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

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.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 That this Act may be cited as the "Federal Technology
- 4 Transfer Act of 1985".

T	UTILIZATION OF FEDERAL TECHNOLOGY
2	SEC. 2. (a) Section 11(a) of the Stevenson-Wydler
3	Technology Innovation Act of 1980 (15 U.S.C. 3710(a)) is
4	amended—
5	(1) by inserting "(1)" after "Policy.—"; and
6	(2) by adding at the end thereof the following:
7	"(2) Each laboratory director shall ensure that efforts to
8	transfer technology are considered positively in laboratory job
9	descriptions, employee promotion policies, and evaluation of
10	the job performance of scientists and engineers in the
11	laboratory.".
12	(b)(1) Section 11(b) of such Act (15 U.S.C. 3710(b)) is
13	amended—
14	(A) by striking "a total annual budget exceeding
15	\$20,000,000 shall provide at least one professional in-
16	dividual full-time" and inserting in lieu thereof "200 or
17	more full-time scientific, engineering, and related tech-
18	nical positions shall provide one or more full-time
19	equivalent positions";
20	(B) by striking "requirements set forth in (1) and/
21	or (2) of this subsection" and inserting in lieu thereof
22	"requirement set forth in clause (2) of the preceding
23	sentence"; and

1	(C) by striking "either requirement (1) or (2)" in
2	the last sentence and inserting in lieu thereof "such re-
3	quirement".
4	(2) Section 11(c) of such Act (15 U.S.C. 3710(c)) is
5	amended—
6	(A) by amending paragraph (1) to read as follows:
7	"(1) to prepare application assessments for select-
8	ed research and development projects in which that
9	laboratory is engaged and which in the opinion of the
10	laboratory may have potential commercial applica-
11	tions;";
12	(B) by inserting "all" before "federally owned" in
13	paragraph (2);
14	(C) by striking "the Center for the utilization of
15	Federal Technology" in paragraph (3) and inserting in
16	lieu thereof "the National Technical Information Serv-
17	ice, the Federal Laboratory Consortium for Technology
18	Transfer,";
19	(D) by striking "in response to requests from
20	State and local government officials." in paragraph (4)
21	and inserting in lieu thereof "to State and local gov-
22	ernment officials; and"; and
23	(E) by adding at the end thereof the following:
24	"(5) to participate, where feasible, in regional,
25	State, and local government programs designed to fa-

1	cilitate or stimulate the transfer of technology for the
2	benefit of the region, State, or local jurisdiction in
3	which the federal laboratory is located.".
4	(c) Section 11(d) of such Act (15 U.S.C. 3710(d)) is
5	amended—
6	(1) by striking all from "(d)" through "shall—"
7	and inserting in lieu thereof the following:
8	"(d) Dissemination of Technical Information.—
9	The National Technical Information Service shall—";
10	(2) by striking paragraph (2);
11	(3) by striking "existing" in paragraph (3), and
12	redesignating such paragraph as paragraph (2);
13	(4) by striking paragraph (4) and inserting in lieu
14	thereof the following:
15	"(3) receive requests for technical assistance from
16	State and local governments, respond to such requests
17	with published information available to the Service,
18	and refer such requests to the Federal Laboratory Con-
19	sortium for Technology Transfer to the extent that
20	such requests require a response involving more than
21	the published information available to the Service;";
22	(5) by redesignating paragraphs (5) and (6) as
23	paragraphs (4) and (5), respectively; and
24	(6) by striking "(c)(4)" in paragraph (4), as so re-
25	designated, and inserting in lieu thereof "(c)(3)".

1	(d) Section 11(e) of such Act (15 U.S.C. 3710(e)) is
2	amended by striking "Center for the Utilization of Federal
3	Technology" and inserting in lieu thereof "Assistant Secre-
4	tary for Productivity, Technology, and Innovation".
5	ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM
6	FOR TECHNOLOGY TRANSFER
7	SEC. 3. Section 11 of the Stevenson-Wydler Technolo-
8	gy Innovation Act of 1980 (15 U.S.C. 3710), as amended by
9	section 2 of this Act, is further amended—
10	(1) by redesignating subsection (e) as subsection
11	(f); and
12	(2) by inserting after subsection (d) the following:
13	"(e) ESTABLISHMENT OF FEDERAL LABORATORY
14	CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is
15	established the Federal Laboratory Consortium for Technolo-
16	gy Transfer (hereinafter referred to as the 'Consortium')
17	which, in cooperation with Federal laboratories and the pri-
18	vate sector, shall—
19	"(A) develop and, with the consent of the Federal
20	laboratory concerned, administer techniques, training
21	courses, and materials concerning technology transfer
22	to increase the awareness of Federal laboratory em-
23	ployees regarding the commercial potential of labora-
24	tory technology and innovations;
25	"(B) furnish advice and assistance requested by
26	Federal agencies and laboratories for use in their tech-

1	nology transfer programs (including the planning of
2	seminars for small business and other industry);
3	"(C) provide a clearinghouse, at the laboratory
4	level, for requests for technical assistance from States
5	and units of local governments, businesses, industrial
6	development organizations, not-for-profit organizations
7	(including universities), Federal agencies and laborato-
8	ries, and other persons, and-
9	"(i) to the extent that a response to such re-
10	quests can be made with published information
11	available to the National Technical Information
12	Service, refer such requests to that Service; and
13	"(ii) otherwise refer such requests to the ap-
14	propriate Federal laboratories and agencies;
15	"(D) facilitate communication and coordination be-
16	tween Offices of Research and Technology Applica-
17	tions of Federal laboratories;
18	"(E) utilize (with the consent of the agency in-
19	volved) the expertise and services of the National Sci-
20	ence Foundation, the Department of Commerce, the
21	National Aeronautics and Space Administration, and
22	other Federal agencies, as necessary;
23	"(F) with the consent of any Federal laboratory,
24	facilitate the use by such laboratory of appropriate

- technology transfer mechanisms such as personnel ex changes 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 appointdefrom each Federal agency with one or more member laboratories.
- 20 "(3) The representatives to the Consortium shall elect a 21 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

- 1 support services of the Bureau, as requested by the Consor-
- 2 tium and approved by such Director.
- 3 "(5) Not later than 1 year after the date of the enact-
- 4 ment of this subsection, and every year thereafter, the Chair-
- 5 man of the Consortium shall submit a report to the President,
- 6 to the appropriate authorization and appropriation commit-
- 7 tees of both Houses of the Congress, and to each agency with
- 8 respect to which a transfer of funding is made (for the fiscal
- 9 year or years involved) under paragraph (6), concerning the
- 10 activities of the Consortium and the expenditures made by it
- 11 under this subsection during the year for which the report is
- 12 made.
- 13 "(6)(A) Subject to subparagraph (B), an amount equal to
- 14 0.005 percent of that portion of the research and develop-
- 15 ment budget of each Federal agency that is to be utilized by
- 16 the laboratories of such agency for a fiscal year referred to in
- 17 subparagraph (B)(ii) shall be transferred by such agency to
- 18 the National Bureau of Standards at the beginning of the
- 19 fiscal year involved. Amounts so transferred shall be provided
- 20 by the Bureau to the Consortium for the purpose of carrying
- 21 out activities of the Consortium under this subsection.
- 22 "(B) A transfer may be made by any Federal agency
- 23 under subparagraph (A), for any fiscal year, only if—

1	"(i) the amount so transferred by that agency (as
2	determined under such subparagraph) would exceed
3	\$10,000; and
4	"(ii) such transfer is made with respect to the
5	fiscal year 1987, 1988, 1989, 1990, or 1991.
6	"(C) The heads of Federal agencies and their designees,
7	and the directors of Federal laboratories, may provide such
8	additional support for operations of the Consortium as they
9	consider appropriate.".
10	FUNCTIONS OF THE SECRETARY OF COMMERCE
11	SEC. 4. Section 11 of such Act (15 U.S.C. 3710), as
12	amended by this Act, is further amended by adding at the end
13	thereof the following:
14	"(g) Functions of the Secretary.—(1) The Secre-
15	tary, in consultation with other Federal agencies, may-
16	"(A) make available to interested agencies the ex-
17	pertise of the Department of Commerce regarding the
18	commercial potential of inventions and methods and
19	options for commercialization which are available to
20	Federal laboratories, including research and develop-
21	ment limited partnerships;
22	"(B) develop and disseminate to appropriate
23	agency and laboratory personnel model provisions for
24	use on a voluntary basis in cooperative research and
25	development arrangements; and

1	"(C) furnish advice and assistance, upon request,
2	to Federal agencies concerning their cooperative re-
3	search and development programs and projects.
4	"(2) Two years after the date of enactment of this sub-
5	section, and every two years thereafter, the Secretary shall
6	submit a report to the President and the Congress on the use
7	by the agencies and the Secretary of the authorities specified
8	in this Act. Other Federal agencies shall, to the extent per-
9	mitted by law, provide the Secretary with all information
10	necessary to prepare such reports.".
11	COOPERATIVE RESEARCH AND DEVELOPMENT
12	AGREEMENTS
13	Sec. 5. The Stevenson-Wydler Technology Innovation
14	Act of 1980 is amended by redesignating sections 12 through
15	15 as sections 15 through 18, respectively, and by inserting
16	after section 11 the following:
17	"SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT
18	AGREEMENTS.
19	"(a) GENERAL AUTHORITY.—(1) Each Federal agency
20	may permit the director of any of its Government-operated
21	Federal laboratories—
22	"(A) to enter into cooperative research and devel-
23	opment arrangements (subject to such regulations or
24	review procedures as the agency considers appropriate)
25	with other Federal agencies, units of State or local
26	government, industrial organizations (including corpo-

1	rations, partnerships and limited partnerships), public
2	and private foundations, nonprofit organizations (in-
3	cluding universities), or other persons (including licens-
4	ees of inventions owned by the Federal agency); and
5	"(B) to negotiate licensing agreements under sec-
6	tion 207 of title 35, United States Code, or other au-
7	thorities for Government-owned inventions made at the
8	laboratory and other inventions of Federal employees
9	that may be voluntarily assigned to the Government.
10	"(2) Under arrangements entered into pursuant to para-
11	graph (1), a laboratory may—
12	"(A) accept funds, services, and property from
13	collaborating parties and provide services and property
14	to collaborating parties;
15	"(B) grant or agree to grant in advance to a col-
16	laborating party patent licenses, assignments, or op-
17	tions thereto, in any invention made by a Federal em-
18	ployee under the arrangement, retaining such rights as
19	the Federal agency considers appropriate;
20	"(C) waive, in whole or in part, any right of own-
21	ership which the Government may have under any
22	other statute to any inventions made by a collaborating
23	party or employee of a collaborating party under the

arrangement; and

1	"(D) to the extent consistent with any applicable
2	agency requirements, permit employees or former em-
3	ployees of the laboratory to participate in efforts to
4	commercialize inventions they made while in the serv-
5	ice of the United States.

- "(3) Each agency shall maintain a record of all agreements entered into under this section.
- 8 "(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-

1	ance of research and development by employees of the
2	Federal Government.".
3	"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in
4	this section is intended to limit or diminish existing authori-
5	ties of any agency.".
6	REWARDS FOR SCIENTIFIC, ENGINEERING, AND
7	TECHNICAL PERSONNEL OF FEDERAL AGENCIES
8	SEC. 6. The Stevenson-Wydler Technology Innovation
9	Act of 1980, as amended by this Act, is further amended by
10	inserting after section 12 the following:
11	"SEC. 13. REWARDS FOR SCIENTIFIC, ENGINEERING, AND
12	TECHNICAL PERSONNEL OF FEDERAL AGEN-
13	CIES.
14	"(a) CASH AWARDS PROGRAM.—The head of each
15	Federal agency that is making expenditures at a rate of more
16	than \$50,000,000 per fiscal year for research and develop-
17	ment in its Government-operated laboratories shall use the
18	appropriate statutory authority to develop and implement a
19	cash awards program to reward its scientific, engineering,
20	and technical personnel for-
21	"(1) inventions, innovations, or other outstanding
22	scientific or technological contributions of value to the
23	United States due to commercial applications or due to
24	contributions to missions of the Federal agency or the
25	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.

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1	"(2) The balance of any royalties or related
2	income earned during any fiscal year after paying the
3	inventors' portions under paragraph (1) may be re-
4	tained by the laboratory up to the limits specified in
5	this paragraph, and used—
6	"(A) for mission-related research and devel-
7	opment of the laboratory;
8	"(B) to support development and education
9	programs for employees of the laboratory;
10	"(C) to reward employees of the laboratory
11	for contributing to the development of new tech-
12	nologies and assisting in the transfer of technolo-
13	gy to the private sector, and for inventions of
14	value to the Government that will not produce
15	royalties;
16	"(D) to further scientific exchange to and
17	from the laboratory; and
18	"(E) for payment of patenting costs and fees
19	and other expenses incidental to promoting, ad-
20	ministering, and licensing inventions, including the
21	fees or costs for services of other agencies or
22	other persons or organizations for invention man-
23	agement and licensing services.
24	If the balance for any laboratory after paying the in-
25	ventors' 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

9 "(c) Assigned Inventions.—If the invention was one

the Treasury of the United States.

10 assigned to the agency either (1) by a contractor, grantee, or

11 the recipient of a cooperative agreement of the agency, or (2)

12 by an employee of the agency that was not working in the

13 laboratory at the time the invention was made, the agency

14 unit that funded or employed or assigned the assignee shall,

15 for purposes of this section, be considered to be a laboratory.

16 "(d) REPORTS.—In making their annual budget submis-

17 sions, Federal agencies shall submit to the appropriate au-

18 thorization and appropriation committees of both Houses of

19 the Congress summaries of the amount of royalties or other

20 income received and expenditures made (including inventor

21 awards) under this section.".

22 EMPLOYEE ACTIVITIES

SEC. 7. The Stevenson-Wydler Technology Innovation

24 Act of 1980, as amended by this Act, is further amended by

25 inserting after section 13 the following:

"(a) In General.—If a Federal agency which has the

1 "SEC. 14. EMPLOYEE ACTIVITIES.

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- 3 right of ownership to an invention under this Act does not
 4 intend to file for a patent application or otherwise to promote
 5 commercialization of such invention, the agency may allow
 6 the inventor, if the inventor is a Government employee or
 7 former employee who made the invention during the course
 8 of employment with the Government, to retain title to the
 9 invention (subject to reservation by the Government of a non10 exclusive, nontransferrable, irrevocable, paid up license to
 11 practice or have practiced the invention throughout the world
- 13 may condition the inventor's right to title on the timely filing

by or on behalf of the Government). In addition, the agency

- 14 of a patent application in cases when the Government deter-
- 15 mines that it has or may have a need to practice the
- 16 invention.

- 17 "(b) Definition.—For purposes of this section, Feder-
- 18 al employees include 'special Government employees' as de-
- 19 fined in section 202 of title 18, United States Code.
- 20 "(c) RELATIONSHIP TO OTHER LAWS.—Nothing in
- 21 this section is intended to limit or diminish existing authori-
- 22 ties of any agency.".
- 23 MISCELLANEOUS AND CONFORMING AMENDMENTS
- SEC. 8. (a) Section 10 of the Stevenson-Wydler Tech-
- 25 nology Innovation Act of 1980 (15 U.S.C. 3709) is repealed.

1	(b)(1) Section 3(2) of such Act (15 U.S.C. 3702(2)) is
2	amended by striking "centers for industrial technology" and
3	inserting in lieu thereof "cooperative research centers".
4	(2) Section 4 of such Act (15 U.S.C. 3703) is
5	amended—
6	(A) by striking "Industrial Technology" in para-
7	graph (1) and inserting in lieu thereof "Productivity,
8	Technology, and Innovation";
9	(B) by striking "'Director' means the Director of
10	the Office of Industrial Technology" in paragraph (3)
11	and inserting in lieu thereof "'Assistant Secretary'
12	means the Assistant Secretary for Productivity, Tech-
13	nology, and Innovation";
14	(C) by striking "Centers for Industrial Tech-
15	nology" in paragraph (4) and inserting in lieu thereof
16	"Cooperative Research Centers";
17	(D) by striking paragraph (6), and redesignating
18	paragraphs (7) and (8) as paragraphs (6) and (7), re-
19	spectively; and
20	(E) by striking "owned and funded" in paragraph
21	(6), as so redesignated, and inserting in lieu thereof
22	"owned, leased, or otherwise used by a Federal agency
23	and funded".

- 1 (3) Section 5(a) of such Act (15 U.S.C. 3704(a)) is
- 2 amended by striking "Industrial Technology" and inserting
- 3 in lieu thereof "Productivity, Technology, and Innovation".
- 4 (4) Section 5(b) of such Act (15 U.S.C. 3704(b)) is
- 5 amended by striking "DIRECTOR" and inserting in lieu there-
- 6 of "Assistant Secretary", and by striking all from "a
- 7 Director of the Office" and inserting in lieu thereof "an
- 8 Assistant Secretary for Productivity, Technology, and
- 9 Innovation."
- 10 (5) Section 5(c) of such Act (15 U.S.C. 3704(c)) is
- 11 amended by striking "the Director" each place it appears and
- 12 inserting in lieu thereof "the Assistant Secretary".
- 13 (6) The heading of section 6 of such Act is amended to
- 14 read as follows:
- 15 "SEC. 6. COOPERATIVE RESEARCH CENTERS.".
- 16 (7) Section 6(a) of such Act (15 U.S.C. 3705(a)) is
- 17 amended by striking "Centers for Industrial Technology"
- 18 and inserting in lieu thereof "Cooperative Research
- 19 Centers".
- 20 (8) Section 6(b)(1) of such Act (15 U.S.C. 3705(b)(1)) is
- 21 amended by striking "basic and applied".
- 22 (9) Section 6(e) of such Act (15 U.S.C. 705(e)) is
- 23 amended to read as follows:
- 24 "(e) Research and Development Utilization.—
- 25 In the promotion of technological innovation and commercial-

- 1 ization of research and development efforts by Centers under
- 2 this section, chapter 18 of title 35, United States Code, shall
- 3 apply.".
- 4 (10) Section 6(f) of such Act (15 U.S.C. 3705(f)) is
- 5 repealed.
- 6 (11) The heading of section 8 of such Act is amended by
- 7 striking "CENTERS FOR INDUSTRIAL TECHNOLOGY"
- 8 and inserting in lieu thereof "COOPERATIVE RESEARCH
- 9 CENTERS".
- 10 (12) Section 8(a) of such Act (15 U.S.C. 3707(a)) is
- 11 amended by striking "Centers for Industrial Technology"
- 12 and inserting in lieu thereof "Cooperative Research
- 13 Centers".
- 14 (c) Section 4 of such Act (15 U.S.C. 3703), as amended
- 15 by subsection (b)(2) of this section, is further amended by
- 16 adding at the end thereof the following:
- 17 "(8) 'Federal agency' means any executive agency
- as defined in section 105 of title 5, United States
- 19 Code, and the military departments, as defined in sec-
- 20 tion 102 of such title.
- 21 "(9) 'Invention' means any invention or discovery
- which is or may be patentable or otherwise protected
- 23 under title 35, United States Code, or any novel vari-
- ety of plant which is or may be protectable under the
- Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

- 1 "(10) 'Made', when used in conjunction with any
- 2 invention, means the conception or first actual reduc-
- 3 tion to practice of such invention.".
- 4 (d)(1) Such Act (as amended by this Act) is further
- 5 amended by redesignating sections 11 through 18 as sections
- 6 10 through 17, respectively.
- 7 (2)(A) Section 5(d) of such Act (15 U.S.C. 3704(d)) is
- 8 amended by inserting "(as then in effect)" after "Act" the
- 9 second time it appears.
- 10 (B) Section 8(a) of such Act (15 U.S.C. 3707(a)) is
- 11 amended by striking the last sentence.
- 12 (C) Section 9(d) of such Act (15 U.S.C. 3708(d)) is
- 13 amended by striking "or 13" and inserting in lieu thereof
- 14 "10, or 14".