



The Green Book

Federal Technology Transfer
Legislation and Policy

Prepared by the Federal Laboratory Consortium for Technology Transfer

Fourth Edition

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OTHER FLC PUBLICATIONS

In addition to The Green Book, the FLC offers a wide range of publications and materials for technology transfer professionals and to the general public. These publications include:

- *FLC Technology Transfer Desk Reference*—A comprehensive introduction to technology transfer and the background, concepts, and practical knowledge required for technology transfer practitioners
- *FLC ORTA Handbook*—A great primer for Office of Research and Technology Applications (ORTA) personnel and to others new to Federal technology transfer.
- *Federal Technology Transfer Mechanisms Matrix*—A reference guide to technology transfer websites, this document identifies a wide variety of technology transfer mechanisms, the agencies that use them, and the websites where information about each agency's use of the mechanism and samples of mechanisms can be found
- FLC Video Training Program—An 11-DVD, 3-CD set containing 14 video courses that cover a variety of technology transfer topics each presented by subject-matter experts from industry and government.
- *Technology for Today*—This annual publication highlights the technology transfer successes of federal laboratories.
- *Federal Laboratories & State and Local Governments: Partners for Technology Transfer Success*—Highlights of some of the technology transfer successes resulting from the collaboration between federal laboratories and state and local governments

All of these publications are available in PDF versions on the FLC website <www.federallabs.org>. To obtain a printed copy, please email the FLC Management Support Office at flcmso@federallabs.org with your request.

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INTRODUCTION TO TECHNOLOGY TRANSFER

LEGISLATION AND POLICY

Over the past several decades, presidents and Congress have worked together to establish a policy framework that enables the federal government to transfer its technology to the nonfederal sector, which includes industry, state and local governments, and academic institutions. Through this technology transfer process, federal laboratories share the benefits of the national investment in research and development (R&D) with all segments of society.

The Federal Laboratory Consortium for Technology Transfer (FLC) is pleased to publish this fourth edition of *Federal Technology Transfer Legislation and Policy* (“The Green Book”), which provides the principal statutory and presidential executive order policies that constitute the framework of the federal technology transfer program. It is intended to assist policy makers and technology transfer practitioners in the government by serving as a legal reference resource. At the same time, The Green Book is intended to help those outside government acquire a fundamental understanding of the legal framework within which technology transfer works.

The FLC published its first consolidated guide to technology transfer legislation in 1991. A second edition was issued in 1994, focusing on the legislation codified in U.S. Code (USC) Title 15, Chapter 63, “Technology Innovation.” The third edition, issued in 2005, updated and significantly expanded the scope of the guide. The Green Book included comprehensive technology transfer legislation as amended, including the Technology Commercialization Act of 2000. In addition, the guide included legislation regarding patents, copyrights, and other forms of intellectual property; legislation applicable to specific agencies; and Executive Order 12591 (“Facilitating Access to Science and Technology”).

This fourth edition cleans up some errata; adds DOE, DHHS, and DOD-specific technology transfer laws; and updates statutory changes, e.g., those mandated in the America COMPETES Act, P.L. 110-79. Of particular note, these latter changes include those found in 15 USC 3703, 3704, 3710, and 3713, and which disestablish the Technology Administration and Office of Technology Policy at the Department of Commerce, as well as the position and duties of the Under Secretary of Commerce for Technology.

In addition, because of inconsistent treatment of legislative history in the previous edition, and concern that the reader might rely on the Green Book as the authoritative state-of-the-law, this edition does not contain statutory notes. Frequent reminders are provided throughout for the reader to refer to the website of the U.S. House of Representatives Office of the Law Revision Counsel, <<http://uscode.house.gov>>, for the legislative history and the latest changes to the USC section(s) of interest.

This new edition maintains the “Technology Innovation Legislation Highlights,” which summarizes technology transfer legislation and executive orders since the Stevenson-Wydler Technology Innovation Act of 1980. In doing so, we have expanded the information provided on the SBIR and STTR Programs, and added summaries of two recent pieces of relevant legislation, the Energy Policy Act of 2005 and the

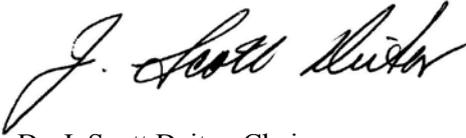
America COMPETES Act. The table entitled “Major Legislative Themes in Federal Technology Transfer,” has been kept intact.

The Green Book contains a detailed table of contents, as well as an index keyed to page numbers.

Although federal technology transfer policy is established by the legislation and executive orders in this guide, the reader is advised that each federal department and agency may develop its own regulations, policies, procedures, and boilerplate agreements that guide how technology transfer works within its organization.

The purpose of the FLC is to help federal departments, agencies, and individual laboratories move technologies and capabilities developed in the laboratories into the private and public sectors. To facilitate this mission, the FLC has a Management Support Office (MSO) and numerous committees, staffed by federal technology transfer professionals, that may be able to offer additional assistance in response to your questions. The MSO and committee chairs can be found at the FLC website, <www.federallabs.org> which also provides additional information about the FLC and where you can find an online edition of The Green Book.

Finally, we express our thanks to Robert “Bob” Charles, Chair, Legal Issues Committee, for providing this valuable update.



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TECHNOLOGY INNOVATION LEGISLATION HIGHLIGHTS

Since 1980, Congress has enacted a series of laws to promote technology transfer and to provide technology transfer mechanisms and incentives. The intent of these laws and related Executive Orders is to encourage the pooling of resources when developing commercial technologies. The bidirectional sharing between federal laboratories and private industry includes not only technologies, but personnel, facilities, methods, expertise, and technical information in general.

Highlights of major technology transfer legislation are discussed on the following pages. An overview of the major legislative themes is provided in the table on page xiv.

Stevenson-Wydler Technology Innovation Act of 1980 (P.L. 96-480)

The Stevenson-Wydler Act of 1980 is the first of a continuing series of laws to define and promote technology transfer. It made it easier for federal laboratories to transfer technology to nonfederal parties and provided outside organizations with a means to access federal laboratory developments.

The primary focus of the Stevenson-Wydler Act concerned the dissemination of information from the federal government and getting federal laboratories more involved in the technology transfer process. The law requires laboratories to take an active role in technical cooperation and to set apart a percentage of the laboratory budget specifically for technology transfer activities. The law also established an Office of Research and Technology Applications (ORTA) in each laboratory to coordinate and promote technology transfer.

Bayh-Dole Act of 1980 (P.L. 96-517)

The Bayh-Dole Act of 1980, together with the Patent and Trademark Clarification Act of 1984 (P.L. 98-620), established more boundaries regarding patents and licenses for federally funded research and development. Small businesses, universities, and not-for-profit organizations were allowed to obtain titles to inventions developed with federal funds. Government owned and government operated (GOGO) laboratories were permitted to grant exclusive patent licenses to commercial organizations.

Small Business Innovation Development Act of 1982 (P.L. 97-219)

The Small Business Innovation Development Act of 1982 established the Small Business Innovation Research (SBIR) Program, requiring agencies to provide special funds for small business R&D connected to the agencies' missions. SBIR has been reauthorized through 2008 by the Small Business Research and Development Enhancement Act of 2000. At the time of this Green Book update, the SBIR Program is operating under a continuing resolution.

SBIR is a highly competitive program designed to encourage innovation, as well as the commercialization of products and processes developed by small businesses through federal funds. Each year 11 federal departments and agencies are required to reserve 2.5% of their extramural R&D budgets for SBIR awards. These agencies designate SBIR R&D topics and accept proposals. SBIR awards or grants are awarded competitively to small U.S.-owned commercial businesses with less than 500 employees that submit proposals addressing topics published by the agencies. Following submission of proposals, agencies make SBIR awards based on technical merit, degree of innovation, and future market potential. Small businesses that receive

awards or grants then begin a three-phase program. The SBIR Program provides four years of confidentiality for data created in the program, and the small business awardee obtains title to the inventions. A 2002 Small Business Administration (SBA) SBIR Policy Directive forbids the SBIR awardee to partner/subcontract with a federal laboratory. However, on a case-by-case basis, the SBA may grant a waiver from this provision if the awarding agency provides sufficient justification, as outlined in the SBIR policy directive. For more information on the SBIR Program, visit the SBA SBIR/STTR website at <www.sba.gov/sbir> or contact the SBA Office of Technology at (202) 205-6450.

Federal Technology Transfer Act of 1986 (P.L. 99-502)

The Federal Technology Transfer Act of 1986 was the second major piece of legislation to focus directly on technology transfer. All federal laboratory scientists and engineers are required to consider technology transfer an individual responsibility, and technology transfer activities are to be considered in employee performance evaluations.

This 1986 law also established a charter and funding mechanism for the previously existing Federal Laboratory Consortium for Technology Transfer (FLC). In addition, the law enabled GOGO laboratories to enter into Cooperative Research and Development Agreements (CRADAs) and to negotiate licensing arrangements for patented inventions made at the laboratories. It also required that government-employed inventors share in royalties from patent licenses. Further, the law provided for the exchange of personnel, services, and equipment among the laboratories and nonfederal partners.

Other specific requirements, incentives and authorities were added, including the ability of GOGO laboratories to grant or waive rights to laboratory inventions and intellectual property, and permission for current and former federal employees to participate in commercial development, to the extent that there is no conflict of interest.

Executive Order 12591 (1987)

Executive Order 12591, Facilitating Access to Science and Technology (1987), was written to ensure that federal laboratories and agencies assist universities and the private sector by transferring technical knowledge. The order required agency and laboratory heads to identify and encourage individuals who would act as conduits of information among federal laboratories, universities, and the private sector. It also underscored the government's commitment to technology transfer and urged GOGOs to enter into cooperative agreements to the limits permitted by law.

The order also promoted commercialization of federally funded inventions by requiring that, to the extent permitted by law, laboratories grant to contractors the title to patents developed in whole or in part with federal funds, as long as the government is given a royalty-free license for use.

Omnibus Trade and Competitiveness Act of 1988 (P.L. 100-418)

The Omnibus Trade and Competitiveness Act of 1988 emphasized the need for public/private cooperation in realizing the benefits of R&D, established centers for transferring manufacturing technology, established Industrial Extension Services and an information clearinghouse on state and local technology programs, and extended royalty payment requirements to non-government employees of federal laboratories. It also changed the name of the National Bureau of Standards to the National Institute of Standards and Technology (NIST) and broadened its technology transfer role, including making NIST the FLC's host agency.

National Competitiveness Technology Transfer Act of 1989 (P.L. 101-189)

The National Competitiveness Technology Transfer Act of 1989 provided additional guidelines and coverage for the use of CRADAs, extending to government owned and contractor operated (GOCO) laboratories essentially the same ability to enter into CRADAs that previously had been granted to GOGO laboratories by the Federal Technology Transfer Act of 1986.

To protect the commercial nature of the agreements, the Act allowed information and innovations that were created through a CRADA, or brought into a CRADA, to be protected from disclosure to third parties.

The Act also provided a technology transfer mission for the Department of Energy's (DOE) nuclear weapons laboratories.

American Technology Preeminence Act of 1991 (P.L. 102-245)

The American Technology Preeminence Act of 1991 contained several provisions covering the FLC and the use of CRADAs. The mandate for the FLC was extended to 1996, the requirement that the FLC conduct a grant program was removed, and a requirement for an independent annual audit was added.

With respect to CRADAs, the Act included intellectual property as potential contributions under CRADAs. The exchanging of intellectual property among the parties to an agreement was allowed, and the Secretary of Commerce was asked to report on the advisability of creating a new type of CRADA that would allow federal laboratories to contribute funds to the effort covered by the agreement (which is not permitted at present). It also allowed laboratory directors to give excess equipment to educational institutions and nonprofit organizations as a gift.

Small Business Research and Development Enhancement Act of 1992 (P.L. 102-564)

This Act established the Small Business Technology Transfer (STTR) Program. STTR is a three-phase program similar to the SBIR Program in many ways. The key differences are that STTR funding is available only from five agencies and the small business must partner a minimum of 30% of the effort with a U.S. college or university, nonprofit research organization, or federally funded research and development center (FFRDC). The designated agencies select R&D topics, accept proposals, and award grants for a three-phase program that mirrors the SBIR Program. Awards are based on small business/nonprofit research institution qualifications, degree of innovation, and future market potential. The STTR Program was reauthorized through 2009 by the Small Business Technology Transfer Program Reauthorization Act of 2001. The STTR Program provides early-stage R&D funding directly to small companies working cooperatively with researchers at other research institutions. The objectives of the STTR Program are to bridge the funding gap between basic research and commercial products, and to provide a way for researchers to pursue commercial applications of technologies. Unlike SBIR, a small business may partner with a federal laboratory that is an FFRDC, without the need of a waiver from SBA. For more information about the STTR Program, visit the SBA SBIR/STTR website <www.sba.gov/sbir> or call the SBA Office of Technology at (202) 205-6450.

National Department of Defense Authorization Act for 1994 (P.L. 103-160)

This Act broadened the definition of a laboratory to include weapons production facilities at the DOE.

National Technology Transfer and Advancement Act of 1995 (P.L. 104-113)

This law amended the Stevenson-Wydler Act to make CRADAs more attractive to both federal laboratories and scientists and to private industry. The law provides assurances to U.S. companies that they will be granted sufficient intellectual property rights to justify prompt commercialization of inventions arising from a CRADA with a federal laboratory, and gives the collaborating party in a CRADA the right to choose an exclusive or nonexclusive license for a prenegotiated field of use for an invention resulting from joint research under a CRADA. The CRADA partner may also retain title to an invention made solely by its employees in exchange for granting the government a worldwide license to use the invention. The law also revised the financial rewards for federal scientists who develop marketable technology under a CRADA—increasing the annual limit of payment of royalties to laboratories from \$100,000 per person to \$150,000.

In addition, the Act permanently provided the FLC with funding from the agencies.

Technology Transfer Commercialization Act of 2000 (P.L. 106-404)

This Act recognizes the success of CRADAs for federal technology transfer and broadens the CRADA licensing authority to include preexisting government inventions to make CRADAs more attractive to private industry and increase the transfer of federal technology. The Act permits federal laboratories to grant a license for a federally owned invention that was created prior to the signing of a CRADA. In addition, the Act requires an agency to provide a 15-day public notice before granting an exclusive or partially exclusive license, and requires licensees to provide a plan for development and/or marketing of the invention and to make a commitment to achieve a practical application of the invention within a reasonable period of time; however, the Act exempts from these requirements the licensing of any inventions made under a CRADA.

Energy Policy Act of 2005 (P.L. 109-58)

This Act established, within the Department of Energy, a technology transfer coordinator as the principal advisor to the secretary on all matters related to technology transfer and commercialization; a technology transfer working group to coordinate technology transfer activities at the DOE labs (with oversight by the technology transfer coordinator); and an energy technology commercialization fund to provide matching funds with private partners to promote energy technologies for commercial purposes.

America COMPETES Act (P.L. 110-69)

This Act authorized programs in multiple agencies focused on the overarching themes of increasing funding for basic research; strengthening teacher capabilities and encouraging student opportunities in science, technology, engineering and mathematics

(STEM) educational programs; enhancing support for higher risk, higher reward research; and supporting early career research programs for young investigators. The primary impact on technology transfer included the elimination of the Department of Commerce Office of Technology Administration, and the associated Under Secretary, which had the principal reporting and analytical responsibilities for technology transfer activities government-wide (these duties were reassigned within Commerce).

Other Legislation

Other laws that are part of the technology transfer effort, although perhaps not quite as directly as the previously discussed legislation, include:

- The Cooperative Research Act of 1984 (P.L. 98-462) established several R&D consortia (e.g., Semiconductor Research Corporation and Microelectronics and Computer Technology Corporation) and eliminated some of the antitrust concerns of companies wishing to pool R&D resources.
- The Trademark Clarification Act of 1984 (P.L. 98-620) permitted patent license decisions to be made at the laboratory level in GOCO laboratories, and permitted contractors to receive patent royalties to support the R&D effort. Private companies were also permitted to obtain exclusive licenses.
- The Japanese Technical Literature Act of 1986 (P.L. 99-382) improved the availability of Japanese science and engineering literature in the U.S.
- The National Institute of Standards and Technology Authorization Act for FY 1989 (P.L. 100-519) permitted contractual consideration for intellectual property rights other than patents in CRADAs, and included software developers as eligible for technology transfer awards.
- The Defense Authorization Act for FY 1991 (P.L. 101-510) established model programs for national defense laboratories to demonstrate successful relationships between the federal government, state and local governments, and small businesses and permitted those laboratories to enter into a contract or a Memorandum of Understanding with an intermediary to perform services related to cooperative or joint activities with small businesses.
- The National Defense Authorization Act for FY 1993 (P.L. 102-484) extended the potential for CRADAs to some Department of Defense-funded FFRDCs not owned by the government.

United States Code

All of the legislation included in The Green Book is embodied in the United States Code (USC), which provides a single source uniting the provisions of each law. The text of the USC contained in this book was downloaded from the website of the U.S. House of Representatives Office of the Law Revision Counsel, which prepares and publishes the USC. The latest official version of the USC is available at <<http://uscode.house.gov>>.

MAJOR LEGISLATIVE THEMES IN FEDERAL TECHNOLOGY TRANSFER

Theme	Initiation	Progression
Technology Transfer as a Mission	1980 Stevenson-Wydler Technology Innovation Act established technology transfer as a mission of the federal government	1986 Federal Technology Transfer Act (FTTA) made technology transfer a priority not only for GOGOs, but for every GOGO employee
	1987 Executive Order 12591 emphasized the government's commitment to facilitating access to science and technology	1989 National Competitiveness Technology Transfer Act (NCTTA) established technology transfer as 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 nonprofit organizations agreeing that products embodying the invention will be manufactured substantially in the U.S.	1980 Stevenson-Wydler Technology Innovation Act required that preference be given to industrial technology transfer 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	1986 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.
Small Business	1980 Patent and Trademark Amendment Act (Bayh-Dole) permitted small businesses to obtain title to inventions developed with government 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
	1981 Defense Authorization Act established model programs for laboratories to demonstrate successful relationships between government and small business	1992 Small Business Technology Transfer Act mandated government agency funding of cooperative R&D projects between small businesses and universities, Federally funded R&D centers, or nonprofit research institutions
		1992 FY 1993 Defense Authorization Act directed DOE to facilitate and encourage technology transfer to small business

MAJOR LEGISLATIVE THEMES IN FEDERAL TECHNOLOGY TRANSFER (Cont.)

Theme	Initiation	Progression						
Title to Inventions	1980 Specific agency authorizing legislation	1980 Bayh-Dole Act permitted universities, not-for-profit organizations, and small businesses to obtain title to inventions developed with government support	1984 Trademark Clarification Act allowed laboratories run by universities and nonprofit institutions to retain title to inventions within limitations	1986 Federal Technology Transfer Act (FTTA) allowed GOGOs	1988 Omnibus Trade and Competitiveness Act extended royalty payment requirement to inventors at the laboratories who are not government employees	1989 National Competitiveness Technology Transfer Act (NCTTA) granted essentially the same CRADA opportunities and intellectual property rights to GOGOs that had been established for GOGOs by the FTTA	1995 National Technology Transfer and Advancement Act gave CRADA partners sufficient intellectual property rights to justify prompt commercialization of inventions resulting from a CRADA, as well as the right to an exclusive or nonexclusive license to an invention resulting from a CRADA	2000 Technology Transfer Commercialization Act improved the ability of federal agencies to license federally owned inventions by reforming technology training authorities under the Bayh-Dole Act and by permitting laboratories to bring already existing government inventions into a CRADA
	1980 Specific agency authorizing legislation	1984 Trademark Clarification Act allowed laboratories run by universities and nonprofit institutions to retain title to inventions within limitations	1986 Federal Technology Transfer Act (FTTA) allowed GOGOs	1988 Omnibus Trade and Competitiveness Act extended royalty payment requirement to inventors at the laboratories who are not government employees	1989 National Competitiveness Technology Transfer Act (NCTTA) granted essentially the same CRADA opportunities and intellectual property rights to GOGOs that had been established for GOGOs by the FTTA	1995 National Technology Transfer and Advancement Act gave CRADA partners sufficient intellectual property rights to justify prompt commercialization of inventions resulting from a CRADA, as well as the right to an exclusive or nonexclusive license to an invention resulting from a CRADA	2000 Technology Transfer Commercialization Act improved the ability of federal agencies to license federally owned inventions by reforming technology training authorities under the Bayh-Dole Act and by permitting laboratories to bring already existing government inventions into a CRADA	

MAJOR LEGISLATIVE THEMES IN FEDERAL TECHNOLOGY TRANSFER (Cont.)

Theme	Initiation	Progression
Dissemination of Information/ FOIA	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 Bayh-Dole Act protected descriptions of inventions from public dissemination and FOIA for a reasonable amount of time to allow patent applications to be filed
	1980 Stevenson-Wydler Technology Innovation Act focused on dissemination of government information through an active commitment to technology transfer	1986 & 1989 Both the FTTA (1986, applying to GOGOs) and the NCTTA (1989, applying to GOCOs) allowed CRADA information to be protected from disclosure under FOIA for up to five years
Authorization of CRADAs	1986 FTTA authorized CRADAs for GOGOs	1989 NCTTA authorized CRADAs for GOCOs
	1988 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
Establishment of Organizations to Advance Technology Transfer	1986 Stevenson-Wydler Technology Innovation Act enabled funding for the establishment of Offices of Research and Technology Application (ORTAs) at major federal laboratories	1989 Conference Committee Report of the FY 1990 Independent Agencies Appropriations Act recommended the establishment of the National Technology Transfer Center (NTTC) by NASA
	1986 Federal Laboratory Consortium (FLC) legislated by the FTTA	1991 FLC mandate extended by the American Technology Preadminence Act
	1986 Stevenson-Wydler Technology Innovation Act enabled funding for the establishment of Offices of Research and Technology Application (ORTAs) at major federal laboratories	1992 NASA established six Regional Technology Transfer Centers (RTTCs) under authority granted in the National Aeronautics and Space Act of 1958
	1986 Stevenson-Wydler Technology Innovation Act enabled funding for the establishment of Offices of Research and Technology Application (ORTAs) at major federal laboratories	1995 National Technology Transfer and Advancement Act permanently provided the FLC with funding from the agencies

SECTION 1

Technology Innovation Legislation Applicable to All Federal Agencies

TITLE 15 — COMMERCE AND TRADE

CHAPTER 63 — TECHNOLOGY INNOVATION

§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 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, which include inventions, computer 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.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

§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.

§3703. Definitions

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

- (1) “Secretary” means the Secretary of Commerce.
- (2) “Centers” means the Cooperative Research Centers established under section 7 [15 USC Sec. 3705 or 3707] or section 9 [15 USC Sec. 3705 or 3707].
- (3) “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.
- (4) “Federal laboratory” means any laboratory, any federally funded research and development center, or any center established under section 7 or section 9 of this Act [15 USC Sec. 3705 or 3707] 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.
- (5) “Supporting agency” means either the Department of Commerce or the National Science Foundation, as appropriate.
- (6) “Federal agency” means any executive agency as defined in section 105 of title 5 and the military departments as defined in section 102 of such title, as well as any agency of the legislative branch of the Federal Government.
- (7) “Invention” means any invention or discovery which is or may be patentable or otherwise protected under title 35 or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (8) “Made” when used in conjunction with any invention means the conception or first actual reduction to practice of such invention.
- (9) “Small business firm” means a small business concern as defined in section 2 of Public Law 85-536 (15 USC 632) and implementing regulations of the Administrator of the Small Business Administration.
- (10) “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.

- (11) “Clearinghouse” means the Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation established by section 6 [15 USC Sec. 3704a].

§3704. Experimental Program to Stimulate Competitive Technology

(a) Program Establishment

(1) In general

Beginning in fiscal year 1999, the Secretary shall establish a program to be known as the Experimental Program to Stimulate Competitive Technology (referred to in this subsection as the “program”). The purpose of the program shall be to strengthen the technological competitiveness of those States that have historically received less Federal research and development funds than those received by a majority of the States.

(2) Arrangements

In carrying out the program, the Secretary shall—

(A) enter into such arrangements as may be necessary to provide for the coordination of the program through the State committees established under the Experimental Program to Stimulate Competitive Research of the National Science Foundation; and

(B) cooperate with—

- (i) any State science and technology council established under the program under subparagraph (A); and
- (ii) representatives of small business firms and other appropriate technology-based businesses.

(3) Grants and cooperative agreements

In carrying out the program, the Secretary may make grants or enter into cooperative agreements to provide for—

(A) technology research and development;

(B) technology transfer from university research;

(C) technology deployment and diffusion; and

(D) the strengthening of technological capabilities through consortia comprised of—

- (i) technology-based small business firms;
- (ii) industries and emerging companies;
- (iii) universities; and
- (iv) State and local development agencies and entities.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

15 USC 3704a

(4) Requirements for making awards

(A) In general—In making awards under this subsection, the Secretary shall ensure that the awards are awarded on a competitive basis that includes a review of the merits of the activities that are the subject of the award.

(B) Matching requirement—The non-Federal share of the activities (other than planning activities) carried out under an award under this subsection shall be not less than 25 percent of the cost of those activities.

(5) Criteria for States

The Secretary shall establish criteria for achievement by each State that participates in the program. Upon the achievement of all such criteria, a State shall cease to be eligible to participate in the program.

(b) Coordination

To the extent practicable, in carrying out subsection (a), the Secretary shall coordinate the program with other programs of the Department of Commerce.

§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 Productivity, Technology, and Innovation. The Clearinghouse shall serve as a central repository of information on initiatives by State and local governments to enhance the competitiveness of American business through the stimulation of productivity, technology, and innovation and Federal 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.

(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.

§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 2 of 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. 1152), retain and, subject to appropriations Acts, utilize its net revenues to the extent necessary to implement the plan submitted under subsection (f)(3)(D).

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15 USC 3704b

- (C) Enter into contracts for the performance of part or all of the functions performed by the Promotion Division of the Service prior to the date of enactment of this Act [enacted 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, 1992, only, retain and use all earned and unearned monies heretofore or hereafter received, including receipts, revenues, and advanced payments and deposits, to fund all obligations and expenses, including inventories and capital equipment. 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, (FOOTNOTE 1)
- (FOOTNOTE 1) So in original. Probably should be capitalized. 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 13(a)(4) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 USC 3710c(a)(4), over operating expenses.
- (4) Omitted.
- (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.

(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. 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

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15 USC 3704b-1/3704b-2

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.

- (3) The Secretary shall submit an annual report to the Congress which shall—
 - (A) summarize the operations of the Service during the preceding year, including financial details and staff levels broken down 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) of this section.
- (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.

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

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

§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 for dissemination to the private sector, academia, State and local governments, and Federal agencies. Only information which would otherwise be available for public dissemination shall be transferred under this subsection. Such information shall include technical reports and information, computer software, application assessments generated pursuant to section 3710(c) of this title, 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.

§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;
- (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;

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15 USC 3706

- (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, entrepreneurship, 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 exclusive license basis to any inventions conceived or made under the auspices of the Center; and
 - (B) the consideration of means to place the Center, to the maximum extent feasible, on a self-sustaining basis;
- (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.

§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 grant made or cooperative agreement entered into under this section shall keep such records as the Secretary shall by regulation prescribe as being necessary and appropriate to facilitate effective audit and evaluation, including records which fully disclose the amount and disposition by such proceeds, the 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.

§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. The objective of the Centers is to enhance technological innovation as provided in 3705(a) of this title through the conduct of activities as provided in section 3705(b) of this title.

(b) Planning grants

The National Science Foundation is authorized to make available nonrenewable planning grants to universities of 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 Act of 1950 (42 U.S.C. 1861 et seq.) and other pertinent Acts.

§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

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15 USC 3709/3710

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 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 opportunity to comment on any proposed program of activity under section 3705, 3707, 3710, 3710d, 3711a, or 3712 of this title before funds are committed to such program in order to mount complementary efforts and avoid duplication.

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

§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 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.

(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 opinion of the laboratory may have potential commercial applications;
- (2) to provide and disseminate information on federally owned or originated products, processes, and services having potential application to State and local governments and to private industry;
- (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

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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

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;
- (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;
 - (H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations;
 - (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;
 - (J) seek advice in each Federal laboratory consortium region from representatives of State and local governments, large and small businesses, universities, and other appropriate persons on the effectiveness of the program (and any such advice shall be provided at no expense to the Government); and
 - (K) work with the Director of the National Institute on Disability and Rehabilitation Research to compile a compendium of current and projected Federal laboratory technologies and projects that have or will have an intended or recognized impact on the available range of assistive technology for individuals with disabilities (as defined in section 3002 of title 29), including technologies and projects that incorporate the principles of universal design (as defined in section 3002 of title 29), as appropriate.
- (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.

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- (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.
 - (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 the amount so transferred by that agency (as determined under such subparagraph) would exceed \$10,000.
 - (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.
- (f) Agency reports on utilization
- (1) In general

Each Federal agency which operates or directs one or more Federal laboratories or which conducts activities under sections 207 and 209 of title 35, United States Code, shall report annually to the Office of Management and Budget, as part of the agency's annual budget submission, on the activities performed by that agency and its Federal laboratories under the provisions of this section and of sections 207 and 209 of title 35, United States Code.
 - (2) Contents

The report shall include—

 - (A) an explanation of the agency's technology transfer program for the preceding fiscal year and the agency's plans for conducting its technology

transfer function, including its plans for securing intellectual property rights in laboratory innovations with commercial promise and plans for managing its intellectual property so as to advance the agency's mission and benefit the competitiveness of United States industry; and

- (B) information on technology transfer activities for the preceding fiscal year, including
- (i) the number of patent applications filed;
 - (ii) the number of patents received;
 - (iii) the number of fully-executed licenses which received royalty income in the preceding fiscal year, categorized by whether they are exclusive, partially-exclusive, or non-exclusive, and the time elapsed from the date on which the license was requested by the licensee in writing to the date the license was executed;
 - (iv) the total earned royalty income including such statistical information as the total earned royalty income, of the top 1 percent, 5 percent, and 20 percent of the licenses, the range of royalty income, and the median, except where disclosure of such information would reveal the amount of royalty income associated with an individual license or licensee;
 - (v) what disposition was made of the income described in clause (iv);
 - (vi) the number of licenses terminated for cause; and
 - (vii) any other parameters or discussion that the agency deems relevant or unique to its practice of technology transfer.
- (3) Copy to Secretary; Attorney General; Congress

The agency shall transmit a copy of the report to the Secretary of Commerce and the Attorney General for inclusion in the annual report to Congress and the President required by subsection (g)(2).

(4) Public availability

Each Federal agency reporting under this subsection is also strongly encouraged to make the information contained in such report available to the public through Internet sites or other electronic means.

(g) Functions of Secretary

- (1) The Secretary in consultation with other Federal agencies, may—
- (A) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;

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- (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) Reports

(A) Annual report required—The Secretary, in consultation with the Attorney General and the Commissioner of Patents and Trademarks, shall submit each fiscal year, beginning 1 year after the enactment of the Technology Transfer Commercialization Act of 2000, a summary report to the President, the United States Trade Representative, and the Congress on the use by Federal agencies and the Secretary of the technology transfer authorities specified in this Act and in sections 207 and 209 of title 35, United States Code.

(B) Content—The report shall—

- (i) draw upon the reports prepared by the agencies under subsection (f);
- (ii) discuss technology transfer best practices and effective approaches in the licensing and transfer of technology in the context of the agencies' missions; and
- (iii) discuss the progress made toward development of additional useful measures of the outcomes of technology transfer programs of Federal agencies.

(C) Public availability—The Secretary shall make the report available to the public through Internet sites or other electronic means.

(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) Duplication of reporting

The reporting obligations imposed by this section—

- (1) are not intended to impose requirements that duplicate requirements imposed by the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note);
- (2) are to be implemented in coordination with the implementation of that Act; and
- (3) are satisfied if an agency provided the information concerning technology transfer activities described in this section in its annual submission under the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note).

(i) Research equipment

The Director of a laboratory, or the head of any Federal agency or department, may loan, lease, or 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 this section.

§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

- (1) Under an agreement entered into pursuant to subsection (a)(1) of this section, the laboratory may 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, or subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement for reasonable compensation when appropriate. The laboratory shall ensure, through such agreement, that the collaborating party has the option to choose an exclusive license for a pre-negotiated field of use for any such invention under the agreement or, if there is more than one collaborating party, that the collaborating parties are offered the option to hold licensing rights that collectively encompass the rights that would be held under such an exclusive license by one party. In consideration for the Government's contribution under the agreement, grants under this paragraph shall be subject to the following explicit conditions:

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

15 USC 3710a

- (A) A nonexclusive, nontransferable, irrevocable, paid-up license from the collaborating party to the laboratory to practice the invention or have the invention practiced throughout the world by or on behalf of the Government. In the exercise of such license, the Government shall not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of section 552(b)(4) of title 5 or which would be considered as such if it had been obtained from a non-Federal party.
 - (B) If a laboratory assigns title or grants an exclusive license to such an invention, the Government shall retain the right—
 - (i) to require the collaborating party to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in the applicant's licensed field of use, on terms that are reasonable under the circumstances; or
 - (ii) if the collaborating party fails to grant such a license, to grant the license itself.
 - (C) The Government may exercise its right retained under subparagraph (B) only in exceptional circumstances and only if the Government determines that—
 - (i) the action is necessary to meet health or safety needs that are not reasonably satisfied by the collaborating party;
 - (ii) the action is necessary to meet requirements for public use specified by Federal regulations, and such requirements are not reasonably satisfied by the collaborating party; or
 - (iii) the collaborating party has failed to comply with an agreement containing provisions described in subsection (c)(4)(B) of this section. This determination is subject to administrative appeal and judicial review under section 203(2) of title 35.
- (2) Under agreements entered into pursuant to subsection (a)(1) of this section, the laboratory shall ensure that a collaborating party may retain title to any invention made solely by its employee in exchange for normally granting the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government for research or other Government purposes.
- (3) Under an agreement entered into pursuant to subsection (a)(1) of this section, a laboratory may—
- (A) accept, retain, and use funds, personnel, services, and property from a collaborating party and provide personnel, services, and property to a collaborating party;
 - (B) use funds received from a collaborating party in accordance with subparagraph (A) to hire personnel to carry out the agreement who will not be subject to full-time-equivalent restrictions of the agency;
 - (C) to the extent consistent with any applicable agency requirements or standards of conduct, permit an employee or former employee of the laboratory to participate in an effort to commercialize an invention

made by the employee or former employee while in the employment or service of the Government; and

- (D) 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) A collaborating party in an exclusive license in any invention made under an agreement entered into pursuant to subsection (a)(1) of this section shall have the right of enforcement under chapter 29 of title 35.
- (5) A Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement pursuant to subsection (a)(1) of this section may use or obligate royalties or other income accruing to the laboratory under such agreement with respect to any invention only—
 - (A) for payments to inventors;
 - (B) for purposes described in clauses (i), (ii), (iii), and (iv) of section 3710c(a)(1)(B) of this title; and
 - (C) for scientific research and development consistent with the research and development missions 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 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—

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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- (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 under this section before both approval of the agreement under clause (iv) and approval under this clause of a joint work statement.
- (ii) In any case in which an agency which has contracted with a non-Federal entity to operate a laboratory disapproves or requests the 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 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

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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 substantial purpose of the contract 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; and
 - (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.

§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 outstanding scientific or technological contributions of value to the United States due to commercial application or due to contributions to missions of the Federal agency or the Federal government, or
- (2) exemplary activities that promote the domestic transfer of science and technology 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.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

§3710c. Distribution of royalties received by Federal agencies

(a) In general

(1) Except as provided in paragraphs (2) and (4), any royalties or other payments received by a Federal agency from the licensing and assignment of inventions under agreements entered into by Federal laboratories under section 3710a of this title, and from the licensing of inventions of Federal laboratories under section 207 of title 35 or under any other provision of law, shall be retained by the laboratory which produced the invention and shall be disposed of as follows:

- (A) (i) The head of the agency or laboratory, or such individual's designee, shall pay each year the first \$2,000, and thereafter at least 15 percent, of the royalties or other payments, other than payments of patent costs as delineated by a license or assignment agreement, to the inventor or coinventors, if inventor's or coinventor's rights are assigned to the United States.
- (ii) An agency or laboratory may provide appropriate incentives, from royalties, or other payments, to laboratory employees who are not an inventor of such inventions but who substantially increased the technical value of such inventions.
- (iii) The agency or laboratory shall retain the royalties and other payments received from an invention until the agency or laboratory makes payments to employees of a laboratory under clause (i) or (ii).
- (B) The balance of the royalties or other payments shall be transferred by the agency to its laboratories, with the majority share of the royalties or other payments from any invention going to the laboratory where the invention occurred. The royalties or other payments so transferred to any laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the 2 succeeding fiscal years—
 - (i) to reward scientific, engineering, and technical employees of the laboratory, including developers of sensitive or classified technology, regardless of whether the technology has commercial applications;
 - (ii) to further scientific exchange among the laboratories of the agency;
 - (iii) for education and training of employees consistent with the research and development missions and objectives of the agency or laboratory, and for other activities that increase the potential for transfer of the technology of the laboratories of the agency;
 - (iv) for payment of expenses incidental to the administration and licensing of intellectual property by the agency or laboratory with respect to inventions made at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for intellectual property management and licensing services; or

- (v) for scientific research and development consistent with the research and development missions and objectives of the laboratory.
- (C) All royalties or other payments retained by the agency or laboratory after payments have been made pursuant to subparagraphs (A) and (B) that is unobligated and unexpended at the end of the second fiscal year succeeding the fiscal year in which the royalties and other payments were received shall be paid into the Treasury.
- (2) If, after payments to inventors under paragraph (1), the royalties or other payments received by an agency in any fiscal year exceed 5 percent of the budget 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 under paragraph (1)(B). 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 \$150,000 per year to any one person, unless the President approves a larger award (with the excess over \$150,000 being treated as a Presidential award under section 4504 of title 5).
- (4) A Federal agency receiving royalties or other payments 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 payments to the extent required to offset payments to inventors under clause (i) of paragraph (1)(A), costs and expenses incurred under clause (iv) of paragraph (1)(B), and the cost of foreign patenting and maintenance for any invention of the other agency. All royalties and other payments remaining after offsetting the payments to inventors, 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 paragraph (1)(B).
- (b) Certain assignments
- If the invention involved was one assigned to the Federal agency—
- (1) by a contractor, grantee, or participant, or an employee of a contractor, grantee, or participant, in an agreement or other arrangement with the agency, or
- (2) by an employee of the agency who was not working in the laboratory at the time the invention was made, the agency unit that was involved in such assignment shall be considered to be a laboratory for purposes of this section.

<p>For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to http://uscode.house.gov.</p>

15 USC 3710d/3711

(c) Reports

The Comptroller General shall transmit a report to the appropriate committees of the Senate and House of Representatives on the effectiveness of Federal technology transfer programs, including findings, conclusions, and recommendations for improvements in such programs. The report shall be integrated with, and submitted at the same time as, the report required by section 202(b)(3) of title 35, United States Code.

§3710d. Employee activities

(a) In general

If a Federal agency which has ownership of or the right of ownership to an invention made by a Federal employee 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 obtain or 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) "Special Government employees" defined

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.

§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.

§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 management, and which as a consequence are deserving of special recognition.
- (2) The presentation of the award shall be made by the President or the Secretary with such ceremonies as the President or the Secretary 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.
 - (D) Health care providers.
 - (E) Education providers.
- (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) In any year, not more than 18 awards may be made under this section to recipients who have not previously received an award under this section, and no award shall be made within any category described in paragraph (1) if there are no qualifying enterprises in that category.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

(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 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, findings, and conclusions of activities conducted pursuant to this section along with recommendations for possible modifications thereof.

§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.

§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 research and development in safety, energy savings, or environmental impact. No person may receive the award more than once every 5 years.

(c) Funding for award

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.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

§3712. Personnel exchanges

The Secretary, and the Secretary of Energy, and the Director of 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.

§3713. Authorization of appropriations

- (a)(1) There is authorized to be appropriated to the Secretary for the purposes of carrying out sections 11(g) and 16 of this Act [15 USCS §§ 3710(g), 3711] 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; and \$500,000 is authorized only for the patent licensing activities of the National Technical Information Service.
- (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 6 of this Act [15 USCS § 3704a] 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 Act [15 USCS §§ 3701 et seq.] only such sums may be appropriated as the Congress may authorize by law.

§3714. Spending authority

No payments shall be made or contracts shall be entered into pursuant to the provisions of this chapter (other than sections 12,13, and 14 [15 USC 3710a, 3710b, and 3710c]) except to such extent or in such amounts as are provided in advance in appropriation Acts.

§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 increase the likelihood of success in the conduct of cooperative or joint activities of such Federal laboratory with small business firms, institutions of higher education

as defined in section 1141(a) of title 20, or educational institutions within the meaning of section 2194 of title 10, United States Code; 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) Omitted

(c) “Partnership intermediary” defined

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, institutions of higher education as defined in section 1141(a) of title 20, or educational institutions within the meaning of section 2194 of title 10, United States Code, 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).

§3716. Critical industries

(a) Identification of industries and development of plan

The Secretary shall—

- (1) identify those civilian industries in the United States that are necessary to support a robust manufacturing infrastructure and critical to the economic security of the United States; and
- (2) list the major research and development initiatives being undertaken, and the substantial investments being made, by the Federal Government, including its research laboratories, in each of the critical industries identified under paragraph (1).

(b) Initial report

The Secretary shall submit a report to the Congress within 1 year after February 14, 1992, on the actions taken under subsection (a) of this section.

(c) Annual updates

The Secretary shall annually submit to the Congress an update of the report submitted under subsection (b) of this section. Each such update shall—

- (1) describe the status of each identified critical industry, including the advances and declines occurring since the most recent report; and
- (2) identify any industries that should be added to the list of critical industries.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

TITLE 35 — PATENTS

CHAPTER 18 — PATENT RIGHTS IN INVENTIONS MADE WITH FEDERAL ASSISTANCE

§200. Policy and objective

It is the policy and objective of the Congress to use the patent system to promote the utilization of inventions arising from federally supported research or development; to encourage maximum participation of small business firms in federally supported research and development efforts; to promote collaboration between commercial concerns and nonprofit organizations, including universities; to ensure that inventions made by nonprofit organizations and small business firms are used in a manner to promote free competition and enterprise without unduly encumbering future research and discovery; to promote the commercialization and public availability of inventions made in the United States by United States industry and labor; to ensure that the Government obtains sufficient rights in federally supported inventions to meet the needs of the Government and protect the public against nonuse or unreasonable use of inventions; and to minimize the costs of administering policies in this area.

§202. Disposition of rights

- (a) Each nonprofit organization or small business firm may, within a reasonable time after disclosure as required by paragraph (c)(1) of this section, elect to retain title to any subject invention: Provided, however, that a funding agreement may provide otherwise—
- (i) when the contractor is not located in the United States or does not have a place of business located in the United States or is subject to the control of a foreign government,
 - (ii) in exceptional circumstances when it is determined by the agency that restriction or elimination of the right to retain title to any subject invention will better promote the policy and objectives of this chapter,
 - (iii) when it is determined by a Government authority which is authorized by statute or Executive Order to conduct foreign intelligence or counter-intelligence activities that the restriction or elimination of the right to retain title to any subject invention is necessary to protect the security of such activities or,
 - (iv) when the funding agreement includes the operation of a Government-owned, contractor-operated facility of the Department of Energy primarily dedicated to that Department's naval nuclear propulsion or weapons related programs and all funding agreement limitations under this subparagraph on the contractor's right to elect title to a subject invention are limited to inventions occurring under the above two programs of the Department of Energy. The rights of the nonprofit organization or small business firm shall

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be subject to the provisions of paragraph (c) of this section and the other provisions of this chapter.

- (b) (1) The rights of the Government under subsection (a) shall not be exercised by a Federal agency unless it first determines that at least one of the conditions identified in clauses (i) through (iv) of subsection (a) exists. Except in the case of subsection (a)(iii), the agency shall file with the Secretary of Commerce, within thirty days after the award of the applicable funding agreement, a copy of such determination. In the case of a determination under subsection (a)(ii), the statement shall include an analysis justifying the determination. In the case of determinations applicable to funding agreements with small business firms, copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration. If the Secretary of Commerce believes that any individual determination or pattern of determinations is contrary to the policies and objectives of this chapter or otherwise not in conformance with this chapter, the Secretary shall so advise the head of the agency concerned and the Administrator of the Office of Federal Procurement Policy, and recommend corrective actions.
 - (2) Whenever the Administrator of the Office of Federal Procurement Policy has determined that one or more Federal agencies are utilizing the authority of clause (i) or (ii) of subsection (a) of this section in a manner that is contrary to the policies and objectives of this chapter, the Administrator is authorized to issue regulations describing classes of situations in which agencies may not exercise the authorities of those clauses.
 - (3) At least once every 5 years, the Comptroller General shall transmit a report to the Committees on the Judiciary of the Senate and House of Representatives on the manner in which this chapter is being implemented by the agencies and on such other aspects of Government patent policies and practices with respect to federally funded inventions as the Comptroller General believes appropriate.
 - (4) If the contractor believes that a determination is contrary to the policies and objectives of this chapter or constitutes an abuse of discretion by the agency, the determination shall be subject to the 203(b).
- (c) Each funding agreement with a small business firm or nonprofit organization shall contain appropriate provisions to effectuate the following—
- (1) That the contractor disclose each subject invention to the Federal agency within a reasonable time after it becomes known to contractor personnel responsible for the administration of patent matters, and that the Federal Government may receive title to any subject invention not disclosed to it within such time.
 - (2) That the contractor make a written election within two years after disclosure to the Federal agency (or such additional time as may be approved by the Federal agency) whether the contractor will retain title to a subject invention: Provided, That in any case where publication, on sale, or public use, has initiated the one year statutory period in which valid patent protection can still be obtained in the United States, the period for election may be shortened by the Federal agency to a date that is not more than sixty days prior to the end of the statutory period: And provided further, That the

Federal Government may receive title to any subject invention in which the contractor does not elect to retain rights or fails to elect rights within such times.

- (3) That a contractor electing rights in a subject invention agrees to file a patent application prior to any statutory bar date that may occur under this title due to publication, on sale, or public use, and shall thereafter file corresponding patent applications in other countries in which it wishes to retain title within reasonable times, and that the Federal Government may receive title to any subject inventions in the United States or other countries in which the contractor has not filed patent applications on the subject invention within such times.
- (4) With respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferrable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world: Provided, That the funding agreement may provide for such additional rights, including the right to assign or have assigned foreign patent rights in the subject invention, as are determined by the agency as necessary for meeting the obligations of the United States under any treaty, international agreement, arrangement of cooperation, memorandum of understanding, or similar arrangement, including military agreement relating to weapons development and production.
- (5) The right of the Federal agency to require periodic reporting on the utilization or efforts at obtaining utilization that are being made by the contractor or his licensees or assignees: Provided, That any such information as well as any information on utilization or efforts at obtaining utilization obtained as part of a proceeding under section 203 of this chapter shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.
- (6) An obligation on the part of the contractor, in the event a United States patent application is filed by or on its behalf or by any assignee of the contractor, to include within the specification of such application and any patent issuing thereon, a statement specifying that the invention was made with Government support and that the Government has certain rights in the invention.
- (7) In the case of a nonprofit organization—
 - (A) a prohibition upon the assignment of rights to a subject invention in the United States without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions (provided that such assignee shall be subject to the same provisions as the contractor);
 - (B) a requirement that the contractor share royalties with the inventor;

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- (C) except with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, a requirement that the balance of any royalties or income earned by the contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, be utilized for the support of scientific research or education;
 - (D) a requirement that, except where it proves infeasible after a reasonable inquiry, in the licensing of subject inventions shall be given to small business firms; and
 - (E) with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, requirements—
 - (i) that after payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, 100 percent of the balance of any royalties or income earned and retained by the contractor during any fiscal year up to an amount equal to 5 percent of the annual budget of the facility, shall be used by the contractor for scientific research, development, and education consistent with the research and development mission and objectives of the facility, including activities that increase the licensing potential of other inventions of the facility; provided that if said balance exceeds 5 percent of the annual budget of the facility, that 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent shall be used for the same purposes as described above in this clause (D); and
 - (ii) that, to the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by contractor employees on location at the facility.
- (8) The requirements of sections 203 and 204 of this chapter.
- (d) If a contractor does not elect to retain title to a subject invention in cases subject to this section, the Federal agency may consider and after consultation with the contractor grant requests for retention of rights by the inventor subject to the provisions of this Act and regulations promulgated hereunder.
 - (e) In any case when a Federal employee is a coinventor of any invention made with a nonprofit organization, a small business firm, or a non-Federal inventor, the Federal agency employing such coinventor may, for the purpose of consolidating rights in the invention and if it finds that it would expedite the development of the invention—
 - (1) license or assign whatever rights it may acquire in the subject invention to the nonprofit organization, small business firm, or non-Federal inventor in accordance with the provisions of this chapter; or
 - (2) acquire any rights in the subject invention from the nonprofit organization, small business firm, or non-Federal inventor, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction and no other transaction under this chapter is conditioned on such acquisition.
 - (f) (1) No funding agreement with a small business firm or nonprofit organization shall contain a provision allowing a Federal agency to require the licensing to third parties of inventions owned by the contractor that are not subject

inventions unless such provision has been approved by the head of the agency and a written justification has been signed by the head of the agency. Any such provision shall clearly state whether the licensing may be required in connection with the practice of a subject invention, a specifically identified work object, or both. The head of the agency may not delegate the authority to approve provisions or sign justifications required by this paragraph.

- (2) A Federal agency shall not require the licensing of third parties under any such provision unless the head of the agency determines that the use of the invention by others is necessary for the practice of a subject invention or for the use of a work object of the funding agreement and that such action is necessary to achieve the practical application of the subject invention or work object. Any such determination shall be on the record after an opportunity for an agency hearing. Any action commenced for judicial review of such determination shall be brought within sixty days after notification of such determination.

§207. Domestic and foreign protection of federally owned inventions

- (a) Each Federal agency is authorized to—
- (1) apply for, obtain, and maintain patents or other forms of protection in the United States and in foreign countries on inventions in which the Federal Government owns a right, title, or interest;
 - (2) grant nonexclusive, exclusive, or partially exclusive licenses under federally owned inventions, royalty-free or for royalties or other consideration, and on such terms and conditions, including the grant to the licensee of the right of enforcement pursuant to the provisions of chapter 29 of this title as determined appropriate in the public interest;
 - (3) undertake all other suitable and necessary steps to protect and administer rights to federally owned inventions on behalf of the Federal Government either directly or through contract, including acquiring rights for and administering royalties to the Federal Government in any invention, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction, to facilitate the licensing of a federally owned invention; and
 - (4) transfer custody and administration, in whole or in part, to another Federal agency, of the right, title, or interest in any federally owned invention.
- (b) For the purpose of assuring the effective management of Government-owned inventions, the Secretary of Commerce is authorized to—
- (1) assist Federal agency efforts to promote the licensing and utilization of Government-owned inventions;
 - (2) assist Federal agencies in seeking protection and maintaining inventions in foreign countries, including the payment of fees and costs connected therewith; and

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- (3) consult with and advise Federal agencies as to areas of science and technology research and development with potential for commercial utilization.

§209. Licensing federally owned inventions

(a) Authority

A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—

- (1) granting the license is a reasonable and necessary incentive to—
 - (A) call forth the investment capital and expenditures needed to bring the invention to practical application; or
 - (B) otherwise promote the invention's utilization by the public;
- (2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;
- (3) the applicant makes a commitment to achieve practical application of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;
- (4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and
- (5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

(b) Manufacture in United States

A Federal agency shall normally grant a license under section 207(a)(2) to use or sell any federally owned invention in the United States only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

(c) Small business

First preference for the granting of any exclusive or partially exclusive licenses under section 207(a)(2) shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.

(d) Terms and conditions

Any licenses granted under section 207(a)(2) shall contain such terms and conditions as the granting agency considers appropriate, and shall include provisions—

- (1) Retaining a nontransferable, irrevocable, paid-up license for any Federal agency to practice the invention or have the invention practiced throughout the world by or on behalf of the Government of the United States;

- (2) requiring periodic reporting on utilization of the invention, and utilization efforts, by the licensee, but only to the extent necessary to enable the Federal agency to determine whether the terms of the license are being complied with, except that any such report shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code; and
- (3) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—
 - (A) the licensee is not executing its commitment to achieve practical application of the invention, including commitments contained in any plan submitted in support of its request for a license, and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical application of the invention;
 - (B) the licensee is in breach of an agreement described in subsection (b);
 - (C) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; or
 - (D) the licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.

(e) Public notice

No exclusive or partially exclusive license may be granted under section 207(a)(2) unless public notice of the intention to grant an exclusive or partially exclusive license on a federally owned invention has been provided in an appropriate manner at least 15 days before the license is granted, and the Federal agency has considered all comments received before the end of the comment period in response to that public notice. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

(f) Plan

No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development or marketing of the invention, except that any such plan shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.

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SECTION 2

Special Legislative Provisions Applicable to One Agency

TITLE 10 — ARMED FORCES

CHAPTER 111 — SUPPORT OF SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION

§2194. Education partnerships

- (a) The Secretary of Defense shall authorize the director of each defense laboratory to enter into one or more education partnership agreements with educational institutions in the United States for the purpose of encouraging and enhancing study in scientific disciplines at all levels of education. The educational institutions referred to in the preceding sentence are local educational agencies, colleges, universities, and any other nonprofit institutions that are dedicated to improving science, mathematics, and engineering education.
- (b) Under a partnership agreement entered into with an educational institution under this section, the director of a defense laboratory may provide, and is encouraged to provide, assistance to the educational institution by—
 - (1) loaning defense laboratory equipment to the institution for any purpose and duration in support of such agreement that the director considers appropriate;
 - (2) notwithstanding the provisions of subtitle I of title 40 and title III of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 471 et seq.) or any provision of law or regulation relating to transfers of surplus property, transferring to the institution any computer equipment, or other scientific equipment, that is—
 - (A) commonly used by educational institutions;
 - (B) surplus to the needs of the defense laboratory; and
 - (C) determined by the director to be appropriate for support of such agreement;
 - (3) making laboratory personnel available to teach science courses or to assist in the development of science courses and materials for the institution;
 - (4) involving faculty and students of the institution in defense laboratory research projects;
 - (5) cooperating with the institution in developing a program under which students may be given academic credit for work on defense laboratory research projects; and
 - (6) providing academic and career advice and assistance to students of the institution.
- (c) The Secretary of Defense shall ensure that the director of each defense laboratory shall give a priority under this section to entering into an education partnership agreement with one or more historically Black colleges and universities and

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other minority institutions referred to in paragraphs (3), (4), and (5) of section 312(b) of the Higher Education Act of 1965 (20 U.S.C. 1058(b)).

- (d) The Secretary of Defense shall ensure that, in entering into education partnership agreements under this section, the director of a defense laboratory gives a priority to providing assistance to educational institutions serving women, members of minority groups, and other groups of individuals who traditionally are involved in the engineering and science professions in disproportionately low numbers.
- (e) In this section—
 - (1) The term “defense laboratory” means any laboratory, product center, test center, depot, training and educational organization, or operational command under the jurisdiction of the Department of Defense.
 - (2) The term “local educational agency” has the meaning given such term in section 9101 of the Elementary and Secondary Education Act of 1965.

CHAPTER 131 – PLANNING AND COORDINATION

§2208. Working-capital funds

- (a) To control and account more effectively for the cost of programs and work performed in the Department of Defense, the Secretary of Defense may require the establishment of working-capital funds in the Department of Defense to—
 - (1) finance inventories of such supplies as he may designate; and
 - (2) provide working capital for such industrial-type activities, and such commercial-type activities that provide common services within or among departments and agencies of the Department of Defense, as he may designate.
- (b) Upon the request of the Secretary of Defense, the Secretary of the Treasury shall establish working-capital funds established under this section on the books of the Department of the Treasury.
- (c) Working-capital funds shall be charged, when appropriate, with the cost of—
 - (1) supplies that are procured or otherwise acquired, manufactured, repaired, issued, or used; and
 - (2) services or work performed; including applicable administrative expenses, and be reimbursed from available appropriations or otherwise credited for those costs, including applicable administrative expenses and costs of using equipment.
- (d) The Secretary of Defense may provide capital for working-capital funds by capitalizing inventories. In addition, such amounts may be appropriated for the purpose of providing capital for working-capital funds as have been specifically authorized by law.
- (e) Subject to the authority and direction of the Secretary of Defense, the Secretary of each military department shall allocate responsibility for its functions, powers, and duties to accomplish the most economical and efficient organization and

operation of the activities, and the most economical and efficient use of the inventories, for which working-capital funds are authorized by this section.

- (f) The requisitioning agency may not incur a cost for supplies drawn from inventories, or services or work performed by industrial-type or commercial-type activities for which working-capital funds may be established under this section, that is more than the amount of appropriations or other funds available for those purposes.
- (g) The appraised value of supplies returned to working-capital funds by a department, activity, or agency may be charged to that fund. The proceeds thereof shall be credited to current applicable appropriations and are available for expenditure for the same purposes that those appropriations are so available. Credits may not be made to appropriations under this subsection as the result of capitalization of inventories under subsection (d).
- (h) The Secretary of Defense shall prescribe regulations governing the operation of activities and use of inventories authorized by this section. The regulations may, if the needs of the Department of Defense require it and it is otherwise authorized by law, authorize supplies to be sold to, or services to be rendered or work performed for, persons outside the Department of Defense. However, supplies available in inventories financed by working capital funds established under this section may be sold to contractors for use in performing contracts with the Department of Defense. Working-capital funds shall be reimbursed for supplies so sold, services so rendered, or work so performed by charges to applicable appropriations or payments received in cash.
- (i) For provisions relating to sales outside the Department of Defense of manufactured articles and services by a working-capital funded Army industrial facility (including a Department of the Army arsenal) that manufactures large caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof, see section 4543 of this title.
- (j)(1) The Secretary of a military department may authorize a working capital funded industrial facility of that department to manufacture or remanufacture articles and sell these articles, as well as manufacturing, remanufacturing, and engineering services provided by such facilities, to persons outside the Department of Defense if—
 - (A) the person purchasing the article or service is fulfilling a Department of Defense contract or a subcontract under a Department of Defense contract, and the solicitation for the contract or subcontract is open to competition between Department of Defense activities and private firms; or
 - (B) The Secretary would advance the objectives set forth in section 2474(b)(2) of this title by authorizing the facility to do so.
- (2) The Secretary of Defense may waive the conditions in paragraph (1) in the case of a particular sale if the Secretary determines that the waiver is

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necessary for reasons of national security and notifies Congress regarding the reasons for the waiver.

- (k) (1) Subject to paragraph (2), a contract for the procurement of a capital asset financed by a working-capital fund may be awarded in advance of the availability of funds in the working-capital fund for the procurement.
- (2) Paragraph (1) applies to any of the following capital assets that have a development or acquisition cost of not less than \$100,000:
 - (A) An unspecified minor military construction project under section 2805(c)(1) of this title.
 - (B) Automatic data processing equipment or software.
 - (C) Any other equipment.
 - (D) Any other capital improvement.
- (l) (1) An advance billing of a customer of a working-capital fund may be made if the Secretary of the military department concerned submits to Congress written notification of the advance billing within 30 days after the end of the month in which the advanced billing was made. The notification shall include the following:
 - (A) The reasons for the advance billing.
 - (B) An analysis of the effects of the advance billing on military readiness.
 - (C) An analysis of the effects of the advance billing on the customer.
- (2) The Secretary of Defense may waive the notification requirements of paragraph (1)—
 - (A) during a period of war or national emergency; or
 - (B) to the extent that the Secretary determines necessary to support a contingency operation.
- (3) The total amount of the advance billings rendered or imposed for all working-capital funds of the Department of Defense in a fiscal year may not exceed \$1,000,000,000.
- (4) In this subsection—
 - (A) The term “advance billing” with respect to a working-capital fund, means a billing of a customer by the fund, or a requirement for a customer to reimburse or otherwise credit the fund, for the cost of goods or services provided (or for other expenses incurred) on behalf of the customer that is rendered or imposed before the customer receives the goods or before the services have been performed.
 - (B) The term “customer” means a requisitioning component or agency.

(m) Capital asset subaccounts

Amounts charged for depreciation of capital assets shall be credited to a separate capital asset subaccount established within a working-capital fund.

(n) Separate accounting, reporting, and auditing of funds and activities

The Secretary of Defense, with respect to the working-capital funds of each Defense Agency, and the Secretary of each military department, with respect to

the working-capital funds of the military department, shall provide for separate accounting, reporting, and auditing of funds and activities managed through the working-capital funds.

(o) Charges for goods and services provided through the fund

Charges for goods and services provided for an activity through a working-capital fund shall include the following:

- (A) Amounts necessary to recover the full costs of the goods and services provided for that activity.
 - (B) Amounts for depreciation of capital assets, set in accordance with generally accepted accounting principles.
- (2) Charges for goods and services provided through a working-capital fund may not include the following:
- (A) Amounts necessary to recover the costs of a military construction project (as defined in section 2801(b) of this title), other than a minor construction project financed by the fund pursuant to section 2805(c)(1) of this title.
 - (B) Amounts necessary to cover costs incurred in connection with the closure or realignment of a military installation.
 - (C) Amounts necessary to recover the costs of functions designated by the Secretary of Defense as mission critical, such as ammunition handling safety, and amounts for ancillary tasks not directly related to the mission of the function or activity managed through the fund.

(p) Procedures for accumulation of funds

The Secretary of Defense, with respect to each working-capital fund of a Defense Agency, and the Secretary of a military department, with respect to each working-capital fund of the military department, shall establish billing procedures to ensure that the balance in that working-capital fund does not exceed the amount necessary to provide for the working-capital requirements of that fund, as determined by the Secretary.

(q) Annual reports and budget

The Secretary of Defense, with respect to each working-capital fund of a Defense Agency, and the Secretary of each military department, with respect to each working-capital fund of the military department, shall annually submit to Congress, at the same time that the President submits the budget under section 1105 of title 31, the following—

- (1) A detailed report that contains a statement of all receipts and disbursements of the fund (including such a statement for each subaccount of the fund) for the fiscal year ending in the year preceding the year in which the budget is submitted.
- (2) A detailed proposed budget for the operation of the fund for the fiscal year for which the budget is submitted.

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- (3) A comparison of the amounts actually expended for the operation of the fund for the fiscal year referred to in paragraph (1) with the amount proposed for the operation of the fund for that fiscal year in the President's budget.
- (4) A report on the capital asset subaccount of the fund that contains the following information:
 - (A) The opening balance of the subaccount as of the beginning of the fiscal year in which the report is submitted.
 - (B) The estimated amounts to be credited to the subaccount in the fiscal year in which the report is submitted.
 - (C) The estimated amounts of outlays to be paid out of the subaccount in the fiscal year in which the report is submitted.
 - (D) The estimated balance of the subaccount at the end of the fiscal year in which the report is submitted.
 - (E) A statement of how much of the estimated balance at the end of the fiscal year in which the report is submitted will be needed to pay outlays in the immediately following fiscal year that are in excess of the amount to be credited to the subaccount in the immediately following fiscal year.
- (r) Notification of Transfers
 - (1) Notwithstanding any authority provided in this section to transfer funds, the transfer of funds from a working-capital fund, including a transfer to another working-capital fund, shall not be made under such authority unless the Secretary of Defense submits, in advance, a notification of the proposed transfer to the congressional defense committees in accordance with customary procedures.
 - (2) The amount of a transfer covered by a notification under paragraph (1) that is made in a fiscal year does not count toward any limitation on the total amount of transfers that may be made for that fiscal year under authority provided to the Secretary of Defense in a law authorizing appropriations for a fiscal year for military activities of the Department of Defense or a law making appropriations for the Department of Defense.

CHAPTER 134 – MISCELLANEOUS ADMINISTRATIVE PROVISIONS

§2260. Licensing of intellectual property: retention of fees

(a) Authority

Under regulations prescribed by the Secretary of Defense, the Secretary concerned may license trademarks, service marks, certification marks, and collective marks owned or controlled by the Secretary concerned and may retain and expend fees received from such licensing in accordance with this section.

(b) Designated Marks

The Secretary concerned shall designate the trademarks, service marks, certification marks, and collective marks regarding which the Secretary will exercise the authority to retain licensing fees under this section.

(c) Use of Fees

The Secretary concerned shall use fees retained under this section for the following purposes:

- (1) For payment of the following costs incurred by the Secretary:
 - (A) Costs of securing trademark registrations.
 - (B) Costs of operating the licensing program under this section
- (2) For morale, welfare, and recreation activities under the jurisdiction of the Secretary, to the extent (if any) that the total amount of the licensing fees available under this section for a fiscal year exceed the total amount needed for such fiscal year under paragraph (1).

(d) Availability

Fees received in a fiscal year and retained under this section shall be available for obligation in such fiscal year and the following two fiscal years.

(e) Definitions

In this section, the terms “trademark”, “service mark”, “certification mark”, and “collective mark” have the meanings given such terms in section 45 of the Act of July 5, 1946 (commonly referred to as the Trademark Act of 1946; 15 U.S.C. 1127).

CHAPTER 137 – PROCUREMENT GENERALLY

§ 2319. Encouragement of new competitors

- (a) In this section, the term “qualification requirement” means a requirement for testing or other quality assurance demonstration that must be completed by an offeror before award of a contract.
- (b) Except as provided in subsection (c), the head of the agency shall, before establishing a qualification requirement—
 - (1) prepare a written justification stating the necessity for establishing the qualification requirement and specify why the qualification requirement must be demonstrated before contract award;
 - (2) specify in writing and make available to a potential offeror upon request all requirements which a prospective offeror, or its product, must satisfy in order to become qualified, such requirements to be limited to those least restrictive to meet the purposes necessitating the establishment of the qualification requirement;
 - (3) specify an estimate of the costs of testing and evaluation likely to be incurred by a potential offeror in order to become qualified;
 - (4) ensure that a potential offeror is provided, upon request and on a reimbursable basis, a prompt opportunity to demonstrate its ability to meet the standards

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specified for qualification using qualified personnel and facilities of the agency concerned or of another agency obtained through interagency agreement, or under contract, or other methods approved by the agency (including use of approved testing and evaluation services not provided under contract to the agency);

- (5) if testing and evaluation services are provided under contract to the agency for the purposes of clause (4), provide to the extent possible that such services be provided by a contractor who is not expected to benefit from an absence of additional qualified sources and who shall be required in such contract to adhere to any restriction on technical data asserted by the potential offeror seeking qualification; and
 - (6) ensure that a potential offeror seeking qualification is promptly informed as to whether qualification is attained and, in the event qualification is not attained, is promptly furnished specific information why qualification was not attained.
- (c) (1) Subsection (b) of this section does not apply with respect to a qualification requirement established by statute or administrative action before October 19, 1984, unless such requirement is a qualified products list.
- (2) (A) Except as provided in subparagraph (B), if it is unreasonable to specify the standards for qualification which a prospective offeror or its product must satisfy, a determination to that effect shall be submitted to the advocate for competition of the procuring activity responsible for the purchase of the item subject to the qualification requirement. After considering any comments of the advocate for competition reviewing such determination, the head of the purchasing office may waive the requirements of clauses (2) through (6) of subsection (b) for up to two years with respect to the item subject to the qualification requirement.
(B) The waiver authority provided in this paragraph does not apply with respect to a qualified products list.
 - (3) A potential offeror may not be denied the opportunity to submit and have considered an offer for a contract solely because the potential offeror (A) is not on a qualified bidders list, qualified manufacturers list, or qualified products list, or (B) has not been identified as meeting a qualification requirement established after October 19, 1984, if the potential offeror can demonstrate to the satisfaction of the contracting officer (or, in the case of a contract for the procurement of an aviation critical safety item or ship critical safety item, the head of the design control activity for such item) that the potential offeror or its product meets the standards established for qualification or can meet such standards before the date specified for award of the contract.
 - (4) Nothing contained in this subsection requires the referral of an offer to the Small Business Administration pursuant to section 8(b)(7) of the Small Business Act (15 U.S.C. 637(b)(7)) if the basis for the referral is a challenge by the offeror to either the validity of the qualification requirement or the offeror's compliance with such requirement.
 - (5) The head of an agency need not delay a proposed procurement in order to comply with subsection (b) or in order to provide a potential offeror with an opportunity to demonstrate its ability to meet the standards specified for qualification.

- (6) The requirements of subsection (b) also apply before enforcement of any qualified products list, qualified manufacturers list, or qualified bidders list.
- (d) (1) If the number of qualified sources or qualified products available to compete actively for an anticipated future requirement is fewer than two actual manufacturers or the products of two actual manufacturers, respectively, the head of the agency concerned shall—
- (A) periodically publish notice in the Commerce Business Daily soliciting additional sources or products to seek qualification, unless the contracting officer determines that such publication would compromise national security; and
- (B) bear the cost of conducting the specified testing and evaluation (excluding the costs associated with producing the item or establishing the production, quality control, or other system to be tested and evaluated) for a small business concern or a product manufactured by a small business concern which has met the standards specified for qualification and which could reasonably be expected to compete for a contract for that requirement, but such costs may be borne only if the head of the agency determines that such additional qualified sources or products are likely to result in cost savings from increased competition for future requirements sufficient to amortize the costs incurred by the agency within a reasonable period of time considering the duration and dollar value of anticipated future requirements.
- (2) The head of an agency shall require a prospective contractor requesting the United States to bear testing and evaluation costs under paragraph (1)(B) to certify as to its status as a small business concern under section 3 of the Small Business Act (15 U.S.C. 632).
- (e) Within seven years after the establishment of a qualification requirement under subsection (b) or within seven years following an agency's enforcement of a qualified products list, qualified manufacturers list, or qualified bidders list, any such qualification requirement shall be examined and revalidated in accordance with the requirements of subsection (b). The preceding sentence does not apply in the case of a qualification requirement for which a waiver is in effect under subsection (c)(2).
- (f) Except in an emergency as determined by the head of the agency, whenever the head of the agency determines not to enforce a qualification requirement for a solicitation, the agency may not thereafter enforce that qualification requirement unless the agency complies with the requirements of subsection (b).
- (g) Definitions – In this section:
- (1) The term “aviation critical safety item” means a part, an assembly, installation equipment, launch equipment, recovery equipment, or support equipment for an aircraft or aviation weapon system if the part, assembly,

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or equipment contains a characteristic any failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in the loss of or serious damage to the aircraft or weapon system, an unacceptable risk of personal injury or loss of life, or an uncommanded engine shutdown that jeopardizes safety.

- (2) The term “ship critical safety item” means any ship part, assembly, or support equipment containing a characteristic the failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in loss of or serious damage to the ship or unacceptable risk of personal injury or loss of life.
- (3) The term “design control activity”, with respect of an aviation critical safety item or ship critical safety item, means the systems command of a military department that is specifically responsible for ensuring the airworthiness of an aviation system or equipment, or the seaworthiness of a ship or ship equipment, in which such item is to be used.

CHAPTER 139 – RESEARCH AND DEVELOPMENT

§2358. Research and development projects

(a) Authority

The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that—

- (1) are necessary to the responsibilities of such Secretary’s department in the field of research and development; and
- (2) either—
 - (A) relate to weapon systems and other military needs; or
 - (B) are of potential interest to the Department of Defense.

(b) Authorized means

The Secretary of Defense or the Secretary of a military department may perform research and development projects—

- (1) by contract, cooperative agreement, or grant, in accordance with chapter 63 of title 31;
- (2) through one or more military departments;
- (3) by using employees and consultants of the Department of Defense; or
- (4) by mutual agreement with the head of any other department or agency of the Federal Government.

(c) Requirement of potential Department of Defense interest

Funds appropriated to the Department of Defense or to a military department may not be used to finance any research project or study unless the project or

study is, in the opinion of the Secretary of Defense or the Secretary of that military department, respectively, of potential interest to the Department of Defense or to such military department, respectively.

(d) Additional provisions applicable to cooperative agreements

Additional authorities, conditions, and requirements relating to certain cooperative agreements authorized by this section are provided in sections 2371 and 2371a of this title.

§2371. Research projects: transactions other than contracts and grants

(a) Additional forms of transactions authorized

The Secretary of Defense and the Secretary of each military department may enter into transactions (other than contracts, cooperative agreements, and grants) under the authority of this subsection in carrying out basic, applied, and advanced research projects. The authority under this subsection is in addition to the authority provided in section 2358 of this title to use contracts, cooperative agreements, and grants in carrying out such projects.

(b) Exercise of authority by Secretary of Defense

In any exercise of the authority in subsection (a), the Secretary of Defense shall act through the Defense Advanced Research Projects Agency or any other element of the Department of Defense that the Secretary may designate.

(c) Advance payments

The authority provided under subsection (a) may be exercised without regard to section 3324 of title 31.

(d) Recovery of funds

- (1) A cooperative agreement for performance of basic, applied, or advanced research authorized by section 2358 of this title and a transaction authorized by subsection (a) may include a clause that requires a person or other entity to make payments to the Department of Defense or any other department or agency of the Federal Government as a condition for receiving support under the agreement or other transaction.
- (2) The amount of any payment received by the Federal Government pursuant to a requirement imposed under paragraph (1) may be credited, to the extent authorized by the Secretary of Defense, to the appropriate account established under subsection (f). Amounts so credited shall be merged with other funds in the account and shall be available for the same purposes and the same period for which other funds in such account are available.

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(e) Conditions

- (1) The Secretary of Defense shall ensure that—
 - (A) to the maximum extent practicable, no cooperative agreement containing a clause under subsection (d) and no transaction entered into under subsection (a) provides for research that duplicates research being conducted under existing programs carried out by the Department of Defense; and
 - (B) to the extent that the Secretary determines practicable, the funds provided by the Government under a cooperative agreement containing a clause under subsection (d) or a transaction authorized by subsection (a) do not exceed the total amount provided by other parties to the cooperative agreement or other transaction.
- (2) A cooperative agreement containing a clause under subsection (d) or a transaction authorized by subsection (a) may be used for a research project when the use of a standard contract, grant, or cooperative agreement for such project is not feasible or appropriate.

(f) Support accounts

There is hereby established on the books of the Treasury separate accounts for each of the military departments and the Defense Advanced Research Projects Agency for support of research projects and development projects provided for in cooperative agreements containing a clause under subsection (d) and research projects provided for in transactions entered into under subsection (a). Funds in those accounts shall be available for the payment of such support.

(g) Regulations

The Secretary of Defense shall prescribe regulations to carry out this section.

(h) Annual report

- (1) Not later than 90 days after the end of each fiscal year, the Secretary of Defense shall submit to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives a report on the use by the Department of Defense during such fiscal year of—
 - (A) cooperative agreements authorized under section 2358 of this title that contain a clause under subsection (d); and
 - (B) transactions authorized by subsection (a).
- (2) The report shall include, with respect to the cooperative agreements and other transactions covered by the report, the following:
 - (A) The technology areas in which research projects were conducted under such agreements or other transactions.
 - (B) The extent of the cost-sharing among Federal Government and non-Federal sources.
 - (C) The extent to which the use of the cooperative agreements and other transactions—

- (i) has contributed to a broadening of the technology and industrial base available for meeting Department of Defense needs; and
 - (ii) has fostered within the technology and industrial base new relationships and practices that support the national security of the United States.
- (D) The total amount of payments, if any, that were received by the Federal Government during the fiscal year covered by the report pursuant to a clause described in subsection (d) that was included in the cooperative agreements and other transactions, and the amount of such payments, if any, that were credited to each account established under subsection (f).
- (3) No report is required under this subsection for a fiscal year after fiscal year 2006.
- (i) Protection of Certain Information From Disclosure
- (1) Disclosure of information described in paragraph (2) is not required, and may not be compelled, under section 552 of title 5 for five years after the date on which the information is received by the Department of Defense.
 - (2)
 - (A) Paragraph (1) applies to information described in subparagraph (B) that is in the records of the Department of Defense if the information was submitted to the Department in a competitive or noncompetitive process having the potential for resulting in an award, to the party submitting the information, of a cooperative agreement for performance of basic, applied, or advanced research authorized by section 2358 of this title or another transaction authorized by subsection (a).
 - (B) The information referred to in subparagraph (A) is the following:
 - (i) A proposal, proposal abstract, and supporting documents.
 - (ii) A business plan submitted on a confidential basis.
 - (iii) Technical information submitted on a confidential basis.

CHAPTER 148 — NATIONAL DEFENSE TECHNOLOGY AND INDUSTRIAL BASE, DEFENSE REINVESTMENT, AND DEFENSE CONVERSION

§2511. Defense dual-use critical technology program

(a) Establishment of program

The Secretary of Defense shall conduct a program to further the national security objectives set forth in section 2501(a) of this title by encouraging and providing for research, development, and application of dual-use critical technologies. The Secretary may make grants, enter into contracts, or enter into

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cooperative agreements and other transactions pursuant to section 2371 of this title in furtherance of the program. The Secretary shall identify projects to be conducted as part of the program.

(b) Assistance authorized

The Secretary of Defense may provide technical and other assistance to facilitate the achievement of the purposes of projects conducted under the program. In providing such assistance, the Secretary shall make available, as appropriate for the work to be performed, equipment and facilities of Department of Defense laboratories (including the scientists and engineers at those laboratories) for purposes of projects selected by the Secretary.

(c) Financial commitment of non-federal government participants

- (1) The total amount of funds provided by the Federal Government for a project conducted under the program may not exceed 50 percent of the total cost of the project. However, the Secretary of Defense may agree to a project in which the total amount of funds provided by the Federal Government exceeds 50 percent if the Secretary determines the project is particularly meritorious, but the project would not otherwise have sufficient non-Federal funding or in-kind contributions.
- (2) The Secretary may prescribe regulations to provide for consideration of in-kind contributions by non-Federal Government participants in a project conducted under the program for the purpose of calculating the share of the project costs that has been or is being undertaken by such participants. In such regulations, the Secretary may authorize a participant that is a small business concern to use funds received under the Small Business Innovation Research Program or the Small Business Technology Transfer Program to help pay the costs of project activities. Any such funds so used may be considered in calculating the amount of the financial commitment undertaken by the non-Federal Government participants unless the Secretary determines that the small business concern has not made a significant equity percentage contribution in the project from non-Federal sources.
- (3) The Secretary shall consider a project proposal submitted by a small business concern without regard to the ability of the small business concern to immediately meet its share of the anticipated project costs. Upon the selection of a project proposal submitted by a small business concern, the small business concern shall have a period of not less than 120 days in which to arrange to meet its financial commitment requirements under the project from sources other than a person of a foreign country. If the Secretary determines upon the expiration of that period that the small business concern will be unable to meet its share of the anticipated project costs, the Secretary shall revoke the selection of the project proposal submitted by the small business concern.

(d) Selection process

Competitive procedures shall be used in the conduct of the program.

(e) Selection criteria

The criteria for the selection of projects under the program shall include the following—

- (1) The extent to which the proposed project advances and enhances the national security objectives set forth in section 2501(a) of this title.
- (2) The technical excellence of the proposed project.
- (3) The qualifications of the personnel proposed to participate in the research activities of the proposed project.
- (4) An assessment of timely private sector investment in activities to achieve the goals and objectives of the proposed project other than through the project.
- (5) The potential effectiveness of the project in the further development and application of each technology proposed to be developed by the project for the national technology and industrial base.
- (6) The extent of the financial commitment of eligible firms to the proposed project.
- (7) The extent to which the project does not unnecessarily duplicate projects undertaken by other agencies.

(f) Regulations

The Secretary of Defense shall prescribe regulations for the purposes of this section.

§2514. Encouragement of technology transfer

(a) Encouragement of transfer required

The Secretary of Defense shall encourage, to the extent consistent with national security objectives, the transfer of technology between laboratories and research centers of the Department of Defense and other Federal agencies, State and local governments, colleges and universities, and private persons in cases that are likely to result in accomplishing the objectives set forth in section 2501(a) of this title.

(b) Examination and implementation of methods to encourage transfer

The Secretary shall examine and implement methods, in addition to the encouragement referred to in subsection (a) and the program described in subsection (c), that are consistent with national security objectives and will enable Department of Defense personnel to promote technology transfer.

(c) Program to encourage diversification of defense laboratories

- (1) The Secretary of Defense shall establish and implement a program to be known as the Federal Defense Laboratory Diversification Program (hereinafter in this subsection referred to as the “Program”). The purpose of the Program shall be to encourage greater cooperation in research and production activities carried out by defense laboratories and by private industry of the United States in order to enhance and improve the products of such research and production activities.

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- (2) Under the Program, the defense laboratories, in coordination with the Office of Technology Transfer in the Office of the Secretary of Defense, shall carry out cooperative activities with private industry in order to promote (by the use or exchange of patents, licenses, cooperative research and development agreements and other cooperative agreements, and the use of symposia, meetings, and other similar mechanisms) the transfer of defense or dual-use technologies from the defense laboratories to private industry, and the development and application of such technologies by the defense laboratories and private industry, for the purpose of the commercial utilization of such technologies by private industry.
- (3)(A) Under the Program, the defense laboratories and research centers may, through leases, contracts, or other appropriate arrangements, provide facilities, services, and equipment to private industry in order to promote accelerated development of critical technologies and technology transfer initiatives that support the Department of Defense.
- (B) The facilities, services, and equipment provided under this paragraph shall be provided on a noninterference basis.
- (C) The defense laboratory or research center:
- (i) shall charge, accept, and retain fees in amounts necessary to recover the full costs of the facilities, services, and equipment provided, including capital improvement costs, utility and service costs, and equipment depreciation costs; and
 - (ii) may charge, accept, and retain fees for providing the facilities, services, and equipment.
- (D) The defense laboratory or research center may accept payment in cash or in kind for fees charged under subparagraph (C).
- (E) Fees accepted under subparagraph (C) shall be credited to the account that was used to cover the costs for which the payment was provided. Amounts so credited shall be merged with amounts in that account, and shall be available for the same purposes, and subject to the same conditions and limitations, as other amounts in that account.
- (4) The Secretary of Defense shall develop and annually update a plan for each defense laboratory that participates in the Program under which plan the laboratory shall carry out cooperative activities with private industry to promote the transfers described in subsection (b).
- (5) In this subsection, the term “defense laboratory” means any laboratory owned or operated by the Department of Defense that carries out research in fiscal year 1993 in an amount in excess of \$50,000,000.

§ 2515. Office of Technology Transition

(a) Establishment

The Secretary of Defense shall establish within the Office of the Secretary of Defense an Office of Technology Transition.

(b) Purpose

The purpose of the office shall be to ensure, to the maximum extent practicable, that technology developed for national security purposes is integrated into the

private sector of the United States in order to enhance national technology and industrial base, reinvestment, and conversion activities consistent with the objectives set forth in section 2501(a) of this title.

(c) Duties

The head of the office shall ensure that the office—

- (1) monitors all research and development activities that are carried out by or for the military departments and Defense Agencies;
- (2) identifies all such research and development activities that use technologies, or result in technological advancements, having potential nondefense commercial applications;
- (3) serves as a clearinghouse for, coordinates, and otherwise actively facilitates the transition of such technologies and technological advancements from the Department of Defense to the private sector;
- (4) conducts its activities in consultation and coordination with the Department of Energy and the Department of Commerce; and
- (5) provides private firms with assistance to resolve problems associated with security clearances, proprietary rights, and other legal considerations involved in such a transition of technology.

(d) Biennial Report

- (1) The Secretary of Defense shall submit to the congressional defense committees a biennial report on the activities of the Office. The report shall be submitted each even-numbered year at the same time that the budget is submitted to Congress by the President pursuant to section 1105 of title 31. The report shall contain a discussion of the accomplishments of the Office during the two fiscal years preceding the fiscal year in which the report is submitted.

CHAPTER 148 — NATIONAL DEFENSE TECHNOLOGY AND INDUSTRIAL BASE, DEFENSE REINVESTMENT, AND DEFENSE CONVERSION

§2539b. Availability of samples, drawings, information, equipment, materials, and certain services

(a) Authority

The Secretary of Defense and the Secretaries of the military departments, under regulations prescribed by the Secretary of Defense and when determined by the Secretary of Defense of the Secretary concerned to be in the interest of national defense, may each:

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- (1) Sell, rent, lend, or give samples, drawings, and manufacturing or other information (subject to the rights of third parties) to any person or entity;
 - (2) Sell, rent, or lend government equipment or materials to any person or entity
 - (A) For use in independent research and development programs, subject to the condition that the equipment or material be used exclusively for such research and development; or
 - (B) For use in demonstrations to a friendly foreign government; and
 - (3) Make available to any person or entity, at an appropriate fee, the services of any government laboratory, center, range, or other testing facility for the testing of materials, equipment, models, computer software, and other items
- (b) Confidentiality of Test Results
- The results of tests performed with services made available under subsection (a)(3) are confidential and may not be disclosed outside the Federal Government without the consent of the persons for whom the tests are performed.
- (c) Fees
- Fees for services made available under subsection (a)(3) shall be established in the regulations prescribed pursuant to subsection (a). Such fees may not exceed the amount necessary to recoup the direct and indirect costs involved, such as direct costs of utilities, contractor support, and salaries of personnel that are incurred by the United States to provide for the testing.
- (d) Use of Fees
- Fees received for services made available under subsection (a)(3) may be credited to the appropriations or other funds of the activity making such services available.

CHAPTER 152 — ISSUE OF SUPPLIES, SERVICES, AND FACILITIES

§2563. Articles and services of industrial facilities: sale to persons outside the Department of Defense

- (a) Authority to sell outside DOD
- (1) The Secretary of Defense may sell in accordance with this section to a person outside the Department of Defense articles and services referred to in paragraph (2) that are not available from any United States commercial source.
 - (2) (A) Except as provided in subparagraph (B), articles and services referred to in paragraph (1) are articles and services that are manufactured or performed by any working-capital funded industrial facility of the armed forces.
 - (B) The authority in this section does not apply to sales of articles and services by a working-capital funded Army industrial facility (including

a Department of the Army arsenal) that manufactures large caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof, which are governed by regulations required by section 4543 of this title.

(b) Designation of participating industrial facilities

The Secretary may designate facilities referred to in subsection (a) as the facilities from which articles and services manufactured or performed by such facilities may be sold under this section.

(c) Conditions for sales

- (1) A sale of articles or services may be made under this section only if—
 - (A) the Secretary of Defense determines that the articles or services are not available from a commercial source in the United States;
 - (B) the purchaser agrees to hold harmless and indemnify the United States, except as provided in paragraph (3), from any claim for damages or injury to any person or property arising out of the articles or services;
 - (C) the articles or services can be substantially manufactured or performed by the industrial facility concerned with only incidental subcontracting;
 - (D) it is in the public interest to manufacture the articles or perform the services;
 - (E) the Secretary determines that the sale of the articles or services will not interfere with the military mission of the industrial facility concerned; and
 - (F) the sale of the goods and services is made on the basis that it will not interfere with performance of work by the industrial facility concerned for the Department of Defense.
- (2) The Secretary of Defense may waive the condition in paragraph (1)(A) and subsection (a)(1) that an article or service must be not available from a United States commercial source in the case of a particular sale if the Secretary determines that the waiver is necessary for reasons of national security and notifies Congress regarding the reasons for the waiver.
- (3) Paragraph (1)(B) does not apply in any case of willful misconduct or gross negligence or in the case of a claim by purchaser of articles or services under this section that damages or injury arose from the failure of the Government to comply with quality, schedule, or cost performance requirements in the contract to provide the article or services.

(d) Methods of sale

- (1) The Secretary shall permit a purchaser of articles or services under this section to use advance incremental funding to pay for the articles or services.
- (2) In the sale of articles and services under this section, the Secretary shall—

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- (A) charge the purchaser, at a minimum, the variable costs, capital improvement costs, and equipment depreciation costs that are associated with the articles or services sold;
- (B) enter into a firm, fixed-price contract or, if agreed by the purchaser, a cost reimbursement contract for the sale; and
- (C) develop and maintain (from sources other than appropriated funds) working capital to be available for paying design costs, planning costs, procurement costs, and other costs associated with the articles or services sold.

(e) Deposit of proceeds

Proceeds from sales of articles and services under this section shall be credited to the funds, including working capital funds and operation and maintenance funds, incurring the costs of manufacture or performance.

(f) Relationship to Arms Export Control Act

Nothing in this section shall be construed to affect the application of the export controls provided for in section 38 of the Arms Export Control Act (22 U.S.C. 2778) to items which incorporate or are produced through the use of an article sold under this section.

(g) Definitions

In this section—

- (1) The term “advance incremental funding,” with respect to a sale of articles or services, means a series of partial payments for the articles or services that includes—
 - (A) one or more partial payments before the commencement of work or the incurring of costs in connection with the manufacture of the articles or the performance of the services, as the case may be; and
 - (B) subsequent progress payments that result in full payment being completed as the required work is being completed.
- (2) The term “not available,” with respect to an article or service proposed to be sold under this section, means that the article or service is unavailable from a commercial source in the required quantity and quality or within the time required.
- (3) The term “variable costs,” with respect to sales of articles or services, means the costs that are expected to fluctuate directly with the volume of sales and—
 - (A) in the case of articles, the volume of production necessary to satisfy the sales orders; or
 - (B) in the case of services, the extent of the services sold.

CHAPTER 159 — REAL PROPERTY; RELATED PERSONAL PROPERTY; AND LEASE OF NON-EXCESS PROPERTY

§2681. Use of test and evaluation installations by commercial entities

(a) Contract authority

The Secretary of Defense may enter into contracts with commercial entities that desire to conduct commercial test and evaluation activities at a Major Range and Test Facility Installation.

(b) Termination or limitation of contract under certain circumstances

A contract entered into under subsection (a) shall contain a provision that the Secretary of Defense may terminate, prohibit, or suspend immediately any commercial test or evaluation activity to be conducted at the Major Range and Test Facility Installation under the contract if the Secretary of Defense certifies in writing that the test or evaluation activity is or would be detrimental—

- (1) to the public health and safety;
- (2) to property (either public or private); or
- (3) to any national security interest or foreign policy interest of the United States.

(c) Contract price

A contract entered into under subsection (a) shall include a provision that requires a commercial entity using a Major Range and Test Facility Installation under the contract to reimburse the Department of Defense for all direct costs to the United States that are associated with the test and evaluation activities conducted by the commercial entity under the contract. In addition, the contract may include a provision that requires the commercial entity to reimburse the Department of Defense for such indirect costs related to the use of the installation as the Secretary of Defense considers to be appropriate. The Secretary may delegate to the commander of the Major Range and Test Facility Installation the authority to determine the appropriateness of the amount of indirect costs included in such a contract provision.

(d) Retention of funds collected from commercial users

Amounts collected under subsection (c) from a commercial entity conducting test and evaluation activities at a Major Range and Test Facility Installation shall be credited to the appropriation accounts under which the costs associated with the test and evaluation activities of the commercial entity were incurred.

(e) Regulations and limitations

The Secretary of Defense shall prescribe regulations to carry out this section.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

(f) Definitions

In this section—

- (1) The term “Major Range and Test Facility Installation” means a test and evaluation installation under the jurisdiction of the Department of Defense and designated as a Major Range and Test Facility Installation by the Secretary.
- (2) The term “direct costs” includes the cost of—
 - (A) labor, material, facilities, utilities, equipment, supplies, and any other resources damaged or consumed during test or evaluation activities or maintained for a particular commercial entity; and
 - (B) construction specifically performed for a commercial entity to conduct test and evaluation activities.

CHAPTER 433 — PROCUREMENT

§4543. Army industrial facilities: sales of manufactured articles or services outside Department of Defense

(a) Authority to sell outside DOD

Regulations under section 2208(h) of this title shall authorize a working-capital funded Army industrial facility (including a Department of the Army arsenal) that manufactures large caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof to sell manufactured articles or services to a person outside the Department of Defense if—

- (1) in the case of an article, the article is sold to a United States manufacturer, assembler, developer, or other concern—
 - (A) for use in developing new products;
 - (B) for incorporation into items to be sold to, or to be used in a contract with, an agency of the United States;
 - (C) for incorporation into items to be sold to, or to be used in a contract with, or to be used for purposes of soliciting a contract with, a friendly foreign government; or
 - (D) for use in commercial products;
- (2) in the case of an article, the purchaser is determined by the Department of Defense to be qualified to carry out the proposed work involving the article to be purchased;
- (3) the sale is to be made on a basis that does not interfere with performance of work by the facility for the Department of Defense or for a contractor of the Department of Defense;
- (4) in the case of services, the services are related to an article authorized to be sold under this section and are to be performed in the United States for the purchaser;
- (5) the Secretary of the Army determines that the articles or services are not available from a commercial source located in the United States;

- (6) the purchaser of an article or service agrees to hold harmless and indemnify the United States, except in a case of willful misconduct or gross negligence, from any claim for damages or injury to any person or property arising out of the article or service;
- (7) the article to be sold can be manufactured, or the service to be sold can be substantially performed, by the industrial facility with only incidental subcontracting;
- (8) it is in the public interest to manufacture such article or perform such service; and
- (9) the sale will not interfere with performance of the military mission of the industrial facility.

(b) Additional requirements

The regulations shall also—

- (1) require that the authority to sell articles or services under the regulations be exercised at the level of the commander of the major subordinate command of the Army with responsibility over the facility concerned;
- (2) authorize a purchaser of articles or services to use advance incremental funding to pay for the articles or services; and
- (3) in the case of a sale of commercial articles or commercial services in accordance with subsection (a) by a facility that manufactures large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, authorize such facility—
 - (A) to charge the buyer, at a minimum, the variable costs that are associated with the commercial articles or commercial services sold;
 - (B) to enter into a firm, fixed-price contract or, if agreed by the buyer, a cost reimbursement contract for the sale; and
 - (C) to develop and maintain (from sources other than appropriated funds) working capital to be available for paying design costs, planning costs, procurement costs, and other costs associated with the commercial articles or commercial services sold.

(c) Relationship to Arms Export Control Act

Nothing in this section shall be construed to affect the application of the export controls provided for in section 38 of the Arms Export Control Act (22 U.S.C. 2778) to items which incorporate or are produced through the use of an article sold under this section.

(d) Definitions

In this section—

- (1) The term “commercial article” means an article that is usable for a nondefense purpose.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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- (2) The term “commercial service” means a service that is usable for a nondefense purpose.
- (3) The term “advance incremental funding,” with respect to a sale of articles or services, means a series of partial payments for the articles or services that includes—
 - (A) one or more partial payments before the commencement of work or the incurring of costs in connection with the production of the articles or the performance of the services, as the case may be; and
 - (B) subsequent progress payments that result in full payment being completed as the required work is being completed.
- (4) The term “variable costs,” with respect to sales of articles or services, means the costs that are expected to fluctuate directly with the volume of sales and—
 - (A) in the case of articles, the volume of production necessary to satisfy the sales orders; or
 - (B) in the case of services, the extent of the services sold.

TITLE 16 — CONSERVATION

CHAPTER 36 — FOREST AND RANGELAND RENEWABLE RESOURCES PLANNING

§1650. Hardwood technology transfer and applied research

(a) Authority of Secretary

The Secretary of Agriculture (hereinafter the “Secretary”) is hereby and hereafter authorized to conduct technology transfer and development, training, dissemination of information and applied research in the management, processing and utilization of the hardwood forest resource. This authority is in addition to any other authorities which may be available to the Secretary, including but not limited to, the Cooperative Forestry Assistance Act of 1978, as amended (16 U.S.C. 2101 et seq.), and the Forest and Rangeland Renewable Resources Act of 1978, as amended (16 U.S.C. 1600-1614). (FOOTNOTE 1)

(FOOTNOTE 1) So in original.

(b) Grants, contracts, and cooperative agreements; gifts and donations

In carrying out this authority, the Secretary may enter into grants, contracts, and cooperative agreements with public and private agencies, organizations, corporations, institutions and individuals. The Secretary may accept gifts and donations pursuant to section 2269 of title 7, including gifts and donations from a donor that conducts business with any agency of the Department of Agriculture or is regulated by the Secretary of Agriculture.

(c) Use of assets of Wood Education and Resource Center; establishment of Institute of Hardwood Technology Transfer and Applied Research

The Secretary is hereby and hereafter authorized to operate and utilize the assets of the Wood Education and Resource Center (previously named the Robert C. Byrd Hardwood Technology Center in West Virginia) as part of a newly formed “Institute of Hardwood Technology Transfer and Applied Research” (hereinafter the “Institute”). The Institute, in addition to the Wood Education and Resource Center, will consist of a Director, technology transfer specialists from State and Private Forestry, the Forestry Sciences Laboratory in Princeton, West Virginia, and any other organizational unit of the Department of Agriculture as the Secretary deems appropriate. The overall management of the Institute will be the responsibility of the Forest Service, State and Private Forestry.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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- (d) Generation of revenue; deposit into Hardwood Technology Transfer and Applied Research Fund

The Secretary is hereby and hereafter authorized to generate revenue using the authorities provided herein. Any revenue received as part of the operation of the Institute shall be deposited into a special fund in the Treasury of the United States, known as the “Hardwood Technology Transfer and Applied Research Fund,” which shall be available to the Secretary until expended, without further appropriation, in furtherance of the purposes of this section, including upkeep, management, and operation of the Institute and the payment of salaries and expenses.

- (e) Authorization of appropriations

There are hereby and hereafter authorized to be appropriated such sums as necessary to carry out the provisions of this section.

TITLE 42 — THE PUBLIC HEALTH AND WELFARE

CHAPTER 6A — PUBLIC HEALTH SERVICE

§241. Research and investigations generally [an excerpt]

(a) Authority of Secretary [i.e., of Health and Human Services]

The Secretary shall conduct in the Service, and encourage, cooperate with, and render assistance to other appropriate public authorities, scientific institutions, and scientists in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, diagnosis, treatment, control, and prevention of physical and mental diseases and impairments of man, including water purification, sewage treatment, and pollution of lakes and streams.

...The Secretary may make available to individuals and entities, for biomedical and behavioral research, substances and living organisms. Such substances and organisms shall be made available to individuals and entities, for biomedical and behavioral research, substances and living organisms. Such substances and organisms shall be made available under such terms and conditions (including payment for them) as the Secretary determines appropriate.

§282. Director of National Institutes of Health [an excerpt]

(a) Appointment

The National Institutes of Health shall be headed by the Director of NIH who shall be appointed by the President by and with the advice and consent of the Senate. The Director of NIH shall perform functions as provided under the subsection (b) of this section and as the Secretary may otherwise prescribe.

...

(c) Availability of substances and organisms for research

The Director of NIH may make available to individuals and entities, for biomedical and behavioral research, substances and living organisms. Such substances and organisms shall be made available under such terms and conditions (including payment for them) as the Secretary determines appropriate.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

§284. Directors of national research institutes [an excerpt]

(a) Appointment

The Director of the National Cancer Institute shall be appointed by the President and the Directors of the other national research institutes shall be appointed by the Secretary. Each Director of a national research institute shall report directly to the Director of NIH.

(b) Duties and authority; grants, contracts, and cooperative agreements

(1) In carrying out the purposes of section 241 of this title with respect to human diseases or disorders or other aspects of human health for which the national research institutes were established, the Secretary, acting through the Director of such national research institute-

(A) shall encourage and support research, investigations, experiments, demonstrations, and studies in the health sciences related to-

(i) the maintenance of health,

(ii) the detection, diagnosis, treatment, and prevention of human diseases and disorders,

(iii) the rehabilitation of individuals with human diseases, disorders, and disabilities, and

(iv) the expansion of knowledge of the processes underlying human diseases, disorders, and disabilities, the processes underlying the normal and pathological functioning of the body and its organ systems, and the processes underlying the interactions between the human organism and the environment;

(E) may develop, conduct, and support public and professional education and information programs;

(F) may secure, develop and maintain, distribute, and support the development and maintenance of resources needed for research;

(G) may make available the facilities of the institute to appropriate entities and individuals engaged in research in research activities and cooperate with and assist Federal and State agencies charged with protecting the public health;

(H) may accept unconditional gifts made to the institute for its activities, and, in the case of gifts of a value in excess of \$50,000, establish suitable memorials to the donor;

(I) may secure for the institute consultation services and advice of persons from the United States or abroad;

- (J) may use, with their consent, the services, equipment, personnel, information, and facilities of other Federal, State, or local public agencies, with or without reimbursement therefore,
- (K) may accept voluntary and uncompensated services; and
- (L) may perform such other functions as the Secretary determines are needed to carry out effectively the purposes of the institute.

CHAPTER 84 — DEPARTMENT OF ENERGY

§7261. Acquisition of copyrights, patents, etc.

The Secretary is authorized to acquire any of the following described rights if the property acquired thereby is for use by or for, or useful to, the Department:

- (1) copyrights, patents, and applications for patents, designs, processes, and manufacturing data;
- (2) licenses under copyrights, patents, and applications for patents; and
- (3) releases, before suit is brought, for past infringement of patents or copyrights.

CHAPTER 149 — ENERGY POLICY, 2005

§16391. Improved technology transfer of energy technologies

(a) Technology Transfer Coordinator

The Secretary shall appoint a Technology Transfer Coordinator to be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.

(b) Qualifications

The Coordinator shall be an individual who, by reason of professional background and experience, is specially qualified to advise the Secretary on matters pertaining to technology transfer at the Department.

(c) Duties of the Coordinator

The Coordinator shall oversee:

- (1) the activities of the Technology Transfer Working Group established under subsection (d);
- (2) the expenditure of funds allocated for technology transfer within the Department;

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

42 USC 16538

- (3) the activities of each technology partnership ombudsman appointed under section 7261c of this title; and
- (4) efforts to engage private sector entities, including venture capital companies.

(d) Technology Transfer Working Group

The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to:

- (1) coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;
- (2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and
- (3) develop and disseminate to the public and prospective technology partners information about opportunities and procedures for technology transfer with the Department, including opportunities and procedures related to alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters.

(e) Technology Commercialization Fund

The Secretary shall establish an Energy Technology Commercialization Fund, using 0.9 percent of the amount made available to the Department for applied energy research, development, demonstration, and commercial application for each fiscal year, to be used to provide matching funds with private partners to promote promising energy technologies for commercial purposes.

(f) Technology transfer responsibility

Nothing in this section affects the technology transfer responsibilities of Federal employees under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(g) Planning and reporting

(1) In general

Not later than 180 days after August 8, 2005, the Secretary shall submit to Congress a technology transfer execution plan.

- (2) Each year after the submission of the plan under paragraph (1), the Secretary shall submit to Congress an updated execution plan and reports that describe progress toward meeting goals set forth in the execution plan and the funds expended under subsection (e).

§16538. Advanced Research Projects Agency-Energy*

(a) Definitions

In this section:

(1) ARPA-E.-The term “ARPA-E” means the Advanced Research Projects Agency-Energy established by subsection (2).

(2) Director.-The term “Director” means the Director of ARPA-E appointed under subsection (d).

(3) Fund.-The term “Fund” means the Energy Transformation Acceleration Fund established under subsection (m)(1).

(b) Establishment.-There is established the Advanced Research Projects Agency-Energy within the Department to overcome the long-term and high-risk technological barriers in the development of energy technologies.

(c) Goals.

(1) In General.-The goals of ARPA-E shall be

(A) To enhance the economic and energy security of the United States through the development of energy technologies that result in-

(i) reductions of imports of energy from foreign sources;

(ii) reductions of energy-related emissions, including greenhouse gases; and

(iii) improvement in the energy efficiency of all economic sectors; and

(B) to ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.

(2) Means.-ARPA-E shall achieve the goals established under paragraph (1) through energy technology projects by-

(A) identifying and promoting revolutionary advances in fundamental sciences;

(B) translating scientific discoveries and cutting edge inventions into technological innovations; and

(C) accelerating transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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(d) Director

- (1) Appointment.-There shall be in the Department of Energy a Director of ARPA-E, who shall be appointed by the President by and with the advice and consent of the Senate.
- (2) Qualifications.-“The Director shall be an individual who, by reason of professional background and experience, is especially qualified to advise the Secretary on, and manage research programs addressing, matters pertaining to long-term and high-risk technological barriers to the development of energy technologies.
- (3) Relationship to Secretary.-The Director shall report to the Secretary.
- (4) Relationship to Other Programs.-No other programs within the Department shall report to the Director.

(e) Responsibilities.-The responsibilities of the Director shall include-

- (1) approving all new programs within ARPA-E;
- (2) developing funding criteria and assessing the success of programs through the establishment of technical milestones;
- (3) administering the Fund through awards to institutions of higher education, companies, research foundations, trade and industry research collaborations, **or** consortia of such entities, which may include federally-funded research and development centers, to achieve the goals described in subsection (c) through targeted acceleration of
 - (A) novel early-stage energy research with possible technology applications;
 - (B) development of techniques, processes, and technologies, and related testing and evaluation;
 - (C) research and development of manufacturing processes for novel energy technologies; and
 - (D) coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer; and
- (4) terminating programs carried out under this section that are not achieving the goals of the programs

(f) Personnel

- (1) Program Managers.
 - (A) In General.-The Director shall designate employees to serve as program managers for each of the programs established pursuant to the responsibilities established for ARPA-E under subsection (e).
 - (B) Responsibilities.-A program manager of a program shall be responsible for-

- (i) establishing research and development goals for the program, including through the convening of workshops and conferring with outside experts, and publicizing the goals of the program to the public and private sectors;
 - (ii) soliciting applications for specific areas of particular promise, especially areas that the private sector or the Federal Government are not likely to undertake alone;
 - (iii) building research collaborations for carrying out the program;
 - (iv) selecting on the basis of merit, with advice under subsection (j) as appropriate, each of the projects to be supported under the program after considering-
 - (I) the novelty and scientific and technical merit of the proposed projects;
 - (II) the demonstrated capabilities of the applicants to successfully carry out the proposed project;
 - (III) the consideration by the applicant of future commercial applications of the project, including the feasibility of partnering with 1 or more commercial entities; and
 - (IV) such other criteria as are established by the Director;
 - (v) monitoring the progress of projects supported under the program; and
 - (vi) recommending program restructure or termination of research partnerships or whole projects.
- (C) Term.-The term of a program manager shall be 3 years and may be renewed.
- (2) Hiring and Management.-
- (A) In General.- The Director shall have the authority to-
 - (i) make appointments of scientific, engineering, and professional personnel without regard to the civil service laws; and
 - (ii) fix the compensation of such personnel at a rate to be determined by the Director.
 - (B) Number.-The Director shall appoint not less than 70, and not more than 120, personnel under this section.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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(C) Private Recruiting Firms.-The Secretary, or the Director serving as an agent of the Secretary, may contract with private recruiting firms for the hiring of qualified technical staff to carry out this section.

(D) Additional Staff.-The Director may use all authorities in existence on the date of enactment of this Act that are provided to the Secretary to hire administrative, financial, and clerical staff as necessary to carry out his section.

(g) Reports and Roadmaps-

(1) Annual Report.-As part of the annual budget request submitted for each fiscal year, the Director shall provide to the relevant authorizing and appropriations committee of Congress a report describing projects supported by ARPA-E during the previous fiscal year.

(2) Strategic Vision Roadmap.-Not later than October 1, 2008, and October 1, 2011, the Director shall provide to the relevant authorizing and appropriations committees of Congress a roadmap describing the strategic vision that ARPA-E will use to guide the choices of ARPA-E for future technology investments over the following 3 fiscal years.

(h) Coordination and Nonduplication.-

(1) In General.-To the maximum extent practicable, the Director shall ensure that the activities of ARPA-E are coordinated with, and do not duplicate the efforts of, programs and laboratories within the Department and other relevant research agencies.

(2) Technology Transfer Coordinator.-To the extent appropriate, the Director may coordinate technology transfer efforts with the Technology Transfer Coordinator appointed under section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391)

(i) Federal Demonstration of Technologies.-The Secretary shall make information available to purchasing and procurement programs of Federal agencies regarding the potential to demonstrate technologies resulting from activities funded through ARPA-E

(j) Advice.-

(1) Advisory Committees.-The Director may seek advice on any aspect of ARPA-E from-

(A) an existing Department of Energy advisory committee; and

(B) a new advisory committee organized to support the programs of ARPA-E and to provide advice and assistance on-

(i) specific program tasks; or

(ii) overall direction of ARPA-E.

(2) Additional Sources of Advice.-In carrying out this section, the Director may seek advice and review from-

- (A) the President's Committee of Advisors on Science and Technology; and
- (B) any professional or scientific organization with expertise in specific processes or technologies under development by ARPA-E.

(k) ARPA-E Evaluation.-

(1) In General.-After ARPA-E has been in operation for 4 years, the Secretary shall offer to enter into a contract with the National Academy of Sciences under which the National Academy shall conduct an evaluation of how all ARPA-E is achieving the goals and mission of ARPA-E.

(2) Inclusions.-The evaluation shall include-

- (A) the recommendation of the National Academy of Sciences on whether ARPA-E should be continued or terminated; and
- (B) a description of lessons learned from operation of ARPA-E

(3) Availability.-On completion of the evaluation, the evaluation shall be made available to Congress and the public.

(l) Existing Authorities.-The authorities granted by this section are-

- (1) in addition to existing authorities granted to the Secretary; and
- (2) are not intended to supersede or modify any existing authorities.

(m) Funding.-

(1) Fund.-There is established in the Treasury of the United States a fund, to be known as the "Energy Transformation Acceleration Fund", which shall be administered by the Director for the purposes of carrying out his section.

(2) Authorization of Appropriations.-Subject to paragraphs (4) and (5), there are authorized to be appropriated to the Director for deposit in the Fund, without fiscal year limitation-

- (A) \$300,000,000 for fiscal year 2008; and
- (B) such sums as are necessary for each of fiscal years 2009 and 2010

(3) Separate Budget and Appropriation.-

- (A) Budget Request.-The budget request for ARPA-E shall be separate from the rest of the budget of the Department.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.

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- (B) Appropriations.-Appropriations to the Fund shall be separate and distinct from the rest of the budget for the Department.
- (4) Limitation.-No amounts may be appropriated for ARPA-E for fiscal year 2008 unless the amount appropriated for the activities of the Office of Science of the Department for fiscal year 2008 exceeds the amount appropriated for the Office for fiscal year 2007, as adjusted for inflation in accordance with the Consumer Price Index published by the Bureau of Labor Statistics of the Department of Labor.
- (5) Allocation.-Of the amounts appropriated for a fiscal year under paragraph (2)-
 - (A) not more than 50 percent of the amount shall be used to carry out subsection (e)(3)(D);
 - (B) at least 2.5 percent of the amount shall be used for technology transfer and outreach activities; and
 - (C) no funds may be used for construction of new buildings or facilities during the 5-year period beginning on the date of enactment of this Act.

*As of the time of publication of The Green Book, the body of 42 U.S.C. 16538 had not yet been added to the Office of the Law Revision Counsel website. Therefore, we have stylized the format of the statute as best as we could from the text of the America COMPETES Act, PL 110-69, Section 5012.

SECTION 3
Executive Order

EXECUTIVE ORDER 12591

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), the Trademark Clarification Act of 1984 (Public Law 98-620), and the University and Small Business Patent Procedure Act of 1980 (Public Law 96-517), 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 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 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, 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 or grantee has not taken adequate steps to market the inventions, in accordance with applicable law or an Institutional Patent Agreement;

- (6) 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. 1 amended by Executive Order 12618 of Dec. 22, 1987, 52 FR 48661, 3 CFR, 1987 Comp., p. 262]

Section 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.

Section 3. Technology Exchange—Scientists and Engineers

The Executive Director of the President's Commission on Executive Exchange shall assist Federal agencies, where appropriate, by developing and implementing an exchange program 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.

Section 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 (COCOM) 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 central mechanism for the prompt and efficient dissemination of science and technology information developed abroad to users in Federal laboratories, academic institutions, and the private sector on a fee-for-service basis.

Section 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.

Section 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.

Section 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:

- (1) 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 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.

Section 8. Relation to Existing Law

Nothing in this Order shall affect the continued applicability of any existing laws or regulations 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

The White House
April 10, 1987

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