

Responding to National Needs 1994 – 2001 Supplement to Appendices

Information contained in this document updates and expands the data presented in the Appendices of NIST SP 955, *Responding to National Needs: The National Bureau of Standards Becomes the National Institute of Standards and Technology 1969–1993*, by James F. Schooley, November 2000

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FOREWORD

This *Supplement to Appendices* is a continuation of the data collected in the appendices of NIST Special Publication 955, *Responding to National Needs: The National Bureau of Standards Becomes the National Institute of Standards and Technology 1969–1993*, by James F. Schooley, November 2000. The present data will be used to support the research and compilation of the fourth volume of the NBS/NIST history series. For complementary information on this topic, please visit the newly-featured exhibit on the NIST Virtual Museum — NIST Timeline 1994–2001 at <http://museum.nist.gov/exhibits/ex1/index.html>.

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APPENDIX A

LEGISLATION RELATING TO THE ORGANIZATION, FUNCTIONS, AND ACTIVITIES OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY 1993-2001

Those portions of Public Laws applicable to NIST are reproduced in this appendix.

October 27, 1993, 107 Stat. 1153 (Public Law 103-121—103rd Congress, 1st session) *Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1994.*

Public Law 103-121

AN ACT

Making appropriations for the Department of Commerce, Justice, and State, the Judiciary, and related agencies for the fiscal year ending September 30, 1994, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE

National Institute of Standards and Technology (107 Stat. 1169-70)

Scientific and Technical Research and Services

For necessary expenses of the National Institute of Standards and Technology, \$226,000,000, to remain available until expended, of which not to exceed \$5,880,000 may be transferred to the "Working Capital Fund" and \$1,500,000 may be transferred to the Department of Commerce "Working Capital Fund."

Industrial Technology Services

For necessary expenses of the Manufacturing Extension Partnership, the Advanced Technology Program and the Quality Outreach Program of the National Institute of Standards and Technology, \$232,524,000, to remain available until expended, of which not to exceed \$1,290,000 may be transferred to the "Working Capital Fund."

Construction of Research Facilities

For construction of new research facilities, including architectural and engineering design, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$61,686,000, to remain available until expended.

August 26, 1994, 108 Stat. 1724 (Public Law 103-317—103rd Congress, 2nd session) *Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1995.*

Public Law 103-317

AN ACT

Making appropriations for the Departments of Commerce, Justice, and State, the Judiciary, and related agencies programs for the fiscal year ending September 30, 1995, and making supplemental appropriations for these departments and agencies for the fiscal year ending September 30, 1994, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE

National Institute of Standards and Technology (108 Stat. 1740-41)

Scientific and Technical Research and Services

For necessary expenses of the National Institute of Standards and Technology, \$265,000,000, to remain available until expended, of which not to exceed \$8,500,000 may be transferred to the "Working Capital Fund."

Industrial Technology Services

For necessary expenses of the Manufacturing Extension Partnership, the Advanced Technology Program and the Quality Program of the National Institute of Standards and Technology, \$525,000,000, to remain available until expended, of which not to exceed \$1,710,000 may be transferred to the "Working Capital Fund": Provided, That notwithstanding the time limitations imposed by 15 U.S.C. 278k(c) (1) and (5) on the duration of Federal financial assistance that may be awarded by the Secretary of Commerce to Regional Centers for the Transfer of Manufacturing Technology ("Centers"), such Federal financial assistance for a Center may continue beyond six years and may be renewed for additional periods, not to exceed three years each, at a rate not to exceed one-third of the Center's total annual costs, subject before any such renewal to a positive evaluation of the Center and to a finding by the Secretary of Commerce that continuation of Federal funding to that Center is in the best interest of the Regional Centers for the Transfer of Manufacturing Technology Program.

Construction of Research Facilities

For construction of new research facilities, including architectural and engineering design, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$64,686,000, to remain available until expended.

September 13, 1994, 108 Stat. 1796 (Public Law 103-322—103rd Congress, 2nd session) *Violent Crime Control and Law Enforcement Act of 1994.*

Public Law 103-322

AN ACT

To control and prevent crime.

TITLE XXI—STATE AND LOCAL LAW ENFORCEMENT

Subtitle C—DNA Identification

SEC. 210303. (108 Stat. 2068) Quality Assurance and Proficiency Testing Standards.

(a) Publication of Quality Assurance and Proficiency Testing Standards.—

(1) (A) Not later than 180 days after the date of enactment of this Act, the Director of the Federal Bureau of Investigation shall appoint an advisory board on DNA quality assurance methods from among nominations proposed by the head of the National Academy of Sciences and professional societies of crime laboratory officials.

(B) The advisory board shall include as members scientists from State, local, and private forensic laboratories, molecular geneticists and population geneticists not affiliated with a forensic laboratory, and a representative from the National Institute of Standards and Technology.

(C) The advisory board shall develop, and if appropriate, periodically revise, recommended standards for quality assurance, including standards for testing the proficiency of forensic laboratories, and forensic analysts, in conducting analyses of DNA.

October 13, 1994, 108 Stat. 3243 (Public Law 103-355—103rd Congress, 2nd session) *Federal Acquisition Streamlining Act of 1994*.

Public Law 103-355

AN ACT

To revise and streamline the acquisition laws of the Federal Government, and for other purposes.

TITLE IX—FEDERAL ACQUISITION COMPUTER NETWORK

SEC. 9001. (108 Stat. 3399) Federal Acquisition Computer Network Architecture and Implementation.

(a) Federal Acquisition Computer Network Architecture.—The Office of Federal Procurement Policy Act (41 U.S.C. 401 et seq.) is amended by adding after section 29, as added by section 1093, the following new sections:

“SEC. 30. Federal Acquisition Computer Network (FACNET) Architecture.

“(a) In General.—

(1) The Administrator shall establish a program for the development and implementation of a Federal acquisition computer network architecture (hereafter in this section referred to as ‘FACNET’) that will be Government-wide and provide interoperability among users. The Administrator shall assign a program manager for FACNET and shall provide for overall direction of policy and leadership in the development, coordination, installation, operation, and completion of implementation of FACNET by executive agencies.

“(2) In carrying out paragraph (1), the Administrator shall consult with the heads of appropriate Federal agencies with applicable technical and functional expertise, including the Office of Information and Regulatory Affairs, the National Institute of Standards and Technology, the General Services Administration, and the Department of Defense.

October 19, 1994, 108 Stat. 3492 (Public Law 103-374—103rd Congress, 2nd session) *Earthquake Hazards Reduction Act of 1977, Authorization and Amendment*.

Public Law 103-374

AN ACT

To authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1977 for fiscal years 1995 and 1996.

SEC. 1. (108 Stat. 3492) Authorization of Appropriations.

Section 12 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706) is amended—

(4) by adding at the end of subsection (d) the following new sentence: “There are authorized to be appropriated, out of funds otherwise authorized to be appropriated to the National Institute of Standards and Technology, \$1,900,000 for the fiscal year ending September 30, 1995, and \$1,957,000 for the fiscal year ending September 30, 1996.”

April 10, 1995, 109 Stat. 73 (Public Law 104-6—104th Congress, 1st session) *Emergency Supplemental Appropriations and Rescissions for the Department of Defense to Preserve and Enhance Military Readiness Act of 1995*; *Mexican Debt Disclosure Act of 1995*.

Public Law 104-6

AN ACT

Making emergency supplemental appropriations and rescissions to preserve and enhance military readiness of the Department of Defense for the fiscal year ending September 30, 1995, and for other purposes.

TITLE II

Rescissions

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology (109 Stat. 84)

Industrial Technology Services.

Of the amounts made available under this heading in Public Law 103-317 for the Advanced Technology Program, \$90,000,000 are rescinded.

May 22, 1995, 109 Stat. 163 (Public Law 104-13—104th Congress, 1st session) *Paperwork Reduction Act of 1995*.

Public Law 104-13

AN ACT

To further the goals of the Paperwork Reduction Act to have Federal agencies become more responsible and publicly accountable for reducing the burden of Federal paperwork on the public, and for other purposes.

SEC. 2. Coordination of Federal Information Policy. Chapter 35 of title 44, United States Code is amended to read as follows:

“SEC. 3504 (109 Stat. 169) Authority and functions of Director

“(h) With respect to Federal information technology, the Director shall—

“(1) in consultation with the Director of the National Insatitute of Standards and Technology and the Administrator of General Services—

“(A) develop and oversee the implementation of policies, principles, standards, and guidelines for information technology functions and activities of the Federal Government, including periodic evaluations of major information systems; and

“(B) oversee the development and implementation of standards under section 111(d) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 759(d));

“(2) monitor the effectiveness of, and compliance with, directives issued under sections 110 and 111 of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 757 and 759);

“(3) coordinate the development and review by the Office of Information and Regulatory Affairs of policy associated with Federal procurement and acquisition of information technology with the Office of Federal Procurement Policy;

“(4) ensure, through the review of agency budget proposals, information resources management plans and other means—

“(A) agency integration of information resources management plans, program plans and budgets for acquisition and use of information technology; and

“(B) the efficiency and effectiveness of inter-agency information technology initiatives to improve agency performance and the accomplishment of agency missions; and

“(5) promote the use of information technology by the Federal Government to improve the productivity, efficiency, and effectiveness of Federal programs, including through dissemination of public information and the reduction of information collection burdens on the public.

“SEC. 3505. (109 Stat. 170) Assignment of tasks and deadlines

“(a) In carrying out the functions under this chapter, the Director shall—

“(3) in consultation with the Administrator of General Services, the Director of the National Institute of Standards and Technology, the Archivist of the United States, and the Director of the Office of Personnel Management, develop and maintain a Governmentwide strategic plan for Information resources management, that shall include—

“(A) a description of the objectives and the means by which the Federal Government shall apply information resources to improve agency and program performance;

“(B) plans for—

“(i) reducing information burdens on the public, including reducing such burdens through the elimination of duplication and meeting shared data needs with shared resources;

“(ii) enhancing public access to and dissemination of, information, using electronic and other formats; and

“(iii) meeting the information technology needs of the Federal Government in accordance with the purposes of this chapter; and

“(C) a description of progress in applying information resources management to improve agency performance and the accomplishment of missions.

“SEC. 3513 (109 Stat. 181) Director review of agency activities; reporting; agency response

“(a) In consultation with the Administrator of General Services, the Archivist of the United States, the Director of the National Institute of Standards and Technology, and the Director of the Office of Personnel Management, the Director shall periodically review selected agency information resources management activities to ascertain the efficiency and effectiveness of such activities to improve agency performance and the accomplishment of agency missions.

July 27, 1995, 109 Stat. 194 (Public Law 104-19—104th Congress, 1st session) *Emergency Supplemental Appropriations for Additional Disaster Assistance, for Anti-Terrorism Initiatives, for Assistance in the Recovery from the Tragedy that Occurred at Oklahoma City, and Rescissions Act, 1995.*

Public Law 104-19

AN ACT

Making emergency supplemental appropriations for additional disaster assistance, for anti-terrorism initiatives, for assistance in the recovery from the tragedy that occurred at Oklahoma City, and making rescissions for the fiscal year ending September 30, 1995, and for other purposes.

TITLE I—SUPPLEMENTALS AND RESCISSIONS

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology (109 Stat. 199)

Scientific and Technical Research and Services
(Rescission)

Of the funds made available under this heading in Public Law 103-317, \$17,000,000 are rescinded. Industrial
Technology Services
(Rescission)

Of the funds made available under this heading in Public Law 103-317, \$16,300,000 are rescinded.

Construction of Research Facilities
(Rescission)

Of the unobligated balances available under this heading, \$30,000,000 are rescinded.

January 26, 1996, 110 Stat. 26 (Public Law 104-99—104th Congress, 2nd session) *Balanced Budget Downpayment Act, 1996*.

Public Law 104-99

AN ACT

Making appropriations for fiscal year 1996 to make a downpayment toward a balanced budget, and for other purposes.

TITLE II—DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY,
AND RELATED AGENCIES APPROPRIATIONS (110 Stat. 35)

SEC. 201. (a)...Provided, that, notwithstanding any other provision of this title of this Act, the rate for operations only for program administration and the continuation of grants awarded in for program administration and the continuation of grants awarded in fiscal year 1995 and prior years of the Advanced Technology Program of the National Institute of Standards and Technology, and the rate for operations for the Ounce of Prevention Council, Drug Courts, Global Learning and Observations to Benefit the Environment, and for the Cops on the Beat Program may be increased up to a level of 75 per centum of the final fiscal year 1995 appropriated amount:...

February 10, 1996, 110 Stat. 186 (Public Law 104-106—104th Congress, 2nd session) *National Defense Authorization Act for Fiscal Year 1996*.

Public Law 104-106

AN ACT

To authorize appropriations for fiscal year 1996 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, to reform acquisition laws and information technology management of the Federal Government, and for other purposes.

Title LI—Responsibility for Acquisitions of Information Technology

SEC. 5112. (110 Stat. 681) Capital Planning and Investment Control.

(d) Information Technology Standards.—The Director shall oversee the development and implementation of standards and guidelines pertaining to Federal computer systems by the Secretary of Commerce through the National Institute of Standards and Technology under section 5131 and section 20 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3).

SEC. 5131. (110 Stat. 687) Responsibilities Regarding Efficiency, Security, and Privacy of Federal Computer Systems.

(a) Standards and Guidelines.—

(1) Authority.—The Secretary of Commerce shall, on the basis of standards and guidelines developed by the National Institute of Standards and Technology pursuant to paragraphs (2) and (3) of section 20(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3(a)), promulgate standards and guidelines pertaining to Federal computer systems.

SEC. 5607. (110 Stat. 701) Other Laws.

(a) National Institute of Standards and Technology Act.—Section 20 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3) is amended—

(1) in subsection (a)—

(A) by striking out “section 3502(2) of title 44” each place it appears in paragraphs (2) and (3)(A) and inserting in lieu thereof “section 3502(9) of title 44” and

(B) in paragraph (4), by striking out "section 111(d) of the Federal Property and Administrative Services Act of 1949" and inserting in lieu thereof section 5131 of the Information Technology Management Reform Act of 1996"

(2) in subsection (b)—

(A) by striking out paragraph (2);

(B) in paragraph (3), by striking out "section 111(d) of the Federal Property and Administrative Services Act of 1949" and inserting in lieu thereof "section 5131 of the Information Technology Management Reform Act of 1996"; and

(C) by redesignating paragraphs (3), (4), (5), and (6) as paragraphs (2), (3), (4), and (5); and (3) in subsection (d)—

(A) in paragraph (1)(B)(v), by striking out "as defined" and all that follows and inserting in lieu thereof a semicolon; and

(B) in paragraph (2)—

(i) by striking out "system"— and all that follows through "means" in subparagraph (A) and inserting in lieu thereof "system" "means"; and

(ii) by striking out "and" at the end of subparagraph (A) and all that follows through the end of subparagraph (B) and inserting in lieu thereof a semicolon.

March 7, 1996, 110 Stat. 775 (Public Law 104-113—104th Congress, 2nd session) *National Technology Transfer and Advancement Act of 1995*.

Public Law 104-113

AN ACT

To amend the Stevenson-Wydler Technology Innovation Act of 1980 with respect to inventions made under cooperative research and development agreements, and for other purposes.

SEC. 1. SHORT TITLE.

This Act may be cited as the "National Technology Transfer and Advancement Act of 1995."

SEC. 2. FINDINGS.

The Congress finds the following:

(1) Bringing technology and industrial innovation to the marketplace is central to the economic, environmental, and social well-being of the people of the United States.

(2) The Federal Government can help United States business to speed the development of new products and processes by entering into cooperative research and development agreements which make available the assistance of Federal laboratories to the private sector, but the commercialization of technology and industrial innovation in the United States depends upon actions by business.

(3) The commercialization of technology and industrial innovation in the United States will be enhanced if companies, in return for reasonable compensation to the Federal Government, can more easily obtain exclusive licenses to inventions which develop as a result of cooperative research with scientists employed by Federal laboratories.

SEC. 3. USE OF FEDERAL TECHNOLOGY.

Subparagraph (B) of section 11(e)(7) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(e)(7)(B)) is amended to read as follows:

"(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".

SEC. 4. TITLE TO INTELLECTUAL PROPERTY ARISING FROM COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

Subsection (b) of section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)) is amended to read as follows:

“(b) Enumerated Authority.—

(1) Under an agreement entered into pursuant to subsection (a)(1), 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, 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:

“(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, United States Code, 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).

This determination is subject to administrative appeal and judicial review under section 203(2) of title 35, United States Code.

“(2) Under agreements entered into pursuant to subsection (a)(1), 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), 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) shall have the right of enforcement under chapter 29 of title 35, United States Code.

“(5) A Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement pursuant to subsection (a)(1) 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 14(a)(1)(B); and

“(C) for scientific research and development consistent with the research and development missions and objectives of the laboratory.”

SEC. 5. DISTRIBUTION OF INCOME FROM INTELLECTUAL PROPERTY RECEIVED BY FEDERAL LABORATORIES

Section 14 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710c) is amended—

(1) by amending subsection (a)(1) to read as follows:

“(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 12, and from the licensing of inventions of Federal laboratories under section 207 of title 35, United States Code, 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 to the inventor or coinventors.

“(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 succeeding fiscal year—

“(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) in subsection (a)(2)—

(A) by inserting “or other payments” after “royalties”; and

(B) by striking “for the purposes described in clauses (i) through (iv) of paragraph (1)(B) during that fiscal year or the succeeding fiscal year” and inserting in lieu thereof “under paragraph (1)(B)”;

(3) in subsection (a)(3), by striking “\$100,000” both places it appears and inserting “\$150,000”;

(4) in subsection (a)(4)—

(A) by striking “income” each place it appears and inserting in lieu thereof “payments”;

(B) by striking “the payment of royalties to inventors” in the first sentence thereof and inserting in lieu thereof “payments to inventors”;

(C) by striking “clause (i) of paragraph (1)(B)” and inserting in lieu thereof “clause (iv) of paragraph (1)(B)”;

(D) by striking “payment of the royalties,” in the second sentence thereof and inserting in lieu thereof “offsetting the payments to inventors”; and

(E) by striking “clauses (i) through (iv) of”; and (5) by amending paragraph (1) of subsection (b) to read as follows:

“(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.”

SEC. 6. EMPLOYEE ACTIVITIES.

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

(1) by striking “the right of ownership to an invention under this Act” and inserting in lieu thereof “ownership of or the right of ownership to an invention made by a Federal employee”; and

(2) by inserting “obtain or” after “the Government, to.”

SEC. 7. AMENDMENT TO BAYH-DOLE ACT

Section 210(e) of title 35, United States Code, is amended by striking,” as amended by the Federal Technology Transfer Act of 1986.”

SEC. 8. NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY ACT AMENDMENTS.

The National Institute of Standards and Technology Act (15 U.S.C 271 et seq.) is amended—

(1) in section 10(a)—

(A) by striking “nine” and inserting in lieu thereof “15”; and

(B) by striking “five” and inserting in lieu thereof “10”;

(2) in section 15—

(A) by striking “Pay Act of 1945; and” and inserting in lieu thereof “Pay Act of 1945;” and

(B) by inserting”; and (h) the provision of transportation services for employees of the Institute between the facilities of the Institute and nearby public transportation, notwithstanding section 1344 of title 31, United States Code” after “interests of the Government”; and

(3) in section 19—

(A) by inserting “, subject to the availability of appropriations,” after “post-doctoral fellowship program”; and

(B) by striking “nor more than forty” and inserting in lieu thereof “nor more than 60”.

SEC. 9. RESEARCH EQUIPMENT

Section 11(i) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(i)) is amended by inserting "loan, lease, or" before "give."

SEC. 10. PERSONNEL

The personnel management demonstration project established under section 10 of the National Bureau of Standards Authorization Act for Fiscal Year 1987 (15 U.S.C. 275 note) is extended indefinitely.

SEC. 11. FASTENER QUALITY ACT AMENDMENTS

- (a) Section 2 Amendments.—Section 2 of the Fastener Quality Act (15 U.S.C. 5401) is amended—
- (1) by striking subsection (a)(4), and redesignating paragraphs (5) through (9) as paragraphs (4) through (8), respectively;
 - (2) in subsection (a)(7), as so redesignated by paragraph (1) of this subsection, by striking "by lot number"; and
 - (3) in subsection (b), by striking "used in critical applications" and inserting in lieu thereof "in commerce."
- (b) Section 3 Amendments.—Section 3 of the Fastener Quality Act (15 U.S.C. 5402) is amended—
- (1) in paragraph (1)(B) by striking "having a minimum tensile strength of 150,000 pounds per square inch";
 - (2) in paragraph (2), by inserting "consensus" after "or any other";
 - (3) in paragraph (5)—
 - (A) by inserting "or" after "standard or specification," in subparagraph (B);
 - (B) by "or" at the end of subparagraph (C);
 - (C) by striking subparagraph (D); and
 - (D) by inserting "or produced in accordance with ASTM F 432" after "307 Grade A";
 - (4) in paragraph (6) by striking "other person" and inserting in lieu thereof "government agency";
 - (5) in paragraph (8) by striking "Standard" and inserting in lieu thereof "Standards";
 - (6) by striking paragraph (11) and redesignating paragraphs (12) through (15) as paragraphs (11) through (14), respectively;
 - (7) in paragraph (13), as so redesignated by paragraph (6) of this subsection, by striking "a government agency" and all that follows through "markings of any fastener" and inserting in lieu thereof "or a government agency"; and
 - (8) in paragraph (14), as so redesignated by paragraph (6) of this subsection, by inserting "for the purpose of achieving a uniform hardness" after "quenching and tempering."
- (c) Section 4 Repeal.—Section 4 of the Fastener Quality Act (15 U.S.C. 5403) is repealed.
- (d) Section 5 Amendments.—Section 5 of the Fastener Quality Act (15 U.S.C. 5404) is amended—
- (1) in subsection (a)(1)(B) and (2)(A)(i) by striking "subsections (b) and (c)" and inserting in lieu thereof "subsections (b), (c), and (d)";
 - (2) in subsection (c)(2) by striking "or, where applicable" and all that follows through "section 7(c)(1)";
 - (3) in subsection (c)(3) by striking "such as the chemical, dimensional, physical, mechanical, and any other";
 - (4) in subsection (c)(4) by inserting "except as provided in subsection (d)", before "state whether"; and
 - (5) by adding at the end the following new subsection: "(d) Alternative Procedure for Chemical Characteristics.—Notwithstanding the requirements of subsections (b) and (c), a manufacturer shall be deemed to have demonstrated, for purposes of subsection (a)(1), that the chemical characteristics of a lot conform to the standards and specifications to which the manufacturer represents such lot has been manufactured if the following requirements are met:
 - "(1) The coil or heat number of metal from which such lot was fabricated has been inspected and tested with respect to its chemical characteristics by a laboratory accredited in accordance with the procedures and conditions specified by the Secretary under section 6.
 - "(2) Such laboratory has provided to the manufacturer, either directly or through the metal manufacturer, a written inspection and testing report, which shall be in a form prescribed by the Secretary by regulation, listing the chemical characteristics of such coil or heat number.

“(3) The report described in paragraph (2) indicates that the chemical characteristics of such coil or heat number conform to those required by the standards and specifications to which the manufacturer represents such lot has been manufactured.

“(4) The manufacturer demonstrates that such lot has been fabricated from the coil or heat number of metal to which the report described in paragraphs (2) and (3) relates. In prescribing the form of report required by subsection (c), the Secretary shall provide for an alternative to the statement required by subsection (c)(4), insofar as such statement pertains to chemical characteristics, for cases in which a manufacturer elects to use the procedure permitted by this subsection.”

(e) Section 6 Amendment.—Section 6(a)(1) of the Fastener Quality Act (15 U.S.C. 5405(a)(1)) is amended by striking “Within 180 days after the date of enactment of this Act, the” and inserting in lieu thereof “The.”

(f) Section 7 Amendments.—Section 7 of the Fastener Quality Act (15 U.S.C. 5406) is amended—

(1) by amending subsection (a) to read as follows:

“(a) Domestically Produced Fasteners.—It shall be unlawful for a manufacturer to sell any shipment of fasteners covered by this Act which are manufactured in the United States unless the fasteners—

”(1) have been manufactured according to the requirements of the applicable standards and specifications and have been inspected and tested by a laboratory accredited in accordance with the procedures and conditions specified by the Secretary under section 6; and

”(2) an original laboratory testing report described in section 5(c) and a manufacturer’s certificate of conformance are on file with the manufacturer, or under such custody as may be prescribed by the Secretary, and available for inspection.”;

(2) in subsection (c)(2) by inserting “to the same” after “in the same manner and”;

(3) in subsection (d)(1) by striking “certificate” and inserting in lieu thereof “test report”; and

(4) by striking subsections (e), (f), and (g) and inserting in lieu thereof the following:

“(e) Commingling.—It shall be unlawful for any manufacturer, importer, or private label distributor to commingle like fasteners from different lots in the same container, except that such manufacturer, importer, or private label distributor may commingle like fasteners of the same type, grade, and dimension from not more than two tested and certified lots in the same container during repackaging and plating operations. Any container which contains fasteners from two lots shall be conspicuously marked with the lot identification numbers of both lots.

“(f) Subsequent Purchaser.—If a person who purchases fasteners for any purpose so requests either prior to the sale or at the time of sale, the seller shall conspicuously mark the container of the fasteners with the lot number from which such fasteners were taken.”

(g) Section 9 Amendment.—Section 9 of the Fastener Quality Act (15 U.S.C. 5408) is amended by adding at the end the following new subsection:

“(d) Enforcement.—The Secretary may designate officers or employees of the Department of Commerce to conduct investigations pursuant to this Act. In conducting such investigations, those officers or employees may, to the extent necessary or appropriate to the enforcement of this Act, exercise such authorities as are conferred upon them by other laws of the United States, subject to policies and procedures approved by the Attorney General.”

(h) Section 10 Amendments.—Section 10 of the Fastener Quality Act (15 U.S.C. 5409) is amended—

(1) in subsections (a) and (b), by striking “10 years” and inserting in lieu thereof “5 years”; and

(2) in subsection (b), by striking “any subsequent” and inserting in lieu thereof “the subsequent.”

(i) Section 13 Amendment.—Section 13 of the Fastener Quality Act (15 U.S.C. 5412) is amended by striking “within 180 days after the date of enactment of this Act”

(j) Section 14 Repeal.—Section 14 of the Fastener Quality Act (15 U.S.C. 5413) is repealed.

SEC. 12. STANDARDS CONFORMITY

(a) Use of Standards.—Section 2(b) of the National Institute of Standards and Technology Act (15 U.S.C. 272(b)) is amended—

(1) in paragraph (2), by striking “, including comparing standards” and all that follows through “Federal Government”;

(2) by redesignating paragraphs (3) through (11) as paragraphs (4) through (12), respectively; and

(3) by inserting after paragraph (2) the following new paragraph:

“(3) to compare standards used in scientific investigations, engineering, manufacturing, commerce, industry, and educational institutions with the standards adopted or recognized by the Federal Government and to coordinate the use by Federal agencies of private sector standards, emphasizing where possible the use of standards developed by private, consensus organizations;”

(b) Conformity Assessment Activities.—Section 2(b) of the National Institute of Standards and Technology Act (15 U.S.C. 272(b)) is amended—

(1) by striking “and” at the end of paragraph (11), as so redesignated by subsection (a)(2) of this section;

(2) by striking the period at the end of paragraph (12), as so redesignated by subsection (a)(2) of this section, and inserting in lieu thereof ; “and”; and

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

“(13) to coordinate Federal, State, and local technical standards activities and conformity assessment activities, with private sector technical standards activities and conformity assessment activities, with the goal of eliminating unnecessary duplication and complexity in the development and promulgation of conformity assessment requirements and measures.

“(c) Transmittal of Plan to Congress.—The National Institute of Standards and Technology shall, within 90 days after the date of enactment of this Act, transmit to the Congress a plan for implementing the amendments made by this section.

(d) Utilization of Consensus Technical Standards by Federal Agencies; Reports.—

(1) In general.—Except as provided in paragraph (3) of this subsection, all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.

(2) Consultation; participation.—In carrying out paragraph (1) of this subsection, Federal agencies and departments shall consult with voluntary, private sector, consensus standards bodies and shall, when such participation is in the public interest and is compatible with agency and departmental missions, authorities, priorities, and budget resources, participate with such bodies in the development of technical standards.

(3) Exception.—If compliance with paragraph (1) of this subsection is inconsistent with applicable law or otherwise impractical, a Federal agency or department may elect to use technical standards that are not developed or adopted by voluntary consensus standards bodies if the head of each such agency or department transmits to the Office of Management and Budget an explanation of the reasons for using such standards. Each year, beginning with fiscal year 1997, the Office of Management and Budget shall transmit to Congress and its committees a report summarizing all explanations received in the preceding year under this paragraph.

(4) Definition of technical standards.—As used in this subsection, the term “technical standards” means performance-based or design-specific technical specifications and related management systems practices.

SEC. 13. SENSE OF CONGRESS

It is the sense of the Congress that the Malcolm Baldrige National Quality Award program offers substantial benefits to United States industry, and that all funds appropriated for such program should be spent in support of the goals of the program.

Approved March 7, 1996.

April 26, 1996, 110 Stat. 1321 (Public Law 104-134—104th Congress, 2nd session) *Omnibus Consolidated Rescissions and Appropriations Act of 1996.*

Public Law 104-134

AN ACT

Making appropriations for fiscal year 1996 to make a further downpayment toward a balanced budget, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE AND RELATED AGENCIES.

Science and Technology.

National Institute of Standards and Technology. (101 Stat. 1321-27)

Scientific and Technical Research and Services. For necessary expenses of the National Institute of Standards and Technology, \$259,000,000, to remain available until expended, of which not to exceed \$8,500,000 may be transferred to the "Working Capital Fund."

Industrial Technology Services.

For necessary expenses of the Manufacturing Extension Partnership and the Advanced Technology Program of the National Institute of Standards and Technology, \$301,000,000, to remain available until expended, of which \$80,000,000 shall be for the Manufacturing Extension Partnership, and of which \$221,000,000 shall be for the Advanced Technology Program: Provided, That not to exceed \$500,000 may be transferred to the "Working Capital Fund."

Construction of Research Facilities.

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$60,000,000, to remain available until expended.

National Institute of Standards and Technology. (101 Stat. 1321-29)

Construction of Research Facilities.

(Rescission)

Of the unobligated balances available under this heading, \$75,000,000 are rescinded.

September 30, 1996, 110 Stat. 3009 (Public Law 104-208—104th Congress, 2nd session) *Omnibus Consolidated Appropriations Act, 1997.*

Public Law 104-208

AN ACT

Making omnibus consolidated appropriations for the fiscal year ending September 30, 1997, and for other purposes.

Title II-Department of Commerce and Related Agencies.

Science and Technology.

National Institute of Standards and Technology. (110 Stat. 3009-36-37)

Scientific and Technical Research and Services.

For necessary expenses of the National Institute of Standards and Technology, \$268,000,000, to remain available until expended, of which not to exceed \$1,625,000 may be transferred to the "Working Capital Fund."

Industrial Technology Services.

For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$95,000,000, to remain available until expended, of which not to exceed \$300,000 may be transferred to the "Working Capital Fund": Provided, That notwithstanding the time limitations imposed by 15 U.S.C. 278k(c) (1) and (5) on the duration of Federal financial assistance that may be awarded by the Secretary of Commerce to Regional Centers for the transfer of Manufacturing Technology ("Centers"), such Federal financial assistance for a Center may continue beyond six years and may be renewed for additional periods, not to exceed one year, at a rate not to exceed one-third of the Center's total annual costs, subject before any such renewal to a positive evaluation of the Center and to a finding by the Secretary of Commerce that continuation of Federal funding to the Center is in the best interest of the Regional Centers for the transfer of Manufacturing Technology Program. In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$225,000,000, to remain available until expended, of which not to exceed \$500,000 may be transferred to the "Working Capital Fund."

National Institute of Standards and Technology. (110 Stat. 3009-39)

Construction of Research Facilities.
(Rescission)

Of the obligated and unobligated balances available under this heading, \$16,000,000 are rescinded.

October 11, 1996, 110 Stat. 3411 (Public Law 104-289—104th Congress, 2nd session) *Savings in Construction Act of 1996*.

Public Law 104-289

AN ACT

To provide for appropriate implementation of the Metric Conversion Act of 1975 in Federal construction projects, and for other purposes.

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

SEC. 1. SHORT TITLE.

This Act may be cited as the "Savings in Construction Act of 1996".

SEC. 2. FINDINGS.

The Congress finds the following:

(1) The Metric Conversion Act of 1975 was enacted in order to set forth the policy of the United States to convert to the metric system. Section 3 of that Act requires that each Federal agency use the metric system of measurements in its procurement, grants, and other business-related activities, unless that use is likely to cause significant cost or loss of markets to United States firms, such as when foreign competitors are producing competing products in non-metric units.

(2) In accordance with that Act and Executive Order 12770, of July 25, 1991, Federal agencies increasingly construct new Federal buildings in round metric dimensions. As a result, companies that wish to bid on Federal construction projects increasingly are asked to supply materials or products in round metric dimensions.

(3) While the Metric Conversion Act of 1975 currently provides an exemption to metric usage when impractical or when such usage will cause economic inefficiencies, amendments are warranted to ensure that the use of specific metric components in metric construction projects do not increase the cost of Federal buildings to the taxpayers.

SEC. 3. DEFINITIONS.

Section 4 of the Metric Conversion Act of 1975 (15 U.S.C. 205c) is amended—

- (1) by striking “and” at the end of paragraph (3);
- (2) by striking “Commerce.” in paragraph (4) and inserting “Commerce;”;
- (3) by inserting after paragraph (4) the following:

“(5) ‘full and open competition’ has the same meaning as defined in section 403(6) of title 41, United States Code;

“(6) ‘total installed price’ means the price of purchasing a product or material, trimming or otherwise altering some or all of that product or material, if necessary to fit with other building components, and then installing that product or material into a Federal facility;

“(7) ‘hard-metric’ means measurement, design, and manufacture using the metric system of measurement, but does not include measurement, design, and manufacture using English system measurement units which are subsequently re-expressed in the metric system of measurement;

“(8) ‘cost or pricing data or price analysis’ has the meaning given such terms in section 304A of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 254b); and

“(9) ‘Federal facility’ means any public building (as defined under section 13 of the Public Buildings Act of 1959 (40 U.S.C. 612) and shall include any Federal building or construction project—

 - “(A) on lands in the public main;
 - “(B) on lands used in connection with Federal programs for agriculture research, recreation, and conservation programs;
 - “(C) on or used in connection with river, harbor, flood control, reclamation, or power projects;
 - “(D) on or used in connection with housing and residential projects;
 - “(E) on military installations (including any fort, camp, post, naval training station, airfield, proving ground, military supply depot, military school, or any similar facility of the Department of Defense);
 - “(F) on installations of the Department of Veteran Affairs used for hospital or domiciliary purposes; or
 - “(G) on lands used in connection with Federal prisons, but does not include (i) any Federal building or construction project the exclusion of which the President deems to be justified in the public interest, or (ii) any construction project or building owned or controlled by a State government, local government, Indian tribe, or any private entity.”.

SEC. 4. IMPLEMENTATION IN ACQUISITION OF FEDERAL FACILITIES.

(a) The Metric Conversion Act of 1975 (15 U.S.C. 205 et seq.) is amended by inserting after section 13 the following new section:

“Sec. 14. IMPLEMENTATION IN ACQUISITION OF CONSTRUCTION SERVICES AND MATERIALS FOR FEDERAL FACILITIES.

“(a) In General.—Construction services and materials for Federal facilities shall be procured in accordance with the policies and procedures set forth in chapter 137 of title 10, United States Code, section 2377 of title 10, United States Code, title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251 et seq.), and section 3(2) of this Act. Determination of a design method shall be based upon preliminary market research as required under section 2377(c) of title 10, United States Code, and section 314B(c) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 264b(c)). If the requirements of this Act conflict with the provisions of section 2377 of title 10, United States Code, or section 314B of the Federal Property and Administrative Services Act of 1949, then the provisions of 2377 or 314B shall take precedence.

“(b) Concrete Masonry Units.—In carrying out the policy set forth in section 3 (with particular emphasis on the policy set forth in paragraph (2) of that section) a Federal agency may require that specifications for the acquisition of structures or systems of concrete masonry be expressed under the metric system of measurement, but may not incorporate specifications, that can only be satisfied by hard-metric versions of concrete masonry units, in a solicitation for design or construction of a Federal facility within the United States or its territories, or a portion of said Federal facility, unless the head of the agency determines in writing that—

“(1) hard-metric specifications are necessary in a contract for the repair or replacement of parts of Federal facilities in existence or under construction upon the effective date of the Savings in Construction Act of 1996; or

“(2) the following 2 criteria are met:

“(A) the application requires hard-metric concrete masonry units to coordinate dimensionally into 100 millimeter building modules; and

“(B) the total installed price of hard-metric concrete masonry units is estimated to be equal to or less than the total installed price of using non-hard-metric concrete masonry units. Total installed price estimates shall be based, to the extent available, on cost or pricing data or price analysis, using actual hard-metric and non-hard-metric offers received for comparable existing projects. The head of the agency shall include in the writing required in this subsection an explanation of the factors used to develop the price estimates.

“(c) Recessed Lighting Fixtures.—In carrying out the policy set forth in section 3 (with particular emphasis on the policy set forth in paragraph (2) of that section) a Federal agency may require that specifications for the acquisition of structures or systems of recessed lighting fixtures be expressed under the metric system of measurement, but may not incorporate specifications, that can only be satisfied by hard-metric versions of recessed lighting fixtures, in a solicitation for design or construction of a Federal facility within the United States or its territories unless the head of the agency determines in writing that—

“(1) the predominant voluntary industry consensus standards include the use of hard-metric for the items specified; or

“(2) hard-metric specifications are necessary in a contract for the repair or replacement of parts of Federal facilities in existence or under construction upon the effective date of the Savings in Construction Act of 1996; or

“(3) the following 2 criteria are met:

“(A) the application requires hard-metric recessed lighting fixtures to coordinate dimensionally into 100 millimeter building modules; and

“(B) the total installed price of hard-metric recessed lighting fixtures is estimated to be equal to or less than the total installed price of using non-hard-metric recessed lighting fixtures. Total installed price estimates shall be based, to the extent available, on cost or pricing data or price analysis, using actual hard-metric and non-hard-metric offers received for comparable existing projects. The head of the agency shall include in the writing required in this subsection an explanation of the factors used to develop the price estimates.

“(d) Limitation.—The provisions of subsections (b) and (c) of this section shall not apply to Federal contracts to acquire construction products for the construction of facilities outside of the United States and its territories.

“(e) Expiration.—The provisions contained in subsections (b) and (c) of this section shall expire 10 years from the effective date of the Savings in Construction Act of 1996.”.

SEC. 5. OMBUDSMAN.

Section 14 of the Metric Conversion Act of 1975, as added by section 4 of this Act, is further amended by adding at the end the following new subsection:

“(f) Agency Ombudsman.—(1) The head of each executive agency that awards construction contracts within the United States and its territories shall designate a senior agency official to serve as a construction metrication ombudsman who shall be responsible for reviewing and responding to complaints from prospective bidders, subcontractors, suppliers, or their designated representatives related to—

“(A) guidance or regulations issued by the agency on the use of the metric system of measurement in contracts for the construction of Federal buildings; and

“(B) the use of the metric system of measurement for services and materials required for incorporation in individual projects to construct Federal buildings. The construction metrication ombudsman shall be independent of the contracting officer for construction contracts.

“(2) The ombudsman shall be responsible for ensuring that the agency is not implementing the metric system of measurement in a manner that is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms in violation of the policy stated in section 3(2), or is otherwise inconsistent with guidance issued by the Secretary of Commerce in consultation with the Interagency Council on Metric Policy while ensuring that the goals of the Metric Conversion Act of 1975 are observed.

“(3) The ombudsman shall respond to each complaint in writing within 60 days and make a recommendation to the head of the executive agency for an appropriate resolution thereto. In such a recommendation, the ombudsman shall consider—

“(A) whether the agency is adequately applying the policies and procedures in this section;

“(B) whether the availability of hard-metric products and services from United States firms is sufficient to ensure full and open competition; and

“(C) the total installed price to the Federal Government.

“(4) After the head of the agency has rendered a decision regarding a recommendation of the ombudsman, the ombudsman shall be responsible for communicating the decision to all appropriate policy, design, planning, procurement, and notifying personnel in the agency. The ombudsman shall conduct appropriate monitoring as required to ensure the decision is implemented, and may submit further recommendations, as needed. The head of the agency’s decision on the ombudsman’s recommendations, and any supporting documentation, shall be provided to affected parties and made available to the public in a timely manner.

“(5) Nothing in this section shall be construed to supersede the bid protest process established under subchapter V of chapter 35 of title 31, United States Code.”

SEC. 6. EFFECTIVE DATE AND MISCELLANEOUS PROVISIONS.

(a) Effective Date.—This Act and the amendments made by this Act shall take effect 90 days after the date of enactment of this Act.

(b) Savings Provisions.—This Act shall not apply to contracts awarded and solicitations issued on or before the effective date of this Act, unless the head of a Federal agency makes a written determination in his or her sole discretion that it would be in the public interest to apply one or more provisions of this Act or its amendments to these existing contracts or solicitations.

Approved October 11, 1996.

June 12, 1997, 111 Stat. 158 (Public Law 105-18—105th Congress, 1st session) *1997 Emergency Supplemental Appropriations Act for Recovery From Natural Disasters, and for Overseas Peacekeeping Efforts, Including those in Bosnia.*

Public Law 105-18

AN ACT

Making emergency supplemental appropriations for recovery from natural disasters, and for overseas peacekeeping efforts, including those in Bosnia, for the fiscal year ending September 30, 1997, and for other purposes.

TITLE II—EMERGENCY SUPPLEMENTAL APPROPRIATIONS FOR RECOVERY FROM NATURAL DISASTERS.

Chapter 2. DEPARTMENT OF COMMERCE.

National Institute of Standards and Technology. (111 Stat. 173)

Industrial Technology Services.

Of the amount provided under this heading in Public Law 104-208 for the Advanced Technology Program, not to exceed \$35,000,000 shall be available for the award of new grants.

National Institute of Standards and Technology. (111 Stat. 203)

Industrial Technology Services.

(Rescission)

Of the unobligated balances available under this heading for the Advanced Technology Program, \$7,000,000 are rescinded.

October 1, 1997, 111 Stat. 1159 (Public Law 105-47—105th Congress, 1st session) *Authorization of Appropriations for Carrying Out the Earthquake Hazards Reduction Act of 1977.*

Public Law 105-47

AN ACT

To authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1977 for fiscal years 1998 and 1999, and for other purposes.

SEC. 3. COMPREHENSIVE ENGINEERING RESEARCH PLAN. (111 Stat. 1162-63)

(a) National Science Foundation.—Section 5(b)(4) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(4)) is amended—

- (1) by striking “and” at the end of subparagraph (D);
- (2) by striking the period at the end of subparagraph (E) and inserting ; “and”; and
- (3) by adding at the end the following:

“(F) develop, in conjunction with the Federal Emergency Management Agency, the National Institute of Standards and Technology, and the United States Geological Survey, a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”

(b) Federal Emergency Management Agency.—Section 5(b)(1) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(1)) is amended—

- (1) by striking “and” at the end of subparagraph (D);
- (2) by striking the period at the end of subparagraph (E) and inserting ; “and”; and
- (3) by adding at the end the following:

“(F) work with the National Science Foundation, the National Institute of Standards and Technology, and the United States Geological Survey, to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (existing at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”

(c) United States Geological Survey.—Section 5(b)(3) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(3)) is amended—

- (1) by striking “and” at the end of subparagraph (E);
- (2) by striking the period at the end of subparagraph (G) and inserting ; “and”; and
- (3) by adding at the end the following:

“(H) work with the National Science Foundation, the Federal Emergency Management Agency, and the National Institute of Standards and Technology to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”

(d) National Institute of Standards and Technology.—Section 5(b)(5) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(5)) is amended—

- (1) by striking “and” at the end of subparagraph (B);
- (2) by striking the period at the end of subparagraph (C) and inserting ; “and”; and
- (3) by adding at the end the following:

“(D) work with the National Science Foundation, the Federal Emergency Management Agency, and the United States Geological Survey to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”

November 18, 1997, 111 Stat. 1629 (Public Law 105-85—105th Congress, 1st session) *National Defense Authorization Act, 1998.*

Public Law 105-85

AN ACT

To authorize appropriations for fiscal year 1998 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, and for other purposes.

SEC. 850. Use of Electronic Commerce in Federal Procurement. (111 Stat. 1847-48)

“SEC. 30. Use of Electronic Commerce in Federal Procurement

“(d) Implementation.—The Administrator shall, in carrying out the requirements of this section—

“(3) consult with the heads of appropriate Federal agencies with applicable technical and functional expertise, including the Office of Information and Regulatory Affairs, the National Institute of Standards and Technology, the General Services Administration, and the Department of Defense.

SEC. 1073. Technical and Clerical Amendments. (111 Stat. 1906-07)

(h) Amendments to Conform Change in short Title of Information Technology Management Reform Act of 1996.—

(1) Section 20 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3) is amended in subsections (a)(4) and (b)(2) by striking out “Information Technology Management Reform Act of 1996” and inserting in lieu thereof “Clinger-Cohen Act of 1996 (40 U.S.C. 1441).”

November 26, 1997, 111 Stat. 2440 (Public Law 105-119—105th Congress, 1st session) *Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998.*

Public Law 105-119

AN ACT

Making appropriations for the Department of Commerce, Justice, and State, the Judiciary, and related agencies for the fiscal year ending September 30, 1998, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE AND RELATED AGENCIES.

National Institute of Standards and Technology. (111 Stat. 2476-77)

For necessary expenses of the National Institute of Standards and Technology, \$276,852,000, to remain available until expended, of which not to exceed \$3,800,000 shall be used to fund a cooperative agreement with Texas Tech University for wind research; and of which not to exceed \$5,000,000 of the amount above \$268,000,000 shall be used to fund a cooperative agreement with Montana State University for a research program on green buildings; and of which not to exceed \$1,625,000 may be transferred to the “Working Capital Fund.” Industrial Technology Services. For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$113,500,000, to remain available until expended, of which not to exceed \$300,000 may be transferred to the “Working Capital Fund”: Provided, That notwithstanding the time limitations imposed by 15 U.S.C. 278k(c)(1) and (5) on the duration of Federal financial assistance that may be awarded by the Secretary of Commerce to Regional Centers for the transfer of Manufacturing Technology (“Centers”), such Federal financial assistance for a Center may continue beyond six years and may be renewed for additional periods, not to exceed one year, at a rate not to exceed one-third of the Center’s total annual costs, subject before any such renewal to a positive evaluation of the Center and to a finding by the Secretary of

Commerce that continuation of Federal funding to the Center is in the best interest of the Regional Centers for the transfer of Manufacturing Technology Program: Provided further, That the Center's most recent performance evaluation is positive, and the Center has submitted a reapplication which has successfully passed merit review.

In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$192,500,000, to remain available until expended, of which not to exceed \$82,000,000 shall be available for the award of new grants, and of which not to exceed \$500,000 may be transferred to the "Working Capital Fund."

Construction of Research Facilities

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$95,000,000, to remain available until expended: Provided, That of the amounts provided under this heading, \$78,308,000 shall be available for obligation and expenditure only after submission of a plan for the expenditure of these funds, in accordance with section 605 of this Act.

June 9, 1998, 112 Stat. 107 (Public Law 105-178—105th Congress, 2nd session) *Transportation Equity Act For the 21st Century*.

Public Law 105-178

AN ACT

To authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes.

SEC. 5012. (112 Stat. 425) Surface Transportation Research.

Chapter 5 of title 23, United States Code (as added by section 5101 of this title), is amended by adding at the end the following:

"Sec. 502 (c) Contents of Research Program.— The Secretary shall include in surface transportation research, technology development, and technology transfer programs carried out under this title coordinated activities in the following areas:

"(9) Standardized estimates, to be developed in conjunction with the National Institute of Standards and Technology and other appropriate organizations, of useful life under various conditions for advanced materials of use in surface transportation."

August 14, 1998, 112 Stat. 1536 (Public Law 105-234—105th Congress, 2nd session) *Fastener Quality Act Amendment*.

Public Law 105-234

AN ACT

Amending the Fastener Quality Act to exempt from its coverage certain fasteners approved by the Federal Aviation Administration for use in aircraft.

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

SEC. 1. AMENDMENT.

Section 15 of the Fastener Quality Act (15 U.S.C. 5414) is amended—

(1) by inserting “(a) Transitional Rule.—” before “The requirements of this Act”; and

(2) by adding at the end the following new subsection:

“(b) Aircraft Exemption.”

(1) In general.—The requirements of this Act shall not apply to fasteners specifically manufactured or altered for use on an aircraft if the quality and suitability of those fasteners for that use has been approved by the Federal Aviation Administration, except as provided in paragraph (2)

“(2) Exception.—Paragraph (1) shall not apply to fasteners represented by the fastener manufacturer as having been manufactured in conformance with standards or specifications established by a consensus standards organization or a Federal agency other than the Federal Aviation Administration.”

SEC. 2. DELAYED IMPLEMENTATION OF REGULATIONS.

The regulations issued under the Fastener Quality Act by the National Institute of Standards and Technology on April 14, 1998, and any other regulations issued by the National Institute of Standards and Technology pursuant to the Fastener Quality Act, shall not take effect until after the later of June 1, 1999, or the expiration of 120 days after the Secretary of Commerce transmits to the Committee on Science and the Committee on Commerce of the House of Representatives, and to the Committee on Commerce, Science, and Transportation of the Senate, a report on—

(1) changes in fastener manufacturing processes that have occurred since the enactment of the Fastener Quality Act;

(2) a comparison of the Fastener Quality Act to other regulatory programs that regulate the various categories of fasteners, and an analysis of any duplication that exists among programs; and

(3) any changes in that Act that may be warranted because of the changes reported under paragraphs (1) and (2).

The report required by this section shall be transmitted to the Committee on Science and the Committee on Commerce of the House of Representatives, and to the Committee on Commerce, Science, and Transportation of the Senate, by February 1, 1999.

Approved August 14, 1998.

October 9, 1998, 112 Stat. 1870 (Public Law 105-251—105th Congress, 2nd session) *Criminal Identification Technology*.

Public Law 105-251

AN ACT

To provide for the improvement of interstate criminal justice identification, information, communications.

SEC. 102 (112 Stat. 1871) State Grant Program for Criminal Justice Identification, Information, and Communication.

(b) Use of Grant Amounts.—Grants under this section may be used for programs to establish, develop, update, or upgrade—

(1) State centralized, automated, adult and juvenile criminal history record information systems, including arrest and disposition reporting;

(2) automated fingerprint identification systems that are compatible with standards established by the National Institute of Standards and Technology and interoperable with the Integrated Automated Fingerprint Identification System (IAFIS) of the Federal Bureau of Investigation;

(3) finger imaging, live scan, and other automated systems to digitize fingerprints and to communicate prints in a manner that is compatible with standards established by the National Institute of Standards and Technology and interoperable with systems operated by States and by the Federal Bureau of Investigation.

October 19, 1998, 112 Stat. 2386 (Public Law 105-271—105th Congress, 2nd session) *Year 2000 Information and Readiness Disclosure Act.*

Public Law 105-271

AN ACT

To encourage the disclosure and exchange of information about computer processing problems, solutions, test practices and test results, and related matters in connection with the transition to the year 2000.

SEC. 9. (112 Stat. 2394) NATIONAL INFORMATION CLEARINGHOUSE AND WEBSITE.

(a) National Website.—

(1) In general.—The Administrator of General Services shall create and maintain until July 14, 2002, a national year 2000 website, and promote its availability, designed to assist consumers, small business, and local governments in obtaining information from other governmental websites, hotlines, or information clearinghouses about year 2000 processing of computers, systems, products, and services, including websites maintained by independent agencies and other departments.

(2) Consultation.—In creating the national year 2000 website, the Administrator of General Services shall consult with—

- (A) the Director of the Office of Management and Budget;
- (B) the Administrator of the Small Business Administration;
- (C) the Consumer Product Safety Commission;
- (D) officials of State and local governments;
- (E) the Director of the National Institute of Standards and Technology;
- (F) representatives of consumer and industry groups; and
- (G) representatives of other entities, as determined appropriate.

October 21, 1998, 112 Stat. 2681 (Public Law 105-277—105th Congress, 2nd session) *Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999.*

Public Law 105-277

AN ACT

Making omnibus consolidated and emergency appropriations for fiscal year ending September 30, 1999, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE AND RELATED AGENCIES.

National Institute of Standards and Technology. (112 Stat. 2681-82-83)

Scientific and Technical Research and Services.

For necessary expenses of the National Institute of Standards and Technology, \$280,136,000, to remain available until expended, of which not to exceed \$1,625,000 may be transferred to the "Working Capital Fund." Industrial Technology Services. For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$106,800,000, to remain available until expended: Provided, That notwithstanding the time limitations imposed by 15 U.S.C. 278k(c) (1) and (5) on the duration of Federal financial assistance that may be awarded by the Secretary of Commerce to Regional Centers for the transfer of Manufacturing Technology ("Centers"), such Federal financial assistance for a Center may continue beyond six years and may be renewed for additional periods, not to exceed one year, at a rate not to exceed one-third of the Center's total annual costs or the level of funding in the sixth year, whichever is less, subject before any such renewal to a positive evaluation of the Center and to a finding by the Secretary of Commerce that continuation of Federal funding to the Center is in the best interest of the Regional Centers for the transfer of Manufacturing Technology Program: Provided further, That the Center's most recent performance evaluation is positive, and the Center has submitted a reapplication which has successfully passed merit review.

In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$203,500,000, to remain available until expended, of which not to exceed \$66,000,000 shall be available for the award of new grants, and of which not to exceed \$500,000 may be transferred to the "Working Capital Fund."

Construction of Research Facilities.

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$56,714,000, to remain available until expended: Provided, That of the amounts provided under this heading, \$40,000,000 shall be available for obligation and expenditure only after submission of a plan for the expenditure of these funds, in accordance with section 605 of this Act.

National Institute of Standards and Technology. (112.Stat. 2681-118)

Industrial Technology Services (Rescission)

Of the unobligated balances available under this heading for the Advanced Technology Program, \$6,000,000 are rescinded.

October 28, 1998, 112 Stat. 2919 (Public Law 105-305—105th Congress, 2nd session) *Next Generation Internet Research Act of 1998*.

Public Law 105-305

AN ACT

To amend the High-Performance Computing Act of 1991 to authorize appropriations for fiscal years 1999 and 2000 for the Next Generation Internet program, to require the President's Information Technology Advisory Committee to monitor and give advice concerning the development and implementation of the Next Generation Internet program and report to the President and the Congress on its activities, and for other purposes.

SEC. 5. (112 Stat. 2921) NEXT GENERATION INTERNET.

Title I of the High-Performance Computing Act of 1991 (15 U.S.C. 5511 et seq.) is amended by adding at the end the following new section:

"SEC. 103. NEXT GENERATION INTERNET.

"a) Establishment.—The National Science Foundation, the Department of Energy, the National Institutes of Health, the National Aeronautics and Space Administration, and the National Institute of Standards and Technology may support the Next Generation Internet program. The objectives of the Next Generation Internet program shall be to—

"(1) support research, development, and demonstration of advanced networking technologies to increase the capabilities and improve the performance of the Internet;

"(2) develop an advanced testbed network connecting a significant number of research sites, including universities, Federal research institutions, and other appropriate research partner institutions, to support networking research and to demonstrate new networking technologies; and

"(3) develop and demonstrate advanced Internet applications that meet important national goals or agency mission needs, and that are supported by the activities described in paragraphs (1) and (2).

"b) Duties of Advisory Committee.—The President's Information Technology Advisory Committee (established pursuant to section 101(b) by Executive Order No. 13035 of February 11, 1997 (62 F.R. 7131), as amended by Executive Order No. 13092 of July 24, 1998), in addition to its functions under section 101(b), shall—

- “(1) assess the extent to which the Next Generation Internet program
- “A) carries out the purposes of this Act; and
 - “B) addresses concerns relating to, among other matters—
 - “i) geographic penalties (as defined in section 7(1) of the Next Generation Internet Research Act of 1998);
 - “ii) the adequacy of access to the Internet by Historically Black Colleges and Universities, Hispanic Serving Institutions, and small colleges and universities (whose enrollment is less than 5,000) and the degree of participation of those institutions in activities described in subsection (a); and
 - “iii) technology transfer to and from the private sector;

“(2) review the extent to which the role of each Federal agency and department involved in implementing the Next Generation Internet program is clear and complementary to, and non-duplicative of, the roles of other participating agencies and departments;

“(3) assess the extent to which Federal support of fundamental research in computing is sufficient to maintain the Nation’s critical leadership in this field; and

“(4) make recommendations relating to its findings under paragraphs (1), (2), and (3).

“(c) Reports.—The Advisory Committee shall review implementation of the Next Generation Internet program and shall report, not less frequently than annually, to the President, the Committee on Commerce, Science, and Transportation, the Committee on Appropriations, and the Committee on Armed Services of the Senate, and the Committee on Science, the Committee on Appropriations, and the Committee on National Security of the House of Representatives on its findings and recommendations for the preceding fiscal year. The first such report shall be submitted 6 months after the date of the enactment of the Next Generation Internet Research Act of 1998 and the last report shall be submitted by September 30, 2000.

“(d) Authorization of Appropriations.—There are authorized to be appropriated for the purposes of this section—

“(1) for the Department of Energy, \$22,000,000 for fiscal year 1999 and \$25,000,000 for fiscal year 2000;

“(2) for the National Science Foundation, \$25,000,000 for fiscal year 1999 and \$25,000,000 for fiscal year 2000, as authorized in the National Science Foundation Authorization Act of 1998;

“(3) for the National Institutes of Health, \$5,000,000 for fiscal year 1999 and \$7,500,000 for fiscal year 2000;

“(4) for the National Aeronautics and Space Administration, \$10,000,000 for fiscal year 1999 and \$10,000,000 for fiscal year 2000; and

“(5) for the National Institute of Standards and Technology, \$5,000,000 for fiscal year 1999 and \$7,500,000 for fiscal year 2000. Such funds may not be used for routine upgrades to existing federally funded communication networks.

October 30, 1998, 112 Stat. 2935 (Public Law 105-309—105th Congress, 2nd session) *Technology Administration Act of 1998*.

Public Law 105-309

AN ACT

To authorize appropriations for the National Institute of Standards and Technology for fiscal years 1998 and 1999, and for other purposes.

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

SEC. 1. SHORT TITLE.

This Act may be cited as the “Technology Administration Act of 1998”.

SEC. 2. MANUFACTURING EXTENSION PARTNERSHIP PROGRAM CENTER EXTENSION.

Section 25(c)(5) of the National Institute of Standards and Technology Act (15 U.S.C. 278k(c)(5)) is amended by striking, "which are designed" and all that follows through "operation of a Center." and inserting "in lieu thereof". After the sixth year, a Center may receive additional financial support under this section if it has received a positive evaluation through an independent review, under procedures established by the Institute. Such an independent review shall be required at least every two years after the sixth year of operation. Funding received for a fiscal year under this section after the sixth year of operation shall not exceed one third of the capital and annual operating and maintenance costs of the Center under the program."

SEC. 3. MALCOLM BALDRIGE QUALITY AWARD.

(a) Additional Awards.—Section 17(c)(3) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711a(c)(3)) is amended by inserting ", unless the Secretary determines that a third award is merited and can be given at no additional cost to the Federal Government" after "in any year".

(b) Categories.—Section 17(c)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711a(c)(1)) is amended by adding at the end the following:

"(D) Health care providers.

"(E) Education providers."

SEC. 4. NOTICE.

(a) Redesignation.—Section 31 of the National Institute of Standards and Technology Act as section 32.

(b) Notice.—The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by inserting after section 30 the following new section:

"NOTICE

"SEC. 31. (a) Notice of Reprogramming.—If any funds authorized for carrying out this Act are subject to a reprogramming action that requires notice to be provided to the Appropriations Committees of the House of Representatives and the Senate, notice of such action shall concurrently be provided to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

"(b) Notice of Reorganization.—

"(1) Requirement.—The Secretary shall provide notice to the Committees on Science and Appropriations of the House of Representatives, and the Committees on Commerce, Science, and Transportation and Appropriations of the Senate, not later than 15 days before any major reorganization of any program, project, or activity of the Institute.

"(2) Definition.—For purposes of this subsection, the term 'major reorganization' means any reorganization of the Institute that involves the reassignment of more than 25 percent of the employees of the Institute."

SEC. 5. SENSE OF THE CONGRESS ON THE YEAR 2000 PROBLEM.

With the year 2000 fast approaching, it is the sense of the Congress that the National Institute of Standards and Technology should—

(1) give high priority to correcting all 2-digit date-related problems in its computer systems to ensure that those systems continue to operate effectively in the year 2000 and beyond; and

(2) develop contingency plans for those systems that the Institute is unable to correct in time.

Sec. 6.: ENHANCEMENT OF SCIENCE AND MATHEMATICS PROGRAMS.

(a) Definitions.—In this section—

(1) Educationally useful Federal equipment.—The term "educationally useful Federal equipment" means computers and related peripheral tools and research equipment that is appropriate for use in schools.

(2) School.—The term "school" means a public or private educational institution that serves any of the grades of kindergarten through grade 12. (b) Sense of the Congress.—

(1) In general.—It is the sense of the Congress that the Director of the National Institute of Standards and Technology should, to the greatest extent practicable and in a manner consistent with applicable Federal law (including Executive Order No. 12999), donate educationally useful Federal equipment to schools in order to enhance the science and mathematics programs of those schools.

(2) Reports.—

(A) In general.—Not later than 1 year after the date of the enactment of this Act, and annually thereafter, the Director of the National Institute of Standards and Technology shall prepare and submit to the President a report. The President shall submit the report to Congress at the same time as the President submits a budget request to Congress under section 1105(a) of title 31, United States Code.

(B) Contents of report.—The report prepared by the Director under this paragraph shall describe any donations of educationally useful Federal equipment to schools made during the period covered by the report.

SEC. 7. TEACHER SCIENCE AND TECHNOLOGY ENHANCEMENT INSTITUTE PROGRAM.

The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by inserting after section 19 the following:

“SEC. 19A. (a) The Director shall establish within the Institute a teacher science and technology enhancement program to provide for professional development of mathematics and science teachers of elementary, middle, and secondary schools (as those terms are defined by the Director), including providing for the improvement of those teachers with respect to the understanding of science and the impacts of science on commerce.

“(b) In carrying out the program under this section, the Director shall focus on the areas of—

“(1) scientific measurements;

“(2) tests and standards development;

“(3) industrial competitiveness and quality;

“(4) manufacturing;

“(5) technology transfer; and

“(6) any other area of expertise of the Institute that the Director determines to be appropriate.

“(c) The Director shall develop and issue procedures and selection criteria for participants in the program.

“(d) The program under this section shall be conducted on an annual basis during the summer months, during the period of time when a majority of elementary, middle, and secondary schools have not commenced a school year.

“(e) The program shall provide for teachers’ participation in activities at the laboratory facilities of the Institute, or shall utilize other means of accomplishing the goals of the program as determined by the Director, which may include the Internet, video conferencing and recording, and workshops and conferences.”

SEC. 8. OFFICE OF SPACE COMMERCIALIZATION.

(a) Establishment.—There is established within the Department of Commerce an Office of Space Commercialization (referred to in this section as the “Office”).

(b) Director.—The Office shall be headed by a Director, who shall be a senior executive and shall be compensated at a level in the Senior Executive Service under section 5382 of title 5, United States Code, as determined by the Secretary of Commerce.

(c) Functions of the Office; Duties of the Director.—The Office shall be the principal unit for the coordination of space-related issues, programs, and initiatives within the Department of Commerce. The primary responsibilities of the Director, in carrying out the functions of the Office, shall include—

(1) promoting commercial provider investment in space activities by collecting, analyzing, and disseminating information on space markets, and conducting workshops and seminars to increase awareness of commercial space opportunities;

(2) assisting United States commercial providers in the efforts of those providers to conduct business with the United States Government;

(3) acting as an industry advocate within the executive branch of the Federal Government to ensure that the Federal Government meets the space-related requirements of the Federal Government, to the fullest extent feasible, using commercially available space goods and services;

(4) ensuring that the United States Government does not compete with United States commercial providers in the provision of space hardware and services otherwise available from United States commercial providers;

(5) promoting the export of space-related goods and services;

(6) representing the Department of Commerce in the development of United States policies and in negotiations with foreign countries to ensure free and fair trade internationally in the area of space commerce; and

(7) seeking the removal of legal, policy, and institutional impediments to space commerce.

SEC. 9. EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE TECHNOLOGY.

Section 5 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3704) is amended by adding at the end the following:

“(f) Experimental Program To Stimulate Competitive Tehnology.—

“(1) In general.—The Secretary, acting through the Under Secretary, shall establish for fiscal year 1999 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, acting through the Under 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, acting through the Under 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.

“(4) Requirements for making awards.—

“(A) In general.—In making awards under this subsection, the Secretary, acting through the Under 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, acting through the Under 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.

“(6) Coordination.—To the extent practicable, in carrying out this subsection, the Secretary, acting through the Under Secretary, shall coordinate the program with other programs of the Department of Commerce.

“(7) Report.—

“(A) In general.—Not later than 90 days after the date of the enactment of the Technology Administration Act of 1998, the Under Secretary shall prepare and submit a report that meets the requirements of this paragraph to the Secretary. Upon receipt of the report, the Secretary shall transmit a copy of the report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science of the House of Representatives.

“(B) Requirements for report.—The report prepared under this paragraph shall contain with respect to the program

“(i) a description of the structure and procedures of the program;

“(ii) a management plan for the program;

“(iii) a description of the merit-based review process to be used in the program;

“(iv) milestones for the evaluation of activities to be assisted under the program in fiscal year 1999;

“(v) an assessment of the eligibility of each State that participates in the Experimental Program to Stimulate Competitive Research of the National Science Foundation to participate in the program under this subsection; and

“(vi) the evaluation criteria with respect to which the overall management and effectiveness of the program will be evaluated.”

SEC. 10. NATIONAL TECHNOLOGY MEDAL FOR ENVIRONMENTAL TECHNOLOGY.

In the administration of section 16 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711), Environmental Technology shall be established as a separate nomination category with appropriate unique criteria for that category.

SEC. 11. INTERNATIONAL ARCTIC RESEARCH CENTER.

The Congress finds that the International Arctic Research Center is an internationally-supported effort to conduct important weather and climate studies, and other research projects of benefit to the United States. It is, therefore, the sense of the Congress that, as with similar research conducted in the Antarctic, the United States should provide similar support for this important effort.

Approved October 30, 1998.

June 8, 1999, 113 Stat. 118 (Public Law 106-34—106th Congress, 1st session) *Fastener Quality Act Amendments Act of 1999*.

Public Law 106-34

AN ACT

To amend the Fastener Quality Act to strengthen the protection against the sale of mismarked, misrepresented, and counterfeit fasteners and eliminate unnecessary requirements, and for other purposes.

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

SEC. 1. SHORT TITLE.

This Act may be cited as the “Fastener Quality Act Amendments Act of 1999”.

SEC. 2. FINDINGS AND PURPOSE.

Section 2 of the Fastener Quality Act (15 U.S.C. 5401) is amended to read as follows:

“SEC. 2. FINDINGS.

“The Congress finds that—

“(1) the United States fastener industry is a significant contributor to the global economy, employing thousands of workers in hundreds of communities;

“(2) the American economy uses billions of fasteners each year;

“(3) state-of-the-art manufacturing and improved quality assurance systems have dramatically improved fastener quality, so virtually all fasteners sold in commerce meet or exceed the consensus standards for the uses to which they are applied;

“(4) a small number of mismarked, misrepresented, and counterfeit fasteners do enter commerce in the United States; and

“(5) multiple criteria for the identification of fasteners exist, including grade identification markings and manufacturer’s insignia, to enable purchasers and users of fasteners to accurately evaluate the characteristics of individual fasteners.”

SEC. 3. DEFINITIONS.

Section 3 of the Fastener Quality Act (15 U.S.C. 5402) is amended to read as follows:

“SEC. 3. DEFINITIONS.

“As used in this Act, the term—

“(1) ‘accredited laboratory’ means a fastener testing facility used to perform end-of-line testing required by a consensus standard or standards to verify that a lot of fasteners conforms to the grade identification marking called for in the consensus standard or standards to which the lot of fasteners has been manufactured, and which—

“(A) meets the requirements of ISO/IEC Guide 25 (or another document approved by the Director under section 10(c)), including revisions from time-to-time; and

“(B) has been accredited by a laboratory accreditation body that meets the requirements of ISO/IEC Guide 58 (or another document approved by the Director under section 10(d)), including revisions from time-to-time;

“(2) ‘consensus standard’ means the provisions of a document that describes fastener characteristics published by a consensus standards organization or a Federal agency, and does not include a proprietary standard;

“(3) ‘consensus standards organization’ means the American Society for Testing and Materials, the American National Standards Institute, the American Society of Mechanical Engineers, the Society of Automotive Engineers, the International Organization for Standardization, any other organization identified as a United States consensus standards organization or a foreign and international consensus standards organization in the Federal Register at 61 Fed. Reg. 50582-83 (September 26, 1996), and any successor organizations thereto;

“(4) ‘Director’ means the Director of the National Institute of Standards and Technology;

“(5) ‘distributor’ means a person who purchases fasteners for the purpose of reselling them at wholesale to unaffiliated persons within the United States (an original equipment manufacturer and its dealers shall be considered affiliated persons for purposes of this Act);

“(6) ‘fastener’ means a metallic screw, nut, bolt, or stud having internal or external threads, with a nominal diameter of 6 millimeters or greater, in the case of such items described in metric terms, or 1/4 inch or greater, in the case of such items described in terms of the English system of measurement, or a load-indicating washer, that is through-hardened or represented as meeting a consensus standard that calls for through-hardening, and that is grade identification marked or represented as meeting a consensus standard that requires grade identification marking, except that such term does not include any screw, nut, bolt, stud, or load-indicating washer that is—

“(A) part of an assembly;

“(B) a part that is ordered for use as a spare, substitute, service, or replacement part, unless that part is in a package containing more than 75 of any such part at the time of sale, or a part that is contained in an assembly kit;

- “(C) produced and marked as ASTM A 307 Grade A, or a successor standard thereto;
- “(D) produced in accordance with ASTM F 432, or a successor standard thereto;
- “(E) specifically manufactured for use on an aircraft if the quality and suitability of those fasteners for that use has been approved—
 - “(i) by the Federal Aviation Administration; or
 - “(ii) by a foreign airworthiness authority as described in part 21.29, 21.500, 21.502, or 21.617 of title 14 of the Code of Federal Regulations;
- “(F) manufactured in accordance with a fastener quality assurance system; or
- “(G) manufactured to a proprietary standard, whether or not such proprietary standard directly or indirectly references a consensus standard or any portion thereof;
- “(7) ‘fastener quality assurance system’ means—
 - “(A) a system that meets the requirements, including revisions from time-to-time, of—
 - “(i) International Organization for Standardization (ISO) Standard 9000, 9001, 9002, or TS16949;
 - “(ii) Quality System (QS) 9000 Standard;
 - “(iii) Verband der Automobilindustrie e.V. (VDA) 6.1 Standard; or
 - “(iv) Aerospace Basic Quality System Standard AS9000; or
 - “(B) any fastener manufacturing system—
 - “(i) that has as a stated goal the prevention of defects through continuous improvement;
 - “(ii) that seeks to attain the goal stated in clause (i) by incorporating—
 - “(I) advanced quality planning;
 - “(II) monitoring and control of the manufacturing process;
 - “(III) product verification embodied in a comprehensive written control plan for product and process characteristics, and process controls (including process influence factors and statistical process control), tests, and measurement systems to be used in production; and
 - “(IV) the creation, maintenance, and retention of electronic, photographic, or paper records required by the control plan regarding the inspections, tests, and measurements performed pursuant to the control plan; and
 - “(iii) that—
 - “(I) is subject to certification in accordance with the requirements of ISO/IEC Guide 62 (or another document approved by the Director under section 10(a)), including revisions from time-to-time, by a third party who is accredited by an accreditation body in accordance with the requirements of ISO/IEC Guide 61 (or another document approved by the Director under section 10(b)), including revisions from time-to-time; or
 - “(II) undergoes regular or random evaluation and assessment by the end user or end users of the screws, nuts, bolts, studs, or load-indicating washers produced under such fastener manufacturing system to ensure that such system meets the requirements of clauses (i) and (ii);
- “(8) ‘grade identification marking’ means any grade-mark or property class symbol appearing on a fastener purporting to indicate that the lot of fasteners conforms to a specific consensus standard, but such term does not include a manufacturer’s insignia or part number;
- “(9) ‘importer’ means a distributor located within the United States who contracts for the initial purchase of fasteners manufactured outside the United States;
- “(10) ‘lot’ means a quantity of fasteners of one part number fabricated by the same production process from the same coil or heat number of metal as provided by the metal manufacturer;
- “(11) ‘manufacturer’ means a person who fabricates fasteners for sale in commerce;
- “(12) ‘proprietary standard’ means the provisions of a document that describes characteristics of a screw, nut, bolt, stud, or load-indicating washer and is issued by a person who—
 - “(A) uses screws, nuts, bolts, studs, or load-indicating washers in the manufacture, assembly, or servicing of its products; and
 - “(B) with respect to such screws, nuts, bolts, studs, or washers, is a developer and issuer of descriptions that have characteristics similar to consensus standards and that bear such user’s identification;

“(13) ‘record of conformance’ means a record or records for each lot of fasteners sold or offered for sale that contains—

“(A) the name and address of the manufacturer;

“(B) a description of the type of fastener;

“(C) the lot number;

“(D) the nominal dimensions of the fastener (including diameter and length of bolts or screws), thread form, and class of fit;

“(E) the consensus standard or specifications to which the lot of fasteners has been manufactured, including the date, number, revision, and other information sufficient to identify the particular consensus standard or specifications being referenced;

“(F) the chemistry and grade of material;

“(G) the coating material and characteristics and the applicable consensus standard or specifications for such coating; and

“(H) the results or a summary of results of any tests performed for the purpose of verifying that a lot of fasteners conforms to its grade identification marking or to the grade identification marking the lot of fasteners is represented to meet;

“(14) ‘represent’ means to describe one or more of a fastener’s purported characteristics in a document or statement that is transmitted to a purchaser through any medium;

“(15) ‘Secretary’ means the Secretary of Commerce; “(16) ‘specifications’ means the required characteristics identified in the contractual agreement with the manufacturer or to which a fastener is otherwise produced, except that the term does not include proprietary standards; and

“(17) ‘through-harden’ means heating above the transformation temperature followed by quenching and tempering for the purpose of achieving uniform hardness.”

SEC. 4. SALE OF FASTENERS.

(a) Amendment.—Sections 5 through 7 of the Fastener Quality Act (15 U.S.C. 5404-6) are repealed, and the following new section is inserted after section 3 of such Act:

“SEC. 4 SALE OF FASTENERS.

“(a) General Rule.—It shall be unlawful for a manufacturer or distributor, in conjunction with the sale or offer for sale of fasteners from a single lot, to knowingly misrepresent or falsify—

“(1) the record of conformance for the lot of fasteners;

“(2) the identification, characteristics, properties, mechanical or performance marks, chemistry, or strength of the lot of fasteners; or

“(3) the manufacturer’s insignia.

“(b) Representations.—A direct or indirect reference to a consensus standard to represent that a fastener conforms to particular requirements of the consensus standard shall not be construed as a representation that the fastener meets all the requirements of the consensus standard.

“(c) Specifications.—A direct or indirect contractual reference to a consensus standard for the purpose of identifying particular requirements of the consensus standard that serve as specifications shall not be construed to require that the fastener meet all the requirements of the consensus standard.

“(d) Use of Accredited Laboratories.—In the case of fasteners manufactured solely to a consensus standard or standards, end-of-line testing required by the consensus standard or standards, if any, for the purpose of verifying that a lot of fasteners conforms with the grade identification marking called for in the consensus standard or standards to which the lot of fasteners has been manufactured shall be conducted by an accredited laboratory.”

(b) Effective Date.—Subsection (d) of section 4 of the Fastener Quality Act, as added by subsection (a) of this section, shall take effect 2 years after the date of the enactment of this Act.

SEC. 5. MANUFACTURERS' INSIGNIAS.

Section 8 of the Fastener Quality Act (15 U.S.C. 5407) is redesignated as section 5 and is amended—

(1) by amending subsection (a) to read as follows:

“(a) General Rule.—Unless the specifications provide otherwise, fasteners that are required by the applicable consensus standard or standards to bear an insignia identifying their manufacturer shall not be offered for sale or sold in commerce unless—

“(1) the fasteners bear such insignia; and

“(2) the manufacturer has complied with the insignia recordation requirements established under subsection (b).”; and

(2) in subsection (b), by striking “and private label” and all that follows and inserting “described in subsection (a).”

SEC. 6. REMEDIES AND PENALTIES.

Section 9 of the Fastener Quality Act (15 U.S.C. 5408) is redesignated as section 6 and is amended—

(1) in subsection (b)(3), by striking “of this section” and inserting “of this subsection”;

(2) in subsection (b)(4), by inserting “arbitrate,” after “Secretary may”; and

(3) in subsection (d)—

(A) by inserting “(1)” after “Enforcement.—”; and

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

“(2) The Secretary shall establish and maintain a hotline system to facilitate the reporting of alleged violations of this Act, and the Secretary shall evaluate allegations reported through that system and report any credible allegations to the Attorney General.”

SEC. 7. RECORDKEEPING REQUIREMENTS.

Section 10 of the Fastener Quality Act (15 U.S.C. 5409) is redesignated as section 7 and is amended by striking subsections (a) and (b) and inserting the following:

“Manufacturers and importers shall retain the record of conformance for fasteners for 5 years, on paper or in photographic or electronic format in a manner that allows for verification of authenticity. Upon request of a distributor who has purchased a fastener, or a person who has purchased a fastener for use in the production of a commercial product, the manufacturer or importer of the fastener shall make available information in the record of conformance to the requester.”

SEC. 8. RELATIONSHIP TO STATE LAWS.

Section 11 of the Fastener Quality Act (15 U.S.C. 5410) is redesignated as section 8.

SEC. 9. CONSTRUCTION.

Section 12 of the Fastener Quality Act (15 U.S.C. 5411) is redesignated as section 9 and is amended by striking “in effect on the date of enactment of this Act.”

SEC. 10. CERTIFICATION AND ACCREDITATION.

Sections 13 and 15 of the Fastener Quality Act (15 U.S.C. 5412 and 14) are repealed, and the following new section is inserted at the end of that Act

“SEC. 10. CERTIFICATION AND ACCREDITATION.

“(a) Certification.— A person publishing a document setting forth guidance or requirements for the certification of manufacturing systems as fastener quality assurance systems by an accredited third party may petition the Director to approve such document for use as described in section 3(7)(B)(iii)(I). The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 62.

“(b) Accreditation.—A person publishing a document setting forth guidance or requirements for the approval of accreditation bodies to accredit third parties described in subsection (a) may petition the Director to approve such document for use as described in section 3(7)(B)(iii)(I). The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 61.

“(c) Laboratory Accreditation.—A person publishing a document setting forth guidance or requirements for the accreditation of laboratories may petition the Director to approve such document for use as described in section 3(1)(A). The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 25.

“(d) Approval of Accreditation Bodies.— A person publishing a document setting forth guidance or requirements for the approval of accreditation bodies to accredit laboratories may petition the Director to approve such document for use as described in section 3(1)(B). The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 58. In addition to any other voluntary laboratory accreditation programs that may be established by private sector persons, the Director shall establish a National Voluntary Laboratory Accreditation Program, for the accreditation of laboratories as described in section 3(1)(B), that meets the requirements of ISO/IEC Guide 58 (or another document approved by the Director under this subsection), including revisions from time-to-time.

“(e) Affirmation.—

(1) An accreditation body accrediting third parties who certify manufacturing systems as fastener quality assurance systems as described in section (7)(B)(iii)(I) shall affirm to the Director that it meets the requirements of ISO/IEC Guide 61 (or another document approved by the Director under subsection (b)), including revisions from time-to-time.

“(2) An accreditation body accrediting laboratories as described in section 3(1)(B) shall affirm to the Director that it meets the requirements of ISO/IEC Guide 58 (or another document approved by the Director under subsection (d)), including revisions from time-to-time.

“(3) An affirmation required under paragraph (1) or (2) shall take the form of a self-declaration that the accreditation body meets the requirements of the applicable Guide, signed by an authorized representative of the accreditation body, without requirement for accompanying documentation. Any such information shall be considered to be a continuous affirmation that the accreditation body meets the requirements of the applicable Guide, unless and until the affirmation is withdrawn by the accreditation body.”

SEC. 11. APPLICABILITY.

At the end of the Fastener Quality Act, insert the following new section:

“SEC. 11. APPLICABILITY.

“The requirements of this Act shall be applicable only to fasteners fabricated 180 days or more after the date of the enactment of the Fastener Quality Act Amendments Act of 1999, except that if a manufacturer or distributor of fasteners fabricated before that date prepares a record of conformance for such fasteners, representations about such fasteners shall be subject to the requirements of this Act.”

SEC. 12. COMPTROLLER GENERAL REPORT.

Not later than 2 years after the date of the enactment of this Act, the Comptroller General shall transmit to the Congress a report describing any changes in industry practice resulting from or apparently resulting from the enactment of section 3(6)(B) of the Fastener Quality Act, as added by section 3 of this Act.

Approved June 8, 1999.

November 29, 1999, 113 Stat. 1501 (Public Law 106-113—106th Congress, 1st session) *Consolidated Appropriations Act, 2000*.

Public Law 106-113

AN ACT

Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes.

TITLE II—DEPARTMENT OF COMMERCE AND RELATED AGENCIES

National Institute of Standards and Technology. (113 Stat. 1501A-28-29)

Scientific and Technical Research and Services.

For necessary expenses of the National Institute of Standards and Technology, \$283,132,000, to remain available until expended, of which not to exceed \$282,000 may be transferred to the "Working Capital Fund."

Industrial Technology Services.

For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$104,836,000, to remain available until expended. In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$142,600,000, to remain available until expended, of which not to exceed \$50,700,000 shall be available for the award of new grants, and of which not to exceed \$500,000 may be transferred to the "Working Capital Fund."

Construction of Research Facilities.

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$108,414,000, to remain available until expended: Provided, That of the amounts provided under this heading, \$84,916,000 shall be available for obligation and expenditure only after submission of a plan for the expenditure of these funds, in accordance with section 605 of this Act.

SEC. 1252. (113 Stat. 1501A-506) MANDATORY USE OF THE AUTOMATED EXPORT SYSTEM FOR FILING CERTAIN SHIPPERS' EXPORT DECLARATIONS.

(a) Authority.— Section 301 of title 13, United States Code, is amended by adding at the end the following new subsection:

"(h) The Secretary is authorized to require by regulation the filing of Shippers' Export Declarations under this chapter through an automated and electronic system for the filing of export information established by the Department of the Treasury."

(b) Implementing Regulations.—

(1) In general.—The Secretary of Commerce, with the concurrence of the Secretary of State, shall publish regulations in the Federal Register to require that, upon the effective date of those regulations, exporters (or their agents) who are required to file Shippers' Export Declarations under chapter 9 of title 13, United States Code, file such Declarations through the Automated Export System with respect to exports of items on the United States Munitions List or the Commerce Control List.

(2) Elements of the regulations.—The regulations referred to in paragraph (1) shall include at a minimum—

(A) provision by the Department of Commerce for the establishment of on-line assistance services to be available for those individuals who must use the Automated Export System;

(B) provision by the Department of Commerce for ensuring that an individual who is required to use the Automated Export System is able to print out from the System a validated record of the individual's submission, including the date of the submission and a serial number or other unique identifier, where appropriate, for the export transaction; and

(C) a requirement that the Department of Commerce print out and maintain on file a paper copy or other acceptable back-up record of the individual's submission at a location selected by the Secretary of Commerce.

(c) Effective Date.—The amendment made by subsection (a) shall take effect 270 days after the Secretary of Commerce, the Secretary of the Treasury, and the Director of the National Institute of Standards and Technology jointly provide a certification to the Committee on Foreign Relations of the Senate and the Committee on International Relations of the House of Representatives that a secure Automated Export System available through the Internet that is capable of handling the expected volume of information required to be filed under subsection (b), plus the anticipated volume from voluntary use of the Automated Export System, has been successfully implemented and tested and is fully functional with respect to reporting all items on the United States Munitions List, including their quantities and destinations.

October 30, 2000, 114 Stat. 1654 (Public Law 106-398—104th Congress, 2nd session) *Department of Defense and Energy—Appropriations*.

Public Law 106-398

AN ACT

To authorize appropriations for fiscal year 2001 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, and for other purposes.

TITLE X—GENERAL PROVISIONS

Subtitle G—Government Information Security Reform.

SEC. 1061. Coordination of Federal Information Policy.

Chapter 35 of title 44, United States Code, is amended by inserting at the end the following new subchapter:

“SUBCHAPTER II—INFORMATION SECURITY

“SEC. 3533. Authority and functions of the Director.

“(4) oversee the development and implementation of standards and guidelines relating to security controls for Federal computer systems by the Secretary of Commerce through the National Institute of Standards and Technology under section 5131 of the Clinger-Cohen Act of 1996 (40 U.S.C. 1441) and section 20 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3); “(5) oversee and coordinate compliance with this section in a manner consistent with— “(A) sections 552 and 552a of title 5; “(B) sections 20 and 21 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3 and 278g-4);

SEC. 1062. RESPONSIBILITIES OF CERTAIN AGENCIES.

(a) Department of Commerce.— Notwithstanding section 20 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3) and except as provided under subsection (b), the Secretary of Commerce, through the National Institute of Standards and Technology and with technical assistance from the National Security Agency, as required or when requested, shall—

- (1) develop, issue, review, and update standards and guidance for the security of Federal information systems, including development of methods and techniques for security systems and validation programs;
- (2) develop, issue, review, and update guidelines for training in computer security awareness and accepted computer security practices, with assistance from the Office of Personnel Management;
- (3) provide agencies with guidance for security planning to assist in the development of applications and system security plans for such agencies;
- (4) provide guidance and assistance to agencies concerning cost-effective controls when interconnecting with other systems; and
- (5) evaluate information technologies to assess security vulnerabilities and alert Federal agencies of such vulnerabilities as soon as those vulnerabilities are known.

November 1, 2000, 114 Stat. 1742 (Public Law 106-404—104th Congress, 2nd session) *Technology Transfer Commercialization Act of 2000*.

Public Law 106-404

AN ACT

To improve the ability of Federal agencies to license federally owned inventions.

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

SEC. 1. SHORT TITLE.

This Act may be cited as the “Technology Transfer Commercialization Act of 2000.”

SEC. 2. FINDINGS.

The Congress finds that—

(1) the importance of linking our unparalleled network of over 700 Federal laboratories and our Nation’s universities with United States industry continues to hold great promise for our future economic prosperity;

(2) the enactment of the Bayh-Dole Act in 1980 was a landmark change in United States technology policy, and its success provides a framework for removing bureaucratic barriers and for simplifying the granting of licenses for inventions that are now in the Federal Government’s patent portfolio;

(3) Congress has demonstrated a commitment over the past 2 decades to fostering technology transfer from and to promoting public/private sector partnerships to enhance our international competitiveness;

(4) Federal technology transfer activities have strengthened the ability of United States industry to compete in the global marketplace; developed a new paradigm for greater collaboration among the scientific enterprises that conduct our Nation’s research and development—government, industry, and universities; and improved the quality of life for the American people, from medicine to materials;

(5) the technology transfer process must be made “industry friendly” for companies to be willing to invest the significant time and resources needed to develop new products, processes, and jobs using federally funded inventions; and

(6) Federal technology licensing procedures should balance the public policy needs of adequately protecting the rights of the public, encouraging companies to develop existing government inventions, and making the entire system of licensing government technologies more consistent and simple.

SEC. 3. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

Section 12(b)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)(1)) is amended by inserting “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,” after “under the agreement.”

SEC. 4. LICENSING FEDERALLY OWNED INVENTIONS.

(a) Amendment.—Section 209 of title 35, United States Code, is amended to read as follows:

“SEC. 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.”

(b) Conforming Amendment.—The item relating to section 209 in the table of sections for chapter 18 of title 35, United States Code, is amended to read as follows: “209. Licensing federally owned inventions.”

SEC. 5. MODIFICATION OF STATEMENT OF POLICY AND OBJECTIVES FOR CHAPTER 18 OF TITLE 35, UNITED STATES CODE.

Section 200 of title 35, United States Code, is amended by striking “enterprise;” and inserting “enterprise without unduly encumbering future research and discovery;”

SEC. 6. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT.

Chapter 18 of title 35, United States Code (popularly known as the “Bayh-Dole Act”), is amended—

(1) by amending section 202(e) to read as follows:

“(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.”; and

(2) in section 207(a)—

(A) by striking “patent applications, patents, or other forms of protection obtained” and inserting “inventions” in paragraph (2); and

(B) by inserting, “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” after “or through contract” in paragraph (3).

SEC. 7. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980.

The Stevenson-Wydler Technology Innovation Act of 1980 is amended—

(1) in section 4(4) (15 U.S.C. 3703(4)), by striking “section 6 or section 8” and inserting “section 7 or 9”;

(2) in section 4(6) (15 U.S.C. 3703(6)), by striking “section 6 or section 8” and inserting “section 7 or 9”;

(3) in section 5(c)(11) (15 U.S.C. 3704(c)(11)), by striking “State of local governments” and inserting “state or local governments”;

(4) in section 9 (15 U.S.C. 3707), by—

(A) striking “section 6(a)” and inserting “section 7(a)”;

(B) striking “section 6(b)” and inserting “section 7(b)”;

(C) striking “section 6(c)(3)” and inserting “section 7(c)(3)”;

(5) in section 11(e)(1) (15 U.S.C. 3710(e)(1)), by striking “in cooperation with Federal Laboratories” and inserting “in cooperation with Federal laboratories”;

(6) in section 11(i) (15 U.S.C. 3710(i)), by striking “a gift under the section” and inserting “a gift under this section”;

(7) in section 14 (15 U.S.C. 3710c)—

(A) in subsection (a)(1)(A)(i), by inserting “, other than payments of patent costs as delineated by a license or assignment agreement,” after “or other payments”;

(B) in subsection (a)(1)(A)(i), by inserting, “if the inventor’s or coinventor’s rights are assigned to the United States” after “inventor or coinventors”;

(C) in subsection (a)(1)(B), by striking “succeeding fiscal year” and inserting “2 succeeding fiscal years”;

(D) in subsection (a)(2), by striking “Government-operated laboratories of the”;

(E) in subsection (b)(2), by striking “inventon” and inserting “invention”; and (8) in section 22 (15 U.S.C. 3714), by striking “sections 11, 12, and 13” and inserting “sections 12, 13, and 14.”

(8) in section 22 (15 U.S.C. 3714), by striking “sections 11, 12, and 13” and inserting “sections 12, 13, and 14”.

SEC. 8. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES.

(a) Review.—Within 90 days after the date of the enactment of this Act, each Federal agency with a federally funded laboratory that has in effect on that date of the enactment one or more cooperative research and development agreements under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a) shall report to the Committee on National Security of the National Science and Technology Council and the Congress on the general policies and procedures used by that agency to gather and consider the views of other agencies on—

(1) joint work statements under section 12(c)(5)(C) or (D) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(5)(C) or (D)); or

(2) in the case of laboratories described in section 12(d)(2)(A) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(2)(A)), cooperative research and development agreements under such section 12, with respect to major proposed cooperative research and development agreements that involve critical national security technology or may have a significant impact on domestic or international competitiveness.

(b) Procedures.—Within 1 year after the date of the enactment of this Act, the Committee on National Security of the National Science and Technology Council, in conjunction with relevant Federal agencies and national laboratories, shall—

(1) determine the adequacy of existing procedures and methods for interagency coordination and awareness with respect to cooperative research and development agreements described in subsection (a); and

(2) establish and distribute to appropriate Federal agencies—

(A) specific criteria to indicate the necessity for gathering and considering the views of other agencies on joint work statements or cooperative research and development agreements as described in subsection (a); and

(B) additional procedures, if any, for carrying out such gathering and considering of agency views with respect to cooperative research and development agreements described in subsection (a).

Procedures established under this subsection shall be designed to the extent possible to use or modify existing procedures, to minimize burdens on Federal agencies, to encourage industrial partnerships with national laboratories, and to minimize delay in the approval or disapproval of joint work statements and cooperative research and development agreements.

(c) Limitation.—Nothing in this Act, nor any procedures established under this section shall provide to the Office of Science and Technology Policy, the National Science and Technology Council, or any Federal agency the authority to disapprove a cooperative research and development agreement or joint work statement, under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a), of another Federal agency.

SEC. 9. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES.

Section 23 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3715) is amended—

(1) in subsection (a)(1) by inserting “, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code” after “small business firms”; and

(2) in subsection (c) by inserting “, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code,” after “small business firms.”

SEC. 10. REPORTS ON UTILIZATION OF FEDERAL TECHNOLOGY.

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

(1) by striking the last sentence of subsection (b);

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

“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 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.”;

(3) by striking subsection (g)(2) and inserting the following:

“(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.”; and

(4) by inserting after subsection (g) the following:

“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).”

(b) Royalties.—Section 14(c) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710c(c)) is amended to read as follows:

“(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.”

SEC. 11. TECHNOLOGY PARTNERSHIPS OMBUDSMAN.

(a) Appointment of Ombudsman.—The Secretary of Energy shall direct the director of each national laboratory of the Department of Energy, and may direct the director of each facility under the jurisdiction of the Department of Energy, to appoint a technology partnership ombudsman to hear and help resolve complaints from outside organizations regarding the policies and actions of each such laboratory or facility with respect to technology partnerships (including cooperative research and development agreements), patents, and technology licensing.

(b) Qualifications.—An ombudsman appointed under subsection (a) shall be a senior official of the national laboratory or facility who is not involved in day-to-day technology partnerships, patents, or technology licensing, or, if appointed from outside the laboratory or facility, function as such a senior official.

(c) Duties.—Each ombudsman appointed under subsection (a) shall—

(1) serve as the focal point for assisting the public and industry in resolving complaints and disputes with the national laboratory or facility regarding technology partnerships, patents, and technology licensing;

(2) promote the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low-cost resolution of complaints and disputes, when appropriate; and

(3) report quarterly on the number and nature of complaints and disputes raised, along with the ombudsman’s assessment of their resolution, consistent with the protection of confidential and sensitive information, to—

(A) the Secretary;

(B) the Administrator for Nuclear Security;

(C) the Director of the Office of Dispute Resolution of the Department of Energy; and

(D) the employees of the Department responsible for the administration of the contract for the operation of each national laboratory or facility that is a subject of the report, for consideration in the administration and review of that contract.

Approved November 1, 2000.

November 13, 2000, 114 Stat. 2298 (Public Law 106-503—106th Congress, 2nd session) *Fire Administration Authorization Act of 2000*.

Public Law 106-503

AN ACT

To authorize appropriations for the U.S. Fire Administration, and for carrying out the Earthquake Reduction Act of 1977, for fiscal years 2001, 2002, and 2003, and for other purposes.

SEC. 103. STRATEGIC PLAN. (114 Stat. 2299)

(b) Contents of Plan.—The plan required by subsection (a) shall include—

(5) an identification of the fire-related activities of the National Institute of Standards and Technology, the Department of Defense, and other Federal agencies, and a discussion of how those activities can be coordinated with and contribute to the achievement of the goals and objectives identified under paragraph (2);

SEC. 104. (114 Stat. 2300) RESEARCH AGENDA.

(a) Requirement.—Not later than 120 days after the date of the enactment of this Act, the Administrator of the United States Fire Administration, in consultation with the Director of the Federal Emergency Management Agency, the Director of the National Institute of Standards and Technology, representatives of trade, professional, and non-profit associations, State and local firefighting services, and other appropriate entities, shall prepare and transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report describing the United States Fire Administration's research agenda and including a plan for implementing that agenda.

(b) Contents of Report.—The report required by subsection (a) shall—

(1) identify research priorities;

(2) describe how the proposed research agenda will be coordinated and integrated with the programs and capabilities of the National Institute of Standards and Technology, the Department of Defense, and other Federal agencies;

SEC. 202. (114 Stat. 2305) AUTHORIZATION OF APPROPRIATIONS.

(e) National Institute of Standards and Technology.—Section 12(d) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706(d)) is amended—

(1) by striking "1998" and inserting "1998,"; and

(2) by striking "1999." and inserting "1999, \$2,332,000 for fiscal year 2001, \$2,431,000 for fiscal year 2002, and \$2,534,300 for fiscal year 2003."

December 21, 2000, 114 Stat. 2762 (Public Law 106-553—106th Congress, 2nd session) *D.C. Appropriations-FY 2001*.

Public Law 106-553

AN ACT

Making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of said District for the fiscal year ending September 30, 2001, and for other purposes.

TITLE II-DEPARTMENT OF COMMERCE AND RELATED AGENCIES.

National Institute of Standards and Technology. (114 Stat. 2762A-176-177)

Scientific and Technical Research and Services

For necessary expenses of the National Institute of Standards and Technology, \$312,617,000, to remain available until expended, of which not to exceed \$282,000 may be transferred to the "Working Capital Fund."

Industrial Technology Services.

For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$105,137,000, to remain available until expended.

In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$145,700,000, to remain available until expended, of which not to exceed \$60,700,000 shall be available for the award of new grants.

Construction of Research Facilities.

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$34,879,000, to remain available until expended.

December 21, 2000, 114 Stat. 2763 (Public Law 106-554—104th Congress, 2nd session) *Consolidated Appropriations—FY2001*.

Public Law 106-554

AN ACT

Making consolidated appropriations for the fiscal year ending September 30, 2001, and for other purposes.

Appendix D-H.R. 5666

Division A

Chapter 9

LIBRARY OF CONGRESS. (114 Stat. 2763A-195)

Salaries and Expenses.

For the Library of Congress, \$25,000,000, to remain available until expended, for necessary salaries and expenses of the National Digital Information Infrastructure and Preservation Program; and an additional \$75,000,000, to remain available until expended, for such purposes: Provided, That the portion of such additional \$75,000,000, which may be expended shall not exceed an amount equal to the matching contributions (including contributions other than money) for such purposes that: (1) are received by the Librarian of Congress for the program from non-Federal sources; and (2) are received before March 31, 2003: Provided further, That such program shall be carried out in accordance with a plan or plans approved by the Committee on House Administration of the House of Representatives, the Committee on Rules and Administration of the Senate, the Committee on Appropriations of the House of Representatives, and the Committee on Appropriations of the Senate: Provided further, That of the total amount appropriated, \$5,000,000 may be expended before the approval of a plan to develop such a plan, and to collect or preserve essential digital information which otherwise would be uncollectible: Provided further, That the balance in excess of such \$5,000,000 shall not be expended without approval in advance by the Committee on Appropriations of the House of Representatives and the Committee on Appropriations of the Senate: Provided further, That the plan under this heading shall be developed by the Librarian of Congress jointly with entities of the Federal Government with expertise in telecommunications technology and electronic commerce policy (including the Secretary of Commerce and the Director of the White House Office of Science and Technology Policy) and the National Archives and Records Administration, and with the participation of representatives of other Federal, research, and private libraries and institutions with expertise in the collection and maintenance of archives of digital materials (including the National Library of Medicine, the National Agricultural Library, the National Institute of Standards and Technology, the Research Libraries Group, the Online Computer Library Center, and the Council on Library and Information Resources) and representatives of private business organizations which are involved in efforts to preserve, collect, and disseminate information in digital formats (including the Open e-Book Forum): Provided further, That notwithstanding any other provision of law, effective with the One Hundred Seventh Congress and each succeeding Congress the chair of the Subcommittee on the Legislative Branch of the Committee on Appropriations of the House of Representatives shall serve as a member of the Joint Committee on the Library with respect to the Library's financial management, organization, budget development and implementation, and program development and administration, as well as any other element of the mission of the Library of Congress which is subject to the requirements of Federal law.

December 29, 2000, 114 Stat. 3088 (Public Law 106-580—106th Congress, 2nd session) *National Institute of Biomedical Imaging and Bioengineering Establishment Act.*

Public Law 106-580

AN ACT

To amend the Public Health Service Act to establish the National Institute of Biomedical Imaging and Bioengineering.

SEC. 3. Establishment of National Institute of Biomedical Imaging and Bioengineering. (114 Stat. 3089-90)

(a) In General.—Part C of title IV of the Public Health Service Act (42 U.S.C. 285 et seq.) is amended by adding at the end the following subpart:

“Subpart 18—National Institute of Biomedical Imaging and Bioengineering. “Purpose of the Institute

“Sec. 464z(c)(3) (114 Stat. 3090) In addition to the ex officio members specified in section 406(b)(2), the ex officio members of the advisory council shall include the Director of the Centers for Disease Control and Prevention, the Director of the National Science Foundation, and the Director of the National Institute of Standards and Technology (or the designees of such officers).

October 26, 2001, 115 Stat. 272 (Public Law 107-56—107th Congress, 1st session) *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act.*

Public Law 107-56

AN ACT

To Unite and Strengthen America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) Act of 2001.

SEC. 403. (c) Technology Standard to Confirm Identity.

(1) In General.—The Attorney General and the Secretary of State jointly, through the National Institute of Standards and Technology (NIST), and in consultation with the Secretary of the Treasury and other Federal law enforcement and intelligence agencies the Attorney General or Secretary of State deems appropriate and in consultation with Congress, shall within 2 years after the date of the enactment of this section, develop and certify a technology standard that can be used to verify and identify of persons applying for a United States visa or such persons seeking to enter the United States pursuant to a visa for the purposes of conducting background checks, confirming identify, and ensuring that a person has not received a visa under a different name or such person seeking to enter the United States pursuant to a visa.

(2) Integrated.—The Technology standard developed pursuant to paragraph (1), shall be the technological basis for a cross-agency, cross-platform electronic system that is a cost-effective, efficient, fully integrated means to share law enforcement and intelligence information necessary to confirm the identify of such persons applying for a United States visa or such person seeking to enter the United States pursuant to a visa.

(3) Accessible.—The electronic system described in paragraph (2), once implemented, shall be readily and easily accessible to—

- (A) all consular officers responsible for the issuance of visas;
- (B) all Federal inspection agents at all United States border inspection points; and
- (C) all law enforcement and intelligence officers as determined by regulation to be responsible for investigation or identification of aliens admitted to the United States pursuant to a visa.

(4) Report.—Not later than 18 months after the date of the enactment of this Act, and every 2 years thereafter, the Attorney General and the Secretary of State shall jointly, in consultation with the Secretary of Treasury, report to Congress describing the development, implementation, efficacy, and privacy implications of the technology standard and electronic database system described in this subsection.

(5) Funding.—There is authorized to be appropriated to the Secretary of State, the Attorney General, and the Director of the National Institute of Standards and Technology such sums as may be necessary to carry out the provisions of this subsection.

November 28, 2001, 115 Stat. 748 (Public Law 107-77—107th Congress, 1st session) *Departments of Commerce, Justice, and State, the Judiciary and Related Agencies Appropriations Act, 2002.*

Public Law 107-77

AN ACT

Making appropriations for the Departments of Commerce, Justice, and State, the Judiciary, and related agencies for the fiscal year ending September 30, 2002, and for other purposes.

TITLE II—DEPARTMENTS OF COMMERCE AND RELATED AGENCIES.

National Institute of Standards and Technology. (115 Stat. 774)

For necessary expenses of the National Institute of Standards and Technology, \$321,111,000, to remain available until expended, of which not to exceed \$282,000 may be transferred to the “Working Capital Fund.” Industrial Technology Services. For necessary expenses of the Manufacturing Extension Partnership of the National Institute of Standards and Technology, \$106,522,000, to remain available until expended: Provided, That the Secretary of Commerce is authorized to enter into agreements with one or more nonprofit organizations for the purpose of carrying out collective research and development initiatives pertaining to 15 U.S.C. 278k paragraph (a), and is authorized to seek and accept contributions from public and private sources to support these efforts as necessary. In addition, for necessary expenses of the Advanced Technology Program of the National Institute of Standards and Technology, \$184,500,000, to remain available until expended, of which not to exceed \$60,700,000 shall be available for the award of new grants.

For construction of new research facilities, including architectural and engineering design, and for renovation of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e, \$62,393,000, to remain available until expended.

Source: Diane Cunningham, Office of Information Services

APPENDIX B

HISTORIES OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY AND NATIONAL BUREAU OF STANDARDS

The most recently published history of NBS/NIST, along with detailed bibliographic data is listed below. Following this the titles of previous histories of NBS are listed.

Responding to National Needs 1969-1993: The National Bureau of Standards Becomes the National Institute of Standards and Technology

James F. Schooley
Chief, Temperature and Pressure Measurements and Standards Division
NBS 1978-1982

NIST Special Publication 955. U.S. Government Printing Office, 2000
1006 pp.

Table of Contents

1. Unique Institution (150 pp.)
2. Bright Prospects for NBS (171 pp.)
3. Nation in Trouble; An Agency in Change (117 pp.)
4. A Durable Direction (171 pp.)
5. The National Bureau of Standards Becomes the National Institute of Standards and Technology: Public Law 100-418, August 23, 1988 (27 pp.)
6. Metrology Makes Room for Industrial Productivity (147 pp.)

Appendices

- A. Legislation Relating to the Organization, Functions, and Activities of the National Bureau of Standards/National Institute of Standards and Technology (78 pp.)
- B. Histories of the National Bureau of Standards (4 pp.)
- C. NBS/NIST in the Federal Administration (4 pp.)
- D. Site Information and Maps: Gaithersburg and Boulder (6 pp.)
- E. NBS/NIST Staff, 1901-1999 (2 pp.)
- F. NBS/NIST Postdoctoral Research Associates, 1968-1993 (12 pp.)
- G. Scientific Awards Given by the Department of Commerce and NBS/NIST to Staff Members, 1968-1993 (14 pp.)
- H. Members of the Visiting Committee for NBS and the Visiting Committee on Advanced Technology for NIST (6 pp.)
- I. NBS/NIST Actual Obligations, 1967-1999 (2 pp.)
- J. NBS/NIST Publications (18 pp.)
- K. Structure and Leadership of NBS/NIST (52 pp.)

Index (17 pp.)

Histories of the National Bureau of Standards

War Work of the Bureau of Standards

Anonymous

Miscellaneous Publication No. 46

U.S. Government Printing Office, 1921

299 pp.

The Bureau of Standards: Its History, Activities, and Organization

Gustavus A. Weber

Johns Hopkins Press, 1925

299 pp.

NBS War Research—The National Bureau of Standards in World War II

Lyman J. Briggs, Director Emeritus, NBS

U.S. Government Printing Office, September 1949

187 pp.

The Story of Standards

John Perry

Funk & Wagnalls, 1955

271 pp.

Measures for Progress: A History of the National Bureau of Standards

Rexmond C. Cochrane

NBS Miscellaneous Publication 275

U.S. Government Printing Office, 1966

702 pp.

Achievement in Radio: Seventy Years of Radio Science, Technology, Standards, and Measurement at the National Bureau of Standards

Wilbert F. Snyder and Charles L. Bragaw

NBS Special Publication 555

U.S. Government Printing Office, 1986

842 pp.

A Unique Institution: The National Bureau of Standards, 1950–1969

Elio Passaglia, with Karma A. Beal

NBS Special Publication 925

U.S. Government Printing Office, 1999

822 pp.

Source: NIST Research Library Online Catalog

APPENDIX C

NIST IN THE FEDERAL ADMINISTRATION

In this appendix we list Executive department officials who exercised supervisory authority over NIST, during the terms of NIST Directors from 1993-2002.

UNITED STATES PRESIDENTS

DEPARTMENT OFFICIALS

NIST DIRECTORS

William J. Clinton
1993-2001

Ronald H. Brown
Secretary of Commerce
1993-1996

Mary L. Good
Under Secretary
of Commerce for
Technology
1993-1997

Michael Kantor
Secretary of Commerce
1996-1997

Mary L. Good
Under Secretary
of Commerce for
Technology
1993-1997

William M. Daley
Secretary of Commerce
1997-2000

Cheryl L. Shavers
Under Secretary
of Commerce for
Technology
1999-2001

Norman A. Mineta
Secretary of Commerce
2000-2001

Cheryl L. Shavers
Under Secretary
of Commerce for
Technology
1999-2001

Karen H. Brown
Acting Under Secretary
of Commerce for
Technology
2001

Arati Prabhakar
1993-1997

Raymond G. Kammer
1997-2001

Karen H. Brown
Acting Director
2001

**UNITED STATES
PRESIDENTS**

George W. Bush
2001

**DEPARTMENT
OFFICIALS**

Donald L. Evans
Secretary of Commerce
2002

Phillip J. Bond
Under Secretary
of Commerce for
Technology
2002

**NIST
DIRECTORS**

Arden L. Bement, Jr.
2002

Source: Agency Web sites

APPENDIX D

SITE INFORMATION AND MAPS: GAITHERSBURG AND BOULDER

This appendix contains site construction information and maps for the Gaithersburg, MD and Boulder, CO campuses. Detailed construction information is provided for the Advanced Measurement Laboratory, under construction at Gaithersburg.

NIST Gaithersburg Site Construction 1990-2001

Building number	Building name	Date completed	Area (Gross sq ft)
311	Grounds Storage Shed	9/30/1990	2511
NN	NIST North (Leased Office Bldg.)	10/1/1995	122,120
313	Site Effluent Neutralization	6/30/1996	245
312	Materials Processing Facility	9/30/1996	3877
227	Advanced Chemical Sciences Laboratory (ACSL)	8/1/1998	200,000
314	Backflow Preventer Building East	10/31/1998	663
315	Backflow Preventer Building West	10/31/1998	663

Source: Joan Stanley, NIST Office of the Director for Administration and Chief Financial Officer

Because of security regulations, maps will be provided to NIST staff only, upon appropriate request.

NIST Gaithersburg campus map

Because of security regulations, maps will be provided to NIST staff only, upon appropriate request.

NIST Boulder campus map

CONSTRUCTION SCHEDULE FOR ADVANCED MEASUREMENT LABORATORY (AML)

<u>Activity</u>	<u>Start Date</u>	<u>End Date</u>
Bldg 215 (Clean Room)		
Excavate Bldg 215 and Tunnel	Dec 26, 2000	Jan. 23, 2001
Utility Tunnel Construction	Jan 22, 2001	April 5, 2001
Install Tower Crane 1	Jan 8, 2001	Jan 19, 2001
Bldg 215 Remaining Work	Feb 12, 2001	April 3, 2003
Bldg 216 (Instrument East)		
Excavate Bldg 216	Jan 10, 2001	Feb 6, 2001
Install Tower Crane 2	Feb 7, 2001	Feb 22, 2001
Bldg 216 Remaining Work	March 1, 2001	Nov 25, 2002
Bldg 217 (Instrument West)	Feb 25, 2002	Aug 29, 2003
Bldg 219 (Metrology West)	Dec 18, 2000	Oct 2, 2003
Relocation Completion		June 15, 2004

AML WING COMPLETION SCHEDULE

Wing	Date
Instrument East (216)	Nov 25, 2002
Cleanroom (215)	April 3, 2003
Metrology East	(218) April 14, 2003
Instrument West	(217) August 29, 2003
Metrology West (219)	October 2, 2003

Cost: \$235.2 million
Occupancy expected in FY 2004

SUPPLEMENTAL CONSTRUCTION INFORMATION FOR AML

Project Size:

Building Area:

47,480 gross square meters (511,070 gross square feet)
 19,537 net assignable square meters (210,295 net square feet)

Net to Gross Ratio:

41.6 %

Gross Building Area Breakdown:

8,520 m² - Cleanroom Wing
 9,529 m² - Instrument Lab (East)
 11,858 m² - Instrument Lab (West)
 8,470 m² - Dynamic Metrology Lab (East)
 9,103 m² - Quiet Metrology Lab (West)

Net Building Area Breakdown:

2,407 m² - Offices
 9,808 m² - Laboratories
 4,086 m² - Laboratory Support
 3,236 m² - Building Support

Lab Types:

187 Instrument Lab Modules
 151 Metrology Lab Modules

Specialty Areas:

48 Precision Temperature Control Laboratories (± 0.01 °C or ± 0.1 °C)
 27 Low Vibration Laboratories (active and passive isolation systems)
 8,520 gsm Cleanroom Facility (Class 100 upgradable to Class 10)

Lab General Areas:

Laboratories building-wide feature each of the critical environmental categories listed for the overall building, including:

Air Cleanliness:

HEPA filtration at the supply-side of all laboratory air handlers

Temperature Control:

± 0.25 °C is the baseline for all laboratories, all digital system

Vibration Isolation:

All laboratories are on-grade or below-grade, with a minimum level of "Criterion-A," isolated slab on-grade. Mechanical, electrical, and structural systems are designed to minimize vibration.

Power Quality:

Laboratories feature a building-wide, conditioned power supply system meeting IEEE Std. 1100-1992 for critical electronic loads.

Acoustical Design:

Considered in the design of all mechanical, architectural, structural, and electrical systems so as not to affect scientific programs. (Based on NC-45 (Labs), NC-55 (Cleanroom) & NC-30 (Special Metrology))

Service Galleys:

Mechanical services (piping, ventilation, & electrical) as well as "dirty" laboratory support equipment and gas bottles are located in a service corridor located between laboratory modules, maximizing flexibility and cleanliness.

Metric Design:

The building is laid out on a hard-metric module and features the use of the metric system wherever economically feasible.

Green Building:

Natural daylighting, energy conservation, and recycling are incorporated into the building design and planned operation.

Because of security regulations, maps will be provided to NIST staff only, upon appropriate request.

NIST Boulder Site Construction 1951-2001

Project	Construction began	Construction complete	Gross sq ft of project	Total gross sq ft	Total gross sq meters
B1 Radio Building Library, Aud., Center	1952	1954	200,257	286,636	26,590
B5 Heavy Equipment	1951	1951	2,850	2,850	264
B4 Camco	1951	1951	15,403	18,253	1,693
B2 Cryogenics South & North half	1951	1951	45,702	63,955	5,933
B3 Liquefier	1951	1951	20,024	83,979	7,790
B1 Radio Building Library, Aud., Center Spine, Wing 1, Wing 2, Wing 3 & Wing 4	1952	1954	200,257	286,636	26,590
B8 Mesa Test Site	1953	1953	2,400	86,379	8,013
B1 Wing 6	1956	1959	26,200	313,834	29,113
B14 Field Strength Calibration	1958	1958	278	286,914	26,615
B11 Vertical Incidence	1958	1958	408	287,322	26,653
B9 Gas Meter	1958	1958	312	287,634	26,682
B1 Wing 5	1960	1962	77,928	401,562	37,251
B2 Wing "B" Addition	1962	1964	9,800	323,634	30,022
B21 Maintenance Garage	1962	1963	3,968	405,530	37,619
B22 Warehouse	1962	1964	17,280	422,810	39,222
B25 North Shop	1965	1966	3,200	426,010	39,519
B24 Plasma Physics	1965	1967	27,328	453,338	42,054
B25 Offices & South Shop	1973	1975	5,000	458,338	42,517
B24 High Bay Addition	1984	1985	2,682	461,020	42,766
B2 High Bay Addition	1986	1986	3,320	464,340	43,074
B1 Annex B	1987	1987	3,800	468,140	43,427
B1 Annex A	1987	1987	4,200	472,340	43,816
B24 Annex A	1988	1988	4,200	476,540	44,206
B2 Annex A	1989	1989	1,800	478,340	44,373
B3 Annex A	1989	1989	2,400	480,740	44,596
B1 Annex C	1989	1989	4,200	484,940	44,985
B26 Day Care Facility	1989	1989	4,200	489,170	45,378
B23 Hazardous Materials Building	1989	1989	4,230	490,605	45,511
B27 High Frequency	1991	1991	1,435	491,085	45,555
B1 Annex D	1992	1992	4,200	495,285	45,945
B4 Addition	1994	1994	1,020	496,305	46,039
B26 Addition	1995	1995	4,370	500,675	46,445
B2 Addition	1995	1995	5,440	506,115	46,949

Source: James McConnell, Engineering, Maintenance, Safety, and Support Division, NIST Boulder

APPENDIX E

NIST STAFF, 1996–2001

The data in the tables below show NIST staff, grouped by major categories, for fiscal years (FYs) 1996–2001.

Full time permanent employees by career path, FYs 1996–2001 (end-of-year onboard)

Fiscal Year	Professional (ZP)	Technical/Wage Grade (ZT/WG)	Admin/Clerical (ZA/ZS)	Total
1996	1510	695	598	2803
1997	1529	727	589	2845
1998	1545	732	584	2861
1999	1520	712	611	2843
2000	1465	687	588	2740
2001	1456	653	577	2686

Full time permanent professional employees (ZP career path) by job classification, FYs 1996–2001 (end-of-year onboard)

Fiscal Year	Physicists	Chemists	Engineers	Comp Sci/ Specialists	Mathematicians/ Statisticians	Other	Total
1996	329	180	408	274	62	257	1510
1997	333	176	411	292	67	250	1529
1998	336	179	409	310	68	243	1545
1999	329	175	398	315	62	241	1520
2000	321	169	377	307	56	235	1465
2001	310	173	372	309	56	236	1456

Full time permanent professional employees (ZP career path) by degree, FYs 1996–2001 (end-of-year onboard)

Fiscal Year	PhD	Masters	Bachelors	No Degree	Total
1996	742	316	386	66	1510
1997	765	326	366	72	1529
1998	778	343	354	70	1545
1999	761	353	336	70	1520
2000	745	336	318	66	1465
2001	740	327	314	75	1456

Full time permanent employees by location, FYs 1996–2001 (end-of-year onboard)

Fiscal Year	Gaithersburg	Boulder	Total
1996	2438	365	2803
1997	2468	377	2845
1998	2475	386	2861
1999	2477	366	2843
2000	2403	337	2740
2001	2350	336	2686

Full time equivalent employees by location, FYs 1996-2001

Fiscal Year	Gaithersburg	Boulder	Total
1996	2739	398	3137
1997	2720	405	3125
1998	2757	417	3174
1999	2765	416	3181
2000	2698	384	3082
2001	2606	365	2971

Postdoctoral Research Associates, FYs 1996-2001

Fiscal Year	
1996	83
1997	87
1998	76
1999	81
2000	78
2001	83

NOTE: The numbers represent only National Research Council Postdoctoral Research Associates employed at the end of September of the specified year.

NIST Guest Researchers (estimates), FYs 1996-2001

Fiscal Year	
1996	1250
1997	1260
1998	1240
1999	1500
2000	1600
2001	1600

NOTE: Beginning in FY 1999, all NIST Center for Neutron Research users covered by a Facility User Agreement are added to the statistics as Guest Researchers. This table represents all guest researchers during a given year regardless of length of stay.

Source: Thelma Allen, Information Specialist, NIST Program Office

APPENDIX F

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994–1999

Associates were selected by panels of the National Academy of Sciences and the National Academy of Engineering. The program was administered by the National Research Council.

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1994					
Daniel M. Anderson	Northwestern University/IL	Applied Mathematics	Geoffrey B. McRadden	Computing and Applied Mathematics Laboratory	Applied/Computational Math Div (MD)
James W. Brown	Stanford University/CA	Chemistry	Frederick P. Schwarz	Chemical Science and Technology Laboratory	Biotechnology Division
John H. Burnett	Harvard University/MA	Solid State Physics	Paul M. Amiriharij	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Theodore A. Camus	Brown University/RI	Computer Science	Martin Herman	Manufacturing Engineering Laboratory	Intelligent Systems Division
Angel Castellanos	Bernard Baruch College, CUNY	Physics	Craig J. Sansonetti	Physics Laboratory	Atomic Physics Division
Matthew A. Davies	Cornell University/NY	Aeronautics and Engr Mech	Mehmet A. Donmez	Manufacturing Engineering Laboratory	Automated Production Technology Division
Frank Dimeo Jr.	Northwestern University/IL	Material Science	Stephen Semancik	Chemical Science and Technology Laboratory	Process Measurements Technology (MD)
Ronald G. Dixon	Yale University-Sch of Med/CT	Physics	Theodore V. Vorbunger	Manufacturing Engineering Laboratory	Precision Engineering Division
Robert P. Dobrow	Johns Hopkins University/MD	Statistics	James A. Lechner	Computing and Applied Mathematics Laboratory	Statistical Engineering Div (MD)
Michael J. Donahue	Ohio State University	Welding Engineering	J. A. Simmons	Materials Science and Engineering Laboratory	Metallurgy Division
John W. Dykes	University of California-Davis	Physics	Ronald B. Goldfarb	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
David A. Everest	University of Michigan-Ann Arbor	Fluid Dynamics	Kermit C. Smyth	Building and Fire Research Laboratory	Fire Science Division
Gerard D. Fogarty	Tufts Univ	Physics	Bruce W. Steiner	Materials Science and Engineering Laboratory	Ceramics Division
Michael A. Gatzke	Princeton University/NJ	Physics and Astronomy	Steven L. Rolston	Physics Laboratory	Atomic Physics Division
Constance L. Gettinger	Univ of California-Santa Barbara	Material Science	Charles C. Han	Materials Science and Engineering Laboratory	Polymers Division
Gloria M. Gusler	Univ of California-Los Angeles	Petroleum and Chem Engr	Gregory B. McKenna	Materials Science and Engineering Laboratory	Polymers Division
Angela R. Hight Walker	Wesleyan University/CT	Chemical Physics	Richard D. Suenram	Physics Laboratory	Molecular Physics Division
Peter F. Hopkins	Harvard University/MA	Solid State Physics	John M. Moreland	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Zena J. Jabbour	Lehigh University/PA	Physics	Jabez J. McClelland	Physics Laboratory	Electron and Optical Physics Division
Gerard J. Kim	University of Southern California	Computer Science	Howard M. Bloom	Manufacturing Engineering Laboratory	Factory Automation Systems Division
Jody J. Klaassen	Massachusetts Inst of Technology	Chemistry	Stephen R. Leone	Physics Laboratory	Quantum Physics Division
Kurt W. Kolasinski	Stanford Univ-Sch of Medicine/CA	Chemical Physics	Richard R. Cavanaugh	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Kenneth S. Macturk	University of Akron/OH	Polymer Science	Donald L. Hunston	Materials Science and Engineering Laboratory	Polymers Division
Martin G. Manley	Penn State University Park	Engineering Acoustics	Nelson N. Hsu	Manufacturing Engineering Laboratory	Automated Production Technology Division
Dawn M. Meckhof	University of Washington	Physics	David J. Wineland	Physics Laboratory	Time and Frequency Division
William E. Mell	University of Washington	Applied Mathematics	Howard R. Baum	Building and Fire Research Laboratory	Fire Safety Engineering Division
John D. Miller	University of Texas-Austin	Physics	John J. Bollinger	Physics Laboratory	Time and Frequency Division
Brigitte L. Ramos	University of Cincinnati/OH	Analytical Chemistry	Steven J. Choquette	Chemical Science and Technology Laboratory	Organic Analytical Research Division
Steven J. Ritchie	Penn State University Park	Mechanical Engineering	Takashi Kashiwagi	Building and Fire Research Laboratory	Fire Safety Engineering Division
William J. Rose	Georgetown University/DC	English	David S. Pallet	Computer Systems Laboratory	Advanced Systems Division
Robin L. Selinger	Harvard University/MA	Physics	Robb M. Thomson	Materials Science and Engineering Laboratory	Office of the Director
Jeffrey W. Sharp	University of Tennessee-Knoxville	Solid State Physics	Paul M. Amiriharij	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Karen L. Williams	University of Hawaii at Manoa	Chemistry	Lane C. Sander	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Nora C. Beck-Tan	University of Maryland	Materials Engineering	Wen-Li Wu	Materials Science and Engineering Laboratory	Polymers Division
Christine M. Bell	University of Texas-Austin	Chemistry	Lane C. Sander	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Dina M. Colucci	Purdue University/IN	Chemical Engineering	Gregory B. McKenna	Materials Science and Engineering Laboratory	Polymers Division
Mark W. Keller	Yale University/CT	Applied Physics	John M. Martinis	Electronics and Electrical Engineering Laboratory	Polymers Division
Kristen L. Steffens	Stanford University/CA	Physical Chemistry	Michael R. Zachariah	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Aephraim M. Steinberg	University of California-Berkeley	Optical Sciences	William D. Phillips	Electronics and Electrical Engineering Laboratory	Cryoelectronic Metrology Group
Fred E. Wiefeldt	University of California-Berkeley	Physics	Geoffrey L. Greene	Physics Laboratory	Process Measurements Division (MD)
					Atomic Physics Division
					Ionizing Radiation Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1995					
Dean B. Atkins	Univ of Arizona-Tucson	Physical Chemistry	Jeffrey Hudgens	Chemical Science and Technology Laboratory	Chemical Kinetics and Thermodynamics Division
Mary K. Behlke	Univ of Massachusetts-Amherst	Chemistry	Michele Schantz	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Dana J. Berkeley	Yale University	Physics	James C. Bergquist	Physics Laboratory	Time and Frequency Division
Bradley J. Biggerstaff	Colorado State University	Statistics	C. M. Wang	Computing and Mathematics Laboratory	Statistical Engineering Division
John L. Bohn	University of Chicago	Physics	Paul Julienne	Physics Laboratory	Molecular Physics Division
John M. Butler	University of Virginia—Charlottesville	Analytical Chemistry	Dennis J. Reeder	Chemical Science and Technology Laboratory	Biotechnology Division
Scott C. Chase	Univ of California—Los Angeles	Architecture	Howard M. Bloom	Manufacturing Engineering Laboratory	Manufacturing Systems Integration Division
Adam M. Calabrese	Univ of Mississippi—University	Acoustics	Michael R. Moldover	Chemical Science and Technology Laboratory	Thermophysics Division
Jonathan L. Cobb	Univ of Texas—Austin	Physics	Edwin Williams	Electronics and Electrical Engineering Laboratory	Electricity Division
Charles A. Cook	Louisiana State Univ—Baton Rouge	Mechanical Engineering	Cary Presser	Chemical Science and Technology Laboratory	Process Measurement Division
Franklin J. Dunmore	Univ of Maryland—College Park	Physics	Leonard Hansson	Physics Laboratory	Optical Technology Division
Martha S. Head	Duke University	Chemistry	Michael K. Gilson	Chemical Science and Technology Laboratory	Biotechnology Division
Kyle W. Holman	Univ of Nebraska—Lincoln	Physics	Chris M. Fortunko	Materials Science and Engineering Laboratory	Materials Reliability Division
Brian Igarashi	Univ of Illinois—Urbana—Champaign	Physics	G. Alers	Materials Science and Engineering Laboratory	Materials Reliability Division
Deborah S. Jin	Univ of Chicago	Physics	Eric Cornell	Physics Laboratory	Quantum Physics Division
Gordon L. Jones	Princeton University	Physics	M. Scott Dewey	Physics Laboratory	Ionizing Radiation Division
Stephen F. Kwalko	Univ of Illinois—Chicago	Engineering	David A. Hill	Electronics and Electrical Engineering Laboratory	Electromagnetic Fields Division
John Lawall	Harvard University	Physics	William D. Phillips	Physics Laboratory	Atomic Physics Division
Eric K. Lin	Stanford University	Chemical Engineering	Wen-H Wu	Materials Science and Engineering Laboratory	Polymer Division
Andrea G. Markelz	Univ of California—Santa Barbara	Physics	E. J. Heilwell	Physics Laboratory	Molecular Physics Division
Ryan P. McCormack	Univ of California—Berkeley	Material Science Engineering	B. P. Burton	Materials Science and Engineering Laboratory	Ceramics Division
Frank E. McFadden	Univ of Maryland—College Park	Computer Science	Charles L. Wilson	Computer Science Laboratory	Advanced Systems Division
Silvia L. Mfoc	Univ of Illinois—Chicago	Physics	Leo Holberg	Physics Laboratory	Time and Frequency Division
Raymond A. Neff	Univ of Minnesota	Material Science	Donald Humston	Materials Science and Engineering Laboratory	Electricity Division
David B. Newell	Univ of Colorado	Physics	Edwin R. Williams	Electronics and Electrical Engineering Laboratory	Time and Frequency Division
Christopher W. Oates	Univ of Colorado	Physics	Leo Holberg	Physics Laboratory	Electricity Division
Timothy M. Owens	Univ of Cincinnati	Environmental Engineering	Michael Zachariah	Chemical Science and Technology Laboratory	Process Measurement Division
Teri L. Quinn	Univ of Maryland—College Park	Chemistry	W. Robert Kelly	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Daniel C. Parks	Univ of Colorado	Physics	John Gillaspay	Physics Laboratory	Atomic Physics Division
Andrew C. Pipino	Northwestern University	Chemical Physics	Jeffrey Hudgens	Chemical Science and Technology Laboratory	Chemical Kinetics and Thermodynamics Division
William C. Regli	Univ of Maryland—College Park	Computer Science	Steve Ray	Manufacturing Engineering Laboratory	Manufacturing Integration Systems Division
Michael A. Spald	Stanford University	Chemical Engineering	Donald Humston	Materials Science and Engineering Laboratory	Polymer Division
Simon Szykman	Carnegie Mellon University	Mechanical Engineering	Howard Bloom	Manufacturing Engineering Laboratory	Manufacturing Integration Systems Division
Nim H. Tea	Univ of Illinois—Urbana—Champaign	Physics	John S. Suehle	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Javier de J. Trelles	Univ of California—Berkeley	Mechanical Engineering	Howard R. Baum	Building and Fire Research Laboratory	Fire Science Division
Timothy M. Whalen	Cornell University	Theoretical and Appl. Mechanics	Emil Simiu	Building and Fire Research Laboratory	Structures Division
David A. Wollman	Univ of Illinois—Urbana—Champaign	Solid State Physics	John Martinis	Electronics and Electrical Engineering Laboratory	Electromagnetic Fields Division
Billibon H. Yoshimi	Columbia University	Computer Science	Martin Herman	Manufacturing Engineering Laboratory	Intelligent Systems Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
Eric R. Abraham	Rice University/TX	Physics	Eric Cornell	Physics Laboratory	Quantum Physics Division
William R. Anderson	University of Virginia	Physics	Jabez J. McClelland	Physics Laboratory	Electron and Optical Physics Division
Jonathan Baker	University of Delaware	Physics	Peter J. Mohr	Physics Laboratory	Atomic Physics Division
Gregory A. Balchin	University of Cincinnati-Unknown	Solid State Physics	Paul M. Amiritharaj	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Lorin Benedict	University of California-Berkeley	Physics	Raju V. Datta	Physics Laboratory	Optical Technology Division
Scott D. Bergeson	University of Wisconsin-Madison	Physics	Thomas B. Lucatorto	Physics Laboratory	Time and Frequency Division
Steven R.F. Bieganski	U of Illinois-Urbana-Champaign	Nuclear Engineering	Lloyd A. Currie	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
James C. Booth	University of Maryland	Physics	David A. Rudman	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Curtis C. Bradley	Portland State University/OR	Science Education	Robert J. Colotta	Physics Laboratory	Electron and Optical Physics Division
Daryl G. Clerc	Washington State University	Material Science	Hassel Ledbetter	Materials Science and Engineering Laboratory	Materials Reliability Division
Mark W. Covington	U of Illinois-Urbana-Champaign	Solid State Physics	John M. Marinis	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Joseph J. Dalluge	University of Utah	Biochemistry	Michael J. Welch	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Benjamin J. Davies	University of Virginia	Physics	Kristian Helmerston	Physics Laboratory	Atomic Physics Division
Paul C. DeRose	University of Pennsylvania	Physical Chemistry	John C. Stephenson	Physics Laboratory	Molecular Physics Division
Barbara A. DiCamillo	Univ of California-Los Angeles	Chemistry	Joseph G. Pellegrino	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Shelley D. Dyer	University of Utah	Electrical Engineering	Kent B. Roothford	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Emile E. Eteedgui	University of Rochester/NY	Physics	G. T. Davis	Materials Science and Engineering Laboratory	Polymers Division
Eva S. Ferre	University of Colorado	Electrical Engineering	Robert E. Drullinger	Physics Laboratory	Time and Frequency Division
Ronald E. Giachetti	North Carolina State U-Raleigh	Industrial Engineering	Ram D. Stram	Manufacturing Engineering Laboratory	Factory Automation Systems Division
Jerome E. Gormley	University of Michigan-Arm Arbor	Nuclear Engineering	Dale E. Newbury	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Todd A. Heimer	Johns Hopkins University/MD	Chemistry	Edwin J. Hellweil	Physics Laboratory	Molecular Physics Division
Jay H. Hendricks	Johns Hopkins University/MD	Mechanical Engineering	Michael R. Zachariah	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
David G. Holmberg	Virginia Polytech Inst and State U	Mechanical Engineering	William L. Grosshandler	Building and Fire Research Laboratory	Fire Science Division
I-Ping Hsu	University of California-Irvine	Aeronautics and Engr Mech	Cary Presser	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
Yumi Ijiri	Cornell University/NY	Physics	Julie A. Borchers	Materials Science and Engineering Laboratory	Center for Neutron Research
Robert W. Ivester	U of Massachusetts-Amherst	Mechanical Engineering	Steven R. Ray	Manufacturing Engineering Laboratory	Factory Automation Systems Division
David L. Jacobson	University of Missouri-Columbia	Optics	Muhammad Arif	Physics Laboratory	Ionizing Radiation Division
Christine E. Kalnas	University of Michigan-Arm Arbor	Material Science	David T. Read	Chemical Science and Engineering Laboratory	Materials Reliability Division
Christian E. Kendrick	Princeton University/NJ	Electrical Engineering	Richard E. Cavicchi	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
William M. Klipstein	University of Washington	Physics	Steven L. Roison	Physics Laboratory	Atomic Physics Division
Benjamin P. Lee	Univ of California-Santa Barbara	Physics	Jack F. Douglas	Materials Science and Engineering Laboratory	Polymers Division
Rasislav Levicky	University of Minnesota-Twin Cit	Chemical Engineering	Michael J. Tarlov	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
Richard A. Loomis	University of Pennsylvania	Physical Chemistry	Stephen R. Leone	Physics Laboratory	Quantum Physics Division
Robert Lutwak	Massachusetts Inst of Technology	Physics	William D. Phillips	Physics Laboratory	Atomic Physics Division
David J. Macon	U of Massachusetts-Amherst	Polymer Science and Engr	Wen-Li Wu	Materials Science and Engineering Laboratory	Polymers Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1996 (cont.)					
Carl C. Miller	Cornell University/NY	Physical Chemistry	Michael P. Casassa	Physics Laboratory	Molecular Physics Division
Travis B. Mitchell	University of San Diego/CA	Physics	John J. Bollinger	Physics Laboratory	Time and Frequency Division
Michael J. Munroe	University of Oregon	Optical Sciences	D. Christenson	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Christopher J. Myatt	University of Colorado	Physics	Wayne M. Itano	Physics Laboratory	Time and Frequency Division
Ralph E. Napolitano	Georgia Institute of Technology	Metallurgical Engr	Robert J. Schaefer	Materials Science and Engineering Laboratory	Metallurgy Division
Bryan C. Nelson	U of Massachusetts-Amherst	Analytical Chemistry	Stephen A. Wise	Chemical Science and Technology Laboratory	Organic Analytical Research Division
James M. Nystrom	Northwestern University/IL	Material Science	Stephen Semancik	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
George Papadopoulos	Polytechnic University/NY	Aero/Astro Engineering	William M. Pitts	Building and Fire Research Laboratory	Fire Science Division
Teresa P. Petralli-Mallow	Georgetown University/DC	Biophysical Chemistry	Anne L. Plant	Chemical Science and Technology Laboratory	Biotechnology Division
Donald G. Porter	Washington University/MO	Electrical Engineering	James L. Blue	Computing and Applied Mathematics Laboratory	Applied/Computat Math Div (MD)
Ty J. Prosa	University of Wisconsin-Madison	Physics	John D. Barnes	Materials Science and Engineering Laboratory	Polymers Division
Nicholas D. Rizzo	Yale University/CT	Applied Physics	Ronald B. Goldfarb	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Kathleen A. Romanik	University of Maryland	Computer Science	James S. Albus	Manufacturing Engineering Laboratory	Intelligent Systems Division
Marc D. Rumminger	University of California-Berkeley	Mechanical Engineering	Gregory T. Linteris	Building and Fire Research Laboratory	Fire Science Division
Todd G. Ruszell	University of Arizona	Optical Sciences	John M. Moreland	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Mark A. Schwabacher	Ruigers State U-Branch Unknown	Computer Science	Ram D. Srram	Manufacturing Engineering Laboratory	Electromagnetic Technology Division
Joseph T. Slusher	University of Tennessee-Knoxville	Chemical Engineering	R. D. Mountain	Chemical Science and Technology Laboratory	Factory Automation Systems Division
Chad R. Snyder	Virginia Polytech Inst and State U	Physical Chemistry	Frederick I. Mopsik	Materials Science and Engineering Laboratory	Phys/Chem Properties Div (MD)
Adam B. Steel	University of Maryland	Analytical Chemistry	Gregory E. Poirier	Chemical Science and Technology Laboratory	Polymers Division
Amos Tsai	Johns Hopkins University	Bioengineering	G. Gilliland	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
David A. Tulchinsky	Univ of California-Santa Barbara	Physics	Michael H. Kelley	Physics Laboratory	Biotechnology Division
Christopher S. Wood	University of Colorado	Physics	David J. Wineland	Physics Laboratory	Electron and Optical Physics Division
Brenton C. Young	Stanford University/CA	Physics	James C. Bergquist	Physics Laboratory	Time and Frequency Division
1997					
Michael Allen	Arizona State University	Physical Chemistry	Kenneth M. Evenson	Physics Laboratory	Time and Frequency Division
Scott R. Angster	Washington State University	Mechanical Engineering	Ram D. Srram	Manufacturing Engineering Laboratory	Manufacturing Syst Integration Division
Kathleen A. Barnes	Michigan Technological University	Petroleum and Chem Engr	Alan I. Nakatani	Materials Science and Engineering Laboratory	Polymers Division
Francine Battaglia	University of Pennsylvania	Mechanical Engineering	Ronald G. Rehm	Computing and Applied Mathematics Laboratory	Applied/Computat Math Div (MD)
Dale J. Brugh	University of Utah	Physical Chemistry	Richard D. Suenram	Physics Laboratory	Optical Technology Division
Rodney A. Bryant	University of Michigan-Ann Arbor	Aerospace Engineering	William M. Pitts	Building and Fire Research Laboratory	Fire Science Division
Daniel L. Burden	Indiana University-Bloomington	Analytical Chemistry	Anne L. Plant	Chemical Science and Technology Laboratory	Biotechnology Division
Carelyn E. Campbell	Northwestern University/IL	Material Science	William J. Boettinger	Materials Science and Engineering Laboratory	Metallurgy Division
Thomas M. Crawford	University of Colorado	Solid State Physics	Ronald B. Goldfarb	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Bruce R. Fabijonas	University of Illinois-Chicago	Applied Mathematics	Daniel W. Lozier	Computing and Applied Mathematics Laboratory	Applied/Computat Math Div (MD)
Jonathan E. Guyer	Northwestern University/IL	Material Science	Joseph G. Pellegrino	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1997 (cont.)					
Margaret A. Hubbard	U of Illinois-Urbana-Champaign	Physics	Sarah L. Gilbert	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
Jeesong Hwang	Michigan State University	Solid State Physics	Lori S. Goldner	Physics Laboratory	Optical Technology Division
Robert Ivkov	University of Maryland	Physical Chemistry	Eric J. Amis	Materials Science and Engineering Laboratory	Polymers Division
Claire E. Jordan	University of Wisconsin-Madison	Analytical Chemistry	Lee J. Richter	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Charles B. Kellogg	University of Georgia	Physics	Karl K. Irikura	Chemical Science and Technology Laboratory	PhysChem Properties Div (MD)
Stephen T. Krieger	University of Rochester/NY	Optics	Kent B. Rochford	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
Terence P. Lerch	Iowa State University	Engineering Mechanics	Christopher M. Fortunko	Materials Science and Engineering Laboratory	Materials Reliability Division
David M. Lorenzetti	Massachusetts Inst of Technology	Building Research	Andrew K. Persly	Building and Fire Research Laboratory	Building Environment Division
Leo Lue	Massachusetts Inst of Technology	Chemical and Paper Engr	Daniel G. Friend	Chemical Science and Technology Laboratory	PhysChem Properties Div (CO)
Scott R. Messenger	Washington University/MO	Physics and Astronomy	David S. Simons	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Chris A. Michaels	Columbia University/NY	Chemistry	Richard R. Cavanagh	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Ronald Minniti	University of Tennessee-Knoxville	Physics	John D. Gillaspay	Physics Laboratory	Atomic Physics Division
Krista L. Mullman	University of Wisconsin-Madison	Physics	Kristian Helmerson	Physics Laboratory	Atomic Physics Division
Tanya L. Myers	University of Chicago/IL	Physical Chemistry	David J. Nesbitt	Physics Laboratory	Quantum Physics Division
Alline F. Myers	North Carolina State U-Raleigh	Material Science	Eric B. Steel	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Walter W. Nederbragt	University of California-Davis	Mechanical Engineering	Ram D. Sriram	Manufacturing Engineering Laboratory	Manufacturing Syst Integration Division
David L. Osborn	University of California-Berkeley	Chemical Physics	Stephen R. Leone	Physics Laboratory	Quantum Physics Division
Scott M. Owens	State Univ of New York at Albany	Physics	R. D. Deslattes	Physics Laboratory	Atomic Physics Division
Darrin J. Pochan	U of Massachusetts-Amherst	Polymer Science	Wen-Li Wu	Materials Science and Engineering Laboratory	Polymers Division
Robert J. Rañac	Virginia Polytech Inst and State U	Engineering Mechanics	Mehmet A. Donmez	Manufacturing Engineering Laboratory	Automated Production Technology Division
Bruce D. Ravel	University of Washington	Physics	Wayne M. Itano	Physics Laboratory	Time and Frequency Division
Andrea M. Reiff	University of Houston/TX	Physics	Charles E. Bouldin	Materials Science and Engineering Laboratory	Ceramics Division
John Henry J. Scott	Carnegie Mellon University/PA	Mathematics	"Frederick R. Phelan, Jr."	Materials Science and Engineering Laboratory	Polymers Division
John R. Seidensticker	Penn State University/Park	Applied Physics	Dale E. Newbury	Materials Science and Engineering Laboratory	Surface and Microanalysis Science Div
Quentin A. Turchette	California Institute Technology	Symbolic Systems	S. M. Wiederhorn	Materials Science and Engineering Laboratory	Ceramics Division
Mark R. VanLandingham	University of Delaware	Physics	Christopher R. Monroe	Physics Laboratory	Time and Frequency Division
Robin M. Walton	University of Michigan-Ann Arbor	Material Science	Jonathan W. Martin	Building and Fire Research Laboratory	Building Materials Division
Christopher C. White	University of Wisconsin-Madison	Chemical Engineering	Stephen Semancik	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
John F. Widmann	University of Washington	Chemical Engineering	Wen-Li Wu	Materials Science and Engineering Laboratory	Polymers Division
			Cary Presser	Chemical Science and Technology Laboratory	Process Measurements Division (MD)

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1998					
Bertha M. Allen	U of Maryland-Baltimore County	Physical Chemistry	Anne L. Plant	Chemical Science and Technology Laboratory	Biotechnology Division
Timothy A. Barchholtz	Ohio State University	Physical Chemistry	Stephen R. Leone	Physics Laboratory	Quantum Physics Division
Michael L. Brauhm	University of Florida	Medicinal Chemistry	Kenneth D. Cole	Chemical Science and Technology Laboratory	Biotechnology Division
David A. Branning	University of Rochester/NY	Physics	Alan L. Migdall	Physics Laboratory	Optical Technology Division
Kimberly Brigeman	Northwestern Univ	Chemistry	J. Stephenson	Physics Laboratory	Optical Technology Division
William W. Brubaker	Indiana University-Bloomington	Analytical Chemistry	Michèle M. Schantz	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Julia Y. Chan	University of California-Davis	Chemistry	Terrell A. Vanderah	Materials Science and Engineering Laboratory	Ceramics Division
Pin Chen	California Institute of Technology	Chemical Physics	Leo W. Hollberg	Physics Laboratory	Time and Frequency Division
Herek L. Clark	University of California-Berkeley	Mechanical Engineering	Cary Presser	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
Eric J. Cockayne	Cornell University/NY	Physics	Benjamin P. Burton	Materials Science and Engineering Laboratory	Ceramics Division
Olga J. Condero-Brana	Utah State University	Mathematical Sciences	David L. Banks	Computing and Applied Mathematics Laboratory	Statistical Engineering Div (MD)
Jeff M. Cronkrite	Georgia Institute of Technology	Chemical Physics	Jeffrey W. Hudgens	Chemical Science and Technology Laboratory	Phys/Chem Properties Div (MD)
Steven W. Deiker	University of Wisconsin-Madison	Physics	John M. Martinis	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Tasshi Dennis	Rice University/TX	Electrical Engineering	Sarah L. Gilbert	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
Scott A. Diddams	University of New Mexico	Physics	John L. Hall	Physics Laboratory	Quantum Physics Division
Alexander C. Drobhat	U of Maryland-Baltimore County	Biochemistry	James T. Stivers	Chemical Science and Technology Laboratory	Biotechnology Division
Christopher E. Elmer	Colorado School of Mines	Math and Applied Math	John W. Cahn	Materials Science and Engineering Laboratory	Metallurgy Division
Fredrik K. Fatemi	University of Virginia	Molecular Physics	Paul D. Leit	Physics Laboratory	Atomic Physics Division
Donald Gajewski	University of California-San Diego	Solid State Physics	Joseph G. Pellegrino	Electronics and Electrical Engineering Laboratory	Semiconductor Electronics Division
Robert J. Goldschmidt	Drexel University/PA	Analytical Chemistry	Charles M. Guttman	Materials Science and Engineering Laboratory	Polymers Division
Jay H. Grinstead	University of Virginia	Mechanical Engineering	Gerald T. Fraser	Physics Laboratory	Optical Technology Division
Wanda K. Hartman	Michigan State University	Chemistry	Frederick P. Schwarz	Chemical Science and Technology Laboratory	Biotechnology Division
Timothy J. Haugan	State Univ of New York-Buffalo	Electrical Computer Sci	Winnie K. Wong Ng	Materials Science and Engineering Laboratory	Ceramics Division
Thomas P. Heavner	University of Colorado	Physics	Steven R. Jefferts	Physics Laboratory	Time and Frequency Division
William H. Huber	University of Minnesota-Twin Cit	Physics	Neil M. Zimmerman	Electronics and Electrical Engineering Laboratory	Electricity Division
Paul R. Hufiman	Duke University/NC	Physics	Muhammad Arif	Physics Laboratory	Ionizing Radiation Division
David J. Jones	Massachusetts Inst of Technology	Electrical Engineering	Tracy S. Clement	Physics Laboratory	Quantum Physics Division
Thomas C. Killian	Massachusetts Inst of Technology	Physics	Sтивен L. Rolston	Physics Laboratory	Atomic Physics Division
Lyon B. King	University of Michigan-Ann Arbor	Aerospace Engineering	John J. Bollinger	Physics Laboratory	Quantum Physics Division
Masaru K. Kuro	Massachusetts Inst of Technology	Chemistry	David J. Nesbitt	Physics Laboratory	Quantum Physics Division
Eric W. Landree	Northwestern University/IL	Material Science	Terence J. Jack	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
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Maritoni Litorja	Northwestern University/IL	Physical Chemistry	Lee J. Richter	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Kristy L. Mardis	University of Wisconsin-Madison	Physical Chemistry	Michael K. Gilson	Chemical Science and Technology Laboratory	Biotechnology Division
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James C. Meredith	University of Texas-Austin	Chemical Engineering	Eric J. Amis	Materials Science and Engineering Laboratory	Polymers Division
Alexander B. Morgan	University of South Carolina	Chemistry	Jeffrey W. Gilman	Building and Fire Research Laboratory	Fire Science Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1998 (cont.)					
Amy B. Musser	Penn State University Park	Architectural Engr	Andrew K. Persly	Building and Fire Research Laboratory	Building Environment Division
Benjamin E. Nachumi	Columbia University/NY	Physics	Raju Datta	Physics Laboratory	Optical Technology Division
Sae Woo Nam	Stanford University/CA	Physics	Gene C. Hilton	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Paul D. Panetta	Iowa State University	Material Science	George A. Alers	Materials Science and Engineering Laboratory	Materials Reliability Division
Harold V. Parks	University of Colorado-Boulder	Atomic Physics	James E. Faller	Physics Laboratory	Quantum Physics Division
J. M. Pedulla	University of Pittsburgh/PA	Physical Chemistry	R. D. Deslattes	Physics Laboratory	Atomic Physics Division
Phillip M. Peters	University of Rochester/NY	Optics	Norman A. Sanford	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
James V. Porto	Cornell University/NY	Physics	John D. Gillaspay	Physics Laboratory	Atomic Physics Division
Michael W. Rabin	U of Illinois-Urbana-Champaign	Physics	John M. Martinis	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Christine H. Russell	State Univ of New York at Albany	Physics	Eric B. Steel	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Charles A. Sackett	Rice University/TX	Physics	David J. Wineland	Physics Laboratory	Time and Frequency Division
Geoffrey B. Sauppe	University of Texas-Austin	Chemistry	Michael J. Tarlov	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
Joshua P. Schwarz	University of Colorado	Physics	Edwin R. Williams	Electronics and Electrical Engineering Laboratory	Electricity Division
John E. Sinsarian	State U of New York-Stony Brook	Physics	William D. Phillips	Physics Laboratory	Molecular Physics Division
Christopher L. Soles	University of Michigan-Ann Arbor	Material Science	Wen-Li Wu	Materials Science and Engineering Laboratory	Polymers Division
Elizabeth A. Sornsin	University of Alabama-Huntsville	Physics	Kent B. Rochford	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
Joseph R. Swinder	University of Maryland	Chemistry	Dale E. Newbury	Chemical Science and Technology Laboratory	Surface and Microanalysis Science Div
Jason Sydow	Cornell University/NY	Physics	Ronald H. Ono	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Lois A. Tully	U of Maryland School of Medicine	Genetics	Barbara C. Levin	Chemical Science and Technology Laboratory	Biotechnology Division
Brent D. Viers	University of Cincinnati/OH	Chemistry	Barry J. Bauer	Materials Science and Engineering Laboratory	Polymers Division
Kurt R. Vogel	University of Colorado	Physics	Hugh Robinson	Physics Laboratory	Time and Frequency Division
John T. Woodward	Univ of California-Santa Barbara	Physics	Anne L. Plant	Chemical Science and Technology Laboratory	Biotechnology Division
1999					
Brian P. Anderson	Stanford University/CA	Applied Physics	Eric Cornell	Physics Laboratory	Quantum Physics Division
William E. Bailey	Stanford University/CA	Material Science	Stephen Russek	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
G. Becker	State Univ of NY at Albany	Computer Science	Paul E. Black	Information Technology Laboratory	Software Diagnostics and Conformance Testing Division
M. F. Bundy	Washington State Univ	Mechanical Engineering	Anthony Hamins	Building and Fire Research Laboratory	Fire Science Division
James P. Burke	University of Colorado	Atomic and Molecular Physics	Paul S. Julienne	Physics Laboratory	Atomic Physics Division
Derrick T. Carpenter	Lehigh University/PA	Material Science	Robert Keller	Materials Science and Engineering Laboratory	Materials Reliability Division
Scott R. Davis	University of Colorado	Chemical Physics	David F. Plusquellic	Physics Laboratory	Optical Technology Division
John T. Elliott	State U of New York-Stony Brook	Biophysical Phys Biochem	Anne L. Plant	Chemical Science and Technology Laboratory	Biotechnology Division
Julie Epelboim	University of Maryland	Psychology	David Coombs	Manufacturing Engineering Laboratory	Intelligent Systems Division
Michael J. Fasolka	Massachusetts Inst of Technology	Polymer Science and Engr	Lori S. Goldner	Physics Laboratory	Optical Technology Division
Richard A. Fry	George Washington University/DC	Material Science	Robert D. Shull	Materials Science and Engineering Laboratory	Metallurgy Division
Stephen P. Fuss	University of Texas-Austin	Thermal Engineering	Anthony Hamins	Building and Fire Research Laboratory	Fire Science Division
Amanda N. Goyette	University of Wisconsin-Madison	Physics	James K. Othoff	Electronics and Electrical Engineering Laboratory	Electricity Division

NIST POSTDOCTORAL RESEARCH ASSOCIATES, 1994-1999

Name	University	PhD Field	NIST Advisor	Laboratory	Division
1999 (cont.)					
Warren W. Harper	Univ of Kentucky	Chemical Physics	David J. Nesbitt	Physics Laboratory	Quantum Physics Division
Maury E. Howard	University of Texas-Austin	Analytical Chemistry	John D. Fasset	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Tina H. T. Huang	University of Kansas	Analytical Chemistry	Michael J. Tarlov	Chemical Science and Technology Laboratory	Process Measurements Division (MD)
Eric W. Hudson	University of California-Berkeley	Solid State Physics	Joseph A. Strosio	Physics Laboratory	Electron and Optical Physics Division
Lawrence K. Iwaki	U of Illinois-Urbana-Champaign	Chemical Physics	Edwin J. Heilwell	Physics Laboratory	Optical Technology Division
Albrecht Jander	Washington University/MO	Engineering and Applied Phys	Ronald B. Goldfarb	Electronics and Electrical Engineering Laboratory	Electromagnetic Technology Division
Kevin J. Knopp	University of Colorado	Optical Sciences	David H. Christensen	Electronics and Electrical Engineering Laboratory	Optoelectronics Division
Donald E. Kramer	University of Minnesota-Twin Cit	Material Science	Richard J. Fields	Materials Science and Engineering Laboratory	Metallurgy Division
Young S. Lee	Massachusetts Inst of Technology	Solid State Physics	Jeffrey W. Lynn	Materials Science and Engineering Laboratory	Center for Neutron Research
Michael J. Y. Lim	University of Michigan-Ann Arbor	Atomic Physics	Steven L. Rolston	Physics Laboratory	Atomic Physics Division
Laura J. Lising	University of California-Berkeley	Physics	William D. Phillips	Physics Laboratory	Atomic Physics Division
Alexander E. Lobkovsky	University of Chicago/IL	Theoretical Physics	James A. Warren	Materials Science and Engineering Laboratory	Metallurgy Division
Mark R. Locatelli	University of California-Berkeley	Material Science	Edwin R. Fuller, Jr	Materials Science and Engineering Laboratory	Ceramics Division
Richard B. Mindek	University of Connecticut	Mechanical Engineering	Christopher J. Evans	Manufacturing Engineering Laboratory	Precision Engineering Division
Erik J. Nelson	Stanford University/CA	Solid State Physics	Joseph C. Woick	Materials Science and Engineering Laboratory	Ceramics Division
Kevin V. O'Donovan	U of Illinois-Urbana-Champaign	Solid State Physics	Julie A. Borchers	Materials Science and Engineering Laboratory	Center for Neutron Research
Steven E. Pell	Harvard University/MA	Physics	K. Helmerson	Physics Laboratory	Atomic Physics Division
David J. Ross	University of California-Irvine	Physics	M. R. Moldover	Chemical Science and Technology Laboratory	Phys/Chem Properties Div (MD)
Mary A. Rowe	University of California-Berkeley	Atomic Physics	Christopher R. Monroe	Physics Laboratory	Time and Frequency Division
Tony L. Schmitz	University of Florida	Mechanical Engineering	Matthew A. Davies	Manufacturing Engineering Laboratory	Intelligent Systems Division
Francis W. Starr	Boston University/MA	Physics	Sharon C. Glotzer	Materials Science and Engineering Laboratory	Polymers Division
David G. Sterling	University of Colorado	Applied Mathematics	Timothy J. Burns	Information Technology Laboratory	Mathematical and Computational Sciences Div (MD)
Peter M. Vaillone	University of Illinois-Chicago	Biophysical Chemistry	Dennis J. Reeder	Chemical Science and Technology Laboratory	Biotechnology Division
Emanuel A. Waddell	Louisiana State U and A&M College	Analytical Chemistry	Steven J. Choquette	Chemical Science and Technology Laboratory	Analytical Chemistry Division
Kenneth D. Weston	Univ of California—Santa Barbara	Physics	J. C. Stepienson	Physics Laboratory	Time and Frequency Division
Marshall C. Wheeler	University of Texas-Austin	Chemical and Paper Engr	Stephen Semanick	Chemical Science and Technology Laboratory	Process Measurements Division (MD)

Source: Jack Hsia, NIST Office of International and Academic Affairs, Jim Voytuk, National Research Council

APPENDIX G

SCIENTIFIC AWARDS GIVEN BY THE DEPARTMENT OF COMMERCE AND NIST TO STAFF MEMBERS, 1994-2001

The Gold Medal, established in 1949, was the highest honor conferred upon an employee by the Department of Commerce. It was bestowed for distinguished achievements of major significance to the Department or to the Nation.

The Samuel Wesley Stratton Award was created by NBS in 1962 to recognize unusually significant research contributions to science or engineering that merited the acclaim of the scientific world and supported NBS/NIST objectives.

The Edward Bennett Rosa Award, established by NBS in 1964, recognized outstanding achievements in the development of meaningful and significant standards of practice in the measurement field.

The Edward Uhler Condon Award was given by NBS, beginning in 1974, to recognize distinguished achievements in written exposition in science or technology.

The Applied Research Award, established by NBS in 1975, recognized superior achievement in the practical application of the results of scientific or engineering research.

The Allen V. Astin Measurement Science Award, first given by NBS in 1984, recognized outstanding achievement in the advancement of measurement science or in the delivery of measurement services.

The William P. Slichter Award, established by NIST in 1992, recognized outstanding achievements by NIST staff in building or strengthening ties between NIST and industry. The award was named as a memorial to William P. Slichter, Executive Director, Materials Science and Engineering Division, AT&T Bell Laboratories, who served on the first NIST Visiting Committee for Advanced Technology.

1994

Gold Medal Awards—

James E. Hill

Miles E. Smid

Jack Sugar

Group: Theodore D. Doiron, Timothy J. Drapela, Paul D. Hale, Steven E. Mechels, Matt Young

Stratton Awards—

Richard D. Leapman

Dale E. Newbury

Condon Award—

Charles M. Beck II

Rosa Award—

David C. Stieren

Applied Research Award—

Group: Herbert T. Bandy, Bradley N. Damazo, M. Alkan Donmez, David E. Gilsinn, Mahn H. Hahn, Kari K. Harper, Michael D. Kennedy, Neil D. Wilkin, Wendy A. Wyatt, Kenneth W. Yee

Astin Award—

Group: George W. Burns, Margaret G. Kaeser, Gregory F. Strouse, M. Carroll Croarkin, William F. Guthrie

Slichter Award—

Robert I. Scace

1995

Gold Medal Awards—

Donald L. Hunston

Michael R. Rubin

Hratch G. Semerjian

Donald B. Sullivan

Charles R. Tilford

Group: Jau Shi Jun, John A. Kramer, William B. Penzes, Fredric E. Scire, E. Clayton Teague, John S. Villarrubia

Stratton Award—

Eric A. Cornell

Condon Award—

David J. Nesbitt

Rosa Award—

Group: William D. Dorko, Franklin R. Guenther

Applied Research Award—

Stephen E. Stein

Astin Award—

E. Clayton Teague

Slichter Award—

Group: David A. Didion, Piotr A. Domanski, Mark A. Kedzierski

1996

Gold Medal Awards—

Eric A. Cornell

Allen C. Newell

Lyle H. Schwartz

Group: Technology Services, Chief Counsel Office for Technology Administration, Office of the Assistant Secretary for Export Enforcement, Office of the Assistant Commissioner for Trademarks

Stratton Award—

John M. Martinis

Condon Award—

None

Rosa Award—

Group: Walter S. Liggett, Jr., Samuel R. Row III, David J. Pitchure, Jun Feng Song, Theodore V. Vorburger

Applied Research Award—

Allen R. Hefner, Jr.

Astin Award—

Group: Eric B. Steel, Shirley Turner, Jennifer R. Verkouteren, Eric S. Windsor

Slichter Award—

Steven T. Bushby

1997

Gold Medal Awards—

Kevin M. Carr

Robert E. Hebner

Ernest G. Kessler

Rance A. Velapoldi

Group: Reactor Operations and Engineering Group

Stratton Award—

Wen-Li Wu

Condon Award—

Richard L. Kautz

Rosa Award—

George W. Burns

Applied Research Award—

Nelson N. Hsu

Astin Award—

Billy W. Mangum

Slichter Award—

Group: Anthony Bur, Kalman Migler, Francis Wang

1998

Gold Medal Awards—

B. Stephen Carpenter

Harry S. Hertz

Lura J. Powell

Rosalie T. Ruegg

Paul S. Julienne

Group: Gene C. Hilton, Kent D. Irwin, John M. Martinis, David A. Wollman

Stratton Award—

William F. Egelhoff, Jr.

Condon Award—

None

Rosa Award—

Group: Edgar G. Erber, Dennis S. Everett, Howard H. Harary

Applied Research Award—

Group: Gene C. Hilton, Kent D. Irwin, John M. Martinis, David A. Wollman

Astin Award—

Judah Levine

Slichter Award—

Group: W. Gary Mallard, Stephen E. Stein

1999

Gold Medal Award—

William J. Boettinger

Group: Charles J. Glinka, Charles F. Majkrzak

Stratton Award—

Group: David B. Newell, Richard L. Steiner, Edwin R. Williams

Condon Award—

John R.D. Copley

Rosa Award—

Fred L. Walls

Applied Research Award—

Group: Ronald G. Dixson, Joseph N. Fu

Astin Award—

Group: Nile M. Oldham, Mark E. Parker, Robert J. Densock, Raymond M. Hoffman, Richard D. Schneeman

Slichter Award—

Mark O. McLinden

2000

Gold Medal Awards—

Takashi Kashiwagi

Group: Victor R. McCrary, John W. Roberts

Stratton Award—

Robert D. McMichael

Condon Award—

Group: Ali Eichenberger, Mark W. Keller, John M. Martinis, Neil M. Zimmerman

Rosa Award—

Belinda L. Collins

Applied Research Award—

Group: Edwin R. Fuller, Jr., Andrew R. Roosen, Stephen A. Langer

Astin Award—

John L. Hall

Slichter Award—

Fernando L. Podio

2001

Gold Medal Awards—

Group: Elaine B. Barker, Lawrence E. Bassham, William E. Burr, James F. Dray, Jr., Morris J. Dworkin, James G. Foti, James R. Nechvatal, Edward A. Roback, Miles E. Smid, Juan Soto, Jr.

Group: Robert A. Clary, Christopher J. Evans, Michael L. McGlaulin, Manfred L. Osti, Richard L. Rhorer, Charles R. Tilford, Eric P. Whitenton

Group: James C. Bergquist, Steven T. Cundiff, Scott A. Diddams, Leo Hollberg, Christopher W. Oates, June Ye

Group: Daniel Josell, Thomas P. Moffat, Gery R. Stafford

Stratton Award—

Deborah Shiu-Lan Jin

Condon Award—

Group: James C. Bergquist, Steven R. Jefferts, David J. Wineland

Rosa Award—

R. Michael McCabe

Applied Research Award—

None

Astin Award—

Thomas R. Scott

Slichter Award—

Group: Eric K. Lin, Wen-Li Wu

Source: NIST Archives—Award Brochure Collection

APPENDIX H

MEMBERS OF THE VISITING COMMITTEE ON ADVANCED TECHNOLOGY FOR NIST

Public Law 56-177, which established the National Bureau of Standards as an agency of the Department of the Treasury on March 3, 1901, directed the creation of a Visiting Committee of five members, "men prominent in the various interests involved," to be appointed by the Secretary of the Treasury, to visit NBS at least annually, and to report to the secretary upon the efficiency of its scientific work and the condition of its equipment. Despite the transfer of NBS to the Department of Commerce and Labor in 1903 and the creation in 1913 of a separate Department of Commerce, the procedures of the Visiting Committee remained unchanged until 1988.

The text of Public Law 100-418, August 23, 1988, replaced the earlier Visiting Committee by a Visiting Committee on Advanced Technology (VCAT). The new committee, to be appointed by the NIST Director, was to be composed of nine members, at least five of whom were to be from U.S. industry. The VCAT was to meet at least quarterly and to provide an annual report on NIST, to be submitted to Congress through the Secretary of Commerce. Dates indicate term of appointment.

Milton M. Chang Chairman, New Focus, Inc.	1996-1999
Steven A. Malone Director, Nebraska Dept. of Agriculture's Weights and Measures Program	1998-1999
Louise K. Goeser General Manager, Whirlpool Corporation	1998-2000
Dr. Duane A. Adams Vice Provost for Research, Carnegie Mellon University	1999-2001
Dr. Conilee G. Kirkpatrick Vice President, HRL Laboratories	1999-2002
Dr. James W. Mitchell Director, Materials, Reliability and Ecology Research Laboratory, Lucent Technologies	1999-2002
Dr. Caroline A. Kovac Vice President, Services, Applications and Solutions, IBM	1999-2002
Dr. Thomas A. Manuel President, Council for Chemical Research	1999-2002
Dr. F. Raymond Salemme Founder, President, and Chief Scientific Officer, 3-Dimensional Pharmaceuticals, Inc.	1999-2002
Dr. Juan M. Sanchez, VCAT Chair Vice President for Research, University of Texas, Austin	2000-2003
Dr. April M. Schweighart Product Business Manager, Motorola	2000-2003
Dr. Deborah L. Grubbe Corporate Director, Safety & Health, DuPont Safety, Health, Environment	2001-2004
Dr. Wayne H. Pitcher, Jr. Technology Management Consultant	2001-2004
Dr. Lloyd R. Harriott Professor, Dept. of Electrical and Computer Engineering, University of Virginia	2001-2004
Dr. Masayoshi Tomizuka Director, Engineering Systems Research Center, University of California, Berkeley	2001-2004

Source: Annual Reports of the Visiting Committee

APPENDIX I

NIST ACTUAL OBLIGATIONS, 2000–2001

The following information represents monies spent by NIST during the period 2000–2001. Four categories of expenditure are indicated. Data for the period 1994–1999 may be found in *Responding to National Needs*, pp. 915–916.

	<u>FY 2000 (\$M)</u>	<u>FY 2001 (\$M)</u>
Congressionally appropriated funds for support of the NIST Laboratories and the Baldrige National Quality Program—Scientific and Technical Research and Services (STRS) appropriation	283.5	311.0
Funds obtained principally from other government agencies for research services rendered, from the sale of Standard Reference Materials, and from calibrations, tests, and advisory services—Reimbursables	114.8	116.6
Congressionally appropriated funds for support of the Advanced Technology Program and the Manufacturing Extension Partnership—Industrial Technology Services (ITS) appropriation	301.6	281.3
Congressionally appropriated funds for new construction and major renovations of NIST facilities—Construction of Research Facilities (CRF) appropriation	200.5	37.7
	<hr/>	<hr/>
	900.4	746.6

Source: Suzanne Evans, NIST Budget Division

APPENDIX J

NIST PUBLICATIONS

This appendix lists current (2002) periodical and nonperiodical NIST publications. Following each publication name is the Information Services Division call number, the date of inception of the publication under its present name, and a description of the material therein. See *Responding to National Needs*, Appendix J, for information on predecessor publications.

Federal Information Processing Standards

JK468.A8A3

No. 0 (1968)–present

Publications in this series collectively constitute the Federal Information Processing Standards Register. The Register serves as the official source of information in the Federal Government regarding standards issued by NIST pursuant to the Federal Property and Administrative Services Act of 1949 as amended, Public Law 89-306 (79 Stat. 1127), and as implemented by Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 CFR (Code of Federal Regulations).

Journal of Physical and Chemical Reference Data

Q199.J65

Vol. 1 (1972)–present

This journal provides critically evaluated physical and chemical property data and critical reviews of measurement techniques. It is not an outlet for original experimental measurements or for review articles of a descriptive or primarily theoretical nature. The National Standard Reference Data System is one source of contributions to the Journal. JPCRD is published by the Institute of Physics for NIST.

Journal of Research of the National Institute of Standards and Technology

QC1.U524

Vol. 93 No. 6 (1988)–present

Reports NIST research and development in metrology and related fields of physical science, engineering, applied mathematics, statistics, biotechnology, and information technology. Papers cover a broad range of subjects, with major emphasis on measurement methodology and the basic technology underlying standardization. Also included from time to time are survey articles on topics closely related to the Institute's technical and scientific programs. Issued six times a year.

Letter Circulars of the National Institute of Standards and Technology

QC100.U5775

No. 1135 (1988)–present

Irregularly published lists of NIST publications and references, and general information concerning specific subjects on which popular interest had been demonstrated by inquiries addressed to NIST.

National Standard Reference Data Series—NIST

QC100.U573

No. 75-120 (2000)–present

Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a worldwide program coordinated by NIST under the authority of the National Standard Data Act (Public Law 90-396).

NIST Building Science Series

TA435.U58

No. 166 (1989)–present

Disseminates technical information developed at the Institute on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

APPENDIX K

STRUCTURE AND LEADERSHIP OF NIST

Changes in NIST administrative structure have occurred over the years 1991-2001. Due to the length of material contained in the organizational charts for these years, please refer to the NIST Virtual Library (NVL) for a compilation of this data at http://nvl.nist.gov/nvl3.cfm?doc_id=144&s_id=95.