99TH CONGRESS
1ST SESSION

S. 1914

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to permit cooperative agreements between industry and laboratories owned and operated by the Federal Government, and for other purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER 9, 1985

Mr. GORTON (for himself, Mr. DANFORTH, Mr. RIEGLE, Mr. HEFLIN, Mr. GORE, Mr. ROCKEFELLER, Mr. DOLE, Mr. HOLLINGS, and Mr. INOUYE) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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A BILL

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to permit cooperative agreements between industry and laboratories owned and operated by the Federal Government, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Federal Technology Transfer Act of 1985".

UTILIZATION OF FEDERAL TECHNOLOGY

SEC. 2. (a) Section 11(a) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(a)) is amended—

(1) by inserting "(1)" after "POLICY.—"; and

(2) by adding at the end thereof the following:

"(2) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.".

(b)(1) Section 11(b) of such Act (15 U.S.C. 3710(b)) is amended—

(A) by striking "a total annual budget exceeding $20,000,000 shall provide at least one professional individual full-time" and inserting in lieu thereof "200 or more full-time scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions";

(B) by striking "requirements set forth in (1) and/or (2) of this subsection" and inserting in lieu thereof "requirement set forth in clause (2) of the preceding sentence"; and

(C) by striking "either requirement (1) or (2)" in the last sentence and inserting in lieu thereof "such requirement".

(2) Section 11(c) of such Act (15 U.S.C. 3710(c)) is amended—

(A) by amending paragraph (1) to read as follows:

"(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications;";

(B) by inserting "all" before "federally owned" in paragraph (2);

(C) by striking "the Center for the utilization of Federal Technology" in paragraph (3) and inserting in lieu thereof "the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer,";

(D) by striking "in response to requests from State and local government officials." in paragraph (4) and inserting in lieu thereof "to State and local government officials; and"; and

(E) by adding at the end thereof the following:

"(5) to participate, where feasible, in regional, State, and local government programs designed to fa-

cilitate or stimulate the transfer of technology for the benefit of the region, State, or local jurisdiction in which the federal laboratory is located.".

(c) Section 11(d) of such Act (15 U.S.C. 3710(d)) is amended—

(1) by striking all from "(d)" through "shall—" and inserting in lieu thereof the following:

"(d) DISSEMINATION OF TECHNICAL INFORMATION.—The National Technical Information Service shall—";

(2) by striking paragraph (2);

(3) by striking "existing" in paragraph (3), and redesignating such paragraph as paragraph (2);

(4) by striking paragraph (4) and inserting in lieu thereof the following:

"(3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests require a response involving more than the published information available to the Service;";

(5) by redesignating paragraphs (5) and (6) as paragraphs (4) and (5), respectively; and

(6) by striking "(c)(4)" in paragraph (4), as so redesignated, and inserting in lieu thereof "(c)(3)".

(d) Section 11(e) of such Act (15 U.S.C. 3710(e)) is amended by striking "Center for the Utilization of Federal Technology" and inserting in lieu thereof "Assistant Secretary for Productivity, Technology, and Innovation".

ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER

SEC. 3. Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710), as amended by section 2 of this Act, is further amended—

(1) by redesignating subsection (e) as subsection (f); and

(2) by inserting after subsection (d) the following:

"(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the 'Consortium') which, in cooperation with Federal laboratories and the private sector, shall—

"(A) develop and, with the consent of the Federal laboratory concerned, administer techniques, training courses, and materials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations;

"(B) furnish advice and assistance requested by Federal agencies and laboratories for use in their tech-

nology transfer programs (including the planning of seminars for small business and other industry);

"(C) provide a clearinghouse, at the laboratory level, for requests for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations (including universities), Federal agencies and laboratories, and other persons, and—

"(i) to the extent that a response to such requests can be made with published information available to the National Technical Information Service, refer such requests to that Service; and

"(ii) otherwise refer such requests to the appropriate Federal laboratories and agencies;

"(D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;

"(E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the National Aeronautics and Space Administration, and other Federal agencies, as necessary;

"(F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate

technology transfer mechanisms such as personnel exchanges and computer-based systems;

"(G) with the consent of any Federal laboratory, assist such laboratory to establish technical volunteer service programs for the purpose of providing technical assistance to communities related to such laboratory; and

"(H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations.

"(2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall include a senior staff member of each Federal laboratory which is a member of the Consortium and a representative appointed from each Federal agency with one or more member laboratories.

"(3) The representatives to the Consortium shall elect a Chairman of the Consortium.

"(4) The Director of the National Bureau of Standards shall provide the Consortium, on a reimbursable basis, with administrative services, such as office space, personnel, and

support services of the Bureau, as requested by the Consortium and approved by such Director.

"(5) Not later than 1 year after the date of the enactment of this subsection, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (6), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made.

"(6)(A) Subject to subparagraph (B), an amount equal to 0.005 percent of that portion of the research and development budget of each Federal agency that is to be utilized by the laboratories of such agency for a fiscal year referred to in subparagraph (B)(ii) shall be transferred by such agency to the National Bureau of Standards at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Bureau to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.

"(B) A transfer may be made by any Federal agency under subparagraph (A), for any fiscal year, only if—

"(i) the amount so transferred by that agency (as determined under such subparagraph) would exceed $10,000; and

"(ii) such transfer is made with respect to the fiscal year 1987, 1988, 1989, 1990, or 1991.

"(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, may provide such additional support for operations of the Consortium as they consider appropriate.".

FUNCTIONS OF THE SECRETARY OF COMMERCE

SEC. 4. Section 11 of such Act (15 U.S.C. 3710), as amended by this Act, is further amended by adding at the end thereof the following:

"(g) FUNCTIONS OF THE SECRETARY.—(1) The Secretary, in consultation with other Federal agencies, may—

"(A) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to Federal laboratories, including research and development limited partnerships;

"(B) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and

"(C) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development programs and projects.

"(2) Two years after the date of enactment of this subsection, and every two years thereafter, the Secretary shall submit a report to the President and the Congress on the use by the agencies and the Secretary of the authorities specified in this Act. Other Federal agencies shall, to the extent permitted by law, provide the Secretary with all information necessary to prepare such reports.".

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

SEC. 5. The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 12 through 15 as sections 15 through 18, respectively, and by inserting after section 11 the following:

"SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

"(a) GENERAL AUTHORITY.—(1) Each Federal agency may permit the director of any of its Government-operated Federal laboratories—

"(A) to enter into cooperative research and development arrangements (subject to such regulations or review procedures as the agency considers appropriate) with other Federal agencies, units of State or local government, industrial organizations (including corpo-

rations, partnerships and limited partnerships), public and private foundations, nonprofit organizations (including universities), or other persons (including licensees of inventions owned by the Federal agency); and

"(B) to negotiate licensing agreements under section 207 of title 35, United States Code, or other authorities for Government-owned inventions made at the laboratory and other inventions of Federal employees that may be voluntarily assigned to the Government.

"(2) Under arrangements entered into pursuant to paragraph (1), a laboratory may—

"(A) accept funds, services, and property from collaborating parties and provide services and property to collaborating parties;

"(B) grant or agree to grant in advance to a collaborating party patent licenses, assignments, or options thereto, in any invention made by a Federal employee under the arrangement, retaining such rights as the Federal agency considers appropriate;

"(C) waive, in whole or in part, any right of ownership which the Government may have under any other statute to any inventions made by a collaborating party or employee of a collaborating party under the arrangement; and

"(D) to the extent consistent with any applicable agency requirements, permit employees or former employees of the laboratory to participate in efforts to commercialize inventions they made while in the service of the United States.

"(3) Each agency shall maintain a record of all agreements entered into under this section.

"(b) DEFINITION.—As used in this section, the term—

"(1) 'cooperative research and development agreement' means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government provides personnel, services, facilities, equipment, or other resources (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, srvices, facilities, equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the agency, except that such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code; and

"(2) 'laboratory' means a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the perform-

ance of research and development by employees of the Federal Government.".

"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.".

REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES

SEC. 6. The Stevenson-Wydler Technology Innovation Act of 1980, as amended by this Act, is further amended by inserting after section 12 the following:

"SEC. 13. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

"(a) CASH AWARDS PROGRAM.—The head of each Federal agency that is making expenditures at a rate of more than $50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

"(1) inventions, innovations, or other outstanding scientific or technological contributions of value to the United States due to commercial applications or due to contributions to missions of the Federal agency or the Federal Government; or

"(2) exemplary activities that promote the domestic transfer of science and technology developed within the Federal Government and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.

"(b) PAYMENT OF ROYALTIES.—Any royalties or other income received by an agency from the licensing or assignment of inventions under this section or under section 207 of title 35, United States Code, or other authority shall be transferred to the agency's Government-operated laboratories with a substantial percentage being returned to the laboratories whose inventions produced the royalties or income. Such royalties or income shall be disposed of as follows:

"(1) At least 15 percent of the royalties or other income received each year by the laboratory on account of any invention shall be paid to the inventor or coinventors if they were employees of the agency at the time the invention was made. Payments made under this paragraph are in addition to the regular pay of the employee and to any awards made to that employee, and such payments shall not affect the entitlement or limit the amount of the regular pay, annuity, or other awards to which the employee is otherwise entitled or for which the employee is otherwise eligible.

"(2) The balance of any royalties or related income earned during any fiscal year after paying the inventors' portions under paragraph (1) may be retained by the laboratory up to the limits specified in this paragraph, and used—

"(A) for mission-related research and development of the laboratory;

"(B) to support development and education programs for employees of the laboratory;

"(C) to reward employees of the laboratory for contributing to the development of new technologies and assisting in the transfer of technology to the private sector, and for inventions of value to the Government that will not produce royalties;

"(D) to further scientific exchange to and from the laboratory; and

"(E) for payment of patenting costs and fees and other expenses incidental to promoting, administering, and licensing inventions, including the fees or costs for services of other agencies or other persons or organizations for invention management and licensing services.

If the balance for any laboratory after paying the inventors' shares under paragraph (1) exceeds 5 percent

of the annual budget of the laboratory, 75 percent of the excess shall be paid to the Treasury of the United States and the remaining 25 percent shall be used for the purposes listed in subparagraphs (A) through (E), by the end of the fiscal year subsequent to the one in which they were received. Any funds not so used or obligated by the end of such fiscal year shall be paid to the Treasury of the United States.

"(c) ASSIGNED INVENTIONS.—If the invention was one assigned to the agency either (1) by a contractor, grantee, or the recipient of a cooperative agreement of the agency, or (2) by an employee of the agency that was not working in the laboratory at the time the invention was made, the agency unit that funded or employed or assigned the assignee shall, for purposes of this section, be considered to be a laboratory.

"(d) REPORTS.—In making their annual budget submissions, Federal agencies shall submit to the appropriate authorization and appropriation committees of both Houses of the Congress summaries of the amount of royalties or other income received and expenditures made (including inventor awards) under this section.".

EMPLOYEE ACTIVITIES

SEC. 7. The Stevenson-Wydler Technology Innovation Act of 1980, as amended by this Act, is further amended by inserting after section 13 the following:

"SEC. 14. EMPLOYEE ACTIVITIES.

"(a) IN GENERAL.—If a Federal agency which has the right of ownership to an invention under this Act does not intend to file for a patent application or otherwise to promote commercialization of such invention, the agency may allow the inventor, if the inventor is a Government employee or former employee who made the invention during the course of employment with the Government, to retain title to the invention (subject to reservation by the Government of a non-exclusive, nontransferrable, irrevocable, paid up license to practice or have practiced the invention throughout the world by or on behalf of the Government). In addition, the agency may condition the inventor's right to title on the timely filing of a patent application in cases when the Government determines that it has or may have a need to practice the invention.

"(b) DEFINITION.—For purposes of this section, Federal employees include 'special Government employees' as defined in section 202 of title 18, United States Code.

"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.".

MISCELLANEOUS AND CONFORMING AMENDMENTS

SEC. 8. (a) Section 10 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3709) is repealed.

(b)(1) Section 3(2) of such Act (15 U.S.C. 3702(2)) is amended by striking "centers for industrial technology" and inserting in lieu thereof "cooperative research centers".

(2) Section 4 of such Act (15 U.S.C. 3703) is amended—

(A) by striking "Industrial Technology" in paragraph (1) and inserting in lieu thereof "Productivity, Technology, and Innovation";

(B) by striking " 'Director' means the Director of the Office of Industrial Technology" in paragraph (3) and inserting in lieu thereof " 'Assistant Secretary' means the Assistant Secretary for Productivity, Technology, and Innovation";

(C) by striking "Centers for Industrial Technology" in paragraph (4) and inserting in lieu thereof "Cooperative Research Centers";

(D) by striking paragraph (6), and redesignating paragraphs (7) and (8) as paragraphs (6) and (7), respectively; and

(E) by striking "owned and funded" in paragraph (6), as so redesignated, and inserting in lieu thereof "owned, leased, or otherwise used by a Federal agency and funded".

(3) Section 5(a) of such Act (15 U.S.C. 3704(a)) is amended by striking "Industrial Technology" and inserting in lieu thereof "Productivity, Technology, and Innovation".

(4) Section 5(b) of such Act (15 U.S.C. 3704(b)) is amended by striking "DIRECTOR" and inserting in lieu thereof "ASSISTANT SECRETARY", and by striking all from "a Director of the Office" and inserting in lieu thereof "an Assistant Secretary for Productivity, Technology, and Innovation.".

(5) Section 5(c) of such Act (15 U.S.C. 3704(c)) is amended by striking "the Director" each place it appears and inserting in lieu thereof "the Assistant Secretary".

(6) The heading of section 6 of such Act is amended to read as follows:

"SEC. 6. COOPERATIVE RESEARCH CENTERS.".

(7) Section 6(a) of such Act (15 U.S.C. 3705(a)) is amended by striking "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(8) Section 6(b)(1) of such Act (15 U.S.C. 3705(b)(1)) is amended by striking "basic and applied".

(9) Section 6(e) of such Act (15 U.S.C. 3705(e)) is amended to read as follows:

"(e) RESEARCH AND DEVELOPMENT UTILIZATION.—In the promotion of technological innovation and commercial-

ization of research and development efforts by Centers under this section, chapter 18 of title 35, United States Code, shall apply.".

(10) Section 6(f) of such Act (15 U.S.C. 3705(f)) is repealed.

(11) The heading of section 8 of such Act is amended by striking "**CENTERS FOR INDUSTRIAL TECHNOLOGY**" and inserting in lieu thereof "**COOPERATIVE RESEARCH CENTERS**".

(12) Section 8(a) of such Act (15 U.S.C. 3707(a)) is amended by striking "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(c) Section 4 of such Act (15 U.S.C. 3703), as amended by subsection (b)(2) of this section, is further amended by adding at the end thereof the following:

"(8) 'Federal agency' means any executive agency as defined in section 105 of title 5, United States Code, and the military departments, as defined in section 102 of such title.

"(9) 'Invention' means any invention or discovery which is or may be patentable or otherwise protected under title 35, United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

"(10) 'Made', when used in conjunction with any invention, means the conception or first actual reduction to practice of such invention.".

(d)(1) Such Act (as amended by this Act) is further amended by redesignating sections 11 through 18 as sections 10 through 17, respectively.

(2)(A) Section 5(d) of such Act (15 U.S.C. 3704(d)) is amended by inserting "(as then in effect)" after "Act" the second time it appears.

(B) Section 8(a) of such Act (15 U.S.C. 3707(a)) is amended by striking the last sentence.

(C) Section 9(d) of such Act (15 U.S.C. 3708(d)) is amended by striking "or 13" and inserting in lieu thereof "10, or 14".

O