Research and Development Priorities'' published by the Director of the Office of Management and Budget and the Director of the Office of Science and Technology Policy.

(2) SOLICITATION OF RECOMMENDATIONS.—In identifying potential recipients of the award under this section, the Director of the Office of Science and Technology Policy shall solicit recommendations from the heads of Federal agencies and the general public.

(c) NATURE OF AWARD.—The award made under this section shall consist of the following:

(1) A medal, of such design as the Director of the Office of Science and Technology Policy shall determine (subject to the approval of the President).

(2) A certificate of recognition.

(3) A cash prize, in such amount as the Director considers appropriate.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is hereby authorized to be appropriated to the Office of Science and Technology Policy each fiscal year $1,000,000 for the making of awards under this section.

Subtitle B—National Aeronautics and Space Administration Matters

SEC. 221. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION EARLY-CAREER RESEARCH GRANTS.

(a) PURPOSE.—It is the purpose of this section to authorize research grants in the National Aeronautics and Space Administration for early-career scientists and engineers for purposes of pursuing independent research.

(b) DEFINITION OF ELIGIBLE EARLY-CAREER RESEARCHER.—In this section, the term ''eligible early-career researcher'' means an individual who—

(1) completed a doctorate or other terminal degree not more than 10 years before the date of enactment of this Act and has demonstrated promise in the field of science, technology, engineering, or mathematics; or

(2) has an equivalent professional qualification in the field of science, technology, engineering, or mathematics.

(c) GRANT PROGRAM AUTHORIZED.—

(1) IN GENERAL.—The Administrator of the National Aeronautics and Space Administration shall award not less than 45 grants per year to outstanding eligible early-career researchers to support the work of such researchers in universities, private industry, or federally-funded research and development centers.

(2) APPLICATION.—An eligible early-career researcher who desires to receive a grant under this section shall submit to the Administrator of the National Aeronautics and Space Administration an application at such time, in such manner, and accompanied by such information as the Administrator may require.

(3) SPECIAL CONSIDERATION.—In awarding grants under this section, the Administrator of the

National Aeronautics and Space Administration shall give special consideration to eligible early-career researchers who have followed alternative career paths such as working part-time or in non-academic settings, or who have taken a significant career break or other leave of absence.

(4) DURATION AND AMOUNT.—A grant under this section shall be 5 years in duration. An eligible early career-researcher who receives a grant under this section shall receive $100,000 for each year of the grant period.

(5) USE OF FUNDS.—An eligible early career-researcher who receives a grant under this section shall use the grant funds for basic research in natural sciences, engineering, mathematics, or computer sciences at a university, private industry, or federally-funded research and development center.

(6) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(A) $4,500,000 for fiscal year 2007;

(B) $9,000,000 for fiscal year 2008;

(C) $13,500,000 for fiscal year 2009;

(D) $18,000,000 for fiscal year 2010; and

(E) $22,500,000 for fiscal year 2011.

SEC. 222. AUTHORIZATION OF APPROPRIATIONS FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION FOR BASIC SCIENCES.

(a) IN GENERAL.—There is hereby authorized to be appropriated for the National Aeronautics and Space Administration for basic sciences for research specified in subsection (b), amounts as follows:

(1) $2,768,000,000 for fiscal year 2007.

(2) $3,044,000,000 for fiscal year 2008.

(3) $3,349,000,000 for fiscal year 2009.

(4) $3,684,000,000 for fiscal year 2010.

(5) $4,052,000,000 for fiscal year 2011.

(6) $4,457,000,000 for fiscal year 2012.

(7) $4,903,000,000 for fiscal year 2013.

(b) COVERED RESEARCH.—The research specified in this subsection is research under programs as follows:

(1) The Solar System Exploration Research Program.

(2) The Mars Exploration Research Program.

(3) The Astronomical Search for Origins Research Program.

(4) The Structure and Evolution of the Universe Research Program.

(5) The Earth–Sun Connection Research Program.

(6) The Earth Systems Science Research Program.

(7) The Earth Science Applications Research Program.

(8) The Biological Sciences Research Program.

(9) The Physical Sciences Research Program.

(10) The Aeronautics Program.

(11) Such other basic research programs as the Administrator of the National Aeronautics and Space Administration may determine to be appropriate, after notifying the appropriate committees of Congress of the Administrator's intent to make the determination.

Subtitle C—Communications Matters

SEC. 231. SENSE OF SENATE ON POLICIES TO ACCELERATE DEPLOYMENT OF ACCESS TO BROADBAND INTERNET.

It is the sense of the Senate that Congress and the Federal Communications Commission should work together to ensure the implementation of regulatory policies that facilitate and accelerate the deployment of access to broadband Internet to order to provide broadband Internet service to as many residences, businesses, and schools as possible in both urban areas and rural areas.

Subtitle D—Science Parks

SEC. 241. DEVELOPMENT OF SCIENCE PARKS.

(a) FINDING.—Section 2 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended by adding at the end the following new paragraph:

''(12) It is in the best interests of the Nation to encourage the formation of science parks to promote the clustering of innovation through high technology activities.''.

(b) DEFINITION.—Section 4 of such Act (15 U.S.C. 3703) is amended by adding at the end the following new paragraphs:

''(14) 'Science park' means a group of interrelated companies and institutions, including suppliers, service providers, institutions of higher education, start-up incubators, and trade associations that cooperate and compete and are located in a specific area whose administration promotes real estate development, technology transfer, and partnerships between such companies and institutions, and does not mean a business or industrial park.

''(15) 'Business or industrial park' means primarily a for-profit real estate venture of businesses or industries which do not necessarily reinforce each

other through supply chain or technology transfer mechanisms.

''(16) 'Science park infrastructure' means facilities that support the daily economic activity of a science park.''.

(c) PROMOTION OF DEVELOPMENT OF SCIENCE PARKS.—Section 5(c) of such Act (15 U.S.C. 3704(c)) is amended—

(1) in paragraph (14), by striking ''and'' at the end;

(2) in paragraph (15), by striking the period at the end and inserting ''; and''; and

(3) by adding at the end the following new paragraph:

''(16) promote the formation of science parks.''.

(d) SCIENCE PARKS.—Such Act is further amended by adding at the end the following new section:

''SEC. 24. SCIENCE PARKS.

''(a) DEVELOPMENT OF PLANS FOR CONSTRUCTION OF SCIENCE PARKS.—

''(1) IN GENERAL.—The Secretary shall award grants for the development of feasibility studies and plans for the construction of new or expansion of existing science parks.

''(2) LIMITATION ON AMOUNT OF GRANTS.—The amount of a grant awarded under this subsection may not exceed $750,000.

''(3) AWARD.—

''(A) COMPETITION REQUIRED.—The Secretary shall award any grant under this subsection pursuant to a full and open competition.

''(B) ADVERTISING.—The Secretary shall advertise any competition under this paragraph in the Commerce Business Daily.

''(C) SELECTION CRITERIA.—The Secretary shall publish the criteria to be utilized in any competition under this paragraph for the selection of recipients of grants under this subsection. Such criteria shall include requirements relating to—

''(i) the number of jobs to be created at the science park each year for a period of 5 years;

''(ii) the funding to be required to construct or expand the science park over the first 5 years;

''(iii) the amount and type of cost matching by the applicant;

"(iv) the types of businesses and research entities expected in the science park and surrounding community;

"(v) letters of intent by businesses and research entities to locate in the science park;

"(vi) the capacity of the science park for expansion over a period of 25 years;

"(vii) the quality of life at the science park for employees at the science park;

"(viii) the capability to attract a well trained workforce to the science park;

"(ix) the management of the science park;

"(x) expected risks in the construction and operation of the science park;

"(xi) risk mitigation;

"(xii) transportation and logistics;

"(xiii) physical infrastructure, including telecommunications; and

"(xiv) ability to collaborate with other science parks throughout the world.

"(4) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated for each of

fiscal years 2007 through 2012, $7,500,000 to carry out this subsection.

''(b) REVOLVING LOAN PROGRAM FOR DEVELOPMENT OF SCIENCE PARK INFRASTRUCTURE.—

''(1) IN GENERAL.—The Secretary shall make grants to six regional centers for the development of existing science park infrastructure through the operation of revolving loan funds by such centers.

''(2) SELECTION OF CENTERS.—

''(A) IN GENERAL.—The Secretary shall select the regional centers to be awarded grants under this subsection utilizing such criteria as the Secretary shall prescribe.

''(B) CRITERIA.—The criteria prescribed by the Secretary under this paragraph shall include criteria relating to revolving loan funds and revolving loan fund operators under paragraph (4), including—

''(i) the qualifications of principal officers;

''(ii) non-Federal cost matching requirements; and

''(iii) conditions for the termination of loan funds.

''(3) LIMITATION ON LOAN AMOUNT.—The amount of any loan for the development of existing science park infrastructure that is funded under this subsection may not exceed $3,000,000.

''(4) REVOLVING LOAN FUNDS.—

''(A) IN GENERAL.—A regional center receiving a grant under this subsection shall fund the development of existing science park infrastructure through the utilization of a revolving loan fund.

''(B) OPERATION AND INTEGRITY.—The Secretary shall prescribe regulations to maintain the proper operation and financial integrity of revolving loan funds under this paragraph.

''(C) EFFICIENT ADMINISTRATION.—The Secretary may—

''(i) at the request of a grantee, amend and consolidate grant agreements governing revolving loan funds to provide flexibility with respect to lending areas and borrower criteria;

''(ii) assign or transfer assets of a revolving loan fund to a third party for the purpose of liquidation, and a third party

may retain assets of the fund to defray costs related to liquidation; and

''(iii) take such actions as are appropriate to enable revolving loan fund operators to sell or securitize loans (except that the actions may not include issuance of a Federal guaranty by the Secretary).

''(D) TREATMENT OF ACTIONS.—An action taken by the Secretary under this paragraph with respect to a revolving loan fund shall not constitute a new obligation if all grant funds associated with the original grant award have been disbursed to the recipient.

''(E) PRESERVATION OF SECURITIES LAWS.—

''(i) NOT TREATED AS EXEMPTED SECURITIES.—No securities issued pursuant to subparagraph (C)(iii) shall be treated as exempted securities for purposes of the Securities Act of 1933 or the Securities Exchange Act of 1934, unless exempted by rule or regulation of the Securities and Exchange Commission.

''(ii) PRESERVATION.—Except as provided in clause (i), no provision of this

paragraph or any regulation issued by the Secretary under this paragraph shall supersede or otherwise affect the application of the securities laws (as such term is defined in section 2(a)(47) of the Securities Exchange Act of 1934) or the rules, regulations, or orders of the Securities and Exchange Commission or a self-regulatory organization thereunder.

''(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated for each of fiscal years 2007 through 2012, $60,000,000 to carry out this subsection.

''(c) LOAN GUARANTEES FOR SCIENCE PARK INFRASTRUCTURE.—

''(1) IN GENERAL.—The Secretary shall guarantee up to 80 percent of the loan amount for loans exceeding $10,000,000 for projects for the construction of science park infrastructure.

''(2) LIMITATIONS ON GUARANTEE AMOUNTS.—The maximum amount of loan principal guaranteed under this subsection may not exceed—

''(A) $50,000,000 with respect to any single project; and

''(B) $500,000,000 with respect to all projects.

''(3) SELECTION OF GUARANTEE RECIPIENTS.—The Secretary shall select recipients of loan guarantees under this subsection based upon the ability of the recipient to collateralize the loan amount through bonds, equity, property, and other such criteria as the Secretary shall prescribe.

''(4) TERMS AND CONDITIONS FOR LOAN GUARANTEES.—For purposes of this section, the loans guaranteed shall be subject to such terms and conditions as the Secretary may prescribe, except that—

''(A) the final maturity of such loans made or guaranteed shall not exceed (as determined by the Secretary) the lesser of—

''(i) 30 years and 32 days; or

''(ii) 90 percent of the useful life of any physical asset to be financed by such loan;

''(B) no loan made or guaranteed may be subordinated to another debt contracted by the borrower or to any other claims against the borrowers in the case of default;

''(C) no loan may be guaranteed unless the Secretary determines that the lender is respon-

sible and that adequate provision is made for servicing the loan on reasonable terms and protecting the financial interest of the United States;

''(D) no loan may be guaranteed if the income from such loan is excluded from gross income for purposes of chapter 1 of the Internal Revenue Code of 1986, or if the guarantee provides significant collateral or security, as determined by the Secretary, for other obligations the income from which is so excluded;

''(E) any guarantee shall be conclusive evidence that said guarantee has been properly obtained, that the underlying loan qualified for such guarantee, and that, but for fraud or material misrepresentation by the holder, such guarantee shall be presumed to be valid, legal, and enforceable;

''(F) the Secretary shall prescribe explicit standards for use in periodically assessing the credit risk of new and existing direct loans or guaranteed loans;

''(G) the Secretary must find that there is a reasonable assurance of repayment before extending credit assistance; and

"(H) new loan guarantees may not be committed except to the extent that appropriations of budget authority to cover their costs are made in advance, as required in section 504 of the Federal Credit Reform Act of 1990.

"(5) PAYMENT OF LOSSES.—For purposes of this section—

"(A) IN GENERAL.—If, as a result of a default by a borrower under a guaranteed loan, after the holder thereof has made such further collection efforts and instituted such enforcement proceedings as the Secretary may require, the Secretary determines that the holder has suffered a loss, the Secretary shall pay to such holder the percentage of such loss (not more than 80 percent) specified in the guarantee contract. Upon making any such payment, the Secretary shall be subrogated to all the rights of the recipient of the payment. The Secretary shall be entitled to recover from the borrower the amount of any payments made pursuant to any guarantee entered into under this section.

"(B) ENFORCEMENT OF RIGHTS.—The Attorney General shall take such action as may be appropriate to enforce any right accruing to the

United States as a result of the issuance of any guarantee under this section.

''(C) FORBEARANCE.—Nothing in this section may be construed to preclude any forbearance for the benefit of the borrower which may be agreed upon by the parties to the guaranteed loan and approved by the Secretary, if budget authority for any resulting subsidy costs (as defined under the Federal Credit Reform Act of 1990) is available.

''(D) MANAGEMENT OF PROPERTY.—Notwithstanding any other provision of law relating to the acquisition, handling, or disposal of property by the United States, the Secretary shall have the right in the Secretary's discretion to complete, recondition, reconstruct, renovate, repair, maintain, operate, or sell any property acquired by the Secretary pursuant to the provisions of this section.

''(6) REVIEW.—The Comptroller General of the United States shall, within 2 years of the date of enactment of this section, conduct a review of the subsidy estimates for the loan guarantees under this subsection, and shall submit to Congress a report on the review conducted under this paragraph.

''(7) TERMINATION.—No loan may be guaranteed under this subsection after September 30, 2012.

''(8) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated—

''(A) $35,000,000 for the cost, as defined in section 502(5) of the Federal Credit Reform Act of 1990, of guaranteeing $500,000,000 of loans under this subsection; and

''(B) $6,000,000 for administrative expenses for fiscal year 2007 and such sums as necessary thereafter for administrative expenses in subsequent years.

''(d) NATIONAL ACADEMY OF SCIENCES EVALUATION.—

''(1) IN GENERAL.—The Secretary shall enter into an agreement with the National Academy of Sciences under which the Academy shall evaluate, on a tri-annual basis, the activities under this section.

''(2) TRI-ANNUAL REPORT.—Under the agreement under paragraph (1), the Academy shall submit to the Secretary a report on its evaluation of science park development under that paragraph. Each report may include such recommendations as the Academy considers appropriate for additional ac-

tivities to promote and facilitate the development of science parks in the United States.

''(e) TRI-ANNUAL REPORT.—Not later than March 31 of every third year, the Secretary shall submit to Congress a report on the activities under this section during the preceding 3 years, including any recommendations made by the National Academy of Sciences under subsection (d)(2) during such period. Each report may include such recommendations for legislative or administrative action as the Secretary considers appropriate to further promote and facilitate the development of science parks in the United States.

''(f) REGULATIONS.—

''(1) REGULATIONS.—Consistent with Office of Management and Budget Circular A–129, 'Policies for Federal Credit Programs and Non-Tax Receivables', the Secretary shall prescribe regulations to carry out this section.

''(2) DEADLINE.—The Secretary shall prescribe such regulations not later than one year after the date of enactment of this section.''.

Subtitle E—Authorization of Appropriations for the National Science Foundation for Research and Related Activities

SEC. 251. AUTHORIZATION OF APPROPRIATIONS FOR THE NATIONAL SCIENCE FOUNDATION FOR RESEARCH AND RELATED ACTIVITIES.

(a) IN GENERAL.—There is hereby authorized to be appropriated for the National Science Foundation for Research and Related Activities, amounts as follows:

(1) $4,195,000,000 for fiscal year 2007.

(2) $4,614,000,000 for fiscal year 2008.

(3) $5,076,000,000 for fiscal year 2009

(4) $5,584,000,000 for fiscal year 2010.

(5) $6,143,000,000 for fiscal year 2011.

(6) $6,757,000,000 for fiscal year 2012.

(7) $7,432,000,000 for fiscal year 2013.

(b) LIMITATION ON AVAILABILITY.—Amounts authorized to be appropriated for the National Science Foundation by subsection (a) shall not be available for the United States Solar Program and Integrative Activities of the Foundation.

TITLE III—ENSURING THE BEST AND BRIGHTEST REMAIN IN THE UNITED STATES

Subtitle A—Visas for Doctorate Students in Mathematics, Engineering, Technology, or the Physical Sciences

SEC. 311. FINDINGS.

Congress finds the following:

(1) The National Academies, in their congressionally requested report entitled ''Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future'', recommended that Congress—

(A) continue to improve visa processing for international students and scholars by providing less complex procedures and continuing to make improvements on issues such as visa categories and duration, travel for scientific meetings, the technology-alert list, reciprocity agreements, and changes in status;

(B) provide a 1-year automatic visa extension to international students who receive doctorates or the equivalent in science, technology, engineering, mathematics, or other fields of na-

tional need at qualified United States institutions to remain in the United States to seek employment;

(C) provide such students with automatic work permits and expedited residence status if they are offered jobs by employers based in the United States and pass a security screening test;

(D) institute a new skills-based, preferential immigration option that gives applicants with doctorate-level education and science and engineering skills priority in obtaining United States citizenship; and

(E) increase the number of H–1B visas by 10,000, which should be allocated for applicants with doctorate degrees in science, or engineering from a United States university; and

(2) Since the publication of the report by the National Academies, the Senate has passed the Deficit Reduction Act of 2005, which authorizes an additional 30,000 H–1B visas per year.

SEC. 312. SENSE OF THE SENATE.

It is the sense of the Senate that—

(1) the Department of State and the Department of Homeland Security have made significant

improvements since 2002 in the efficiency with which visas are processed for—

(A) students at colleges and universities in the United States; and

(B) foreign researchers to engage in appropriate scientific research in the United States;

(2) particular improvements have been made to the MANTIS clearance process, which—

(A) reduce wait times from more than 70 days to less than 15 days; and

(B) extend the duration of the MANTIS clearance process up to 4 years, as appropriate, to cover the duration of study for foreign students in the United States;

(3) both departments and related supporting agencies should further improve efficiency and convenience in the granting of visas to foreign students and researchers while protecting national security;

(4) the departments should extend MANTIS clearance for foreign researchers for the duration of a specified scientific research program while balancing security concerns; and

(5) other such improvements should include—

(A) review of the technology-alert list; and

(B) efforts to better facilitate travel for scientific conferences.

SEC. 313. VISAS FOR DOCTORATE STUDENTS IN MATHEMATICS, ENGINEERING, TECHNOLOGY, OR THE PHYSICAL SCIENCES.

(a) CREATION OF NEW VISA CATEGORY.—Section 101(a)(15)(F) of the Immigration and Nationality Act (8 U.S.C. 1101(a)(15)(F)) is amended—

(1) in clause (i)—

(A) by inserting ''(except for a graduate program described in clause (iv))'' after ''full course of study'';

(B) by striking ''214(*l*)'' and inserting ''214(m)''; and

(C) by striking the comma at the end and inserting a semicolon;

(2) in clause (ii)—

(A) by inserting ''or clause (iv)'' after ''clause (i)''; and

(B) by striking '', and'' and inserting a semicolon;

(3) in clause (iii), by inserting ''and'' at the end; and

(4) by adding at the end the following:

''(iv) an alien described in clause (i) who has been accepted and plans to attend an accredited graduate program in mathematics, engineering, technology, or the physical sciences in the United States for the purpose of obtaining a doctorate degree;''.

(b) REQUIREMENTS FOR OBTAINING AN F–4 VISA.—Section 214(m) of the Immigration and Nationality Act (8 U.S.C. 1184(m)) is amended—

(1) by striking the matter preceding paragraph (1) and inserting the following:

''(m) NONIMMIGRANT ELEMENTARY, SECONDARY, AND POST-SECONDARY SCHOOL STUDENTS.—''; and

(2) by adding at the end the following:

''(3)(A) An alien who obtains the status of a nonimmigrant under section 101(a)(15)(F)(iv) shall demonstrate an intent to—

''(i) return to the country of residence of such alien immediately after the completion or termination of the graduate program qualifying such alien for such status; or

''(ii) find employment in the United States related to the field of study of such alien and become a permanent resident of the United States upon the

completion of the graduate program, which was the basis for such nonimmigrant status.

''(B) A visa issued to an alien under section 101(a)(15)(F)(iv) shall be valid—

''(i) during the intended period of study in a graduate program described in such section;

''(ii) for an additional period, not to exceed 1 year beyond the completion of the graduate program, if the alien is actively pursuing an offer of employment related to the knowledge and skills obtained through the graduate program; and

''(iii) for an additional period, not to exceed 6 months, while the alien's application for adjustment of status under section 245(i)(4) is pending.

''(C) An alien shall qualify for adjustment of status to that of a person admitted for permanent residence if the alien—

''(i) has the status of a nonimmigrant under section 101(a)(15)(F)(iv);

''(ii) has successfully earned a doctorate degree in mathematics, engineering, technology or the physical sciences at an accredited college or university in the United States; and

''(iii) is employed full-time in the United States in a position related to the knowledge and skills gained while pursuing such degree.''.

(c) ADJUSTMENT OF STATUS.—Section 245(i) of the Immigration and Nationality Act (8 U.S.C. 1255(i)) is amended by adding at the end the following:

''(4) The Secretary of Homeland Security may adjust the status of an alien who meets the requirements under section 214(m)(3) to that of an alien lawfully admitted for permanent residence if the alien—

''(A) makes an application for such adjustment;

''(B) is eligible to receive an immigrant visa;

''(C) is admissible to the United States for permanent residence; and

''(D) remits a fee of $1,000 to the Secretary.''.

(d) USE OF FEES.—

(1) JOB TRAINING; SCHOLARSHIPS.—Section 286(s)(1) of the Immigration and Nationality Act (8 U.S.C. 1356(s)(1)) is amended by inserting ''and 80 percent of the fees collected under section 245(i)(4)'' before the period at the end.

(2) FRAUD PREVENTION AND DETECTION.—Section 286(v)(1) of the Immigration and Nationality Act (8 U.S.C. 1356(v)(1)) is amended by in-

serting ''and 20 percent of the fees collected under section 245(i)(4)'' before the period at the end.

SEC. 314. ALIENS NOT SUBJECT TO NUMERICAL LIMITATIONS ON EMPLOYMENT-BASED IMMIGRANTS.

(a) IN GENERAL.—Section 201(b)(1) of the Immigration and Nationality Act (8 U.S.C. 1151(b)(1)) is amended by adding at the end the following:

''(F) Aliens who have earned an advanced degree in science, technology, engineering, or math and have been working in a related field in the United States under a nonimmigrant visa during the 3-year period preceding their application for an immigrant visa under section 203(b).

''(G) Aliens described in subparagraph (A) or (B) of section 203(b)(1)(A) or who have received a national interest waiver under section 203(b)(2)(B).

''(H) The immediate relatives of an alien who is admitted as an employment-based immigrant under section 203(b).''.

(b) APPLICABILITY.—The amendments made by subsection (a) shall apply to any visa application pending on

the date of enactment of this Act and any visa application filed on or after such date of enactment.

Subtitle B—Patent Reform

SEC. 321. PATENT REFORM.

It is the sense of the Senate that—

(1) the United States Patent and Trademark Office should be provided with sufficient resources to make intellectual property protection more timely, predictable, and effective;

(2) the resources described under paragraph (1) should include a 20 percent increase in overall funding to hire and train additional examiners and implement more capable electronic processing; and

(3) Congress should implement comprehensive patent reform that—

(A) establishes a first-inventor-to-file system;

(B) institutes an open review process following the grant of a patent;

(C) encourages research uses of patented inventions by shielding researchers from infringement liability; and

(D) reduces barriers to innovation in specific industries with specialized patent needs.

TITLE IV—REFORMING DEEMED EXPORTS

SEC. 401. SENSE OF SENATE ON EXEMPTION OF CERTAIN USES OF TECHNOLOGY FROM TREATMENT AS EXPORTS.

(a) SENSE OF SENATE.—It is the sense of the Senate that the use of technology by an institution of higher education in the United States should not be treated as an export of such technology for purposes of section 5 of the Export Administration Act of 1979 (50 U.S.C. App. 2404) and any regulations prescribed thereunder, as currently in effect pursuant to the provisions of the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.), or any other provision of law, if such technology is so used by such institution for fundamental research.

(b) DEFINITIONS.—In this section:

(1) FUNDAMENTAL RESEARCH.—The term ''fundamental research'' has the meaning given that term in National Security Decision Directive 189, entitled ''National Policy on Transfer of Scientific, Technical, and Engineering Information'' and dated September 21, 1985.

(2) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the

meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a).

TITLE V—STRENGTHENING BASIC RESEARCH AT THE DEPARTMENT OF DEFENSE

SEC. 501. DEPARTMENT OF DEFENSE EARLY-CAREER RESEARCH GRANTS.

(a) PURPOSE.—It is the purpose of this section to authorize research grants in the Department of Defense for early-career scientists and engineers for purposes of pursuing independent research.

(b) DEFINITION OF ELIGIBLE EARLY-CAREER RESEARCHER.—In this section, the term ''eligible early-career researcher'' means an individual who—

(1) completed a doctorate or other terminal degree not more than 10 years before the date of enactment of this Act and has demonstrated promise in the field of science, technology, engineering, or mathematics; or

(2) has an equivalent professional qualification in the field of science, technology, engineering, or mathematics.

(c) GRANT PROGRAM AUTHORIZED.—

(1) IN GENERAL.—The Secretary of Defense shall award not less than 25 grants per year to outstanding eligible early-career researchers to support the work of such researchers in universities, private

industry, or federally-funded research and development centers.

(2) APPLICATION.—An eligible early-career researcher who desires to receive a grant under this section shall submit to the Secretary of Defense an application at such time, in such manner, and accompanied by such information as the Secretary may require.

(3) SPECIAL CONSIDERATION.—In awarding grants under this section, the Secretary of Defense shall give special consideration to eligible early-career researchers who have followed alternative career paths such as working part-time or in non-academic settings, or who have taken a significant career break or other leave of absence.

(4) DURATION AND AMOUNT.—A grant under this section shall be 5 years in duration. An eligible early career-researcher who receives a grant under this section shall receive $100,000 for each year of the grant period.

(5) USE OF FUNDS.—An eligible early career-researcher who receives a grant under this section shall use the grant funds for basic research in natural sciences, engineering, mathematics, or computer

sciences at a university, private industry, or federally-funded research and development center.

(6) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(A) $2,500,000 for fiscal year 2007;

(B) $5,000,000 for fiscal year 2008;

(C) $7,500,000 for fiscal year 2009;

(D) $10,000,000 for fiscal year 2010; and

(E) $12,500,000 for fiscal year 2011.

SEC. 502. AUTHORIZATION OF APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR BASIC RESEARCH.

There is hereby authorized to be appropriated for the Department of Defense for basic (6.1) research, amounts for the research, development, test, and evaluation accounts of the Department, and for other accounts of the Department providing funding for such research, in the aggregate as follows:

(1) $1,616,000,000 for fiscal year 2007.

(2) $1,778,000,000 for fiscal year 2008.

(3) $1,995,000,000 for fiscal year 2009.

(4) $2,151,000,000 for fiscal year 2010.

(5) $2,364,000,000 for fiscal year 2011.

(6) $2,602,000,000 for fiscal year 2012.

(7) $2,862,000,000 for fiscal year 2013.