

TECHNOLOG' INNOVATION

CHAPTER 63
United States Code Annotate
Title 15, Commerce and Trade

SECTIONS 3701-3715
(As Amended Through 1993 Public Laws and with Annotations)

PREPARED FOR:
THE FEDERAL LABORATORY CONSORTIL
FOR TECHNOLOGY TRANSFER

West Publishing Co.

DOUBLE

INNOVATION

CHAPTER 63 UNITED STATES CODE ANNOTATED

TITLE 15 COMMERCE AND TRADE

SECTIONS 3701 TO 3715

(As Amended Through 1993 Public Laws and with Annotations)

Prepared for:

THE FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER WASHINGTON, D.C.

Ву:

WEST PUBLISHING COMPANY St. Paul, Minnesota

AUGUST 1994

Federal Laboratory Consortium Special Reports Series No. 1 ISSN 1075-9492

FROM INNOVATION TO APPLICATION

New knowledge, processes and products emerge from research and development programs at federal laboratories. The laboratories then work closely with U.S. business, industry, and state and local governments, helping them to apply these new capabilities to their own particular needs. Through this technology transfer process, the laboratories share the benefits of national investments in scientific progress with all segments of society.

The Federal Laboratory Consortium for Technology Transfer (FLC) facilitates the movement of technologies and capabilities developed at the federal laboratories into the private and public sectors, and promotes collaborative technology development agreements between industry, laboratories and universities. All federal R&D laboratories and centers and their funding departments and agencies assign a representative to the FLC, whose membership includes over 600 laboratories and centers representing 16 different departments and agencies.

The Stevenson-Wydler Technology Innovation Act of 1980 initiated legislation that made it easier for the laboratories to transfer their technologies and provided means for other users to access laboratory developments. Since then other initiatives have modified and improved the original legislation. The FLC first issued a consolidated guide to technology transfer legislation in 1991. This guide, titled *Technology Innovation: Chapter 63 United States Code Annotated, Title 15, Commerce and Trade,* comprises most of the relevant legislation, executive orders, and references. The FLC issued the guide in the hope that it would ease the job of those working the technology transfer process and serve as a useful tool for understanding the opportunities available for technology transfer. It met those hopes and has been well received.

Although there have been significant changes in implementation, there have been only a few changes in the statutes since the original FLC guide was published. This newest version of the guide incorporates these changes. In addition, the section "Technology Innovation Legislation Highlights" has been updated and a new section has been added that shows the evolution of major legislative themes in technology transfer. These sections give a historical view of the technology innovation legislation but do not include other initiatives, such as early Executive Orders, the 1954 Atomic Energy Act or the 1958 Space Act, that were precursors to the legislation.

Table of Contents

Innovation to Application	III
Technology Innovation Legislation Highlights	VII
Major Legislative Themes in Federal Technology Transfer	XIII
Chapter 63—Stevenson-Wydler Act	XVII
Chapter 63, Title 15, U.S.C.A.	1
Index	63

Prepared by the FLC

* Note: Laws marked with an asterisk are included in this document.

*Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96–480)

- Focused on dissemination of information.
- Required federal laboratories to take an active role in technical cooperation.
- Established Offices of Research and Technology Application at major federal laboratories.
- Established the Center for the Utilization of Federal Technology (in the National Technical Information Service).

Bayh-Dole Act of 1980 (Public Law 96-517)

- Permitted universities, not for profits, and small businesses to obtain title to inventions developed with governmental support.
- ◆ Allowed government-owned, government-operated (GOGO) laboratories to grant exclusive licenses to patents.

Small Business Innovation Development Act of 1982 (Public Law 97–219)

◆ Required agencies to provide special funds for small business R&D connected to the agencies' missions.

Cooperative Research Act of 1984 (Public Law 98-462)

- ♦ Eliminated treble damage aspect of antitrust concerns for companies wishing to pool research resources and engage in joint, precompetitive R&D.
- Resulted in Consortia: Semiconductor Research Corporation (SRC) and Microelectronics and Computer Technology Corporation (MCC), among others.

- and small companies on title and license to inventions resulting from Cooperative R&D Agreements (CRADAs) with government laboratories.
- ♦ Allowed directors of GOGO laboratories to negotiate licensing agreements for inventions made at their laboratories.
- ◆ Provided for exchanging GOGO laboratory personnel, services, and equipment with their research partners.
- ◆ Made it possible to grant and waive rights to GOGO laboratory inventions and intellectual property.
- ◆ Allowed current and former federal employees to participate in commercial development, to the extent there is no conflict of interest.

*Malcom Baldrige National Quality Improvement Act of 1987 (Public Law 100–107)

♦ Established categories and criteria for the Malcom Baldrige National Quality Award.

*Executive Orders 12591 and 12618 (1987): Facilitating Access to Science and Technology

Promoted access to science and technology.

*Omnibus Trade and Competitiveness Act of 1988 (Public Law 100-418)

- ◆ Placed emphasis on the need for public/private cooperation on assuring full use of results of research.
- Established centers for transferring manufacturing technology.
- ♦ Established Industrial Extension Services within states and an information clearinghouse on successful state and local technology programs.
- Changed the name of the National Bureau of Standards to the National Institute of Standards and Technology and broadened its technology transfer role.

- ♦ Established model programs for national defense laboratories to demonstrate successful relationships between federal government, state and local governments, and small business.
- Provided for a federal laboratory to enter into a contract or memorandum of understanding with a partnership intermediary to perform services related to cooperative or joint activities with small business.
- Provided for development and implementation of a National Defense Manufacturing Technology Plan.

*Intermodal Surface Transportation Efficiency Act of 1991 (Public Law 102–240)

- ♦ Authorized the Department of Transportation to provide not more than 50% of the cost of CRADAs for highway research and development.
- ♦ Encouraged innovative solutions to highway problems and stimulated the marketing of new technologies on a cost shared basis of more than 50% if there is substantial public interest or benefit.

*American Technology Preeminence Act of 1991 (Public Law 102–245)

- ◆ Extended FLC mandate, removed FLC responsibility for conducting a grant program, and required the inclusion of the results of an independent annual audit in the FLC Annual Report to Congress and the President.
- ◆ Included intellectual property as potential contributions under CRADAs.
- ♦ Required the Secretary of Commerce to report on the advisability of authorizing a new form of CRADA that permits federal contributions of funds.
- ♦ Allowed laboratory directors to give excess equipment to educational institutions and nonprofit organizations as a gift.

	<u> </u>	Majo	r Legislative Themes	in Federal Technology Transfer		
Theme	Initiation	Progression				
Technology Transfer As a Mission	1980 Stevenson-Wydler Technology Innovation Act established T ² as a mission of the federal government	Transfer Act (FTTA) Act made T ² a priority T ² as a but for every GOGO, but for every GOGO	12591 emphasized the government's commitment to	1989 National Competitiveness Technology Transfer Act (NCTTA) established T ² a laboratory mission for GOCOs and GOCO employees		
U.S. Manufacture	1980 Patent and Trademark Amendments Act (Bayh-Dole) provided exclusive rights to inventions arising under funding agreements with federal agencies to small businesses and non-profit organizations agreeing that products embodying the invention will be manufactured substantially in the U.S.	1980 Stevenson-Wydler Technology Innovation Act required that preference given to industrial T ² partners agreeing to substantially manufacture in the U.S. any products resulting from Technology Transfer	1984 Trademark Clarification Act (amending Bayh-Dole) extended substantial manufacture in the U.S. provisions to all partners of federal agencies	Federal Technology Transfer Act (FTTA) required that preference be given to CRADA partners located in the U.S. and agreeing that products embodying inventions made under the CRADA will be manufactured substantially in the U.S.	1989 National Competitiveness Technormal Competitiveness Technormal Congressional intent that CRAI performed in a manner that fos competitiveness of U.S. industr	

		Мајо	r Legislative Themes	in Federal Technology Transfer			
Theme	Initiation	Progression					
Title to Inventions	Specific agency authorizing legislation	1980 Patent and Trademark Amendments Act (Bayh-Dole) permitted universities, not-for-profit organizations, and small businesses to obtain title to inventions developed with governmental support	1984 Trademark Clarification Act allowed laboratories run by universities and non-profit institutions to retain title to inventions within limitations	1986 Federal Technology Transfer Act (FTTA) allowed GOGOs: •To make advance agreements with large and small businesses on title to inventions resulting from CRADAs •To grant and waive rights to laboratory inventions and intellectual property •The act also required that inventors who are government employees share in royalties from patent licenses	Omnibus Trade and Competitiveness Act extended royalty payment requirements to inventors at the laboratories who are not government employees	National Competer Techno Act (NC granted the sam opports intellect rights to that had establis GOGOs	
Information/	1966 Freedom of Information Act (FOIA): •Provided a vehicle to inform the public about federal government activities •Gave citizens the right to request agency records and have them available promptly	1980 Stevenson-Wydler Technology Innovation Act focused on dissemination of government information through an active commitment to T ²	1980 Patent and Trademark Amendments Act (Bayh-Dole) protected descriptions of inventions from public dissemination and FOIA for a reasonable amount of time to allow patent applications to be filed	1986 & 1989 Both the FTTA (1986, applying to GOGOs) allowed CRADA information to be protected years			

Chapter 63 Title 15, U.S.C.A.

Stevenson-Wydler Technology Innovation Act of 1980 as amended through 1993

Pub.L. No.	Date Appr.	Stat. At Large	15 U.S.C.A. §§
			3701 to 3714
99–382, § 2 99–502, §§ 2 to 9(b), (d),	- 8/14/86	100 Stat. 811	3704
(e), (f)	- 10/20/86	100 Stat. 1785	5 to
		1/8/	3701 to 3705, 3707 to 3710d,
			3711 to 3714
100–107, § 3	- 8/20/87	101 Stat. 725	3708, 3711a, 3712, 3713, 3714
100-418,			
§§ 5115(b), 5122, 5152,			
	- 8/23/88	102 Stat. 1433	3,
		1437, 1449	3703, 3704a, 3705 to 3710c,
			3711, 3711a,
100 510			3712 to 3714
100–519, §§ 201(a) to			
(d)(1), 3,			
212(a)(4), 301 to 303(a)	- 10/24/88	102 Stat 259	3 .
10 203 (4)	10,21,00	2594, 2597	3703, 3704,
			3710, 3710a to 3710c
101–189,	•		•
§ 3133	- 11/29/89		
		10 10/9	3710, 3710a, 3710c
101-510,			
§§ 827a, 827b, 828(b)	- 11/5/90	104 Stat. 160	5.
		1607	3, 3705, 3710a, 3715
102–25, § 705(g)	- 4/6/91	105 Stat. 121	3710a

THE CODE OF THE LAWS OF THE UNITED STATES OF AMERICA

TITLE 15 COMMERCE AND TRADE

CHAPTER 63—TECHNOLOGY INNOVATION

As amended through March 9, 1994

Sec.					
3701.	Findings.				
3702.	Purpose.				
3703.	Definitions.				
3704.	Commerce and technological innovation.				
	(a) Establishment.				
	(b) Under Secretary and Assistant Secretary.				
	(c) Duties.				
	(d) Japanese technical literature.				
	(e) Report.				
3704a.	Clearinghouse for State and Local Initiatives on Productivity, Tech-				
	nology, and Innovation.				
	(a) Establishment.				
	(b) Responsibilities.				
	(c) Contracts.				
	(d) Triennial Report.				
3704b.	National Technical Information Service.				
	(a) Powers.				
	(b) Director of the Service.				
	(c) Advisory Board.				
	(d) Audits.				
	(e) Functions.				
	(f) Notification of Congress.				
3704b-	1. Recovery of operating costs through fee collections.				
3704b-2	2. Transfer of Federal scientific and technical information.				
	(a) Transfer.				
	(b) Annual report to Congress.				
3705.	Cooperative Research Centers.				
	(a) Establishment.				
	(b) Activities.				

(c) Requirements.(d) Planning grants.

(f) Repealed.

(e) Research and development utilization.

- (f) Funding.(g) Report.
- 3711b. Conference on advanced automotive technologies.
- 3711c. Advanced motor vehicle research award.
 - (a) Establishment.
 - (b) Making and presenting award.
 - (c) Funding for award.
- 3712. Personnel exchanges.
- 3713. Authorization of appropriations.
- 3714. Spending authority.
- 3715. Use of partnership intermediaries.
 - (a) Authority.
 - (b) Partnership progress reports.
 - (c) Definition.

§ 3701. Findings

The Congress finds and declares that:

- (1) Technology and industrial innovation are central to the economic, environmental, and social well-being of citizens of the United States.
- (2) Technology and industrial innovation offer an improved standard of living, increased public and private sector productivity, creation of new industries and employment opportunities, improved public services and enhanced competitiveness of United States products in world markets.
- (3) Many new discoveries and advances in science occur in universities and Federal laboratories, while the application of this new knowledge to commercial and useful public purposes depends largely upon actions by business and labor. Cooperation among academia, Federal laboratories, labor, and industry, in such forms as technology transfer, personnel exchange, joint research projects, and others, should be renewed, expanded, and strengthened.
- (4) Small businesses have performed an important role in advancing industrial and technological innovation.
- (5) Industrial and technological innovation in the United States may be lagging when compared to historical patterns and other industrialized nations.
- (6) Increased industrial and technological innovation would reduce trade deficits, stabilize the dollar, increase productivity gains, increase employment, and stabilize prices.
- (7) Government antitrust, economic, trade, patent, procurement, regulatory, research and development, and tax policies have significant impacts upon industrial innovation and development of

Short Title of 1987 Amendment. Pub.L. 100–107, § 1, Aug. 20, 1987, 101 Stat. 724, provided that: "This Act [enacting section 3711a of this title, amending section 3708 of this title, and enacting a provision set out as a note under section 3711a of this title] may be cited as the 'Malcolm Baldrige National Quality Improvement Act of 1987'."

Short Title of 1986 Amendments. Section 1 of Pub.L. 99-502 provided that: "This Act [enacting sections 3710a to 3710d of this title, amending this section and sections 3702, 3703, 3704, 3705, 3707, 3708, 3710 and 3714 of this title and section 210 of Title 35, Patents and repealing former section 3709 of this title] may be cited as the 'Federal Technology Transfer Act of 1986'."

Pub.L. 99-382, § 1, Aug. 14, 1986, 100 Stat. 811, provided: "That this Act [amending section 3704 of this title] may be cited as the 'Japanese Technical Literature Act of 1986'."

Short Title. Section 1 of Pub.L. 96-480 provided: "That this Act [enacting this chapter] may be cited as the 'Stevenson-Wydler Technology Innovation Act of 1980'."

Definitions of Terms Used in 1992 Amendment. Pub.L. 102-245, § 2, Feb. 14, 1992, 106 Stat. 7, provided that:

"As used in this Act [see Short Title of 1992 Amendments note under this section]—

- "(1) the term 'high-resolution information systems' means equipment and techniques required to create, store, recover, and play back high-resolution images and accompanying sound;
- "(2) the term 'advanced manufacturing technology' means numerically-controlled machine tools, robots, automated process control equipment, computerized flexible manufacturing systems, associated computer software, and other technology for improving manufacturing and industrial processes:
- "(3) the term 'advanced materials' means a field of research including the study of composites, ceramics, metals, polymers, superconducting materials, materials produced through bio-technology, and materials production technologies, including coated systems, that

- "(4) the term 'Institute' means the National Institute of Standards and Technology;
- "(5) the term 'Secretary' means the Secretary of Commerce; and
- "(6) the term 'Under Secretary' means the Under Secretary of Commerce for Technology."

Congressional Statement of Policy for 1992 Amendment. Pub.L. 102-245, Title I, § 102, Feb. 14, 1992, 106 Stat. 7, provided that: "Congress finds that in order to help United States industries to speed the development of new products and processes so as to maintain the economic competitiveness of the Nation, it is necessary to strengthen the programs and activities of the Department of Commerce's Technology Administration and National Institute of Standards and Technology."

National Commission on Reducing Capital Costs for Emerging Technology. Pub.L. 102-245, Title IV, § 401, Feb. 14, 1992, 106 Stat. 21, provided that:

- "(a) Establishment and purpose.— There is established a National Commission on Reducing Capital Costs for Emerging Technology (hereafter in this section referred to as the 'Commission'), for the purpose of developing recommendations to increase the competitiveness of United States industry by encouraging investments in research, the development of new process and product technologies, and the production of those technologies.
- "(b) Issues.—The function of the Commission shall be to address the following issues:
 - "(1) How has the overall cost of capital paid by United States companies differed during the past decade from that paid by companies in other industrial economies such as Germany, Japan, and the United Kingdom?
 - "(2) To what extent has the cost of capital faced by technology companies differed from the overall cost of capital in each of these nations during the same period?
 - "(3) To what extent do high capital costs in general inhibit investment in projects with long-term payoffs, such as the development and commercialization of new technology?
 - "(4) To what extent does the structure of the financial services industry in

- "(b) Issues.—The Commission shall address the following issues:
 - "(1) To what extent, if any, should Federal Government technology purchase strategies be used to give domestic suppliers a competitive advantage in new generations of existing technologies and in initial market penetration for new technologies?
 - "(2) Under what conditions can Federal Government purchases of advanced technology-based products be based on performance specifications rather than on product specifications? Should Federal Government procurement first look to the commercial markets for products that will meet performance specifications before purchasing a unique product that has to be developed?
 - "(3) How can the Federal Government procurement laws, practices, and procedures be used as a strategic tool to foster the use of emerging technologies?
 - "(4) How can the Federal Government ensure that its suppliers adopt the principles embodied in the Malcolm Baldrige National Quality Award?
 - "(5) Should Federal Government procurement practices include cooperative efforts between the supplier and the Federal entity to develop products so as to be more easily marketed on a commercial basis? Should a program for the exchange of technical personnel to foster innovation in product development be part of such practices?
 - "(6) To what extent, if any, should Federal Government documents specify standards that are beneficial to domestic suppliers, aid the compatibility of advanced technologies, and speed the commercial acceptance of those technologies, and what would be the role of the Institute in such an effort?
 - "(7) Should Federal Government procurement be linked to the Advanced Technology Program and to technology transfer activities so that specification development can incorporate the latest technical advances available?
 - "(8) To what extent should worldwide, state of the art technology be required in Federal Government procurement?

quorum. "(2) The Secretary, the Administrator

members, o or whom shan constitute a

- of the Office of Federal Procurement Policy, the Director of the Office of Science and Technology Policy, the Secretary of Defense, and the Administrator of General Services, or their designees who serve in executive level positions, shall serve as members of the Commis-
- "(3) The Secretary shall appoint as members of the Commission, from among individuals not employed by the Federal Government—
 - "(A) 4 members who are eminent in advanced technology businesses representing manufacturing and services industries, including at least 1 member representing labor;
 - "(B) 3 members who are eminent in the fields of technology and international economic development; and
 - "(C) with the concurrence of the Administrator of the Office of Federal Procurement Policy, 3 members who are eminent in the field of Federal Government procurement.
- "(4) The Secretary shall appoint a Commission chairman from among the members of the Commission. chairman shall call the first meeting of the Commission within 90 days after the date of enactment of this Act [Feb. 14, 1992].
- "(5) The Secretary and the Administrator of the Office of Federal Procurement Policy shall provide such staff as may be required by the Commission to carry out its responsibilities.
- "(6) Members of the Commission, other than full-time employees of the Federal Government, while attending meetings of the Commission or otherwise performing duties of the Commission while away from their homes or regular places of business, shall be allowed travel expenses in accordance with subchapter I of chapter 57 of title 5, United States Code [5 U.S.C.A. § 5701 et seq.].
- "(d) Reports.—(1) The Commission shall, within 1 year after the date of enactment of this Act [Feb. 14, 1992], submit to the Secretary, the Administrator of the Office of Federal Procurement Policy, the

"(6) more effective cooperation between those laboratories and the private sector in the United States is required to provide speed and certainty in the technology transfer process.

"(b) Purposes.—The purposes of this part [see Short Title of 1989 Amendment note under this section] are to—

"(1) enhance United States national security by promoting technology transfer between Government-owned, con"(2) enhance collaboration between universities, the private sector, and Government-owned, contractor-operated laboratories in order to foster the development of technologies in areas of significant economic potential."

Legislative History. For legislative history and purpose of Pub.L. 96–480, see 1980 U.S.Code and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S.Code Cong. and Adm.News, p. 3442.

Library References

Health and Environment €=25.5(3).

C.J.S. Health and Environment §§ 91 et seq., 106 et seq., 129 et seq.

§ 3702. Purpose

It is the purpose of this chapter to improve the economic, environmental, and social well-being of the United States by—

- (1) establishing organizations in the executive branch to study and stimulate technology;
- (2) promoting technology development through the establishment of cooperative research centers;
- (3) stimulating improved utilization of federally funded technology developments, including inventions, software, and training technologies, by State and local governments and the private sector;
- (4) providing encouragement for the development of technology through the recognition of individuals and companies which have made outstanding contributions in technology; and
- (5) encouraging the exchange of scientific and technical personnel among academia, industry, and Federal laboratories.

(Pub.L. 96-480, § 3, Oct. 21, 1980, 94 Stat. 2312. As amended Pub.L. 99-502, § 9(b)(1), (f)(2), Oct. 20, 1986, 100 Stat. 1795, 1797.)

Historical and Statutory Notes

1986 Amendment. Par. (2). Pub.L. 99–502, § 9(b)(1), substituted "cooperative research centers" for "centers for industrial technology".

Par. (3). Pub.L. 99-502, § 9(f)(2), inserted ", including inventions, software, and training technologies," after "developments".

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S.Code Cong. and Adm.News, p. 3442.

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.
- (11) "Small business firm" means a small business concern as defined in section 632 of this title and implementing regulations of the Administrator of the Small Business Administration.
- (12) "Training technology" means computer software and related materials which are developed by a Federal agency to train employees of such agency, including but not limited to software for computer-based instructional systems and for interactive video disc systems.
- (13) "Clearinghouse" means the Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation established by section 3704a of this title.

(Pub.L. 96–480, § 4, Oct. 21, 1980, 94 Stat. 2312. As amended Pub.L. 99–502, § 9(b)(2), (d), Oct. 20, 1986, 100 Stat. 1795, 1796; Pub.L. 100–418, Title V, § 5122(b), Aug. 23, 1988, 102 Stat. 1439; Pub.L. 100–519, Title II, § 201(d)(1), Oct. 24, 1988, 102 Stat. 2594; Pub.L. 102–245, Title III, § 304, Feb. 14, 1992, 106 Stat. 20.)

Historical and Statutory Notes

References in Text. Sections 3705 and 3707 of this title, referred to in pars. (4) and (6), were in the original references to sections 6 and 8 of this Act, respectively, meaning sections 6 and 8 of the Stevenson-Wydler Technology Innovation Act of 1980. Sections 6 and 8 of this Act were renumbered sections 7 and 9, respectively, by section 5122(a)(1) of Pub.L. 100-418 without corresponding amendment to this section.

The Plant Variety Protection Act, referred to in par. (9), is Pub.L. 91-577, Dec. 24, 1970, 84 Stat. 1542, as amended, which is classified principally to chapter 57 (section 2321 et seq.) of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 2321 of Title 7 and Tables.

1992 Amendments. Par. (8). Pub.L. 102-245 inserted ", as well as any agency of the legislative branch of the Federal Government".

1988 Amendment. Par. (1). Pub.L. 100-519, § 201(d)(1)(A), substituted "Technol-

ogy Policy" for "Productivity, Technology, and Innovation".

Par. (3). Pub.L. 100-519, § 201(d)(1)(B), substituted provisions defining the term "Under Secretary" for provisions defining the term "Assistant Secretary".

Par. (13). Pub.L. 100-418, § 5122(b), added par. (13).

1986 Amendment. Par. (1). Pub.L. 99-502, § 9(b)(2)(A), substituted definition of "Office" as the Office of Productivity, Technology, and Innovation for former definition of that term as the Office of Industrial Technology.

Par. (3). Pub.L. 99-502, § 9(b)(2)(B), substituted provisions relating to the Assistant Secretary for Productivity, Technology and Innovation for provisions which related to the Director of the Office of Industrial Technology.

Par. (4). Pub.L. 99-502, § 9(b)(2)(C), substituted definition of "Centers" as Cooperative Research Centers for former definition of that term as the Centers for Industrial Technology.

- (4) assist in the implementation of the Metric Conversion Act of 1975;
- (5) determine the relationships of technological developments and international technology transfers to the output, employment, productivity, and world trade performance of United States and foreign industrial sectors;
- (6) determine the influence of economic, labor and other conditions, industrial structure and management, and government policies on technological developments in particular industrial sectors worldwide;
- (7) identify technological needs, problems, and opportunities within and across industrial sectors that, if addressed, could make a significant contribution to the economy of the United States;
- (8) assess whether the capital, technical and other resources being allocated to domestic industrial sectors which are likely to generate new technologies are adequate to meet private and social demands for goods and services and to promote productivity and economic growth;
- (9) propose and support studies and policy experiments, in cooperation with other Federal agencies, to determine the effectiveness of measures with the potential of advancing United States technological innovation;
- (10) provide that cooperative efforts to stimulate industrial innovation be undertaken between the Under Secretary and other officials in the Department of Commerce responsible for such areas as trade and economic assistance;
- (11) encourage and assist the creation of centers and other joint initiatives by State of local governments, regional organizations, private businesses, institutions of higher education, nonprofit organizations, or Federal laboratories to encourage technology transfer, to stimulate innovation, and to promote an appropriate climate for investment in technology-related industries;
- (12) propose and encourage cooperative research involving appropriate Federal entities, State or local governments, regional organizations, colleges or universities, nonprofit organizations, or private industry to promote the common use of resources, to improve training programs and curricula, to stimulate interest in high technology careers, and to encourage the effective dissemination of technology skills within the wider community;
- (13) serve as a focal point for discussions among United States companies on topics of interest to industry and labor, including discussions regarding manufacturing and discussions regarding emerging technologies;

information; and

- (B) all translations of Japanese technical documents performed by agencies and departments of the Federal Government in the preceding 12 months that are available to the public.
- (5) The Secretary shall transmit to the Congress, within 1 year after August 14, 1986, a report on the activities of the Federal Government to collect, abstract, translate, and distribute declassified Japanese scientific and technical information.

(e) Report

The Secretary shall prepare and submit to the President and Congress, within 3 years after October 21, 1980, a report on the progress, findings, and conclusions of activities conducted pursuant to this section and sections 3705, 3707, 3710, 3711, and 3712 of this title (as then in effect) and recommendations for possible modifications thereof.

(Pub.L. 96-480, § 5, Oct. 21, 1980, 94 Stat. 2312. As amended Pub.L. 99-382, § 2, Aug. 14, 1986, 100 Stat. 811; Pub.L. 99-502, § 9(b)(3)-(5), (e)(2)(A), Oct. 20, 1986, 100 Stat. 1795, 1797; Pub.L. 100-519, Title II, § 201(a)-(c), (d)(2), Oct. 24, 1988, 102 Stat. 2593, 2594; Pub.L. 102-245, Title III, § 306, Feb. 14, 1992, 106 Stat. 20.)

Historical and Statutory Notes

References in Text. The Metric Conversion Act of 1975, referred to in subsec. (c)(4), is Pub.L. 94–168, Dec. 23, 1975, 89 Stat. 1007, as amended, which is classified generally to subchapter II (section 205a et seq.) of chapter 6 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 205a of this title and Tables.

1992 Amendments. Subsec. (c)(13). Pub.L. 102-245, § 306(1), (2), added par. (13) and redesignated former par. (13) as (14).

Subsec. (c)(14). Pub.L. 102-245, § 306(1), redesignated former par. (13) as (14). Former par. (14) was redesignated (15).

Subsec. (c)(15). Pub.L. 102-245, § 306(1), redesignated former par. (14) as (15).

1988 Amendment. Subsec. (a). Pub.L. 100-519, § 201(a), added subsec. catchline; substituted provisions establishing a Technology Administration within the Dept. of Commerce for provisions establishing an Office of Productivity, Technol-

ogy, and Innovation; and added pars. (1) to (3).

Subsec. (b). Pub.L. 100-519, § 201(b), added subsec. catchline; and substituted provisions relative to the appointment of an Under Secretary of Commerce for Technology and an Assistant Secretary of Commerce for Technology Policy for provisions relative to the appointment of an Assistant Secretary for Productivity, Technology, and Innovation.

Subsec. (c). Pub.L. 100-519, § 201(c)(2), substituted "Under Secretary, as appropriate," for "Assistant Secretary, on a continuing basis," in provisions preceding par. (1).

Subsec. (c)(1) to (4). Pub.L. 100-519, § 201(c)(1), (2), added pars. (1) to (4). Former pars. (1) to (4) redesignated (5) to (8), respectively.

Subsec. (c)(5) to (9). Pub.L. 100-519, § 201(c)(1), redesignated former pars. (1) to (5) as (5) to (9), respectively.

Subsec. (c)(10). Pub.L. 100-519, § 201(c)(1), (3), redesignated former par. (6) as (10); and substituted "Under Secretary" for "Assistant Secretary".

¹ So in original. Probably should be "or".

efforts to assist State and local governments to enhance competitiveness.

(b) Responsibilities

The Clearinghouse may-

- (1) establish relationships with State and local governments, and regional and multistate organizations of such governments, which carry out such initiatives;
- (2) collect information on the nature, extent, and effects of such initiatives, particularly information useful to the Congress, Federal agencies, State and local governments, regional and multistate organizations of such governments, businesses, and the public throughout the United States;
- (3) disseminate information collected under paragraph (2) through reports, directories, handbooks, conferences, and seminars:
- (4) provide technical assistance and advice to such governments with respect to such initiatives, including assistance in determining sources of assistance from Federal agencies which may be available to support such initiatives;
- (5) study ways in which Federal agencies, including Federal laboratories, are able to use their existing policies and programs to assist State and local governments, and regional and multistate organizations of such governments, to enhance the competitiveness of American business;
- (6) make periodic recommendations to the Secretary, and to other Federal agencies upon their request, concerning modifications in Federal policies and programs which would improve Federal assistance to State and local technology and business assistance programs;
- (7) develop methodologies to evaluate State and local programs, and, when requested, advise State and local governments, and regional and multistate organizations of such governments, as to which programs are most effective in enhancing the competitiveness of American business through the stimulation of productivity, technology, and innovation; and
- (8) make use of, and disseminate, the nationwide study of State industrial extension programs conducted by the Secretary.

(c) Contracts

In carrying out subsection (b) of this section, the Secretary may enter into contracts for the purpose of collecting information on the nature, extent, and effects of initiatives.

An increase or decrease in the personnel of the Service shall not affect or be affected by any ceilings on the number or grade of personnel.

- (2) The functions and activities of the Service specified in subsection (e)(1) through (6) are permanent Federal functions to be carried out by the Secretary through the Service and its employees, and shall not be transferred from the Service, by contract or otherwise, to the private sector on a permanent or temporary basis without express approval of the Congress. Functions or activities—
 - (A) for the procurement of supplies, materials, and equipment by the Service;
 - (B) referred to in paragraph (1)(C); or
 - **(C)** to be performed through joint ventures or cooperative agreements which do not result in a reduction in the Federal workforce of the affected programs of the service,

shall not be considered functions or activities for purposes of this paragraph.

(3) For the purposes of this subsection, the term "net revenues" means the excess of revenues and receipts from any source, other than royalties and other income described in section 3710c(a)(4) of this title, over operating expenses.

(b) Director of the Service

The management of the Service shall be vested in a Director who shall report to the Under Secretary of Commerce for Technology and the Secretary of Commerce.

(c) Advisory Board

- (1) There is established the Advisory Board of the National Technical Information Service, which shall be composed of a chairman and four other members appointed by the Secretary.
- (2) In appointing members of the Advisory Board the Secretary shall solicit recommendations from the major users and beneficiaries of the Service's activities and shall select individuals experienced in providing or utilizing technical information.
- (3) The Advisory Board shall review the general policies and operations of the Service, including policies in connection with fees and charges for its services, and shall advise the Secretary and the Director with respect thereto.
- (4) The Advisory Board shall meet at the call of the Secretary, but not less often than once each six months.

by major activities;

- (B) detail the operating plan of the Service, including specific expense and staff needs, for the upcoming year;
- (C) set forth details of modernization progress made in the preceding year;
- (D) describe the long-term modernization plans of the Service;and
- (E) include the results of the most recent annual audit carried out under subsection (d).
- (4) The Secretary shall also give the Congress detailed advance notice of not less than 30 calendar days of—
 - (A) any proposed reduction-in-force;
 - **(B)** any joint venture or cooperative agreement which involves a financial incentive to the joint venturer or contractor; and
 - (C) any change in the operating plan submitted under paragraph (3)(B) which would result in a variation from such plan with respect to expense levels of more than 10 percent.

(Pub.L. 100–519, Title II, § 212, Oct. 24, 1988, 102 Stat. 2594; Pub.L. 102–140, Title II, Oct. 28, 1991, 105 Stat. 804; Pub.L. 102–245, Title V, § 506(c), Feb. 14, 1992, 106 Stat. 27.)

Historical and Statutory Notes

References in Text. This section, referred to in subsec. (a)(1), was in the original "this subtitle", meaning subtitle B (sections 211, 212) of Title II of Pub.L. 100–519, Oct. 24, 1988, 102 Stat. 2594, which enacted section 3704b of this title and amended section 3710 of this title. For complete classification of this subtitle to the Code, see Short Title of 1988 Amendment note set out under section 3701 of this title and Tables.

Section 3710c(a)(4) of this title, referred to in subsec. (a)(3), was in the original a reference to section 13(a)(4) of the Stevenson-Wydler Technology Innovation Act of 1980 which was translated as reading section 14(a)(4) of the Act to reflect the probable intent of Congress and the renumbering of section 13 of the Act as section 14 by section 5122(a)(1) of Pub.L. 100-418.

The Act entitled "An Act to provide for the dissemination of technological, scientific, and engineering information to American business and industry, and for other purposes" enacted September 9, 1950, referred to in subsec. (e)(6), is Act Sept. 9, 1950, c. 936, 64 Stat. 823, as amended, which is classified generally to chapter 23 (section 1151 et seq.) of this title. For complete classification of this Act to the Code, see Tables.

Codification. Section was enacted as part of the National Technical Information Act of 1988, and not as part of the Stevenson-Wydler Technology Innovation Act of 1980 which comprises this chapter.

Subsec. (a)(4) of this section repealed subsec. (h) of section 3710 of this title.

1992 Amendments. Subsec. (e)(5). Pub.L. 102-245 inserted ", including producing and disseminating information products in electronic format".

1991 Amendment. Subsec. (a)(1)(E). Pub.L. 102–140 added subpar. (E).

National Technical Information Service Revolving Fund. Pub.L. 102–395, Title II, Oct. 6, 1992, 106 Stat. 1853, provided that:

"For establishment of a National Technical Information Service Revolving Fund, and information, computer software, application assessments generated pursuant to section 11(c) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(c)), and information regarding training technology and other federally owned or originated technologies. The Secretary shall issue regulations within one year after February 14, 1992, outlining procedures for the ongoing transfer of such information to the National Technical Information Service.

(b) Annual report to Congress

As part of the annual report required under section 3704b(f)(3) of this title, the Secretary shall report to Congress on the status of efforts under this section to ensure access to Federal scientific and technical information by the public. Such report shall include—

- (1) an evaluation of the comprehensiveness of transfers of information by each Federal executive department or agency under subsection (a) of this section;
- (2) a description of the use of Federal scientific and technical information;
- (3) plans for improving public access to Federal scientific and technical information; and
- (4) recommendations for legislation necessary to improve public access to Federal scientific and technical information.

(Pub.L. 102-245, Title I, § 108, Feb. 14, 1992, 106 Stat. 13.)

Historical and Statutory Notes

References in Text. The Stevenson-Wydler Technology Innovation Act of 1980, referred to in subsec. (a), is Pub.L. 96-480, Oct. 21, 1980, 94 Stat. 2311, as amended, which is classified generally to this chapter. Section 11(c) of that Act is classified to section 3710(c) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 3701 of this title and Tables.

Codification. Section was enacted as part of the American Technology Preeminence Act of 1991, and not as part of the Stevenson-Wydler Technology Innovation Act of 1980 which comprises this chapter.

Legislative History. For legislative history and purpose of Pub.L. 102–245, see 1992 U.S. Code Cong. and Adm. News, p. 19.

§ 3705. Cooperative Research Centers

- (a) Establishment.—The Secretary shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with any university, or other nonprofit institution, or group thereof, that applies for and is awarded a grant or enters into a cooperative agreement under this section. The objective of the Centers is to enhance technological innovation through—
 - (1) the participation of individuals from industry and universities in cooperative technological innovation activities;

- (4) suitable consideration has been given to the university's or other nonprofit institution's capabilities and geographical location; and
- (5) consideration has been given to any effects upon competition of the activities proposed under the Center.
- (d) Planning grants.—The Secretary is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing a plan required under subsection (c)(3) of this section.
- (e) Research and development utilization.—In the promotion of technology from research and development efforts by Centers under this section, chapter 18 of Title 35 shall apply to the extent not inconsistent with this section.
- (f) Repealed. Pub.L. 99–502, § 9(b)(10), Oct. 20, 1986, 100 Stat. 1796 (Pub.L. 96–480, § 7, formerly § 6, Oct. 21, 1980, 94 Stat. 2313; Pub.L. 99–502, § 9(b)(6)–(10), Oct. 20, 1986, 100 Stat. 1796; renumbered § 7, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438.)

Historical and Statutory Notes

Prior Provisions. A prior section 7 of Pub.L. 96-480 was renumbered section 8 by Pub.L. 100-418 and is classified to section 3706 of this title.

1986 Amendment. Catchline. Pub.L. 99–502, § 9(b)(6), substituted "Cooperative Research Centers" for "Centers for Industrial Technology".

Subsec. (a). Pub.L. 99-502, § 9(b)(7), substituted "Cooperative Research Centers" for "Centers for Industrial Technology" in provisions preceding par. (1).

Subsec. (b)(1). Pub.L. 99-502, § 9(b)(8), struck out "basic and applied" following "industry-university".

Subsec. (e). Pub.L. 99-502, § 9(b)(9), substituted provisions that in research and development utilization under this section chapter 18 of Title 35 shall apply to the extent not inconsistent with this section for provisions establishing conditions under which each Center for Industrial Technology or supporting agency could acquire or retain title to any invention conceived or made under the auspices of the Center, or patent on such invention, and further establishing procedures for issuing licenses to responsible applicants, with de novo review of adverse decisions by the supporting agency available in the United States Court of Claims.

Subsec. (f). Pub.L. 99-502, § 9(b)(10), struck out subsec. (f), which had provided for consultation by the supporting agency with the Attorney General and issuance by the Attorney General of an advisory opinion as to whether the proposed joint research activities of a Center for Industrial Technology would violate any of the antitrust laws.

Model Program. Pub.L. 101-510, Div. A, Title VIII, § 827(b), Nov. 5, 1990, 104 Stat. 1607, as amended Pub.L. 102-190, Div. A, Title X, § 1062(a)(2), Dec. 5, 1991, 105 Stat. 1475, provided that:

- "(1) In the administration of applicable provisions of the Stevenson-Wydler Technology Innovation Act of 1980 [this chapter] or section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 [section 278l note of this title], the Secretary of Commerce shall develop, in consultation with the Secretary of Defense and the Secretary of Energy, model programs for national defense laboratories.
- "(2) Model programs under this subsection shall involve Federal laboratories, small businesses, and partnership intermediaries. The purpose of the model programs is to demonstrate successful relationships between the Federal Government, State and local governments.

total cost of the program or project in connection with which such proceeds were used, and the amount, if any, of such costs which was provided through other sources.

(Pub.L. 96–480, § 8, formerly § 7, Oct. 21, 1980, 94 Stat. 2315; renumbered § 8 and amended Pub.L. 100–418, Title V, §§ 5115(b)(1), 5122(a)(1), Aug. 23, 1988, 102 Stat. 1433, 1438.)

Historical and Statutory Notes

Prior Provisions. A prior section 8 of Pub.L. 96-480 was renumbered section 9 by Pub.L. 100-418 and is classified to section 3707 of this title.

1988 Amendment. Subsec. (b). Pub.L. 100-418, § 5115(b)(1), substituted "Assistant Secretary" for "Director".

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 100-418, see 1988 U.S. Code Cong. and Adm.News, p. 1547.

Library References

Health and Environment \$\sime 25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 3707. National Science Foundation Cooperative Research Centers

- (a) Establishment and provisions.—The National Science Foundation shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with a university, or other nonprofit institution, or a group thereof.
- (b) Planning grants.—The National Science Foundation is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing the plan, as described under section 3705(c)(3) of this title.
- (c) Terms and conditions.—Grants, contracts, and cooperative agreements entered into by the National Science Foundation in execution of the powers and duties of the National Science Foundation under this chapter shall be governed by the National Science Foundation Act of 1950 and other pertinent Acts.

(Pub.L. 96–480, § 9, formerly § 8, Oct. 21, 1980, 94 Stat. 2316; Pub.L. 99–502, § 9(b)(11), (12), (e)(2)(B), Oct. 20, 1986, 100 Stat. 1796, 1797; renumbered § 9, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438.)

Historical and Statutory Notes

References in Text. Section 3705 of this title, referred to in subsecs. (a) and (b), was in the original a reference to section 6 of this Act, meaning section 6 of the Stevenson-Wydler Technology Innovation Act of 1980. Section 6 of the Act was renumbered section 7 by section 5122(a)(1)

of Pub.L. 100-418 without corresponding amendment to this section.

The National Science Foundation Act of 1950, referred to in subsec. (c), is Act May 10, 1950, c. 171, 64 Stat. 149, as amended, which is classified generally to

(Pub.L. 96–480, § 10, formerly § 9, Oct. 21, 1980, 94 Stat. 2316; Pub.L. 99–502, § 9(e)(2)(C), Oct. 20, 1986, 100 Stat. 1797; Pub.L. 100–107, § 3(b), Aug. 20, 1987, 101 Stat. 727; renumbered § 10 and amended Pub.L. 100–418, Title V, § 5122(a)(1), (c), Aug. 23, 1988, 102 Stat. 1438, 1439; Pub.L. 102–240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

Prior Provisions. A prior section 10 of Pub.L. 96-480 was renumbered section 11 by Pub.L. 100-418 and is classified to section 3710 of this title.

Another prior section 10 of Pub.L. 96-480, which related to the National Industrial Technology Board and which was classified to section 3709 of this title, was repealed by section 9(a) of Pub.L. 99-502.

1991 Amendments. Subsec. (d). Pub.L. 102-240 substituted reference in the original to section 20 of Pub.L. 96-480 for former reference in the original to section 18 of Pub.L. 96-480 to conform to the renumbering of sections of Pub.L. 96-480. Since both references translate as section "3712 of this title" the amendment resulted in no change in the text of subsec. (d) as set out in this section.

1988 Amendment. Subsec. (c). Pub.L. 100-418, § 5122(c), in the original substituted "section 7, 9, 11, 15, 17, or 18 of this Act" for "section 6, 8, 10, 14, 16, or 17 of this Act". Due to the renumbering of sections 6 through 19 of Pub.L. 96-480 as sections 7 through 20 by section

5122(a)(1) of Pub.L. 100-418, both phrases translate as "section 3705, 3707, 3710, 3710d, 3711a or 3712 of this title". Accordingly, amendment by section 5122(c) of Pub.L. 100-418 resulted in no change in text.

1987 Amendment. Subsec. (d). Pub.L. 100–107 substituted "3711a, or 3712 of this title" for "or 3712 of this title".

1986 Amendment. Subsec. (d). Pub.L. 99–502, § 9(e)(2)(C), added references to sections 3710 and 3710d of this title.

Legislative History. For legislative history and purpose of Pub.L., 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-107, 1987 U.S. Code Cong. and Adm. News, p. 722; Pub.L. 100-418, 1988 U.S. Code Cong. and Adm. News, p. 1547; Pub.L. 102-240, 1991 U.S. Code Cong. and Adm. News, p. 1526.

Library References

Health and Environment € 25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 3709. Repealed. Pub.L. 99-502, § 9(a), Oct. 20, 1986, 100 Stat. 1795

Historical and Statutory Notes

Section, Pub.L. 96-480, § 10, Oct. 21, 1980, 94 Stat. 2317, related to the National Industrial Technology Board.

§ 3710. Utilization of Federal technology

(a) Policy

(1) It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end the Federal Government shall (3) to cooperate with and assist the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer, and other organizations which link the research and development resources of that laboratory and the Federal Government as a whole to potential users in State and local government and private industry;

- (4) to provide technical assistance to State and local government officials; and
- (5) to participate, where feasible, in regional, State, and local programs designed to facilitate or stimulate the transfer of technology for the benefit of the region, State, or local jurisdiction in which the Federal laboratory is located.

Agencies which have established organizational structures outside their Federal laboratories which have as their principal purpose the transfer of federally owned or originated technology to State and local government and to the private sector may elect to perform the functions of this subsection in such organizational structures. No Office of Research and Technology Applications or other organizational structures performing the functions of this subsection shall substantially compete with similar services available in the private sector.

(d) Dissemination of technical information

try;

The National Technical Information Service shall-

- (1) serve as a central clearinghouse for the collection, dissemination and transfer of information on federally owned or originated technologies having potential application to State and local governments and to private industry;
- (2) utilize the expertise and services of the National Science Foundation and the Federal Laboratory Consortium for Technology Transfer; particularly in dealing with State and local governments;
- (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;
- (4) provide funding, at the discretion of the Secretary, for Federal laboratories to provide the assistance specified in subsection (c)(3) of this section;

(I) when requested, assist colleges or universities, businesses, nonprofit organizations, State or local governments, or regional organizations to establish programs to stimulate research and to encourage technology transfer in such areas as technology program development, curriculum design, long-term research planning, personnel needs projections, and productivity assessments; and

and regionar, ciare, and recar recorded a manage -- -----

- (J) seek advice in each Federal laboratory consortium region from representatives of State and local governments, large and small business, universities, and other appropriate persons on the effectiveness of the program (and any such advice shall be provided at no expense to the Government).
- (2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) of this section 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 senior 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 Institute of Standards and Technology shall provide the Consortium, on a reimbursable basis, with administrative services, such as office space, personnel, and support services of the Institute, as requested by the Consortium and approved by such Director.
- (5) Each Federal laboratory or agency shall transfer technology directly to users or representatives of users, and shall not transfer technology directly to the Consortium. Each Federal laboratory shall conduct and transfer technology only in accordance with the practices and policies of the Federal agency which owns, leases, or otherwise uses such Federal laboratory.
- (6) Not later than one year after October 20, 1986, 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 (7), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made. Such report shall include an annual independent audit of the financial statements of the Consortium, conducted in accordance with generally accepted accounting principles.

- (3) Not later than one year after October 20, 1986, the Secretary shall submit to the President and the Congress a report regarding—
 - (A) any copyright provisions or other types of barriers which tend to restrict or limit the transfer of federally funded computer software to the private sector and to State and local governments, and agencies of such State and local governments; and
 - **(B)** the feasibility and cost of compiling and maintaining a current and comprehensive inventory of all federally funded training software.
- (h) Repealed. Pub.L. 100-519, Title II, § 212(a)(4), Oct. 24, 1988, 102 Stat. 2595

(i) Research equipment

The Director of a laboratory, or the head of any Federal agency or department, may give research equipment that is excess to the needs of the laboratory, agency, or department to an educational institution or nonprofit organization for the conduct of technical and scientific education and research activities. Title of ownership shall transfer with a gift under the section.

(Pub.L. 96–480, § 11, Oct. 21, 1980, 94 Stat. 2318, renumbered § 10 and amended Pub.L. 99–502, §§ 3–5, 9(e)(1), Oct. 20, 1986, 100 Stat. 1787, 1789, 1791, 1797; Pub.L. 99–502, § 4(c)(1), Oct. 20, 1986, 100 Stat. 1790; renumbered § 11 and amended Pub.L. 100–418, Title V, §§ 5115(b)(2), 5122(a)(1), 5162(b), 5163(c)(1), (3), Aug. 23, 1988, 102 Stat. 1433, 1438, 1450, 1451; Pub.L. 100–519, Title II, §§ 201(d)(3), 212(a)(4), Oct. 24, 1988, 102 Stat. 2594, 2595; Pub.L. 101–189, Div. C, Title XXXI, § 3133(e), Nov. 29, 1989, 103 Stat. 1679; Pub.L. 102–245, Title III, §§ 301, 303, Feb. 14, 1992, 106 Stat. 19, 20.)

Historical and Statutory Notes

1992 Amendments. Subsec. (e)(2). Pub.L. 102–245, § 301(a), substituted "senior representative appointed from" for "representative appointed from".

Subsec. (e)(6). Pub.L. 102-245, § 301(b), added provision requiring that the report include an annual independent audit of the financial statements of the Consortium, conducted in accordance with generally accepted accounting principles.

Subsec. (e)(7)(B)(ii). Pub.L. 102-245, § 301(c), substituted "1991, 1992, 1993, 1994, 1995, or 1996" for "or 1991".

Subsec. (e)(8). Pub.L. 102-245, § 301(d), struck out par. (8) which had directed the Consortium to use funds to establish demonstration projects in technology transfer.

Subsec. (i). Pub.L. 102-245, § 303, added subsec. (i).

1989 Amendment. Subsec. (b). Pub.L. 101-189, § 3133(e)(1), (2), substituted "each Federal agency which operates or directs one or more Federal laboratories shall make available sufficient funding, either as a separate line item or from the agency's research and development budget, to support" for "after September 30, 1981, each Federal agency which operates or directs one or more Federal laboratories shall make available not less than 0.5 percent of the agency's research and development budget to support".

Pub.L. 101–189, § 3133(e)(3), (4), substituted "The agency head shall submit to Congress at the time the President submits the budget to Congress an explanation of the agency's technology transfer program for the preceding year and the

Applications of the Federal laboratories.

Subsec. (d)(3). Pub.L. 99-502, § 4(c)(4), added par. (3). Former par. (3) redesignated (2).

Subsec. (d)(4). Pub.L. 99-502, § 4(c)(5), redesignated former par. (5) as (4). Former par. (4) was struck out.

Pub.L. 99-502, § 4(c)(6), in par. (4) as so redesignated substituted "subsection (c)(3)" for "subsection (c)(4)".

Pub.L. 99-502, § 4(c)(4), struck out former par. (4), which had required the Center for the Utilization of Federal Technology to receive requests for technical assistance from State and local governments and refer these requests to the appropriate Federal laboratories.

Subsec. (d)(5). Pub.L. 99-502, § 4(c)(5), redesignated former par. (6) as (5). Former par. (5) redesignated (4).

Subsec. (d)(6). Pub.L. 99-502, § 4(c)(5), redesignated former par. (6) as (5).

Subsec. (e). Pub.L. 99-502, § 3(2), added subsec. (e). Former subsec. (e) redesignated (f).

Subsec. (f). Pub.L. 99-502, § 3(1), redesignated former subsec. (e) as (f).

Pub.L. 99-502, § 4(d)(1), in subsec. (f) as so redesignated substituted "report annually to the Congress, as part of the

Pub.L. 99-502, § 4(d)(2), in subsec. (f) as so redesignated struck out provision which had required that the report be transmitted to the Center for the Utilization of Federal Technology by Nov. 1 of each year in which it was due.

hour aminimizing me accuracy.

Subsec. (g). Pub.L. 99-502, § 5, added subsec. (g).

Superconductivity: National Action Plan on Superconductivity Research and Development

Secretary of Energy's superconductivity research and development program and submission of annual reports to Congress respecting technology transfer activities, see section 5203 of this title.

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 100-519, 1988 U.S.Code Cong. and Adm.News, p. 3269; Pub.L. 101-189, 1989 U.S. Code Cong. and Adm. News, p. 838; Pub.L. 102-245, see 1992 U.S. Code Cong. and Adm. News, p. 19.

EXECUTIVE ORDERS EXECUTIVE ORDER NO. 12591

Apr. 10, 1987, 52 F.R. 13414, as amended Ex.Ord. No. 12618, Dec. 22, 1987, 52 F.R. 48661

FACILITATING ACCESS TO SCIENCE AND TECHNOLOGY

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Technology Transfer Act of 1986 [Public Law 99–502] [Pub.L. 99–502, Oct. 20, 1986, 100 Stat. 1785], the Trademark Clarification Act of 1984 [Public Law 98–620] [Pub.L. 98–620, Nov. 8, 1984, 98 Stat. 3335], and the University and Small Business Patent Procedure Act of 1980 [Public Law 96–517] [Pub.L. 96–517, Dec. 12, 1980, 94 Stat. 3015], and in order to ensure that Federal agencies and laboratories assist universities and the private

sector in broadening our technology base by moving new knowledge from the research laboratory into the development of new products and processes, it is hereby ordered as follows:

Section 1. Transfer of Federally Funded Technology.

(a) The head of each Executive department and agency, to the extent permitted by law, shall encourage and facilitate collaboration among Federal laboratories, State and local governments, universities, and the private sector, particularly small

gram whereby scientists and engineers in the private sector may take temporary assignments in Federal laboratories, and scientists and engineers in Federal laboratories may take temporary assignments in the private sector.

- Sec. 4. International Science and Technology. In order to ensure that the United States benefits from and fully exploits scientific research and technology developed abroad,
- (a) The head of each Executive department and agency, when negotiating or entering into cooperative research and development agreements and licensing arrangements with foreign persons or industrial organizations (where these entities are directly or indirectly controlled by a foreign company or government], shall, in consultation with the United States Trade Representative, give appropriate consideration:
- (1) to whether such foreign companies or governments permit and encourage United States agencies, organizations, or persons to enter into cooperative research and development agreements and licensing arrangements on a comparable basis;
- (2) to whether those foreign governments have policies to protect the United States intellectual property rights; and
- (3) where cooperative research will involve data, technologies, or products subject to national security export controls under the laws of the United States, to whether those foreign governments have adopted adequate measures to prevent the transfer of strategic technology to destinations prohibited under such national security export controls, either through participation in the Coordinating Committee for Multilateral Export Controls (CO-COM) or through other international agreements to which the United States and such foreign governments are signatories.
- (b) The Secretary of State shall develop a recruitment policy that encourages scientists and engineers from other Federal agencies, academic institutions, and industry to apply for assignments in embassies of the United States; and
- (c) The Secretaries of State and Commerce and the Director of the National Science Foundation shall develop a cen-

users in Federal laboratories, academic institutions, and the private sector on a fee-for-service basis.

- Sec. 5. Technology Transfer from the Department of Defense. Within 6 months of the date of this Order, the Secretary of Defense shall identify a list of funded technologies that would be potentially useful to United States industries and universities. The Secretary shall then accelerate efforts to make these technologies more readily available to United States industries and universities.
- Sec. 6. Basic Science and Technology Centers. The head of each Executive department and agency shall examine the potential for including the establishment of university research centers in engineering, science, or technology in the strategy and planning for any future research and development programs. Such university centers shall be jointly funded by the Federal Government, the private sector, and, where appropriate, the States and shall focus on areas of fundamental research and technology that are both scientifically promising and have the potential to contribute to the Nation's long-term economic competitiveness.
- Sec. 7. Reporting Requirements. (a) Within 1 year from the date of this Order, the Director of the Office of Science and Technology Policy shall convene an interagency task force comprised of the heads of representative agencies and the directors of representative Federal laboratories, or their designees, in order to identify and disseminate creative approaches to technology transfer from Federal laboratories. The task force will report to the President on the progress of and problems with technology transfer from Federal laboratories.
- (b) Specifically, the report shall include:
- a listing of current technology transfer programs and an assessment of the effectiveness of these programs;
- (2) identification of new or creative approaches to technology transfer that might serve as model programs for Federal laboratories;
- (3) criteria to assess the effectiveness and impact on the Nation's economy of

and property to collaborating parties;

- (2) grant or agree to grant in advance, to a collaborating party, patent licenses or assignments, or options thereto, in any invention made in whole or in part by a laboratory employee under the agreement, retaining a nonexclusive, nontransferrable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government and such other rights as the Federal laboratory deems appropriate;
- (3) waive, subject to reservation by the Government of a nonexclusive, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government, in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made under the agreement by a collaborating party or employee of a collaborating party;
- (4) determine rights in other intellectual property developed under an agreement entered into under subsection (a)(1); and
- (5) to the extent consistent with any applicable agency requirements and standards of conduct, 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.

A Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement under subsection (a)(1) of this section may use or obligate royalties or other income accruing to such laboratory under such agreement with respect to any invention only (i) for payments to inventors; (ii) for the purposes described in section 3710c(a)(1)(B)(i), (ii), and (iv) of this title; and (iii) for scientific research and development consistent with the research and development mission and objectives of the laboratory.

(c) Contract considerations

- (1) A Federal agency may issue regulations on suitable procedures for implementing the provisions of this section; however, implementation of this section shall not be delayed until issuance of such regulations.
- (2) The agency in permitting a Federal laboratory to enter into agreements under this section shall be guided by the purposes of this chapter.
- (3)(A) Any agency using the authority given it under subsection (a) of this section shall review standards of conduct for its employees for resolving potential conflicts of interest to make sure they adequately establish guidelines for situations likely to arise through the use of this authority, including but not limited to cases where present or former employees or their partners negotiate licenses or assignments of titles

modification of a joint work statement submitted under this section, the agency shall promptly transmit a written explanation of such disapproval or modification to the director of the laboratory concerned.

- (iii) Any agency which has contracted with a non-Federal entity to operate a laboratory or laboratories shall develop and provide to such laboratory or laboratories one or more model cooperative research and development agreements, for the purposes of standardizing practices and procedures, resolving common legal issues, and enabling review of cooperative research and development agreements to be carried out in a routine and prompt manner.
- (iv) An agency which has contracted with a non-Federal entity to operate a laboratory shall review each agreement under this section. Within 30 days after the presentation, by the director of the laboratory, of such agreement, the agency shall, on the basis of such review, approve or request specific modification to such agreement. Such agreement shall not take effect before approval under this clause.
- (v) If an agency fails to complete a review under clause (iv) within the 30-day period specified therein, the agency shall submit to the Congress, within 10 days after the end of that 30-day period, a report on the reasons for such failure. The agency shall, at the end of each successive 30-day period thereafter during which such failure continues, submit to the Congress another report on the reasons for the continuing failure. Nothing in this clause relieves the agency of the requirement to complete a review under clause (iv).
- (vi) In any case in which an agency which has contracted with a non-Federal entity to operate a laboratory requests the modification of an agreement presented under this section, the agency shall promptly transmit a written explanation of such modification to the director of the laboratory concerned.
- (D)(i) Any non-Federal entity that operates a laboratory pursuant to a contract with a Federal agency shall submit to the agency any cooperative research and development agreement that the entity proposes to enter into with a small business firm and the joint work statement required with respect to that agreement.
- (ii) A Federal agency that receives a proposed agreement and joint work statement under clause (i) shall review and approve, request specific modifications to, or disapprove the proposed agreement and joint work statement within 30 days after such submission. No agreement may be entered into by a Government-owned, contractor-operated laboratory under this section before both approval of the agreement and approval of a joint work statement under this clause.
- (iii) In any case in which an agency which has contracted with an entity referred to in clause (i) disapproves or requests the modification of a cooperative research and development agreement or joint work

(C) a Government-owned, contractor-operated facility (including a weapon production facility of the Department of Energy) that is not under a common contract described in subparagraph (B), and the primary purpose of which is the performance of research and development, or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components, for the Federal Government,

but such term does not include any facility covered by Executive Order No. 12344, dated February 1, 1982, pertaining to the naval nuclear propulsion program;

- (3) the term "joint work statement" means a proposal prepared for a Federal agency by the director of a Government-owned, contractor-operated laboratory describing the purpose and scope of a proposed cooperative research and development agreement, and assigning rights and responsibilities among the agency, the laboratory, and any other party or parties to the proposed agreement; and
- (4) the term "weapon production facility of the Department of Energy" means a facility under the control or jurisdiction of the Secretary of Energy that is operated for national security purposes and is engaged in the production, maintenance, testing, or dismantlement of a nuclear weapon or its components.

(e) Determination of laboratory missions

For purposes of this section, an agency shall make separate determinations of the mission or missions of each of its laboratories.

(f) Relationship to other laws

Nothing in this section is intended to limit or diminish existing authorities of any agency.

(g) Principles

In implementing this section, each agency which has contracted with a non-Federal entity to operate a laboratory shall be guided by the following principles:

- (1) The implementation shall advance program missions at the laboratory, including any national security mission.
- (2) Classified information and unclassified sensitive information protected by law, regulation, or Executive order shall be appropriately safeguarded.

(Pub.L. 96-480, § 12, as added and renumbered § 11, Pub.L. 99-502, §§ 2, 9(e)(1), Oct. 20, 1986, 100 Stat. 1785, 1797; renumbered § 12, Pub.L. 100-418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438, and amended Pub.L. 100-519, Title III, § 301, Oct. 24, 1988, 102 Stat. 2597; Pub.L. 101-189, Div. C, Title XXXI, § 3133(a), (b), Nov. 29, 1989, 103 Stat. 1675-1677; Pub.L.

§ 3133(a)(8)(A), (C), added par. (3).

Subsec. (g). Pub.L. 101-189, § 3133(b), added subsec. (g).

1988 Amendment. Subsec. (a)(2). Pub.L. 100-519, § 301(1), inserted reference to other intellectual property, wherever appearing.

Subsec. (b)(4), (5). Pub.L. 100-519, § 301(2), added par. (4). Former par. (4) redesignated (5).

Magnetic Levitation Technology. Secretary of the Army, in cooperation with the Secretary of Transportation, authorized to conduct research and development activities on magnetic levitation technology with funds (\$1,000,000 authorized for fiscal year 1990 and \$4,000,000 authorized for fiscal year 1991) to remain available until expended, see section 417 of Pub.L. 101-640, set out as a note under section 2313 of Title 33, Navigation and Navigable Waters.

Contract Provisions. Section 3133(d) of Pub.L. 101-189; as amended Pub.L. 101-510, Div. A, Title VIII, § 828(a), Nov. 5, 1990, 104 Stat. 1607, provided that:

- "(1) Not later than 150 days after the date of enactment of this Act [Nov. 29, 1989], each agency which has contracted with a non-Federal entity to operate a Government-owned laboratory shall propose for inclusion in that laboratory's operating contract, to the extent not already included and subject to paragraph (6), appropriate contract provisions that—
 - "(A) establish technology transfer, including cooperative research and development agreements, as a mission for the laboratory under section 11(a)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 [section 3710(a)(1) of this title];
 - "(B) describe the respective obligations and responsibilities of the agency and the laboratory with respect to this part [sections 3131 to 3133 of Pub.L. 101-189]; and section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 [this section];
 - "(C) require that, except as provided in paragraph (2), no employee of the laboratory shall have a substantial role (including an advisory role) in the preparation, negotiation, or approval of a cooperative research and develop-

- child, parent, sibling, or partner of such employee, or an organization (other than the laboratory) in which such employee serves as an officer, director, trustee, partner, or employee—
- "(I) holds a financial interest in any entity, other than the laboratory, that has a substantial interest in the preparation, negotiation, or approval of the cooperative research and development agreement; or
- "(II) receives a gift or gratuity from any entity, other than the laboratory, that has a substantial interest in the preparation, negotiation, or approval of the cooperative research and development agreement; or
- "(ii) a financial interest in any entity, other than the laboratory, that has a substantial interest in the preparation, negotiation, or approval of the cooperative research and development agreement, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment;
- "(D) require that each employee of the laboratory who negotiates or approves a cooperative research and development agreement shall certify to the agency that the circumstances described in subparagraph (C)(i) and (ii) do not apply to such employee;
- "(E) require the laboratory to widely disseminate information on opportunities to participate with the laboratory in technology transfer, including cooperative research and development agreements; and
- "(F) provides for an accounting of all royalty or other income received under cooperative research and development agreements.
- "(2) The requirements described in paragraph (1)(C) and (D) shall not apply in a case where the negotiating or approving employee advises the agency that reviewed the applicable joint work statement under section 12(c)(5)(C)(i) of the Stevenson-Wydler Technology Innovation Act of 1980 [subsec. (c)(5)(C)(i) of this section] in advance of the matter in which he is to participate and the nature of any financial interest described in paragraph

(2) exemplary activities that promote the domestic transfer of science and technology development 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.

(Pub.L. 96–480, § 13, as added and renumbered § 12, Pub.L. 99–502, §§ 6, 9(e)(1), Oct. 20, 1986, 100 Stat. 1792, 1797; renumbered § 13, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; Pub.L. 100–519, Title III, § 302, Oct. 24, 1988, 102 Stat. 2597.)

Historical and Statutory Notes

1988 Amendment. Par. (1). Pub.L. 100–519, § 302, extended cash award program to include rewards for research and development of computer software.

Legislative History. For legislative history and purpose of Pub.L. 99-502, see

1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 100-519, 1988 U.S.Code Cong. and Adm.News, p. 3269.

§ 3710c. Distribution of royalties received by Federal agencies

(a) In general

- (1) Except as provided in paragraphs (2) and (4), any royalties or other income received by a Federal agency from the licensing or assignment of inventions under agreements entered into by Government-operated Federal laboratories under section 3710a of this title, and inventions of Government-operated Federal laboratories licensed under section 207 of Title 35, or under any other provision of law, shall be retained by the agency whose laboratory produced the invention and shall be disposed of as follows:
 - (A)(i) The head of the agency or his designee shall pay at least 15 percent of the royalties or other income the agency receives on account of any invention to the inventor (or co-inventors) if the inventor (or each such co-inventor) has assigned his or her rights in the invention to the United States. This clause shall take effect on October 20, 1986 unless the agency publishes a notice in the Federal Register within 90 days of such date indicating its election to file a Notice of Proposed Rulemaking pursuant to clause (ii).
 - (ii) An agency may promulgate, in accordance with section 553 of Title 5 regulations providing for an alternative program for sharing royalties with inventors under clause (i). Such regulations must—
 - (I) guarantee a fixed minimum payment to each such inventor, each year that the agency receives royalties from that inventor's invention;

(iv) for education and training of employees consistent with the research and development mission and objectives of the agency, and for other activities that increase the licensing potential for transfer of the technology of the laboratories of the agency.

Any of such funds not so used or obligated by the end of the fiscal year succeeding the fiscal year in which they are received shall be paid into the Treasury of the United States.

- (2) If, after payments to inventors under paragraph (1), the royalties received by an agency in any fiscal year exceed 5 percent of the budget of the Government-operated laboratories of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated for the purposes described in clauses (i) through (iv) of paragraph (1)(B) during that fiscal year or the succeeding fiscal year. Any funds not so used or obligated shall be paid into the Treasury of the United States.
- (3) Any payment made to an employee under this section shall be in addition to the regular pay of the employee and to any other awards made to the employee, and shall not affect the entitlement of the employee to any regular pay, annuity, or award to which he is otherwise entitled or for which he is otherwise eligible or limit the amount thereof. Any payment made to an inventor as such shall continue after the inventor leaves the laboratory or agency. Payments made under this section shall not exceed \$100,000 per year to any one person, unless the President approves a larger award (with the excess over \$100,000 being treated as a Presidential award under section 4504 of Title 5).
- (4) A Federal agency receiving royalties or other income as a result of invention management services performed for another Federal agency or laboratory under section 207 of Title 35 may retain such royalties or income to the extent required to offset the payment of royalties to inventors under clause (i) of paragraph (1)(A), costs and expenses incurred under clause (i) of paragraph (1)(B), and the cost of foreign patenting and maintenance for any invention of the other agency. All royalties and other income remaining after payment of the royalties, costs, and expenses described in the preceding sentence shall be transferred to the agency for which the services were performed, for distribution in accordance with clauses (i) through (iv) of paragraph (1)(B).

(b) Certain assignments

If the invention involved was one assigned to the Federal agency-

(1) by a contractor, grantee, or participant in a cooperative agreement with the agency, or

Subsec. (a)(1)(A)(ii). Pub.L. 100-519, § 303(a)(2), substituted provisions relative to the alternative program of sharing royalties with inventors under cl. (i) for provisions relative to the sharing of such royalties with inventors employed by the agency at the time the invention was made and whose names appear on licensed inventions.

Subsec. (a)(4). Pub.L. 100-418, § 5162(a), substituted "may retain such royalties" for "shall retain such royalties" and "any invention of the other agency" for "such invention performed at the request of the other agency or laboratory".

1986 Amendment. Subsec. (a)(1). Pub.L. 99-502, § 9(e)(3), in provisions preceding subpar. (A) substituted refer-

section.

Effective Date of 1988 Amendment. Section 303(b) of Pub.L. 100-519 provided that: "This section [amending subsec. (a)(1)(A)(i) and (ii) of this section] shall be effective as of October 20, 1986."

Legislative History. For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 100-519, 1988 U.S.Code Cong. and Adm.News, p. 3269; Pub.L. 101-189, 1989 U.S. Code Cong. and Adm. News, p. 838.

Law Review Commentaries

Government exchange of technology under the Federal Technology Transfer Act of 1986. Maurice W. Ryan and Margaret M. Rioux, 36 Fed.B.News & J. 47 (January 1989).

§ 3710d. Employee activities

(a) In general

If a Federal agency which has the right of ownership to an invention under this chapter does not intend to file for a patent application or otherwise to promote commercialization of such invention, the agency shall 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 nonexclusive, nontransferrable, irrevocable, paid-up license to practice the invention or have the invention practiced 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.

(c) Relationship to other laws

Nothing in this section is intended to limit or diminish existing authorities of any agency.

(Pub.L. 96–480, § 15, as added and renumbered § 14, Pub.L. 99–502, §§ 8, 9(e)(1), Oct. 20, 1986, 100 Stat. 1794, 1797; renumbered § 15, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438.)

may deem proper.

(3) An organization to which an award is made under this section, and which agrees to help other American organizations improve their quality management, may publicize its receipt of such award and use the award in its advertising, but it shall be ineligible to receive another such award in the same category for a period of 5 years.

(c) Categories in which award may be given

- (1) Subject to paragraph (2), separate awards shall be made to qualifying organizations in each of the following categories—
 - (A) Small businesses.
 - (B) Companies or their subsidiaries.
 - (C) Companies which primarily provide services.
- (2) The Secretary may at any time expand, subdivide, or otherwise modify the list of categories within which awards may be made as initially in effect under paragraph (1), and may establish separate awards for other organizations including units of government, upon a determination that the objectives of this section would be better served thereby; except that any such expansion, subdivision, modification, or establishment shall not be effective unless and until the Secretary has submitted a detailed description thereof to the Congress and a period of 30 days has elapsed since that submission.
- (3) Not more than two awards may be made within any subcategory in any year (and no award shall be made within any category or subcategory if there are no qualifying enterprises in that category or subcategory).

(d) Criteria for qualification

- (1) An organization may qualify for an award under this section only if it—
 - (A) applies to the Director of the National Institute of Standards and Technology in writing, for the award,
 - **(B)** permits a rigorous evaluation of the way in which its business and other operations have contributed to improvements in the quality of goods and services, and
 - (C) meets such requirements and specifications as the Secretary, after receiving recommendations from the Board of Overseers established under paragraph (2)(B) and the Director of the National Institute of Standards and Technology, determines to be appropriate to achieve the objectives of this section.

In applying the provisions of subparagraph (C) with respect to any organization, the Director of the National Institute of Standards and Technology shall rely upon an intensive evaluation by a competent board

§§ 5115(b)(2)(A), 5122(a)(1), Aug. 23, 1988, 102 Stat. 1433, 1438; Pub.L 102–245, Title III, § 305, Feb. 14, 1992, 106 Stat. 20.)

Historical and Statutory Notes

1992 Amendments. Subsec. (f). Pub.L. 102–245 added provision authorizing the Director to use appropriated funds to carry out responsibilities under this chapter.

1988 Amendment. Subsec. (d). Pub.L. 100-418, § 5115(b)(2)(A), substituted "National Institute of Standards and Technology" for "National Bureau of Standards" wherever appearing.

Subsec. (e). Pub.L. 100-418, § 5115(b)(2)(A), substituted "National Institute of Standards and Technology" for "National Bureau of Standards".

Congressional Findings and Statement of Purpose. Section 2 of Pub.L. 100–107 provided that:

- "(a) Findings.—The Congress finds and declares that—
 - "(1) the leadership of the United States in product and process quality has been challenged strongly (and sometimes successfully) by foreign competition, and our Nation's productivity growth has improved less than our competitors over the last two decades:
 - "(2) American business and industry are beginning to understand that poor quality costs companies as much as 20 percent of sales revenues nationally, and that improved quality of goods and services goes hand in hand with improved productivity, lower costs, and increased profitability;
 - "(3) strategic planning for quality and quality improvement programs, through a commitment to excellence in manufacturing and services, are becoming more and more essential to the well-being of our Nation's economy and our ability to compete effectively in the global marketplace;
 - "(4) improved management understanding of the factory floor, worker involvement in quality, and greater emphasis on statistical process control can lead to dramatic improvements in the cost and quality of manufactured products;

- "(5) the concept of quality improvement is directly applicable to small companies as well as large, to service industries as well as manufacturing, and to the public sector as well as private enterprise;
- "(6) in order to be successful, quality improvement programs must be management-led and customer-oriented and this may require fundamental changes in the way companies and agencies do business;
- "(7) several major industrial nations have successfully coupled rigorous private sector quality audits with national awards giving special recognition to those enterprises the audits identify as the very best; and
- "(8) a national quality award program of this kind in the United States would help improve quality and productivity by—
 - "(A) helping to stimulate American companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits,
 - "(B) recognizing the achievements of those companies which improve the quality of their goods and services and providing an example to others,
 - "(C) establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own quality improvement efforts, and
 - "(D) providing specific guidance for other American organizations that wish to learn how to manage for high quality by making available detained information on how winning organizations were able to change their cultures and achieve eminence.
- "(b) Purpose.—It is the purpose of this Act [enacting this section, amending section 3708 of this title, and enacting a provision set out as a note under section 3701 of this title] to provide for the establishment and conduct of a national quality improvement program under which (1) awards are given to selected companies

The Secretary of Transportation may seek and accept gifts of money from private sources for the purpose of making cash prize awards under this section. Such money may be used only for that purpose, and only such money may be used for that purpose.

(Pub.L. 96-480, § 19, as added Pub.L. 102-240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2184.)

Historical and Statutory Notes

Legislative History. For legislative history and purpose of Pub.L. 102-240, see 1526.

§ 3712. Personnel exchanges

The Secretary and the National Science Foundation, jointly, shall establish a program to foster the exchange of scientific and technical personnel among academia, industry, and Federal laboratories. Such program shall include both (1) federally supported exchanges and (2) efforts to stimulate exchanges without Federal funding.

(Pub.L. 96–480, § 20, formerly § 13, Oct. 21, 1980, 94 Stat. 2320; renumbered § 17, Pub.L. 99–502, § 2, Oct. 20, 1986, 100 Stat. 1785; renumbered § 16, Pub.L. 99–502, § 9(e)(1), Oct. 20, 1986, 100 Stat. 1797; renumbered § 17, Pub.L. 100–107, § 3(a), Aug. 20, 1987, 101 Stat. 725; renumbered § 18, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; renumbered § 20, Pub.L. 102–240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 100-418, see 1988 U.S. Code Cong. and Adm. News, p. 1547. See, also, Pub.L. 102-240, 1991 U.S. Code Cong. and Adm. News, p. 1526.

Library References

Indians €10. Public Lands €3. C.J.S. Indians § 46 et seq. C.J.S. Public Lands § 37 et seq.

§ 3713. Authorization of appropriations

- (a)(1) There is authorized to be appropriated to the Secretary for the purposes of carrying out sections 3704, 3710(g), and 3711 of this title not to exceed \$3,400,000 for the fiscal year ending September 30, 1988.
- (2) Of the amount authorized under paragraph (1) of this subsection, \$2,400,000 is authorized only for the Office of Productivity, Technology, and Innovation; \$500,000 is authorized only for the purpose of carrying out the requirements of the Japanese technical literature program established under section 3704(d) of this title; and \$500,000 is authorized only for the patent licensing activities of the National Technical Information Service.

No payments shall be made or contracts shall be entered into pursuant to the provisions of this chapter (other than sections 3710a, 3710b and 3710c of this title) except to such extent or in such amounts as are provided in advance in appropriation Acts.

(Pub.L. 96–480, § 22, formerly § 15, Oct. 21, 1980, 94 Stat. 2320; renumbered § 19 and amended Pub.L. 99–502, §§ 2, 9(b)(13), Oct. 20, 1986, 100 Stat. 1785, 1796; renumbered § 18 and amended Pub.L. 99–502, §§ 9(e)(1), (4), Oct. 20, 1986, 100 Stat. 1797; renumbered § 19, Pub.L. 100–107, § 3(a), Aug. 20, 1987, 101 Stat. 725; renumbered § 20, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; renumbered § 22, Pub.L. 102–240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

References in Text. Sections 3710a, 3710b, and 3710c of this title, referred to in text, were in the original references to sections 11, 12, and 13 of this Act, respectively, meaning sections 11, 12, and 13 of the Stevenson-Wydler Technology Innovation Act of 1980. Sections 11, 12, and 13 of the Act were renumbered sections 12, 13, and 14, respectively, by section 5122(a)(1) of Pub.L. 100-418, without corresponding amendment to this section.

Codification. Amendment by section 9(e)(4) of Pub.L. 99-502, directing that "sections 11, 12, and 13" be substituted for "sections 12, 13, and 14" was not executed in view of renumbering of sections 12, 13, and 14 of Pub.L. 96-480 as sections 11, 12 and 13, respectively, of Pub.L. 96-480 by section 9(e)(1) of Pub.L. 99-502. Since both references translate as "sections 3710a, 3710b, and 3710c of this title", amendment by section 9(e)(4) of

Pub.L. 99-502 resulted in no change in text

1986 Amendment. Pub.L. 99-502, § 9(b)(13), added exception relating to sections 3710a, 3710b and 3710c of this title.

Pub.L. 99–502, § 9(e)(4), substituted references to sections 11, 12 and 13 of Pub.L. 96–480 for references to sections 12, 13 and 14 of Pub.L. 96–480. See Codification note set out under this section.

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S. Code Cong. and Adm. News, p. 1547; Pub.L. 102-240, 1991 U.S. Code Cong. and Adm. News, p. 1526.

Library References

Indians €10.
Public Lands €3.

C.J.S. Indians § 46 et seq. C.J.S. Public Lands § 37 et seq.

§ 3715. Use of partnership intermediaries

(a) Authority

Subject to the approval of the Secretary or head of the affected department or agency, the Director of a Federal laboratory, or in the case of a federally funded research and development center that is not a laboratory (as defined in section 3710a(d)(2) of this title), the Federal employee who is the contract officer, may—

(1) enter into a contract or memorandum of understanding with a partnership intermediary that provides for the partnership intermediary to perform services for the Federal laboratory that

INDEX

FEDERAL LABORATORY CONSORTIUM

References are to Sections of USCA Title 15 and Executive Order Numbers (EON)

ADMINISTRATIVE PROCEDURE

Applicability, agencies dealing with contractors, innovators, etc., exemptions, cooperative research and development, 3710a

ADVISORY BOARDS

National Technical Information Service, composition, etc., 3704b

AERONAUTICS AND SPACE

Administration, Federal Laboratory Consortium for Technology Transfer, use of expertise of, 3710

pertise of, 3710

Administrator, Technology Share Program, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

AMERICAN TECHNOLOGY PREEMINENCE ACT OF 1991

Text of Act. See United States Code Annotated Popular Name Table
Short title, 3701 nt

Technology Innovation, generally, this index

APPROPRIATIONS

Japanese technical literature, monitoring of, Commerce Department, 3704 Technology innovation, 3713

ATTORNEY GENERAL

Technology innovation, supporting agency to request opinion whether research activities violate antitrust laws, 3705

AWARDS

Motor Vehicles, generally, this index National Award for Advancement of Motor Vehicle Research and Development, establishment, etc., 3711c

BUDGET

Federal agencies and instrumentalities, summary of royalties, income, etc., technology innovation, 3710c

COMMERCE AND TRADE

International Trade, generally, this index

COMMERCE DEPARTMENT

Technology Innovation, generally, this index

COMMISSIONS AND COMMISSIONERS

Reducing Capital Costs for Emerging Technology, establishment, purposes, membership, etc., 3701 nt

Technology and Procurement, establishment, purposes, membership, etc., 3701 nt

COMMITTEES

Congressional Committees, generally, this index

Coordinating Committees, generally, this index

COMPANIES AND CORPORATIONS

Qualifying organizations for Malcolm Baldrige National Quality Awards, 3711a

CONFERENCES

Advanced automotive technologies, safety and energy savings, provisions, 3711b

CONFIDENTIALITY

Trade secrets, etc., obtained by agencies of Government, cooperative research and development, 3710a

CONGRESS

Congressional Committees, generally, this index

Reports,

National Research Council, international product testing and issue certification, by review panel, 3701 nt

National Technical Information Service, public access, scientific and technical information, 3704b-2

Secretary of Commerce, Japanese technical literature, monitoring, activities relating to, etc., 3704

Technology Innovation, generally, this index

CONGRESSIONAL COMMITTEES

Reports,

Commerce, Science, and Transportation Committee, Senate, advanced automotive technologies, conference, results, 3711b Executive Agencies, generally, this index
Executive Departments, generally, this index
Royalties received by. Technology Innovation, generally, this index

Technology Innovation, generally, this index

FEDERAL PROCUREMENT POLICY, OFFICE

See Office of Federal Procurement Policy, generally, this index

FEDERAL TECHNOLOGY TRANSFER ACT OF 1986

Text of Act. See United States Code Annotated Popular Name Table Short title, 3701 nt

Technology Innovation, generally, this index

FREEDOM OF INFORMATION

Agency obligations, exception, cooperative research and development, 3710a

GENERAL SERVICES ADMINISTRATION

Commissions, Technology and Procurement, member. 3701 nt

GOODS

Technology innovation, Secretary to assess resources allocated to new technologies, 3704

CHANTS

Technology Innovation, this index

HEARINGS

Technology innovation, inventions, supporting agency to require Centers to issue license, determination after public hearing, etc., 3705

IMPORTS AND EXPORTS

Coordinating Committee for Multilateral Export Controls, heads of departments and agencies, international research agreements, consideration of national security export controls, 3710 nt, EON 1259i

INDUSTRIAL TECHNOLOGY, CENTERS FOR

See Technology Innovation, generally, this index

INSTITUTIONS

Technology innovation, application for grant or cooperative agreement, Secretary to act within time limit, 3706

INTELLECTUAL PROPERTY

Transfer of federally funded technology, heads of departments and agencies, licensing, assigning or waiving rights to, 3710 nt. EON 12591

INTERNATIONAL TRADE

Trade Representative, international cooperative research and development agreement, consultation with Representative by heads of departments and agencies, 3710 nt. EON 12591

INVENTIONS

Technology Innovation, generally, this index

OF 1986 Text of Act, 3701 nt, 3704

Short title, 3701 nt
Technology Innovation, generally, this index

JOB PERFORMANCE

Evaluations, insuring optimum utilization of scientists, engineers, etc., 3710

LABORATORIES

Federal laboratories,

Laboratory Consortium for Technology Transfer, establishment, powers and duties, 3710

Office of Research and Technology Applications, establishment, powers and duties, 3710

Research equipment, gift, educational institutions or nonprofit organizations, authority, 3710

Science and technology, facilitating access to, transfer of federally funded technology, 3710 nt, EON 12591 Technology Innovation, generally, this index

LICENSES AND PERMITS

Technology innovation, invention, supporting agency may require Centers to issue license, terms and conditions, review, etc., 3705

MALCOLM BALDRIGE NATIONAL QUALITY IMPROVEMENT ACT OF 1987

Text of Act. See United States Code Annotated Popular Name Table Short title, 3701 nt

Technology Innovation, generally, this index

MOTOR VEHICLES

Automotive technologies, advanced, conference, 3711b

Awards, advanced research, establishment, etc., 3711c

Conferences, advanced automotive technologies, 3711b

Domestic manufacturers, etc.,

Advanced automotive technologies, conference, 3711b

Research and development, National Award for Advancement of Motor Vehicle Research and Development, 3711c

NATIONAL COMPETITIVENESS TECHNOLOGY TRANSFER ACT OF 1989

Text of Act, 3701 nt Short title, 3701 nt

Technology Innovation, generally, this index

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Director,

Federal Laboratory Consortium for Technology Transfer, provision of administrative services, etc., to, 3710 Malcolm Baldrige National Quality Award,

Malcolm Baldrige National Quality Award responsibilities respecting, 3711a Office of Science and Technology Policy.
Technology Innovation, this index
Technology transfer from Federal laboratories, interagency task force to identify new approaches, report to President,
3710 nt, EON 12591

SCIENTIFIC INFORMATION AND DATA

Technology innovation, Cooperative Research Centers, improving mechanisms for dissemination of scientific, engineering and technical information, 3705

SECRETARY OF AGRICULTURE

~ . . .

Technology share program, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

SECRETARY OF COMMERCE

Dissemination of science and technology information developed abroad to Federal laboratories, colleges and private sector, 3710 nt, EON 12591

Japanese technical literature, monitoring of, dissemination, etc., 3704

National Research Council, generally, this

Technology Innovation, this index
Technology share program, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

SECRETARY OF DEFENSE

Commissions, Technology and Procurement, members, etc., 3701 nt

Technology transfer to U.S. industries and universities, 3710 nt, EON 12591

SECRETARY OF ENERGY

Technology share program, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

SECRETARY OF HEALTH AND HUMAN SERVICES

Technology share program, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

SECRETARY OF STATE

Dissemination of science and technology information developed abroad to Federal laboratories, colleges and private sector, 3710 nt, EON 12591

SECRETARY OF TRANSPORTATION

Awards, National Award for Advancement of Motor Vehicle Research and Development, determination and presentation, domestic motor vehicle manufacturers, etc., 3711c

SENATE

Commerce and technological innovation, advice and consent, appointments, Under Secretary, Assistant Secretary, 3704

SMALL BUSINESS

Qualifying organizations for Malcolm Baldrige National Quality Award, generally, ante, this heading 3705
Technology transfer, agreements with small businesses, expedited review, Federal laboratories, etc., 3710a

SPACE

Aeronautics and Space, generally, this index

STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980

Text of Act, 3701 et seq. Short title, 3701 nt Technology Innovation, generally, this index

STUDIES

National Research Council, contract with, international product testing and certification issues, review panel, etc., 3701 nt

TECHNICAL ASSISTANCE AND COOPERATION

Technology innovation, Cooperative Research Centers, technical assistance, advisory services to industry, 3705

TECHNICAL INFORMATION AND DATA

Technology innovation, Cooperative Research Centers, dissemination of scientific, engineering and technical information, 3705

TECHNOLOGY ADMINISTRATION

Technology Innovation, generally, this index

TECHNOLOGY ADMINISTRATION AUTHORIZATION ACT OF 1991

Text of Act. See United States Code Annotated Popular Name Table Short title, 3701 nt

Technology Innovation, generally, this index

TECHNOLOGY ASSESSMENT

Secretary of Commerce, Commission on Technology and Procurement, report, 3701 nt

TECHNOLOGY INNOVATION

Activities, Centers, 3705

Administrative arrangements, NSF and Secretary shall obtain advice, cooperation, support of certain departments and agencies, 3708

Administrative authorization, 3708

Aeronautics and Space Administration, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708

American preeminence,

Administration, Congressional statement of policy, 3701 nt

Definitions, 3701 nt

Antitrust laws, advice by Attorney General on violations of, 3705

Appropriations, authorization,

Generally, 3713

Commission on Technology and Procurement, 3701 nt

National Commission on Reducing Capital Costs for Emerging Technology, 3701 nt

Please refer to TECHNOLOGY INNOVATION heading for primary coverage of topics in this pamphlet

Employees, ACIONITORS OF LESCULOR WHO N Activities, ownership of inventions, patperimentation agenda, etc., 3708 ents, licenses, title, etc., 3710d Housing and Urban Development, cooperation with Secretary and NSF, develop-Payments of royalties, additions to salary, ment of research and policy experimenrestriction, etc., 3710c tation agenda, etc., 3708 Energy Department, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708 ally, ante, this heading Environmental Protection Agency, coopera-Invention, tion with Secretary and NSF, development of research and policy experimenagency may require Center grant litation agenda, etc., 3708
Environmental Quality Control, cooperation tions, appeal and review, 3705 Defined, 3703 with Secretary and NSF, development Title acquisition by Centers, etc., 3705 of research and policy experimentation agenda, etc., 3708 Joint work statement, Establishment, Clearinghouse for State and Defined, 3710a Local Initiatives on Productivity, Tech-Joint work statement-Cont'd nology, and Innovation, responsibilities, contracts, etc., 3704a businesses, technology transfer, Federal agencies, 3710a Budget submission, summary of royalties, Laboratory, defined, 3710a income, etc., 3710c Laboratory director, Defined, 3703 Giving access to science and technology, restrictions, etc., 3710a 3710 nt, EON 12591 Limitation or diminishing of authority, Limitations, appropriations, 3713 3710d Made, defined, 3703 Retention of royalties, 3710c Federal laboratory, Contracts with partnership intermediaries, purpose, 3711a nt Establishment, presentation, categories, Defined, 3703 Federal technology, etc., 3711a ries, generally, 3705 Facilitating access to, 3710 nt, EON 12591 Motor vehicles, domestic manufacturers, Transfer of, use of partnership intermedietc., advanced automotive technoloaries, 3715 gies conference. 3711b Utilization of, 3710 Freedom of Information Act, periodic retablishment, etc., 3711c ports by Centers to supporting agency, not subject to disclosure under, 3705 Funds. National Award for Advancement of Motor Vehicle Research and Development, 3701 nt gifts from private sources, 3711c National defense laboratories. National Quality Performance Trust, estab-Defined, 3705 lishment, etc., 3717 Model programs, 3705 Gifts, research equipment, educational instiogy, generally, this index National Quality Council, tutions or nonprofit organizations, 3710 Grants, planning grants, Trust Fund, gifts, etc., 3713

Secretary, cooperative agreements, etc., activities to promote innovation, eligibility, etc., 3706

Terms and conditions, generally, post, this heading

To universities or nonprofit institutions, Authorization of NSF to make available, 3707

Authorization of Secretary to make, 3705

Grants and cooperative agreements, eligibility, procedure, terms, etc., 3706

Industrial technology, centers for. See Centers for Industrial Technology, gener-Center to acquire title, license, supporting cense to responsible applicant, condi-Expedited review, agreements with small Development of agreements, preferences, Partnership intermediaries, use of, 3715 Malcolm Baldrige National Quality Award, Congressional findings and declaration of Model programs, national defense laborato-National Award for Advancement of Motor Vehicle Research and Development, es-National Commission on Reducing Capital Costs for Emerging Technology, establishment, purposes, membership, etc., National Institute of Standards and Technol-National Science Foundation, Appropriations, authorization, 3713 Cooperative Research Centers, Assistance for establishment, etc., 3707 Powers, etc., as supporting agency,

Coordination, cooperation, etc., provisions

concerning, 3708 Personnel exchanges, 3712

National Technology Information Service, generally, this index

National Technology Medal, establishment, award and presentation by President, 3711

Nonprofit institutions, defined, 3703

Cooperative agreements, 3706 Title, inventions by Federal employees or officers, licenses, provisions, etc., 3710d

Training technology, defined, 3703 Trust fund. Fund, generally, ante, this head-

Under Secretary, defined, 3703 United States Court of Federal Claims, jurisdiction, review of agency determina-

tion denying license, 3705 Utilization of Federal technology, policy, etc., 3710

Weapon production facility of the Depart-

ment of Energy, defined, 3710a **TECHNOLOGY POLICY, OFFICE OF**

Technology Innovation, generally, this index

velopment, 3710a

TRAVELING EXPENSES OR ALLOWANCES Commissions and National Commissions, Reducing Capital Costs for Emerging Tech-

nology, 3701 nt Technology and Procurement, members, 3701 nt

UNITED STATES COURT OF FEDERAL CLAIMS

United States Court of Claims, Claims Court, (former courts), technology innovation, supporting agency may require Center to issue license, review, jurisdiction, etc., 3705

WEAPONS

Technology Innovation, generally, this index

WORDS AND PHRASES See Definitions, generally, this index

*				•	
	•	•			
	•				
				•	
				-	
·	•				
 	•				
	_				
-					
					-
	•				
i			•	•	
		*			
			· ·	•	
	and the second second	•			
* *					
	•				•
		-			
		,			
		•		•	
					*.
	•	•			
	•		•		
	•				
	•				
•			•		
•	*				



	•							
				-			•	* *
		•	4					
				*.			•	
	•	•	•					
		·				*		
		-					•	
				•				
		•						
					•		•	•
						4.0		
			-					
	4				-			
	100			•				
			•	• •			•	
					•			· ·
		•						
					-			
							-	
								·
	•							
		•						•
		•					•	
					*			
				•		*		
~								
							4,	•
					•			
				•	•			





· ·		
:		
	•	
1		

TECHNOLOGY INNOVATION—Cont'd Office, defined, 3703

Office of Productivity, Technology, and Innovation, Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation established in, responsibilities, etc., 3704a

Office of Science and Technology Policy, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708

Offices for research and technology applications, requirements, etc., 3710

Participation, by consortium, in State and local programs, 3710

Partnership intermediaries,

Generally, 3715

Defined, 3715

National defense laboratories, model programs, 3705

Personnel exchanges among academia, industry, and Federal laboratories, NSF and Secretary shall establish program, 3712

Policy, utilization of Federal technology, 3710

Presentation, Malcolm Baldrige National Quality Award, 3711a

President of U.S.,

Award and presentation of National Technology Medal, 3711

Reports, generally, post, this heading Royalties, approval of awards, 3710c Procedure, grants and cooperative agreements, 3706

Program for personnel exchanges between Secretary and NSF, establishment, etc., 3712

Quest for Excellence. Malcolm Baldrige National Quality Award, generally, ante, this heading

Reports,

Advanced automotive technologies, conference, results, submission to President and Congressional committees, 3711b

Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation, time, contents, etc., 3704a

Federal Laboratory Consortium for Technology Transfer, Chairman, activities and expenditures, 3710

Malcolm Baldrige National Quality Award, time, contents, etc., 3711a

National Research Council, international product testing and issue certification, by review panel, requirement, 3701 nt

Offices of, Science and Technology Policy,
Director, interagency task force convened by, technology transfer from
Federal laboratories to industry and
university, 3710 nt, EON 12591

Partnership progress reports, 3715
Periodic reports by Center to supporting
agency, treatment, etc., 3705
Progress, findings, etc., 3704, 3710

Summary of activities performed by agency and Federal laboratories, time etc. 3710

TECHNOLOGY INNOVATION—Cont'd

Reports—Cont'd

Requirements, establishment of Centers, 3705

Research and development utilization, provisions, 3705

Research and Technology Applications Offices, establishment, functions, etc., 3710

Rewards, Federal officers and employees, for inventions, promoting technological development, etc... 3710b

cal development, etc., 3710b Royalties, distribution, by Federal agencies, provisions, requirements, etc., 3710c

Science and technology, facilitating access to, 3710 nt, EON 12591

Secretary, defined, 3703

Secretary of Commerce,

See, also, specific index lines under this heading

Advanced automotive technologies, conference, 3711b

Functions, responsibilities, reports, Congress, President, etc., 3710

Powers, duties, etc., 3704 et seq.

Small Business Administration, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708

Small business firm, defined, 3703
Special Government employees, defined,

Spending authority, 3714
Supporting agency, defined, 3703
Technology Administration,

Assistant Secretary of Commerce for Technology Policy,

Appointment, functions, duties, etc., 3704

Transition provision, 3704 nt

Establishment, maintenance, etc., by Secretary, 3704

National Institute of Standards and Technology, included in, 3704

National Technical Information Service, included in, 3704

Office of Technology Policy, included in, 3704

Under Secretary of Commerce for Technology,

Appointment, functions, duties, etc., 3704

Compensation, 3704

Creation of centers, cooperative research, dissemination of technological skills, etc., 3704

cal skills, etc., 3704
Japanese technical literature, establishment of Program to monitor, etc., 3704

Metric Conversion Act of 1975, implementation of, assistance by, 3704

Office of Productivity, Technology, and Innovation, functions of former Office to be carried out by, 3704

Technology share program, Secretaries of certain Departments, selection of laboratory to perform research as participant in consortium, 3710 nt, EON 12591

TECHNOLOGY INNOVATION—Cont'd Assignment, inventions, provisions for, etc.,

3710c

Assistant Secretary, defined, 3703 Attorney General, antitrust laws, advice to supporting agencies on violations, 3705

Audit, consortium, independent, annual, requirement, 3710

Automotive technologies, advanced, conference, 3711b

Award.

National Award for Advancement of Motor Vehicle Research and Development, establishment, etc., 3711c

National Technology Medal, 3711 Centers for Industrial Technology, Grants to universities and nonprofit institu-

tions by NSF, 3707
National Science Foundation, assistance
for establishment of, 3707

Clearinghouse, defined, State and Local Initiatives on Productivity, Technology and Innovation, 3703

Commerce and technological innovation, 3704

Commerce Department,

American preeminence, administration, 3701 nt

Cooperative Research Centers, powers, etc., as supporting agency, 3705

Commercial space programs, restriction on, 3704 nt

Comptroller General, review of programs, reports, etc., 3710c

Conference, advanced automotive technologies, participants, etc., 3711b

Congressional findings and declaration of purposes, 3701, 3701 nt, 3702 Malcolm Baldrige National Quality Award,

3711a nt Consortium,

Budget, demonstration projects, records, etc., 3710

Establishment, procedures, authority, membership, etc., 3710

Membership, election of Chairman, reports to Congress, President, etc., 3710

National Science Foundation, grants, contracts, cooperative agreements are governed by National Science Foundation Act of 1950, etc., 3707

Spending authority, 3714

Contracts,

Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation, authority of Secretary to enter into, etc., 3704a

Considerations, procedures, standards of conduct, title to, inventions, etc., 3710a

National Technical Information Service activities or functions, not performed by certain date, prohibition on contracting, exception, etc., 3710

Partnership intermediaries with Federal laboratories, 3715

Provisions, non-Federal entity to operate a Government-owned laboratory, TECHNOLOGY INNOVATION—Cont'd

Cooperation, sense of Congress concerning participation in authorized activities or projects, 3708

Cooperative agreements,

Eligibility, procedure, terms, etc., 3706 Secretary may enter to aid, eligibility, term and conditions, 3706

Use of partnership intermediaries, 3715 Cooperative research and development agreement,

Authority, participation, Federal laboratories and employees, etc., 3710a

Defined, 3710a

Cooperative research and development agreement—Cont'd

Expedited review, agreements with small businesses, technology transfer, 3710a

Heads of departments and agencies to delegate authority to Federal laboratories to enter into, 3710 nt, EON 12591
Principles, 3710a

Cooperative Research Centers,

Appropriations, authorization, 3713
Establishment, duties, etc., 3705, 3707
Grants to universities and nonprofit institutions by NSF, 3707

National defense laboratories, model programs, 3705

National Science Foundation, assistance for establishment of, 3707

Research equipment, gifts, educational institutions or nonprofit organizations, authority, 3710

Coordination of Secretary and NSF with departments and agencies, administrative arrangements, 3708

Copyright provisions, report by Secretary, inventory, training software, etc., 3710

Council of Economic Advisers, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708

Criteria for qualification, Malcolm Baldrige National Quality Award, 3711a

Defense Department, cooperation with Secretary and NSF, development of research and policy experimentation agenda, etc., 3708

Definitions, 3703

Director, National Institute of Standards and Technology, cooperation and obligations to consortium, personnel, support services, etc., 3710

Dissemination of technical information, by National Technical Information Service, 3710

Distribution, royalties, percentages, transfer of funds, payment of unused funds, etc., 3710c

Domestic motor vehicle manufacturers, etc., research and development, substantial improvement in safety, etc., National Award for Advancement of Motor Vehicle Research and Development, 371ic

Education Department, cooperation with Secretary and NSF, development of research and policy experimentation

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY-Cont'd

Federal Laboratory Consortium for Technology Transfer, provision of administrative services, etc., 3710

Malcolm Baldrige National Quality Award, responsibilities of Director. 3711a

NATIONAL QUALITY COUNCIL

Technology Innovation, generally, this index

NATIONAL RESEARCH COUNCIL

Commerce Secretary.

Contract for review, international product testing and issue certification, 3701 nt

Report, by review panel, requirement, 3701 nt

Reports, Congress, international product testing and issue certification, by review panel, technology innovation. etc., 3701 nt

Review panel, international product testing and certification issues, appointment, membership, etc., 3701 nt

NATIONAL SCIENCE FOUNDATION

National Technical Information Service, dissemination of technical information.

Technology exchange, central mechanism for dissemination of science and technology information developed abroad to Federal laboratories, etc., 3710 nt. EON 12591

NATIONAL TECHNICAL INFORMATION SERVICE

Text of Act of 1988. 3701 nt. 3704h Advisory Board, establishment, composition, powers, duties, etc., 3704b Director, powers, duties, etc., 3704b Dissemination,

Information, by electronic format, 3704b Technical information, cooperation with Office of Research and Technology Applications, etc., 3710

Federal executive departments and agencies, heads of, transfer, Federal scientific and technical information, provisions, 3704b-2

Fees and costs, operating costs, document storage and archiving, 3704b-1

Japanese technical literature, monitoring, etc., by Service, 3704 Net revenues, defined, 3704b

Reports, Congress, access to public, Federal scientific and technical information,

Rules and regulations, transfer of Federal scientific and technical information. 3704b-2

Secretary of Commerce, powers, duties,

etc., 3704b Short title, Act of 1988, 3701 nt

Transfer, Federal scientific and technical information, unclassified, provisions, -3704b-2

Under Secretary of Commerce for Technology, Director of Service to report to, 37046

NATIONAL TECHNOLOGY MEDAL

Establishment, award, presentation, 3711

OCEAN DUMPING

Under Secretary of Commerce for Technology, appointment by President, advice and consent of, 3704

OFFICE OF FEDERAL PROCUREMENT POLICY

Transfer of federally funded technology, guidance provided by, retention of rights by Federal contractors in exchange for royalty-free use by Government, 3710 nt, EON 12591

OFFICE OF TECHNOLOGY POLICY

Technology Innovation, this index

OFFICERS AND EMPLOYEES OF GOVERNMENT

Technology Innovation, generally, this index

PARTNERSHIP

Intermediaries. Technology Innovation, generally, this index

PATENTS

Federally funded technology, transfer to private sector, grants of patents to contractors in exchange for royalty-free use by Government, 3710 nt. EON 12591

PERMITS

Licenses and Permits, generally, this index

PERSONNEL

Technology innovation, Secretary and NSF shall foster exchange of scientific and technical personnel, 3712

PRESIDENT OF THE UNITED STATES

Malcolm Baldrige National Quality Award, presentation by, etc., 3711a

Reports. Technology Innovation, this index Technology Innovation, this index

PRIVATE SECTOR

Transfer of federally owned or originated technology to, 3710, 3710 nt, EON 12591

PRODUCTIVITY

Technology innovation, Secretary to assess resources allocated to new technologies, 3704

PROPERTY

Intellectual Property, generally, this index

REPORTS

See specific index headings

RESEARCH AND DEVELOPMENT

Cooperative centers, consortium, establishment, etc., 3705, 3710

REWARDS

Technology Innovation, generally, this index

Technology innovation, Cooperative Research Centers, acquiring title to inventions, royalties used as compensation, educational and research activities. 3705

CONGRESSIONAL COMMITTEES—Cont'd

Reports-Cont'd

Federal Laboratory Consortium for Technology Transfer, Chairman, activities and expenditures, 3710

Public Works and Transportation Committee, House, advanced automotive technologies, conference, results, 3711h

Science, Space, and Technology Committee, House, advanced automotive technologies, conference, results, 3711b

CONSORTIUM

Federal Laboratory Consortium for Technology Transfer, establishment, powers and duties, 3710

Technology Innovation, this index Technology Share Program, Secretary of certain Departments, selection of laboratory to participate in as member of consortium, 3710 nt, EON 12591

CONTRACTS

National Research Council, international product testing and issue certification, technology innovation, 3701 nt

Technology Innovation, generally, this index

COOPERATIVE AGREEMENTS OR ARRANGEMENTS

Technology Innovation, generally, this index

COOPERATIVE RESEARCH CENTERS

Technology Innovation, this index

COPYRIGHTS

Secretary of Commerce, report to President and Congress, copyright provisions restricting transfer of federally funded computer software to private sector, etc., 3710

CRITICAL INDUSTRIES

Technology Innovation, generally, this index

CURRICULUM

Technology innovation, Cooperative Research Centers, development of curriculum, training, instruction, inventions, innovations, 3705

DECORATIONS, MEDALS, AND BADGES

National Award for Advancement of Motor Vehicle Research and Development, design, etc., 3711c

DEFINITIONS

Advanced manufacturing technology, technology preeminence, 3701 nt
Advanced materials, technology preemi-

nence, 3701 nt Assistant Secretary, 3703

Center or centers, technology preeminence, 3701 nt, 3703

Clearinghouse, 3703

Cooperative research and development, 3710a

Cooperative research and development agreement, 3710a

Federal employee or employees, employee activities, 3710d

Federal laboratory, 3703

DEFINITIONS—Cont'd

High-resolution information system, technology preeminence, 3701 nt

Institute, technology preeminence, 3701 nt Invention, 3703

Joint work statement, research and development, 3710a

Laboratory, research and development, 3710a

Made, 3703

Nonprofit institution, 3703

Office, 3703

Partnership intermediary, 3715

Secretary, 3701 nt, 3703 Small business firm, 3703

Special Government employee, employee ac-

tivities, 3710d

Supporting agency, 3703

Training technology, 3703 Under Secretary, 3701 nt, 3703

Weapon production facility of the Department of Energy, research and development, 3710a

DEPARTMENTS OF GOVERNMENT

Executive Agencies, generally, this index Executive Departments, generally, this index

ECONOMIC GROWTH

Technology innovation, Secretary to assess resources allocated to new technologies, promotion, economic growth, etc., 3704

EMPLOYERS AND EMPLOYEES

Employee activities, patents, ownership to inventions, title, etc., 3710d

EVALUATIONS

Laboratory job performance, optimum utilization of technology, criteria and requirements, 3710

EXECUTIVE AGENCIES

Basic science and technology centers, proposal, establishment of university research centers, funding, focus, 3710 nt, EON 12591

Science and technology centers, proposal, establishment of university research centers, funding, focus, 3710 nt, EON 12591

EXECUTIVE DEPARTMENTS

Basic science and technology centers, proposal, establishment of university research centers, funding, focus, 3710 nt, EON 12591

Science and technology, facilitating access, transfer of federally funded technology to the market place, centers, establishment of university research centers, etc., 3710 nt, EON 12591

EXECUTIVE EXCHANGE PROGRAM

Executive Director, technology exchange, scientists and engineers in Federal laboratories and private sector, temporary assignments, 3710 nt, EON 12591

EXECUTIVE ORDERS

President of U.S., facilitating access to science and technology, transfers and exchanges, etc., 3710, EON 12951

15 § 3716 TECHNOLOGY INNOVATION

increase the likelihood of success in the conduct of cooperative or joint activities of such Federal laboratory with small business firms; and

(2) pay the Federal costs of such contract or memorandum of understanding out of funds available for the support of the technology transfer function pursuant to section 3710(b) of this title.

(b) Partnership progress reports

The Secretary shall include in each triennial report required under section 3704b(d) of this title a discussion and evaluation of the activities carried out pursuant to this section during the period covered by the report.

(c) Definition

For purposes of this section, the term "partnership intermediary" means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory, including State programs receiving funds under cooperative agreements entered into under section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 2781 note).

(Pub.L. 96–480, § 23, formerly § 21, as added Pub.L. 101–510, Div. A, Title VIII, § 827(a), Nov. 5, 1990, 104 Stat. 1606, and amended Pub.L. 102–190, Div. A, Title VIII, § 836, Dec. 5, 1991, 105 Stat. 1448; renumbered § 23, Pub.L. 102–240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

References in Text. Section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988, referred to in subsec. (c), is classified to section 2781 note of this title.

1991 Amendment. Subsec. (a). Pub.L. 102-190 inserted "that is not a laboratory (as defined in section 3710a(d)(2) of this title)" following "federally funded research and development center".

Legislative History. For legislative history and purpose of Pub.L. 101–510, see 1990 U.S. Code Cong. and Adm. News, p. 2931. See, also, Pub.L. 102–190, 1991 U.S. Code Cong. and Adm. News, p. 918; Pub.L. 102–240, 1991 U.S. Code Cong. and Adm. News, p. 1526.

- **(b)** In addition to the authorization of appropriations provided under subsection (a) of this section, there is authorized to be appropriated to the Secretary for the purposes of carrying out section 3704a of this title not to exceed \$500,000 for the fiscal year ending September 30, 1988, \$1,000,000 for the fiscal year ending September 30, 1989, and \$1,500,000 for the fiscal year ending September 30, 1990.
- (c) Such sums as may be appropriated under subsections (a) and (b) of this section shall remain available until expended.
- (d) To enable the National Science Foundation to carry out its powers and duties under this chapter only such sums may be appropriated as the Congress may authorize by law.

(Pub.L. 96–480, § 21, formerly § 14, Oct. 21, 1980, 94 Stat. 2320; renumbered § 18, Pub.L. 99–502, § 2, Oct. 20, 1986, 100 Stat. 1785; renumbered § 17, Pub.L. 99–502, § 9(e)(1), Oct. 20, 1986, 100 Stat. 1797; renumbered § 18, Pub.L. 100–107, § 3(a), Aug. 20, 1987, 101 Stat. 725; renumbered § 19 and amended, Pub.L. 100–418, Title V, §§ 5122(a)(1), 5152, Aug. 23, 1988, 102 Stat. 1438, 1449; renumbered § 21, Pub.L. 102–240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

1988 Amendment. Subsec. (a)(1). Pub.L. 100-418, § 5152, designated existing provisions of subsec. (a) as par. (1) and, in par. (1) as so designated, substituted "There is authorized to be appropriated to the Secretary for the purposes of carrying out sections 3704, 3710(g), and 3711 of this title not to exceed \$3,400,000 for the fiscal year ending September 30, 1988" for "There is authorized to be appropriated to the Secretary for purposes of carrying out section 3705 of this title, not to exceed \$19,000,000 for the fiscal year ending September 30, 1981, \$40,000,000 for the fiscal year ending September 30, 1982, \$50,000,000 for the fiscal year ending September 30, 1983, and \$60,000,000 for each of the fiscal years ending September 30, 1984, and 1985.".

Subsec. (a)(2). Pub.L. 100-418, § 5152, added par. (2).

Subsec. (b). Pub.L. 100-418, § 5152, substituted "In addition to the authorization of appropriations provided under subsection (a) of this section, there is authorized to be appropriated to the Sec-

retary for the purposes of carrying out section 3704a of this title not to exceed \$500,000 for the fiscal year ending September 30, 1988, \$1,000,000 for the fiscal year ending September 30, 1989, and \$1,500,000 for the fiscal year ending September 30, 1990" for "In addition to authorizations of appropriations under subsection (a) of this section, there is authorized to be appropriated to the Secretary for purposes of carrying out the provisions of this chapter, not to exceed \$5,000,000 for the fiscal year ending September 30, 1981, \$9,000,000 for the fiscal year ending September 30, 1982, and \$14,000,000 for each of the fiscal years ending September 30, 1983, 1984, and 1985".

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 100-418, see 1988 U.S. Code Cong. and Adm. News, p. 1547. See, also, Pub.L. 102-240, 1991 U.S. Code Cong. and Adm. News, p. 1526.

Library References

Indians €10. Public Lands €3. C.J.S. Indians § 46 et seq. C.J.S. Public Lands § 37 et seq.

15 § 3711b

TECHNOLOGY INNOVATION

and other organizations in the United States that practice effective quality management and as a result make significant improvements in the quality of their goods and services, and (2) information is disseminated about the successful strategies and programs."

Legislative History. For legislative history and purpose of Pub.L. 100-107, see 1987 U.S.Code Cong. and Adm.News, p. 722. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 102-245, 1992 U.S.Code Cong. and Adm.News, p. 19.

§ 3711b. Conference on advanced automotive technologies

Not later than 180 days after December 18, 1991, the Secretary of Commerce, through the Under Secretary of Commerce for Technology, in consultation with other appropriate officials, shall convene a conference of domestic motor vehicle manufacturers, parts suppliers, Federal laboratories, and motor vehicle users to explore ways in which cooperatively they can improve the competitiveness of the United States motor vehicle industry by developing new technologies which will enhance the safety and energy savings, and lessen the environmental impact of domestic motor vehicles, and the results of such conference shall be published and then submitted to the President and to the Committees on Science, Space, and Technology and Public Works and Transportation of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(Pub.L. 96-480, § 18, as added Pub.L. 102-240, Title VI, § 6019, Dec. 18, 1991, 105 Stat. 2183.)

Historical and Statutory Notes

Legislative History. For legislative history and purpose of Pub.L. 102-240, see 1526.

Library References

Highways \$3. C.J.S. Highways § 17. WESTLAW Topic No. 200.

§ 3711c. Advanced motor vehicle research award

(a) Establishment

There is established a National Award for the Advancement of Motor Vehicle Research and Development. The award shall consist of a medal, and a cash prize if funding is available for the prize under subsection (c) of this section. The medal shall be of such design and materials and bear inscriptions as is determined by the Secretary of Transportation.

(b) Making and presenting award

The Secretary of Transportation shall periodically make and present the award to domestic motor vehicle manufacturers, suppliers, or Federal laboratory personnel who, in the opinion of the Secretary of Transportation, have substantially improved domestic motor vehicle of examiners which shall review the evidence submitted by the organization and, through a site visit, verify the accuracy of the quality improvements claimed. The examination should encompass all aspects of the organization's current practice of quality management, as well as the organization's provision for quality management in its future goals. The award shall be given only to organizations which have made outstanding improvements in the quality of their goods or services (or both) and which demonstrate effective quality management through the training and involvement of all levels of personnel in quality improvement.

- (2)(A) The Director of the National Institute of Standards and Technology shall, under appropriate contractual arrangements, carry out the Director's responsibilities under subparagraphs (A) and (B) of paragraph (1) through one or more broad-based nonprofit entities which are leaders in the field of quality management and which have a history of service to society.
- (B) The Secretary shall appoint a board of overseers for the award, consisting of at least five persons selected for their preeminence in the field of quality management. This board shall meet annually to review the work of the contractor or contractors and make such suggestions for the improvement of the award process as they deem necessary. The board shall report the results of the award activities to the Director of the National Institute of Standards and Technology each year, along with its recommendations for improvement of the process.

(e) Information and technology transfer program

The Director of the National Institute of Standards and Technology shall ensure that all program participants receive the complete results of their audits as well as detailed explanations of all suggestions for improvements. The Director shall also provide information about the awards and the successful quality improvement strategies and programs of the award-winning participants to all participants and other appropriate groups.

(f) Funding

The Secretary is authorized to seek and accept gifts from public and private sources to carry out the program under this section. If additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the award in amounts sufficient to provide such additional sums. The Director is authorized to use appropriated funds to carry out responsibilities under this chapter.

(g) Report

The Secretary shall prepare and submit to the President and the Congress, within 3 years after August 20, 1987, a report on the progress.

Historical and Statutory Notes

Legislative History. For legislative history and purpose of Pub.L. 99-502, see U.S.Code Cong. and 1986 U.S. Code Cong. and Adm. News, p.

3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547.

§ 3711. National Technology Medal

- (a) Establishment.—There is hereby established a National Technology Medal, which shall be of such design and materials and bear such inscriptions as the President, on the basis of recommendations submitted by the Office of Science and Technology Policy, may prescribe.
- **(b)** Award.—The President shall periodically award the medal, on the basis of recommendations received from the Secretary or on the basis of such other information and evidence as he deems appropriate, to individuals or companies, which in his judgment are deserving of special recognition by reason of their outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States.
- **(c) Presentation.**—The presentation of the award shall be made by the President with such ceremonies as he may deem proper.

(Pub.L. 96–480, § 16, formerly § 12, Oct. 21, 1980, 94 Stat. 2319, renumbered § 16, Pub.L. 99–502, § 2, Oct. 20, 1986, 100 Stat. 1785; renumbered § 15, Pub.L. 99–502, § 9(e)(1), Oct. 20, 1986, 100 Stat. 1797; renumbered § 16, Pub.L. 100–418, Title V, § 5122(a)(1), Aug. 23, 1988, 102 Stat. 1438.)

Historical and Statutory Notes

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 100-418, see 1988 U.S. Code Cong. and Adm.News, p. 1547.

§ 3711a. Malcolm Baldrige National Quality Award

(a) Establishment

There is hereby established the Malcolm Baldrige National Quality Award, which shall be evidenced by a medal bearing the inscriptions "Malcolm Baldrige National Quality Award" and "The Quest for Excellence." The medal shall be of such design and materials and bear such additional inscriptions as the Secretary may prescribe.

(b) Making and presentation of award

(1) The President (on the basis of recommendations received from the Secretary), or the Secretary, shall periodically make the award to companies and other organizations which in the judgment of the President or the Secretary have substantially benefited the economic or social well-being of the United States through improvements in the quality of their goods or services resulting from the effective practice of quality (2) by an employee of the agency who was not working in the laboratory at the time the inventon¹ was made,

the agency unit that was involved in such assignment shall be considered to be a laboratory for purposes of this section.

(c) Reports

- (1) 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.
- (2) The Comptroller General, five years after October 20, 1986, shall review the effectiveness of the various royalty-sharing programs established under this section and report to the appropriate committees of the House of Representatives and the Senate, in a timely manner, his findings, conclusions, and recommendations for improvements in such programs.

(Pub.L. 96–480, § 14, as added, renumbered § 13 and amended Pub.L. 99–502, §§ 7, 9(e)(1), (3), Oct. 20, 1986, 100 Stat. 1792, 1797; renumbered § 14 and amended Pub.L. 100–418, Title V, §§ 5122(a)(1), 5162(a), Aug. 23, 1988, 102 Stat. 1438, 1450; Pub.L. 100–519, Title III, § 303(a), Oct. 24, 1988, 102 Stat. 2597; Pub.L. 101–189, Div. C, Title XXXI, § 3133(c), Nov. 29, 1989, 103 Stat. 1677, 1678.)

¹ So in original. Probably should be "invention".

Historical and Statutory Notes

References in Text. Section 3710a of this title, referred to in subsec. (a)(1), was in the original a reference to section 11 of this Act, meaning section 11 of the Stevenson-Wydler Technology Innovation Act of 1980. Section 11 of the Act was renumbered section 12 by section 5122(a)(1) of Pub.L. 100–418 without corresponding amendment to this section.

Codification. Amendment to subsec. (a)(1) by section 9(e)(3) of Pub.L. 99-502, directing that "section 11" be substituted for "section 12" in provisions preceding subpar. (A), was not executed in view of renumbering of section 12 of Pub.L. 96-480 as section 11 by section 9(e)(1) of Pub.L. 99-502. Since both references rescribed as "section 3710a of this title" amendment by section 9(e)(3) of Pub.L. 99-502 resulted in no change in text.

1989 Amendment. Subsec. (a)(1). Pub.L. 101-189, § 3133(c)(1), in provisions preceding subpar. (A), substituted "entered into by Government-operated Paderal lehamteries under action. 3710a

reference to "section 12" was substituted for reference to "section 11", both referring to sections of Pub.L. 96-480. Owing to the redesignation of section 11 of Pub.L. 96-480 as section 12 by Pub.L. 100-418, both references translate as "section 3710a of this title".

Subsec. (a)(1)(B)(ii). Pub.L. 101-189, § 3133(c)(2), inserted ", including payments to inventors and developers of sensitive or classified technology, regardless of whether the technology has commercial applications" after "that laboratory".

Subsec. (a)(1)(B)(iv). Pub.L. 101-189, § 3133(c)(3), substituted "technology of the laboratories" for "technology of the Government-operated laboratories".

1988 Amendment. Subsec. (a)(1)(A)(i). Pub.L. 100-519, § 303(a)(1), substituted provisions relative to the payment of royalties or other income to inventors who have assigned rights in inventions to the United States for provisions for the payment of such royalties and other income

- (II) provide a percentage royalty share to each such inventor, each year that the agency receives royalties from that inventor's invention in excess of a threshold amount:
- (III) provide that total payments to all such inventors shall exceed 15 percent of total agency royalties in any given fiscal year; and
- (IV) provide appropriate incentives from royalties for those laboratory employees who contribute substantially to the technical development of a licensed invention between the time of the filing of the patent application and the licensing of the invention.
- (iii) An agency that has published its intention to promulgate regulations under clause (ii) may elect not to pay inventors under clause (i) until the expiration of two years after October 20, 1986 or until the date of the promulgation of such regulations, whichever is earlier. If an agency makes such an election and after two years the regulations have not been promulgated, the agency shall make payments (in accordance with clause (i)) of at least 15 percent of the royalties involved, retroactive to October 20, 1986. If promulgation of the regulations occurs within two years after October 20, 1986, payments shall be made in accordance with such regulations, retroactive to October 20, 1986. The agency shall retain its royalties until the inventor's portion is paid under either clause (i) or (ii). Such royalties shall not be transferred to the agency's Government-operated laboratories under subparagraph (B) and shall not revert to the Treasury pursuant to paragraph (2) as a result of any delay caused by rulemaking under this subparagraph.
- (B) The balance of the royalties or other income shall be transferred by the agency to its Government-operated laboratories, with the majority share of the royalties or other income from any invention going to the laboratory where the invention occurred; and the funds so transferred to any such laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the succeeding fiscal year—
 - (i) for payment of expenses incidental to the administration and licensing of inventions by that laboratory or by the agency with respect to inventions which occurred at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for invention management and licensing services;
 - (ii) to reward scientific, engineering, and technical employees of that laboratory, including payments to inventors and

(1)(C), and where the agency employee determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the laboratory employee's service in that matter.

- "(3) Not later than 180 days after the date of enactment of this Act [Nov. 29, 1989], each agency which has contracted with a non-Federal entity to operate a Government-owned laboratory shall submit a report to the Congress which includes a copy of each contract provision amended pursuant to this subsection.
- "(4) No Government-owned, contractor-operated laboratory may enter into a cooperative research and development agreement under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 [this section] unless—
 - "(A) that laboratory's operating contract contains the provisions described in paragraph (1)(A) through (F); or
 - "(B) such laboratory agrees in a separate writing to be bound by the provisions described in paragraph (1)(A) through (F).
- "(5) Any contract for a Governmentowned, contractor-operated laboratory entered into after the expiration of 150

days after the date of enactment of this Act [Nov. 29, 1989] shall contain the provisions described in paragraph (1)(A) through (F).

"(6) Contract provisions referred to in paragraph (1) shall include only such provisions as are necessary to carry out paragraphs (1) and (2) of this subsection."

[Pub.L. 101-510, Div. A, Title VIII, § 828(b), Nov. 5, 1990, 104 Stat. 1607, provided that: "[Paragraph (6) of 3133(d) of such Act [par. 6 of this note] as added by subsection (a), shall apply only to contracts entered into after the date of enactment of this Act [Nov. 5, 1990]."

Legislative History. For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 100-519, 1988 U.S.Code Cong. and Adm.News, p. 3269; Pub.L. 101-189, 1989 U.S. Code Cong. and Adm. News, p. 838; Pub.L. 102-25, 1991 U.S. Code Cong. and Adm. News, p. 36; Pub.L. 102-245, 1992 U.S. Code Cong. and Adm. News, p. 19; Pub.L. 102-484, 1992 U.S. Code Cong. and Adm. News, p. 1636; Pub.L. 103-160, 1993 U.S. Code Cong. and Adm. News, p. 1636; Pub.L. 103-160, 1993 U.S. Code Cong. and Adm. News, p. 2013.

Cross References

Advanced research projects, see 10 USCA § 2371.

Notes of Decisions

1. Standing

Corporation in business of production, distribution, and sale of reference, neat, and inorganic materials was not arguably within zone of interest of Federal Technology Transfer Act (FTTA) and, thus, lacked standing to challenge cooperative research and development agreements (CRADAs) entered into between corpora-

tion's competitors and Office of Research and Development of Environmental Protection Agency (EPA) which allegedly violated FTTA, even though corporation may have been injured in fact. Chem Service, Inc. v. Environmental Monitoring Systems Laboratory-Cincinnati of U.S. E.P.A., E.D.Pa.1993, 816 F.Supp. 328.

§ 3710b. Rewards for scientific, engineering, and technical personnel of Federal agencies

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, computer software, or other out-

102–25, Title VII, § 705(g), Apr. 6, 1991, 105 Stat. 121; Pub.L. 102–245, Title III, § 302(a), Feb. 14, 1992, 106 Stat. 20; Pub.L. 102–484, Div. C, Title XXXI, § 3135(a), Oct. 23, 1992, 106 Stat. 2640; Pub.L. 103–160, Div. C, Title XXXI, § 3160, Nov. 30, 1993, 107 Stat. 1957.)

Historical and Statutory Notes

1993 Amendments. Subsec. (d)(2)(B). Pub.L. 103-160, § 3160(1), inserted "(including a weapon production facility of the Department of Energy)" following "facilities" and ", or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components," following "research and development".

Subsec. (d)(2)(C). Pub.L. 103-160, § 3160(2), inserted "(including a weapon production facility of the Department of Energy)" following "facility" and ", or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components," following "research and development".

Subsec. (d)(4). Pub.L. 103-160, § 3160(3)-(5), added par. (4).

1992 Amendments. Subsec. (c)(5)(C)(i). Pub.L. 102-484, § 3135(a)(1), substituted "Except as provided in subparagraph (D), any agency" for "Any agency".

Subsec. (c)(5)(D). Pub.L. 102-484, § 3135(a)(2), added subpar. (D).

Subsec. (d)(1). Pub.L. 102-245 inserted ", intellectual property" in two places.

1991 Amendment. Subsec. (d)(2). Pub.L. 102-25 substituted "naval" for "Naval".

1989 Amendment. Subsec. (a). Pub.L. 101-189, § 3133(a)(1)(A), inserted ", and, to the extent provided in an agency-approved joint work statement, the director of any of its Government-owned, contractor-operated laboratories" after "Government-operated Federal laboratories" in provisions preceding par. (1).

Subsec. (a)(2). Pub.L. 101-189, § 3133(a)(1)(B), (C), substituted "(in the case of a Government-owned, contractor-operated laboratory, subject to subsection (c) of this section) for inventions made or other intellectual property developed at the laboratory and other inventions or other intellectual property that" for "for Government-owned inventions made or other intellectual property developed at the laboratory and other inventions or

Subsec. (b). Pub.L. 101-189, § 3133(a)(2)(A), inserted ", and, to the extent provided in an agency-approved joint work statement, a Government-owned, contractor-operated laboratory," after "Government-operated Federal laboratory" in provisions preceding par. (1).

Pub.L. 101-189, § 3133(a)(2)(C), following numbered paragraphs, added undesigprovisions that Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement under subsec. (a)(1) of this section may use or obligate royalties or other income accruing to such laboratory under such agreement with respect to any invention only (i) for payments to inventors; (ii) for the purposes described in section 3710c(a)(1)(B)(i), (ii), and (iv) of this title, and (iii) for scientific research and development consistent with the research and development mission and objectives of the laboratory.

Subsec. (b)(2). Pub.L. 101-189, § 3133(a)(2)(B), substituted "a laboratory employee" for "a Federal employee".

Subsec. (c)(3)(A). Pub.L. 101-189, § 3133(a)(3), substituted "standards of conduct for its employees" for "employee standards of conduct".

Subsec. (c)(5)(A), Pub.L. 101-189, § 3133(a)(4), inserted "presented by the director of a Government-operated laboratory" after "any such agreement".

Subsec. (c)(5)(B). Pub.L. 101-189, § 3133(a)(5), inserted "by the director of a Government-operated laboratory" after "an agreement presented".

Subsec. (c)(5)(C). Pub.L. 101-189, § 3133(a)(6), added subpar. (C).

Subsec. (c)(7). Pub.L. 101-189, § 3133(a)(7), added par. (7).

Subsec. (d)(2). Pub.L. 101-189, § 3133(a)(8)(B), designated existing provisions in part as subpar. (A), added subpars. (B) and (C), and added provision, following subpart. (C) that such town does

statement submitted under that clause, the agency shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

- (6) Each agency shall maintain a record of all agreements entered into under this section.
- (7)(A) No trade secrets or commercial or financial information that is privileged or confidential, under the meaning of section 552(b)(4) of Title 5, which is obtained in the conduct of research or as a result of activities under this chapter from a non-Federal party participating in a cooperative research and development agreement shall be disclosed.
- **(B)** The director, or in the case of a contractor-operated laboratory, the agency, for a period of up to 5 years after development of information that results from research and development activities conducted under this chapter and that would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from a non-Federal party participating in a cooperative research and development agreement, may provide appropriate protections against the dissemination of such information, including exemption from subchapter II of chapter 5 of Title 5.

(d) Definitions

As used in this section—

- (1) the term "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, through its laboratories, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory; 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;
 - (2) the term "laboratory" means-
 - (A) a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government;
 - (B) a group of Government-owned, contractor-operated facilities (including a weapon production facility of the Department of Energy) under a common contract, when a

to inventions or negotiate cooperative research and development agreements with Federal agencies (including the agency with which the employee involved is or was formerly employed).

- **(B)** If, in implementing subparagraph (A), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.
- (4) The laboratory director in deciding what cooperative research and development agreements to enter into shall—
 - (A) give special consideration to small business firms, and consortia involving small business firms; and
 - (B) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such inventions will be manufactured substantially in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, as appropriate, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements.
- (5)(A) If the head of the agency or his designee desires an opportunity to disapprove or require the modification of any such agreement presented by the director of a Government-operated laboratory, the agreement shall provide a 30-day period within which such action must be taken beginning on the date the agreement is presented to him or her by the head of the laboratory concerned.
- **(B)** In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented, by the director of a Government-operated laboratory under this section, the head of the agency or such designee shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.
- (C)(i) Except as provided in subparagraph (D), any agency which has contracted with a non-Federal entity to operate a laboratory shall review and approve, request specific modifications to, or disapprove a joint work statement that is submitted by the director of such laboratory within 90 days after such submission. In any case where an agency has requested specific modifications to a joint work statement, the agency shall approve or disapprove any resubmission of such joint work statement within 30 days after such resubmission, or 90 days after the original submission, whichever occurs later. No agreement may be entered into by a Government-owned, contractor-operated laboratory

planned or future technology transfer efforts: and

(4) a compilation and assessment of the Technology Share Program established in Section 2 and, where appropriate, related cooperative research and development venture programs.

Sec. 8. Relation to Existing Law. Nothing in this Order shall affect the continued applicability of any existing laws or regu-

lations relating to the transfer of United States technology to other nations. The head of any Executive department or agency may exclude from consideration, under this Order, any technology that would be, if transferred, detrimental to the interests of national security.

RONALD REAGAN

Cross References

Advanced research projects, cooperative research and development agreements, technology transfers, etc., see 10 USCA § 2371.

Law Review Commentaries

Public-private partnerships in biomedical research: Resolving conflicts of interest arising under the Federal technology Transfer Act of 1986. Thomas N. Bulleit, Jr., 4 J.L. & Health 1 (1989-90).

§ 3710a. Cooperative research and development agreements

(a) General authority

Each Federal agency may permit the director of any of its Government-operated Federal laboratories, and, to the extent provided in an agency-approved joint work statement, the director of any of its Government-owned, contractor-operated laboratories—

- (1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons (including licensees of inventions owned by the Federal agency); and
- (2) to negotiate licensing agreements under section 207 of Title 35, or under other authorities (in the case of a Government-owned, contractor-operated laboratory, subject to subsection (c) of this section) for inventions made or other intellectual property developed at the laboratory and other inventions or other intellectual property that may be voluntarily assigned to the Government.

(b) Enumerated authority

Under agreements entered into pursuant to subsection (a)(1) of this section, a Government-operated Federal laboratory, and, to the extent provided in an agency-approved joint work statement, a Government-owned, contractor-operated laboratory, may (subject to subsection (c) of this section)—

business, in order to assist in the transfer of technology to the marketplace.

- (b) The head of each Executive department and agency shall, within overall funding allocations and to the extent permitted by law:
- (1) delegate authority to its government-owned, government-operated Federal laboratories:
- (A) to enter into cooperative research and development agreements with other Federal laboratories, State and local governments, universities, and the private sector; and
- (B) to license, assign, or waive rights to intellectual property developed by the laboratory either under such cooperative research or development agreements and from within individual laboratories.
- (2) identify and encourage persons to act as conduits between and among Federal laboratories, universities, and the private sector for the transfer of technology developed from federally funded research and development efforts;
- (3) ensure that State and local governments, universities, and the private sector are provided with information on the technology, expertise, and facilities available in Federal laboratories;
- (4) promote the commercialization, in accord with my Memorandum to the Heads of Executive Departments and Agencies of February 18, 1983, of patentable results of federally funded research by granting to all contractors, regardless of size, the title to patents made in whole or in part with Federal funds, in exchange for royalty-free use by or on behalf of the government;
- (5) administer all patents and licenses to inventions made with federal assistance, which are owned by the non-profit contractor or grantee, in accordance with Section 202(c)(7) of Title 35 of the United States Code as amended by Public Law 98-620 [section 202(c)(7) of title 35, Patents], without regard to limitations on licensing found in that section prior to amendment or in Institutional Patent Agreements now in effect that were entered into before that law was enacted on November 8, 1984, unless, in the case of an invention that has not been marketed, the funding agency determines, based on information in its files, that the contractor

- applicable law or an Institutional Patent Agreement;
- (6) implement, as expeditiously as practicable, royalty-sharing programs with inventors who were employees of the agency at the time their inventions were made, and cash award programs; and
- (7) cooperate, under policy guidance provided by the Office of Federal Procurement Policy, with the heads of other affected departments and agencies in the development of a uniform policy permitting Federal contractors to retain rights to software, engineering drawings, and other technical data generated by Federal grants and contracts, in exchange for royalty-free use by or on behalf of the government.
- Sec. 2. Establishment of the Technology Share Program. The Secretaries of Agriculture, Commerce, Energy, and Health and Human Services and the Administrator of the National Aeronautics and Space Administration shall select one or more of their Federal laboratories to participate in the Technology Share Program. Consistent with its mission and policies and within its overall funding allocation in any year, each Federal laboratory so selected shall:
- (a) Identify areas of research and technology of potential importance to long-term national economic competitiveness and in which the laboratory possesses special competence and/or unique facilities;
- (b) Establish a mechanism through which the laboratory performs research in areas identified in Section 2(a) as a participant of a consortium composed of United States industries and universities. All consortia so established shall have, at a minimum, three individual companies that conduct the majority of their business in the United States; and
- (c) Limit its participation in any consortium so established to the use of laboratory personnel and facilities. However, each laboratory may also provide financial support generally not to exceed 25 percent of the total budget for the activities of the consortium. Such financial support by any laboratory in all such consortia shall be limited to a maximum of \$5 million per annum.
- Sec. 3. Technology Exchange-Scien-

agency's plans for conducting its technology transfer function for the upcoming year, including plans for securing intellectual property rights in laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry." for "The agency head may waive the requirement set forth in clause (2) of the preceding sentence. If the agency head waives such requirement. the agency head shall submit to Congress at the time the President submits the budget to Congress an explanation of the reasons for the waiver and alternate plans for conducting the technology transfer function at the agency."

1988 Amendment. Subsec. (d)(6). Pub.L. 100-418, § 5163(c)(3), added par. (6). A prior par. (6) had been redesignated (5) by Pub.L. 99-502.

Subsec. (e)(4). Pub.L. 100-418, § 5115(b)(2), substituted "National Institute of Standards and Technology" for "National Bureau of Standards" and "Institute" for "Bureau", respectively.

Subsec. (e)(7)(A). Pub.L. 100-418, § 5115(b)(2), substituted "National Institute of Standards and Technology" for "National Bureau of Standards" and "Institute" for "Bureau", respectively.

Pub.L. 100-418, § 5162(b), substituted "0.008 percent of the budget of each Federal agency from any Federal source, including related overhead, that is to be utilized by or on behalf of" for "0.005 percent of that portion of the research and development budget of each Federal agency that is to be utilized by".

Subsec. (g)(1). Pub.L. 100-519, § 201(d)(3), inserted reference to the Under Secretary.

Subsec. (h). Pub.L. 100-418, § 5163(c)(1), added subsec. (h).

1986 Amendment. Subsec. (a). Pub.L. 99-502, § 4(a), designated existing provisions as par. (1), and added pars. (2) and (3).

Subsec. (b). Pub.L. 99-502, § 4(b)(1), substituted "200 or more full-time equivalent scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions" for "a total annual budget exceeding \$20,000,000 shall provide at least one professional individual full-time" added

Applications shall be included in the overall laboratory/agency management development programs so as to ensure that highly competent technical managers are full participants in the technology transfer process", substituted "requirement set forth in clause (2) of the preceding sentence" for "requirements set forth in (1) and/or (2) of this subsection", and substituted "such requirement" for "either requirement (1) or (2)".

Subsec. (c)(1). Pub.L. 99-502, § 4(b)(2)(A), substituted "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" for "to prepare an application assessment of each research and development project in which that laboratory is engaged which has potential for successful application in State or local government or in private industry".

Subsec. (c)(3). Pub.L. 99-502, § 4(b)(2)(B), substituted "the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer" for "the Center for the Utilization of Federal Technology", and struck out "and" following the semicolon.

Subsec. (c)(4). Pub.L. 99-502, § 4(b)(2)(C), substituted "to State and local government officials; and" for "in response to requests from State and local government officials" and struck out the period at the end thereof.

Subsec. (c)(5). Pub.L. 99-502, § 4(b)(2)(D), added par. (5).

Catchline. Pub.L. 99-502, § 4(c)(1), substituted "Dissemination of technical information" for "Center for the Utilization of Federal Technology".

Subsec. (d). Pub.L. 99-502, § 4(c)(1), in provisions preceding par. (1), substituted "The National Technical Information Service shall" for "The Center for the Utilization of Federal Technology shall" and struck out provision establishing in the Department of Commerce a Center for the Utilization of Federal Technology".

Subsec. (d)(2). Pub.L. 99-502, § 4(c)(3), redesignated former par. (3) as (2), and in par. (2) as so redesignated struck out "existing" preceding "Federal Laboratory". Former par. (2) was struck out.

- (7)(A) Subject to subparagraph (B), an amount equal to 0.008 percent of the budget of each Federal agency from any Federal source, including related overhead, that is to be utilized by or on behalf of the laboratories of such agency for a fiscal year referred to in subparagraph (B)(ii) shall be transferred by such agency to the National Institute of Standards and Technology at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Institute to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.
- (B) A transfer shall 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, 1991, 1992, 1993, 1994, 1995, or 1996.
- **(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 deem appropriate.
- (8) Repealed. Pub.L. 102–245, Title III, § 301(d), Feb. 14, 1992, 106 Stat. 20

(f) Agency reporting

Each Federal agency which operates or directs one or more Federal laboratories shall report annually to the Congress, as part of the agency's annual budget submission, on the activities performed by that agency and its Federal laboratories pursuant to the provisions of this section.

(g) Functions of Secretary

- (1) The Secretary, through the Under Secretary, and 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 the 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 October 20, 1986 and every two years thereafter,

- (5) use appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems; and
- (6) maintain a permanent archival repository and clearinghouse for the collection and dissemination of nonclassified scientific, technical, and engineering information.

(e) Establishment of Federal Laboratory Consortium for Technology Transfer

- (1) There is hereby 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 technology transfer programs (including the planning of seminars for small business and other industry);
 - (C) provide a clearinghouse for requests, received at the laboratory level, 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 such requests can be responded to with published information available to the National Technical Information Service, refer such requests to that Service, and
 - (ii) otherwise refer these 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 programs using technical volunteers to provide technical assistance to communities related to such laboratory.

strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector.

- (2) Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.
- (3) 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) Establishment of Research and Technology Applications Offices

Each Federal laboratory shall establish an Office of Research and Technology Applications. Laboratories having existing organizational structures which perform the functions of this section may elect to combine the Office of Research and Technology Applications within the existing organization. The staffing and funding levels for these offices shall be determined between each Federal laboratory and the Federal agency operating or directing the laboratory, except that (1) each laboratory having 200 or more full-time equivalent scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions as staff for its Office of Research and Technology Applications, and (2) each Federal agency which operates or directs one or more Federal laboratories shall make available sufficient funding, either as a separate line item or from the agency's research and development budget, to support the technology transfer function at the agency and at its laboratories, including support of the Offices of Research and Technology Applications.

Furthermore, individuals filling positions in an Office of Research and Technology Applications shall be included in the overall laboratory/agency management development program so as to ensure that highly competent technical managers are full participants in the technology transfer process.

The agency head shall submit to Congress at the time the President submits the budget to Congress an explanation of the agency's technology transfer program for the preceding year and the agency's plans for conducting its technology transfer function for the upcoming year, including plans for securing intellectual property rights in laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry.

(c) Functions of Research and Technology Applications Offices

It shall be the function of each Office of Research and Technology Applications—

(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the applicance of the laboratory may have potential com-

chapter 16 (s 1861 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under § 1861 of Title 42 and Tables.

Prior Provisions. A prior section 9 of Pub.L. 96–480 was renumbered section 10 by Pub.L. 100–418 and is classified to section 3708 of this title.

1986 Amendment. Catchline. Pub.L. 99–502, § 9(b)(11), substituted "Cooperative Research Centers" for "Centers for Industrial Technology".

Subsec. (a). Pub.L. 99-502, § 9(b)(12), substituted "Cooperative Research Cen-

ters" for "Centers for Industrial Technology".

Pub.L. 99-502, § 9(e)(2)(B), struck out provisions that sections 3705(e) and 3705(f) of this title would apply to Centers established under this section.

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547.

§ 3708. Administrative arrangements

- (a) Coordination.—The Secretary and the National Science Foundation shall, on a continuing basis, obtain the advice and cooperation of departments and agencies whose missions contribute to or are affected by the programs established under this chapter, including the development of an agenda for research and policy experimentation. These departments and agencies shall include but not be limited to the Departments of Defense, Energy, Education, Health and Human Services, Housing and Urban Development, the Environmental Protection Agency, National Aeronautics and Space Administration, Small Business Administration, Council of Economic Advisers, Council on Environmental Quality, and Office of Science and Technology Policy.
- **(b) Cooperation.**—It is the sense of the Congress that departments and agencies, including the Federal laboratories, whose missions are affected by, or could contribute to, the programs established under this chapter, should, within the limits of budgetary authorizations and appropriations, support or participate in activities or projects authorized by this chapter.

(c) Administrative authorization.—

- (1) Departments and agencies described in subsection (b) of this section are authorized to participate in, contribute to, and serve as resources for the Centers and for any other activities authorized under this chapter.
- (2) The Secretary and the National Science Foundation are authorized to receive moneys and to receive other forms of assistance from other departments or agencies to support activities of the Centers and any other activities authorized under this chapter.
- (d) Cooperative efforts.—The Secretary and the National Science Foundation shall, on a continuing basis, provide each other the oppor-

and small businesses which encourage economic growth through the commercial application of technology resulting from federally funded research.

"(3) In this subsection, the term 'national defense laboratory' means any laboratory, federally funded research and development center (FFRDC), or other center established under section 7 or 9 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3705, 3707) [this section or section 3707 of this title] that is owned by the Federal Government, whether operated by the Federal Government or by a contractor, and—

"(A) is under the jurisdiction of the Secretary of Defense; or

"(B) is under the jurisdiction of the Secretary of Energy, but only if the primary function of the laboratory, FFRDC, or other center under the Secretary's jurisdiction is to support the national defense activities of the Department of Defense or the Department of Energy."

Legislative History. For legislative history and purpose of Pub.L. 96–480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S. Code Cong. and Adm. News, p. 3442. See, also, Pub.L. 100-418, 1988 U.C. Code Cong. and Adm. News, p. 1547.

Cross References

National Critical Materials Council, recommendations by Council regarding establishment of Centers under this section, see section 1805(a) of Title 30, Miner Lands and Mining.

Library References

Health and Environment \$\sim 25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 3706. Grants and cooperative agreements

- (a) In general.—The Secretary may make grants and enter into cooperative agreements according to the provisions of this section in order to assist any activity consistent with this chapter, including activities performed by individuals. The total amount of any such grant or cooperative agreement may not exceed 75 percent of the total cost of the program.
- (b) Eligibility and procedure.—Any person or institution may apply to the Secretary for a grant or cooperative agreement available under this section. Application shall be made in such form and manner, and with such content and other submissions, as the Assistant Secretary shall prescribe. The Secretary shall act upon each such application within 90 days after the date on which all required information is received.

(c) Terms and conditions.—

- (1) Any grant made, or cooperative agreement entered into, under this section shall be subject to the limitations and provisions set forth in paragraph (2) of this subsection, and to such other terms, conditions, and requirements as the Secretary deems necessary or appropriate.
 - (2) Any person who receives or utilizes any proceeds of any

- (2) the development of the generic research base, important for technological advance and innovative activity, in which individual firms have little incentive to invest, but which may have significant economic or strategic importance, such as manufacturing technology;
- (3) the education and training of individuals in the technological innovation process;
- (4) the improvement of mechanisms for the dissemination of scientific, engineering, and technical information among universities and industry;
- (5) the utilization of the capability and expertise, where appropriate, that exists in Federal laboratories; and
- (6) the development of continuing financial support from other mission agencies, from State and local government, and from industry and universities through, among other means, fees, licenses, and royalties.
- (b) Activities.—The activities of the Centers shall include, but need not be limited to—
 - (1) research supportive of technological and industrial innovation including cooperative industry-university research;
 - (2) assistance to individuals and small businesses in the generation, evaluation, and development of technological ideas supportive of industrial innovation and new business ventures;
 - (3) technical assistance and advisory services to industry, particularly small businesses; and
 - (4) curriculum development, training, and instruction in invention, enterpreneurship, and industrial innovation.

Each Center need not undertake all of the activities under this subsection.

- (c) Requirements.—Prior to establishing a Center, the Secretary shall find that—
 - (1) consideration has been given to the potential contribution of the activities proposed under the Center to productivity, employment, and economic competitiveness of the United States;
 - (2) a high likelihood exists of continuing participation, advice, financial support, and other contributions from the private sector;
 - (3) the host university or other nonprofit institution has a plan for the management and evaluation of the activities proposed within the particular Center, including:
 - (A) the agreement between the parties as to the allocation of patent rights on a nonexclusive, partially exclusive, or ex-

15 § 3704b-1 TECHNOLOGY INNOVATION

\$8,000,000 without fiscal year limitation: Provided, That unexpended balances in Information Products and Services shall be transferred to and merged with this account, to remain available until expended. Notwithstanding 15 U.S.C. 1525 and 1526 [sections 1525 and 1526 of this title], all payments collected by the National Technical Information Service in performing its activities authorized by chapters 23 and 63 of title 15 of the United States Code [section 1151 et seq. of this title and section 3701 et seq. of this title] shall be credited to this Revolving Fund. Without further appropriations action, all expenses incurred in performing the activities of the National Technical Information Service, including modernization, capital equipment and inventory, shall be paid from the fund. A business-type budget for the fund shall be prepared in the manner prescribed by 31 U.S.C. 9103 [section 9103 of Title 31, Money and Finance]."

Termination of Advisory Boards. Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the two-year period beginning on the date of their establishment, unless, in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such two-year period, or in the case of a board established by the Congress, its duration is otherwise provided by law. See sections 3(2) and 14 of Pub.L. 92-463, Oct. 6, 1972, 86 Stat. 770, 776, set out in Appendix 2 to Title 5, Government Organization and Employees.

Legislative History. For legislative history and purpose of Pub.L. 100-519, see 1988 U.S. Code Cong. and Adm. News, p. 3269. See, also, Pub.L. 102-245, 1992 U.S. Code Cong. and Adm. News, p. 19.

Library References

Health and Environment \$\infty\$25.5.
United States \$\infty\$41.
C.J.S. Health and Environment §§ 61 to
153.

C.J.S. United States § 41. WESTLAW Topic Nos. 199, 393.

§ 3704b-1. Recovery of operating costs through fee collections

Operating costs for the National Technical Information Service associated the acquisition, processing, storage with t bibliographic control, and archiving of information and documents shall be recovered primarily through the collection of fees.

(Pub.L. 102-245, Title I, § 103(c), Feb. 14, 1992, 106 Stat. 8.)

Historical and Statutory Notes

Codification. Section was enacted as part of the American Technology Preeminence Act of 1991, and not as part of the Stevenson-Wydler Technology Innovation Act of 1980 which comprises this chapter.

Legislative History. For legislative history and purpose of Pub.L. 102-245, see 1992 U.S. Code Cong. and Adm. News, p. 19.

§ 3704b-2. Transfer of Federal scientific and technical information

a) Transfer

The head of each Federal executive department or agency shall transfer in a timely manner to the National Technical Information Service unclassified scientific, technical, and engineering information which results from federally funded research and development activities

(d) Audits

The Secretary of Commerce shall provide for annual independent audits of the Service's financial statements beginning with fiscal year 1988, to be conducted in accordance with generally accepted accounting principles.

(e) Functions

The Secretary of Commerce, acting through the Service, shall—

- (1) establish and maintain a permanent repository of nonclassified scientific, technical, and engineering information;
- (2) cooperate and coordinate its operations with other Government scientific, technical, and engineering information programs;
- (3) make selected bibliographic information products available in a timely manner to depository libraries as part of the Depository Library Program of the Government Printing Office;
- (4) in conjunction with the private sector as appropriate, collect, translate into English, and disseminate unclassified foreign scientific, technical, and engineering information;
- (5) implement new methods or media for the dissemination of scientific, technical, and engineering information, including producing and disseminating information products in electronic format; and
- (6) carry out the functions and activities of the Secretary under the Act entitled "An Act to provide for the dissemination of technological, scientific, and engineering information to American business and industry, and for other purposes" enacted September 9, 1950 [15 U.S.C.A. § 1151 et seq.], and the functions and activities of the Secretary performed through the National Technical Information Service as of October 24, 1988, under this chapter.

(f) Notification of Congress

- (1) The Secretary of Commerce and the Director shall keep the appropriate committees of Congress fully and currently informed about all activities related to the carrying out of the functions of the Service, including changes in fee policies.
- (2) Within 90 days after October 24, 1988, the Secretary of Commerce shall submit to the Congress a report on the current fee structure of the Service, including an explanation of the basis for the fees, taking into consideration all applicable costs, and the adequacy of the fees, along with reasons for the declining sales at the Service of scientific, technical, and engineering publications. Such report shall explain any actions planned or taken to increase such sales at reasonable fees.

(d) Triennial Report

The Secretary shall prepare and transmit to the Congress once each 3 years a report on initiatives by State and local governments to enhance the competitiveness of American businesses through the stimulation of productivity, technology, and innovation. The report shall include recommendations to the President, the Congress, and to Federal agencies on the appropriate Federal role in stimulating State and local efforts in this area. The first of these reports shall be transmitted to the Congress before January 1, 1989.

(Pub.L. 96-480, § 6, as added Pub.L. 100-418, Title V, § 5122(a)(2), Aug. 23, 1988, 102 Stat. 1438.)

Historical and Statutory Notes

Prior Provisions. A prior section 6 of Pub.L. 96-480 was renumbered section 7 by Pub.L. 100-418 and is classified to section 3705 of this title.

Legislative History. For legislative history and purpose of Pub.L. 100–418, see 1988 U.S. Code Cong. and Adm. News, p. 1547.

§ 3704b. National Technical Information Service

(a) Powers

- (1) The Secretary of Commerce, acting through the Director of the National Technical Information Service (hereafter in this section referred to as the "Director") is authorized to do the following:
 - (A) Enter into such contracts, cooperative agreements, joint ventures, and other transactions, in accordance with all relevant provisions of Federal law applicable to such contracts and agreements, and under reasonable terms and conditions, as may be necessary in the conduct of the business of the National Technical Information Service (hereafter in this section referred to as the "Service").
 - **(B)** In addition to the authority regarding fees contained in section 1152 of this title, retain and, subject to appropriations Acts, utilize its net revenues to the extent necessary to implement the plan submitted under subsection (f)(3)(D) of this section.
 - (C) Enter into contracts for the performance of part or all of the functions performed by the Promotion Division of the Service prior to October 24, 1988. The details of any such contract, and a statement of its effect on the operations and personnel of the Service, shall be provided to the appropriate committees of the Congress 30 days in advance of the execution of such contract.
 - **(D)** Employ such personnel as may be necessary to conduct the business of the Service.
 - (E) For the period of October 1, 1991 through September 30,

Subsec. (c)(11) to (14). Pub.L. 100-519, § 201(c)(1), redesignated former pars. (7) to (10) as (11) to (14), respectively.

Subsec. (d)(1). Pub.L. 100-519, § 201(d)(2), inserted reference to the Under Secretary and inserted provisions relative to cooperation among offices within the Department of Commerce.

1986 Amendments. Subsec. (a). Pub.L. 99–502, § 9(b)(3), substituted "Office of Productivity, Technology, and Innovation" for "Office of Industrial Technology".

Subsec. (b). Pub.L. 99-502, § 9(b)(4), substituted "Assistant Secretary" for "Director" as the subsection catchline, and in text substituted "an Assistant Secretary for Productivity, Technology, and Innovation" for "a Director of the Office" and struck out provision which required that the Director of the Office be compensated at the rate provided for Level V of the Executive Schedule in section 5316 of Title 5.

Subsec. (c). Pub.L. 99-502, § 9(b)(5)(A), substituted "the Assistant Secretary" for "the Director" in provisions preceding par. (1).

Subsec. (c)(6). Pub.L. 99-502, § 9(b)(5)(A), substituted "the Assistant Secretary" for "the Director".

Subsec. (c)(7). Pub.L. 99-502, § 9(b)(5)(C), added par. (7). Former par. (7) redesignated (9).

Subsec. (c)(8). Pub.L. 99-502, § 9(b)(5)(C), added par. (8). Former par. (8) redesignated (10).

Subsec. (c)(9). Pub.L. 99-502, § 9(b)(5)(B), redesignated former par. (7) as (9).

Subsec. (c)(10). Pub.L. 99-502, § 9(b)(5)(B), redesignated former par. (8) as (10).

Subsec. (d). Pub.L. 99-382, § 2(2), added subsec. (d). Former subsec. (d) was redesignated (e).

Subsec. (e). Pub.L. 99-502, § 9(e)(2)(A), in subsec. (e) as so redesignated inserted "(as then in effect)" after "3712 of this title".

Subsec. (e). Pub.L. 99-382, § 2(1), redesignated subsec. (d) as (e).

Transition Provisions. Section 201(e) of Pub.L. 100-519, provided that: "The individual serving as the Assistant Secretary of Commerce for Productivity, Technology, and Innovation immediately before the date of enactment of this Act [Oct. 24, 1988] shall serve as Acting Assistant Secretary of Commerce for Technology Policy until the Assistant Secretary takes office."

Commercial Space Programs. Section 201(f) of Pub.L. 100-519, as added Pub.L. 100-685, Title II, § 219, Nov. 17, 1988, 102 Stat. 4095, provided that: "Nothing in this section [amending this section and sections 3703 and 3710 of this title and section 5314 of Title 5, Government Organization and Employees] authorizes the Department to establish an Office of Commercial Administration without prior authorization of the Congress."

Legislative History. For legislative history and purpose of Pub.L. 96-480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-382, see 1986 U.S.Code Cong. and Adm.News, p. 1812. See, also, Pub.L. 99-502, 1986 U.S.Code Cong. and Adm.News, p. 3442; Pub.L. 100-519, 1988 U.S.Code Cong. and Adm.News, p. 3269; Pub.L. 102-245, 1992 U.S.Code Cong. and Adm.News, p. 19.

Library References

Health and Environment € 25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 3704a. Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation

(a) Establishment

There is established within the Office of Productivity, Technology, and Innovation a Clearinghouse for State and Local Initiatives on Produc-

- (14) consider government measures with the potential of advancing United States technological innovation and exploiting innovations of foreign origin; and
 - (15) publish the results of studies and policy experiments.

(d) Japanese technical literature

- (1) In addition to the duties specified in subsection (c) of this section, the Secretary and the Under Secretary shall establish, and through the National Technical Information Service and with the cooperation of such other offices within the Department of Commerce as the Secretary considers appropriate, maintain a program (including an office in Japan) which shall, on a continuing basis—
 - (A) monitor Japanese technical activities and developments;
 - (B) consult with businesses, professional societies, and libraries in the United States regarding their needs for information on Japanese developments in technology and engineering;
 - (C) acquire and translate selected Japanese technical reports and documents that may be of value to agencies and departments of the Federal Government, and to businesses and researchers in the United States; and
 - (**D**) coordinate with other agencies and departments of the Federal Government to identify significant gaps and avoid duplication in efforts by the Federal Government to acquire, translate, index, and disseminate Japanese technical information.

Activities undertaken pursuant to subparagraph (C) of this paragraph shall only be performed on a cost-reimbursable basis. Translations referred to in such subparagraph shall be performed only to the extent that they are not otherwise available from sources within the private sector in the United States.

- (2) Beginning in 1986, the Secretary shall prepare annual reports regarding important Japanese scientific discoveries and technical innovations in such areas as computers, semiconductors, biotechnology, and robotics and manufacturing. In preparing such reports, the Secretary shall consult with professional societies and businesses in the United States. The Secretary may, to the extent provided in advance by appropriation Acts, contract with private organizations to acquire and translate Japanese scientific and technical information relevant to the preparation of such reports.
- (3) The Secretary also shall encourage professional societies and private businesses in the United States to increase their efforts to acquire, screen, translate, and disseminate Japanese technical literature.

(4) In addition the Secretary shall committee will the 1 10

TECHNOLOGY INNOVATION

Par. (6). Pub.L. 99-502, § 9(b)(2)(D), redesignated former par. (7) as (6), and struck out former par. (6), which defined the term "Board" as the National Industrial Technology Board established pursuant to section 3709 of this title.

Par. (7). Pub.L. 99–502, § 9(b)(2)(D), redesignated former par. (8) as (7). Former par. (7) redesignated (6).

Pub.L. 99-502, § 9(b)(2)(D), redesignated former par. (8) as (7).

Pub.L. 99-502, § 9(b)(2)(E), in par. (6) as so redesignated substituted "owned, leased, or otherwise used by a Federal agency and funded" for "owned and funded".

Par. (8). Pub.L. 99-502, § 9(d), added par. (8). Former par. (8) redesignated (7).

Pars. (9) to (12). Pub.L. 99-502, § 9(d), added pars. (9) to (12).

Legislative History. For legislative history and purpose of Pub.L. 96–480, see 1980 U.S.Code Cong. and Adm.News, p. 4892.

For legislative history and purpose of Pub.L. 99-502, see 1986 U.S.Code Cong. and Adm.News, p. 3442. See, also, Pub.L. 100-418, 1988 U.S.Code Cong. and Adm.News, p. 1547; Pub.L. 102-245, 1992 U.S.Code Cong. and Adm.News, p. 19.

§ 3704. Commerce and technological innovation

(a) Establishment

There is established in the Department of Commerce a Technology Administration, which shall operate in accordance with the provisions, findings, and purposes of this chapter. The Technology Administration shall include—

- (1) the National Institute of Standards and Technology;
- (2) the National Technical Information Service; and
- (3) a policy analysis office, which shall be known as the Office of Technology Policy.

(b) Under Secretary and Assistant Secretary

The President shall appoint, by and with the advice and consent of the Senate, to the extent provided for in appropriations Acts—

- (1) an Under Secretary of Commerce for Technology, who shall be compensated at the rate provided for level III of the Executive Schedule in section 5314 of Title 5; and
- (2) an Assistant Secretary of Commerce for Technology Policy, who shall serve as policy analyst for the Under Secretary.

(c) Duties

The Secretary, through the Under Secretary, as appropriate, shall—

- (1) manage the Technology Administration and supervise its agencies, programs, and activities;
- (2) conduct technology policy analyses to improve United States industrial productivity, technology, and innovation, and cooperate with United States industry in the improvement of its

TECHNOLOGY INNOVATION

Law Review Commentaries

Government exchange of technology under the Federal Technology Transfer Act of 1986. Maurice W. Ryan and Margaret M. Rioux, 36 Fed.B.News & J. 47 (January 1989).

Library References

Health and Environment \$\iinspec 25.5(2).

C.J.S. Health and Environment §§ 61 et seq., 91 et seq., 106 et seq., 115 et seq., 125 et seq., 133 et seq.

Notes of Decisions

1. Generally

Federal Technology Transfer Act (FTTA) was passed in order to ensure transfer of technology developed by federal agencies to private sector through use of cooperative research and development agreements (CRADAs) and thereby stimulate

economy by protecting nation's position in world marketplace and creating jobs within nation. Chem Service, Inc. v. Environmental Monitoring Systems Laboratory-Cincinnati of U.S. E.P.A., E.D.Pa.1993, 816 F.Supp. 328.

§ 3703. Definitions

As used in this chapter, unless the context otherwise requires, the term—

- (1) "Office" means the Office of Technology Policy established under section 3704 of this title.
 - (2) "Secretary" means the Secretary of Commerce.
- (3) "Under Secretary" means the Under Secretary of Commerce for Technology appointed under section 3704(b)(1) of this title.
- (4) "Centers" means the Cooperative Research Centers established under section 3705 or section 3707 of this title.
- (5) "Nonprofit institution" means an organization owned and operated exclusively for scientific or educational purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual.
- (6) "Federal laboratory" means any laboratory, any federally funded research and development center, or any center established under section 3705 or section 3707 of this title that is owned, leased, or otherwise used by a Federal agency and funded by the Federal Government, whether operated by the Government or by a contractor.
- (7) "Supporting agency" means either the Department of Commerce or the National Science Foundation, as appropriate.
- (8) "Federal agency" means any executive agency as defined in section 105 of Title 5 and the military departments as defined in

President, and Congress a report containing preliminary recommendations with respect to the issues addressed under subsection (b).

- "(2) The Commission shall, within 2 years after the date of enactment of this Act [Feb. 14, 1992], submit to the Secretary and Congress a final report containing final recommendations with respect to the issues addressed under subsection (b).
- "(e) Consultation.—The Commission shall consult, as appropriate, with the National Commission on Reducing Capital Costs for Emerging Technology.
- "(f) Termination.—The Commission shall terminate 6 months after the submission of its final report under subsection (d)(2).
- "(g) Authorization of appropriations.— There are authorized to be appropriated to carry out this section such sums as may be necessary for the fiscal years 1992, 1993, and 1994."

Study of Testing and Certification. Pub.L. 102-245, Title V, § 508, Feb. 14, 1992, 106 Stat. 29, provided that:

- "(a) Contract with National Research Council.—Within 90 days after the date of enactment of this Act [Feb. 14, 1992] and within available appropriations, the Secretary shall enter into a contract with the National Research Council for a thorough review of international product testing and certification issues. The National Research Council will be asked to address the following issues and make recommendations as appropriate:
 - "(1) The impact on United States manufacturers, testing and certification laboratories, certification organizations, and other affected bodies of the European Community's plans for testing and certification of regulated and nonregulated products of non-European origin.
 - "(2) Ways for United States manufacturers to gain acceptance of their products in the European Community and in other foreign countries and regions.
 - "(3) The feasibility and consequences of having mutual recognition agreements between testing and certification organizations in the United States and those of major trading partners on the

- "(4) Information coordination regarding product acceptance and conformity assessment mechanisms between the United States and foreign governments.
- "(5) The appropriate Federal, State, and private roles in coordination and oversight of testing, certification, accreditation, and quality control to support national and international trade.
- "(b) Membership.—In selecting the members of the review panel, the National Research Council shall consult with and draw from, among others, laboratory accreditation organizations, Federal and State government agencies involved in testing and certification, professional societies, trade associations, small business, and labor organizations.
- "(c) Report.—A report based on the findings and recommendations of the review panel shall be submitted to the Secretary, the President, and Congress within 18 months after the Secretary signs the contract with the National Research Council."

Congressional Findings and Declaration of Purposes; 1989 Amendment. Pub.L. 101–189, Div. C, Title XXXI, § 3132, Nov. 29, 1989, 103 Stat. 1674, provided that:

- "(a) Findings.—Congress finds that—
- "(1) technology advancement is a key component in the growth of the United States industrial economy, and a strong industrial base is an essential element of the security of this country;
- "(2) there is a need to enhance United States competitiveness in both domestic and international markets:
- "(3) innovation and the rapid application of commercially valuable technology are assuming a more significant role in near-term marketplace success;
- "(4) the Federal laboratories and other facilities have outstanding capabilities in a variety of advanced technologies and skilled scientists, engineers, and technicians who could contribute substantially to the posture of United States industry in international competition;
- "(5) improved opportunities for cooperative research and development agreements between contractor-managers of certain Federal laboratories and

the United States affect the flow of capital to advanced technology investment, and to what extent do current practices in the equity markets raise the cost of capital and inhibit the availability of capital to fund research and development, purchase advanced manufacturing equipment, and fund other investments necessary to commercialize advanced technology?

- "(5) In what ways do Government regulations influence the cost of capital in the United States?
- "(6) To what extent have national differences in capital costs facilitated the foreign acquisition of technology-based United States companies?
- "(7) What macroeconomic and other policies would promote greater investment in advanced manufacturing techniques, in research and development, and in other activities necessary to commercialize and produce new technologies?
- "(8) What specific policies should the Federal Government follow in order to reduce the cost of capital for United States companies to levels that are near parity with those faced by the Nation's principal trading partners?
- "(c) Membership.—(1) The Commission shall be composed of 9 members who are eminent in such fields as advanced technology, manufacturing, finance, and international economics and who are appointed as follows:
 - "(A) 3 individuals appointed by the President, one of whom shall chair the Commission.
 - "(B) 3 individuals appointed by the Speaker of the House of Representatives, 1 of whom shall be appointed upon the recommendation of the minority leader of the House of Representatives.
 - "(C) 3 individuals appointed by the President pro tempore of the Senate, 2 of whom shall be appointed upon the recommendation of the majority leader of the Senate and 1 of whom shall be appointed upon the recommendation of the minority leader of the Senate.
 - "(2) Each member shall be appointed for the life of the Commission. A va-

- "(d) Procedures.—(1) The chairman shall call the first meeting of the Commission within 90 days after the date of enactment of this Act [Feb. 14, 1992].
 - "(2) Recommendations of the Commission shall require the approval of three-quarters of the members of the Commission.
 - "(3) The Commission may use such personnel detailed from Federal agencies as may be necessary to enable it to carry out its duties.
 - "(4) Members of the Commission, other than full-time employees of the Federal Government, while attending meetings of the Commission while away from their homes or regular places of business, shall be allowed travel expenses in accordance with subchapter I of chapter 57 of title 5, United States Code [5 U.S.C.A. § 5701 et seq.].
- "(e) Reports.—The Commission shall, within 1 year after the date of enactment of this Act [Feb. 14, 1992], submit to the President and Congress a report containing legislative and other recommendations with respect to the issues addressed under subsection (b).
- "(f) Consultation.—The Commission shall consult, as appropriate, with the Commission on Technology and Procurement established by section 505 of this Act [set out as a note under this section].
- "(g) Termination.—The Commission shall terminate 6 months after the submission of its report under subsection (e).
- "(h) Authorization of appropriations.— There are authorized to be appropriated to carry out this section such sums as may be necessary for the fiscal years 1992 and 1993."

Research, Development, Technology Utilization, and Government Procurement Policy. Pub.L. 102-245, Title V, § 505, Feb. 14, 1992, 106 Stat. 25, provided that:

"(a) Establishment of Commission.— The Secretary, in consultation with the Administrator of the Office of Federal Procurement Policy, shall establish a Commission on Technology and Procurement (hereafter in this section referred to as the 'Commission'), for the purposes of analyzing the effect of Federal Government procurement laws, procedures, and policies technology, but there is insufficient knowledge of their effects in particular sectors of the economy.

- (8) No comprehensive national policy exists to enhance technological innovation for commercial and public purposes. There is a need for such a policy, including a strong national policy supporting domestic technology transfer and utilization of the science and technology resources of the Federal Government.
- (9) It is in the national interest to promote the adaptation of technological innovations to State and local government uses. Technological innovations can improve services, reduce their costs, and increase productivity in State and local governments.
- (10) The Federal laboratories and other performers of federally funded research and development frequently provide scientific and technological developments of potential use to State and local governments and private industry. These developments, including inventions, software, and training technologies, should be made accessible to those governments and industry. There is a need to provide means of access and to give adequate personnel and funding support to these means.
- (11) The Nation should give fuller recognition to individuals and companies which have made outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States.

(Pub.L. 96-480, § 2, Oct. 21, 1980, 94 Stat. 2311. As amended Pub.L. 99-502, § 9(f)(1), Oct. 20, 1986, 100 Stat. 1797.)

Historical and Statutory Notes

1986 Amendment. Par. (10). Pub.L. 99-502, § 9(f)(1), inserted ", which include inventions, computer software, and training technologies," after "These developments".

Short Title of 1992 Amendments. Pub.L. 102-245, § 1, Feb. 14, 1992, 106 Stat. 7, provided that: "This Act [enacting sections 1536, 3704b-1, 3704b-2, 3716, and 3717 of this title and section 6618 of Title 42, The Public Health and Welfare, amending sections 272, 278d, 278g, 278g-1, 278k, 278l note, 278n, 1453, 1454, 3703, 3704, 3704b, 3710, 3710a, 3711, 4603, 4603a, and 4632 of this title and section 6683 of Title 42, and enacting provisions set out as notes under this section and sections 271, 278f, 278n, and 1453 of this title and section 6611 of Title 42] may be cited as the 'American Technology Preeminence Act of 1991'."

[enacting sections 1536, 3704b-1 and 3704b-2 of this title, amending sections 278d, 278g, 278g-1, 278k, 278l note, 1453, 1454, 4603, 4603a, and 4632 of this title and enacting provisions set out as notes under this section and section 278f of this title] may be cited as the 'Technology Administration Authorization Act of 1991'."

Short Title of 1989 Amendment. Pub.L. 101–189, Div. C, Title XXXI, § 3131, Nov. 29, 1989, 103 Stat. 1674, provided that: "This part [amending sections 3710, 3710a, and 3710c of this title and enacting provisions set out as notes under this section and section 3710a of this title] may be cited as the 'National Competitiveness Technology Transfer Act of 1989'."

Short Title of 1988 Amendment. Pub.L. 100-519, § 211, Oct. 24, 1988, 102 Stat. 2594 provided that: "This subtitle length-

Sec. 3706. Grants and cooperative agreements. (a) In general. (b) Eligibility and procedure. (c) Terms and conditions. National Science Foundation Cooperative Research Centers. 3707. (a) Establishment and provisions. (b) Planning grants. (c) Terms and conditions. 3708. Administrative arrangements. (a) Coordination (b) Cooperation (c) Administrative authorization (d) Cooperative efforts 3709. Repealed. 3710. Utilization of Federal technology. (a) Policy. (b) Establishment of Research and Technology Applications Offices. (c) Functions of Research and Technology Applications Offices. (d) Dissemination of technical information. (e) Establishment of Federal Laboratory Consortium for Technology Transfer. (f) Agency reporting. (g) Functions of Secretary. (h) Repealed. (i) Research equipment. 3710a. Cooperative research and development agreements. (a) General authority. (b) Enumerated authority. (c) Contract considerations. (d) Definitions. (e) Determination of laboratory missions. (f) Relationship to other laws. (g) Principles. 3710b. Rewards for scientific, engineering, and technical personnel of Federal agencies. 3710c. Distribution of royalties received by Federal agencies. (a) In general. (b) Certain assignments. (c) Reports. 3710d. Employee activities. (a) In general. (b) Definition. (c) Relationship to other laws. 3711. National Technology Medal. (a) Establishment

(a) Establishment. (b) Making and presentation of award.

Malcolm Baldrige National Quality Award.

(b) Award (c) Presentation

3711a.

TABLE OF PUBLIC LAWS

Pub.L. No. 102–140,	Date Appr. - 10/28/91			15 U.S.C.A. §§
102-190,	,, ,			2.010
§ 836	- 12/5/91	105 Sta	t. 1448	 3715
102–240,				
§ 6019	- 12/18/91	105 Sta	t. 2183	3708, 3711b,
				3711c, 3712
				to 3715
102–245,				
§§ 301 to			4 **	
306	- 2/14/92	106 Sta	t. 19, 20	3703, 3704,
				3710, 3710a,
•			•	3711a
102–484,				
§ 3135(a)	- 10/23/92	106 Sta	t. 2640	3710a
103–160,				
§ 3160	- 11/30/93	107 Sta	t. 1957	3710a

Major Legislative Themes in Federal Technology Transfer								
ıe ·	Initiation	Progression						
orization RADAs	1986 FTTA authorized CRADAs for GOGOs	1989 NCTTA authorized CRADAs for GOCOs	1992 Energy Policy Act authorized DOE to enter into CRADAs directly, without laboratory participation	1992 FY 1993 Defense Authorization Act extended potential CRADA authority to some DOD-funded Federally Funded R&D Centers not owned by the government				
blishment inizations dvance mology isfer	Stevenson-Wydler	1986 Federal Laboratory Consortium (FLC) legislated by the FTTA	1989 Conference Committee Report of the FY 1990 Independent Agencies Appropriations Act recommended the establishment of the National Technology Transfer Center (NTTC) by NASA	1991 FLC mandate extended by the American Technology Preeminence Act	1992 NASA established six Regional Technology Transfer Centers (RTTCs) under authority granted in the National Aeronautics and Space Act of 1958			

NOTE: This analysis is provided to the FLC by the U.S. Department of Energy. August 1994

——— е	Major Legislative Themes in Federal Technology Transfer Initiation Progression									
l	1980 Patent and Trademark Amendments Act (Bayh-Dole) permitted small businesses to obtain title to inventions developed with governmental support	1982 Small Business Innovation Development Act •Established the Small Business Innovation Research (SBIR) Program •Required agencies to provide special funds for small business R&D connected to the agencies mission	1991 Defense Authorization Act established model programs for laboratories to demonstrate successful relationships between government and small business	Small Business T ² Act mandated government agency funding of cooperative R&D projects between small businesses and universities, federally funded R&D centers or non-profit research institutions	1992 FY 1993 Defense Authorization Act directed DOE to facilitate and encourage T ² to small business					

Technology Innovation Legislation Highlights

Small Business Technology Transfer Act of 1992 (Public Law 102–564)

- Established a three-year pilot program, the Small Business Technology Transfer (STTR) program, at DOD, DOE, HHS, NASA, and NSF.
- Directed the Small Business Administration (SBA) to oversee and coordinate the implementation of the STTR program.
- ◆ Designed the STTR similar to the Small Business Innovation Research (SBIR) program.
- ♦ Required each of the five agencies to fund cooperative R&D projects involving a small company and a researcher at a university, federally-funded research and development center, or nonprofit research institution.

*National Department of Defense Authorization Act for 1993 (Public Law 102–25)

◆ Facilitated and encouraged technology transfer to small businesses.

*National Defense Authorization Act for FY 1993 (Public Law 102–484)

- Extended the streamlining of small business technology transfer procedures for non-federal laboratory contractors.
- ♦ Directed DOE to issue guidelines to facilitate technology transfer to small businesses.
- ♦ Extended the potential for CRADAs to some DOD-funded Federally Funded Research and Development Centers (FFRDCs) not owned by the government.

*National Department of Defense Authorization Act for 1994 (Public Law 103–160)

♦ Broadened the definition of a laboratory to include weapons production facilities of the DOE.

Technology Innovation Legislation Highlights

- Extended royalty payment requirements to non-government employees of federal laboratories.
- Authorized Training Technology Transfer centers administered by the Department of Education.

*National Institute of Standards and Technology Authorization Act for FY 1989 (Public Law 100-519)

- ◆ Established a Technology Administration within the Department of Commerce.
- Permitted contractual consideration for rights to intellectual property other than patents in CRADAs.
- Included software development contributors eligible for awards.
- ◆ Clarified the rights of guest worker inventors regarding royalties.

Water Resources Development Act of 1988 (Public Law 100-676)

- Authorized Army Corps of Engineers laboratories and research centers to enter into cooperative research and development agreements.
- ♦ Allowed the Corps to fund up to 50% of the cost of the cooperative project.

*National Competitiveness Technology Transfer Act of 1989 (Public Law 101–189) (included as Section 3131 et seq. of DOD Authorization Act for FY 1990)

- Granted GOCO federal laboratories opportunities to enter into CRADAs and other activities with universities and private industry, in essentially the same ways as highlighted under the Federal Technology Transfer Act of 1986.
- ♦ Allowed information and innovations brought into, and created through, CRADAs to be protected from disclosure.
- A Provided a technology transfer mission for the muclean

Technology Innovation Legislation Highlights

Trademark Clarification Act of 1984 (Public Law 98-620)

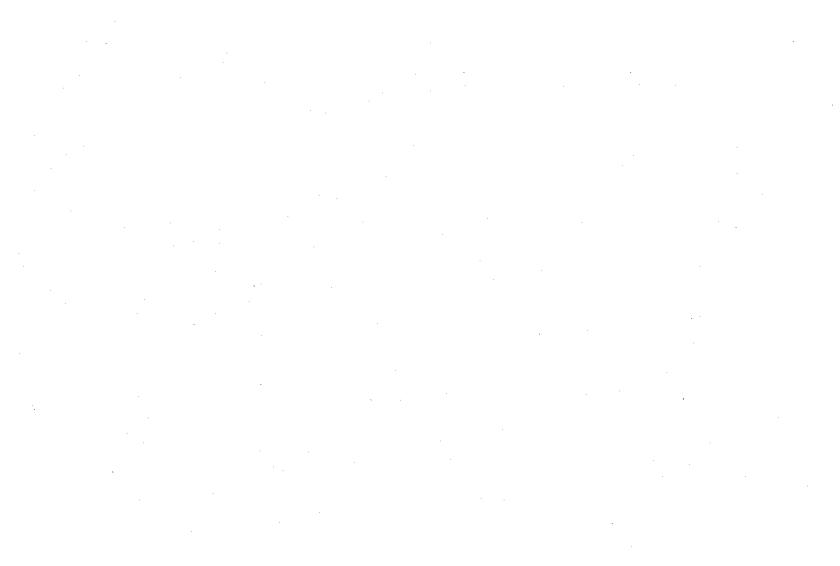
- Permitted decisions to be made at the laboratory level in government-owned, contractor-operated (GOCO) laboratories as to the awarding of licenses for patents.
- ◆ Permitted contractors to receive patent royalties for use in R&D, awards, or for education.
- ◆ Permitted private companies, regardless of size, to obtain exclusive licenses.
- ◆ Permitted laboratories run by universities and non-profit institutions to retain title to inventions within limitations.

*Japanese Technical Literature Act of 1986 (Public Law 99-382)

♦ Improved the availability of Japanese science and engineering literature in the U.S.

*Federal Technology Transfer Act of 1986 (Public Law 99-502)

- ♦ Made technology transfer a responsibility of all federal laboratory scientists and engineers.
- ♦ Mandated that technology transfer responsibility be considered in laboratory employee performance evaluations.
- ♦ Established principle of royalty sharing for federal inventors (15% minimum) and set up a reward system for other innovators.
- ♦ Legislated a charter for Federal Laboratory Consortium for Technology Transfer and provided a funding mechanism for that organization to carry out its work.
- Provided specific requirements, incentives and authorities for the federal laboratories.
- Empowered each agency to give the director of GOGO laboratories authority to enter into cooperative R&D agreements and negotiate licensing agreements with



FROM INNOVATION TO APPLICATION

At the Spring 1991 FLC meeting, attorneys from member laboratories and agencies evaluated the need for a legal networking group to enhance the objectives of technology transfer and to support the laboratory representatives more effectively. As a result, the FLC officially established a new legal group as a subcommittee of the Member Services Committee which has become the Legal Issues Committee. This group provides a mechanism for the free exchange of ideas, evaluates issues for more effective transfer, and broadens FLC training opportunities.

A network of FLC members interested in legal issues works with technology transfer officers within the FLC Legal Issues Committee. Network members (professionals from member R&D laboratories, departments and agencies, and industry) exchange technology transfer ideas, share experiences, prepare summary issue papers, and support FLC training and education efforts. The laboratory intellectual property attorney and technology transfer officer, working as a team, are the natural purveyors of information about intellectual property. Jointly, they communicate the importance of intellectual property in technology transfer and encourage its protection.

Presently, the FLC Legal Issues Committee has five subcommittees: Standards of Conduct and Conflict of Interest, CRADAs and Patent and Licensing Agreements, Fiscal Law, Intellectual Property, and Freedom of Information Act. The Committee welcomes participation of laboratory, department/agency and company professionals involved in the technology transfer process.

Dr. Loren C. Schmid, Chairman Federal Laboratory Consortium

> For more information about the FLC contact:

FLC Management Support Office P.O. Box 545 Sequim, WA 98382-0545 (206) 683-1005 (Voice) (206) 683-6654 (Fax)

Copyright © 1994 by West Publishing Co.

Copyright is not claimed as to any part of the original work prepared by a United States Government officer or employee as part of that person's official duties. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

