further the effectiveness of administration of the Foundation. Specifically:

- (1) There is established a new office of Director of the National Science Foundation and that Director, ex officio, is made a member of the National Science Board on a basis coordinate with that of other Board members.
- (2) There is substituted for the now-existing Executive Committee of the National Science Board a new Executive Committee composed of the Director of the National Science Foundation, ex officio, as a voting member and Chairman of the Committee, and of four other members elected by the National Science Board from among its appointive members.
- (3) Committees advisory to each of the divisions of the Foundation will make their recommendations to the Director only rather than to both the Director and the National Science Board.

After investigation I have found and hereby declare that each reorganization included in Reorganization Plan No. 2 of 1962 is necessary to accomplish one or more of the purposes set forth in section 2(a) of the Reorganization Act of 1949, as amended.

I have found and hereby declare that it is necessary to include in the reorganization plan, by reason of reorganizations made thereby, provisions for the appointment and compensation of the Director and Deputy Director of the Office of Science and Technology and of the Director of the National Science Foundation. The rate of compensation fixed for each of these officers is that which I have found to prevail in respect of comparable officers in the executive branch of the Government.

The functions abolished by the provisions of section 23(b) of the reorganization plan are provided for in sections 4(a), 5(a), 6(a), 6(b), and 8(d) of the National Science Foundation Act of 1950.

The taking effect of the reorganizations included in the reorganization plan will provide sound organizational arrangements and will make possible more effective and efficient administration of Government programs in science and technology. It is, however, impracticable to itemize at this time the reductions in expenditures which it is probable will be brought about by such taking effect.

I recommend that the Congress allow the reorganization plan to become effective.

JOHN F. KENNEDY.

THE WHITE HOUSE, March 29, 1962.

## § 1862. Functions

# (a) Initiation and support of studies and programs; scholarships; current register of scientific and engineering personnel

The Foundation is authorized and directed—

- (1) to initiate and support basic scientific research and programs to strengthen scientific research potential and science education programs at all levels in the mathematical, physical, medical, biological, social, and other sciences, and to initiate and support research fundamental to the engineering process and programs to strengthen engineering research potential and engineering education programs at all levels in the various fields of engineering, by making contracts or other arrangements (including grants, loans, and other forms of assistance) to support such scientific, engineering, and educational activities and to appraise the impact of research upon industrial development and upon the general welfare:
- (2) to award, as provided in section 1869 of this title, scholarships and graduate fellowships for study and research in the sciences or in engineering;

- (3) to foster the interchange of scientific and engineering information among scientists and engineers in the United States and foreign countries:
- (4) to foster and support the development and use of computer and other scientific and engineering methods and technologies, primarily for research and education in the sciences and engineering:
- (5) to evaluate the status and needs of the various sciences and fields of engineering as evidenced by programs, projects, and studies undertaken by agencies of the Federal Government, by individuals, and by public and private research groups, employing by grant or contract such consulting services as it may deem necessary for the purpose of such evaluations; and to take into consideration the results of such evaluations in correlating the research and educational programs undertaken or supported by the Foundation with programs, projects, and studies undertaken by agencies of the Federal Government, by individuals, and by public and private research groups;
- (6) to provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources and to provide a source of information for policy formulation by other agencies of the Federal Government:
- (7) to initiate and maintain a program for the determination of the total amount of money for scientific and engineering research, including money allocated for the construction of the facilities wherein such research is conducted, received by each educational institution and appropriate nonprofit organization in the United States, by grant, contract, or other arrangement from agencies of the Federal Government, and to report annually thereon to the President and the Congress; and
- (8) to take a leading role in fostering and supporting research and education activities to improve the security of networked information systems.

# (b) Contracts, grants, loans, etc., for scientific and engineering activities; financing of programs

The Foundation is authorized to initiate and support specific scientific and engineering activities in connection with matters relating to international cooperation, national security, and the effects of scientific and engineering applications upon society by making contracts or other arrangements (including grants, loans, and other forms of assistance) for the conduct of such activities. When initiated or supported pursuant to requests made by any other Federal department or agency, including the Office of Technology Assessment, such activities shall be financed whenever feasible from funds transferred to the Foundation by the requesting official as provided in section 1873(f) of this title, and any such activities shall be unclassified and shall be identified by the Foundation as being undertaken at the request of the appropriate of-

#### (c) Scientific and engineering research programs at academic and other nonprofit institutions; applied scientific and engineering research programs by Presidential directive; employment of consulting services; coordination of activities

In addition to the authority contained in subsections (a) and (b) of this section, the Foundation is authorized to initiate and support scientific and engineering research, including applied research, at academic and other nonprofit institutions. When so directed by the President, the Foundation is further authorized to support, through other appropriate organizations, applied scientific research and engineering research relevant to national problems involving the public interest. In exercising the authority contained in this subsection, the Foundation may employ by grant or contract such consulting services as it deems necessary, and shall coordinate and correlate its activities with respect to any such problem with other agencies of the Federal Government undertaking similar programs in that field.

# (d) Promotion of research and education in science and engineering

The Board and the Director shall recommend and encourage the pursuit of national policies for the promotion of research and education in science and engineering.

# (e) Balancing of research and educational activities in the sciences and engineering

In exercising the authority and discharging the functions referred to in the foregoing subsections, it shall be an objective of the Foundation to strengthen research and education in the sciences and engineering, including independent research by individuals, throughout the United States, and to avoid undue concentration of such research and education.

## (f) Annual report to the President and Congress

The Foundation shall render an annual report to the President for submission on or before the 15th day of April of each year to the Congress summarizing the activities of the Foundation and making such recommendations as it may deem appropriate. Such report shall include information as to the acquisition and disposition by the Foundation of any patents and patent rights.

# (g) Support of access to computer networks

In carrying out subsection (a)(4) of this section, the Foundation is authorized to foster and support access by the research and education communities to computer networks which may be used substantially for purposes in addition to research and education in the sciences and engineering, if the additional uses will tend to increase the overall capabilities of the networks to support such research and education activities

(May 10, 1950, ch. 171, §3, 64 Stat. 149; Pub. L. 85–510, §1, July 11, 1958, 72 Stat. 353; Pub. L. 86–232, §1, Sept. 8, 1959, 73 Stat. 467; Pub. L. 90–407, §1, July 18, 1968, 82 Stat. 360; Pub. L. 92–372, §8, Aug. 10, 1972, 86 Stat. 528; Pub. L. 92–484, §10(b), Oct. 13, 1972, 86 Stat. 802; Pub. L. 94–273, §11(3), Apr. 21, 1976, 90 Stat. 378; Pub. L.

95–99, §12(a), formerly §14(a), Aug. 15, 1977, 91 Stat. 835, renumbered §12(a), Pub. L. 99–159, title I, §109(h), Nov. 22, 1985, 99 Stat. 890; Pub. L. 99–159, title I, §§109(e)(2), 110(a)(1)–(11), Nov. 22, 1985, 99 Stat. 890, 891; Pub. L. 99–383, §7(a), Aug. 21, 1986, 100 Stat. 814; Pub. L. 102–476, §4, Oct. 23, 1992, 106 Stat. 2300; Pub. L. 102–588, title II, §217, Nov. 4, 1992, 106 Stat. 5117; Pub. L. 105–207, title II, §202(e), July 29, 1998, 112 Stat. 875; Pub. L. 107–305, §7, Nov. 27, 2002, 116 Stat. 2375.)

#### AMENDMENTS

2002—Subsec. (a)(8). Pub. L. 107–305 added par. (8).

 $1998-Subsec.~(\mathrm{g}).$  Pub. L. 105-207 struck out the subsec. (g) enacted by Pub. L. 102-588. See 1992 Amendment note below.

1992—Subsec. (g). Pub. L. 102–476 and Pub. L. 102–588 amended section identically, adding subsec. (g).

1986—Subsec. (a)(6). Pub. L. 99–383 amended par. (6) generally. Prior to amendment, par. (6) read as follows: "to maintain a current register of scientific and engineering personnel, and in other ways to provide a central clearinghouse for the collection, interpretation, and analysis of data on the availability of, and the current and projected need for, scientific and engineering resources in the United States, and to provide a source of information for policy formulation by other agencies of the Federal Government; and".

1985—Subsec. (a)(1). Pub. L. 99–159, §110(a)(1), struck out "engineering," after "biological," and inserted provisions relating to research fundamental to the engineering process, engineering programs, and engineering activities.

Subsec. (a)(2). Pub. L. 99–159, §110(a)(2), substituted "for study and research in the sciences or in engineering" for "in the mathematical, physical, medical, biological, engineering, social, and other sciences".

Subsec. (a)(3). Pub. L. 99–159, §110(a)(3), inserted applicability to engineering and engineers.

Subsec. (a)(4). Pub. L. 99-159, §110(a)(4), inserted applicability to engineering.

Subsec. (a)(5). Pub. L. 99–159, §110(a)(5), inserted applicability to fields of engineering.

Subsec. (a)(6). Pub. L. 99-159, \$110(a)(6), substituted "engineering" for "technical" in two places.

Subsec. (a)(7). Pub. L. 99-159, 110(a)(7), inserted applicability to engineering.

Subsec. (b). Pub. L. 99–159, §§109(e)(2), 110(a)(8), inserted reference to engineering in two places and substituted "1873(f)" for "1873(g)".

Subsec. (c). Pub. L. 99–159,  $\S110(a)(9)$ , inserted applicability to engineering research.

Subsec. (d). Pub. L. 99-159, §110(a)(10), substituted "research and education in science and engineering" for "basic research and education in the sciences".

Subsec. (e). Pub. L. 99–159, 110(11), inserted applicability to engineering.

1977—Subsec. (e). Pub. L. 95–99 substituted "an objective" for "one of the objectives".

1976—Subsec. (f). Pub. L. 94–273 substituted "April" for "January".

1972—Subsec. (a)(1). Pub. L. 92–372 inserted support of science education programs at all levels to the functions of the Foundation and substituted "scientific and educational activities" for "scientific activities".

Subsec. (b). Pub. L. 92–484 inserted provisions authorizing the Foundation to initiate and support specific scientific activities in connection with matters relating to the effects of scientific applications upon society, and substituted provisions relating to the initiation or support pursuant to requests of activities by any other Federal department or agency, including the Office of Technology Assessment, for provisions relating to the initiation or support pursuant to requests of activities by the Secretary of State or Secretary of Defense.

1968—Subsec. (a)(1). Pub. L. 90-407 redesignated par. (2) as (1) and added social sciences to the enumerated

list of sciences. Former par. (1) redesignated subsec.

Subsec. (a)(2). Pub. L. 90-407 redesignated par. (4) as (2) and added social sciences to the enumerated list of sciences. Former par. (2) redesignated (1). Subsec. (a)(3). Pub. L. 90-407 redesignated par. (5) as

(3). Former par. (3) redesignated subsec. (b).

Subsec. (a)(4). Pub. L. 90-407 added par. (4). Former par. (4) redesignated subsec. (a)(2).

Subsec. (a)(5). Pub. L. 90-407 redesignated par. (6) as (5) and provided for the employment of consulting services, by grant or contract, to assist in the evaluation of the status and needs of the various sciences as evidenced by the programs and studies undertaken by agencies of the government, by individuals, and by public and private research groups, and provided for the consideration of the results of such evaluations in the correlation of the Foundation's programs with those undertaken by agencies of the government, as well as those undertaken by individuals and by public and private research groups. Former par. (5) redesignated (3). Subsec. (a)(6). Pub. L. 90-407 redesignated par. (8) as

(6) and provided that the register of scientific and technical personnel shall be current, and authorized the Foundation to analyze and interpret the collected data on the availability of, and the current and projected need for, scientific and technical resources in the United States and to make such information available to other agencies of the government for policy formula-

tion. Former par. (6) redesignated (5). Subsec. (a)(7). Pub. L. 90–407 added par. (7). Former par. (7), which provided for the establishment of such special commissions as the Board may from to time deem necessary for the purposes of this chapter, was struck out.

Subsec. (a)(8). Pub. L. 90–407 redesignated par. (8) as

Subsec. (a)(9). Pub. L. 90-407 struck out par. (9) which authorized the Foundation to initiate and support a program of study, research, and evaluation in the field of weather modification, with particular attention to areas experiencing floods, drought, etc., and to report annually to the President and the Congress thereon.

Subsec. (b). Pub. L. 90-407 redesignated former subsec. (a)(3) as (b) and substituted provisions authorizing the Foundation to initiate and support specific scientific activities in matters related to international cooperation or national security for provisions authorizing the Foundation to initiate and support only scientific research activities, only in matters related to national defense and only when requested to do so by the Secretary of Defense, and inserted provisions specifying the manner of financing such scientific activities. Former subsec. (b) redesignated (e).

Subsec. (c). Pub. L. 90-407 added subsec. (c). Former subsec. (c) redesignated (f).

Subsec. (d). Pub. L. 90-407 redesignated former subsec. (a)(1) as (d) and substituted provisions authorizing the Board and the Director to recommend and encourage national policies promoting basic research and education in the sciences for provisions authorizing and directing the Foundation to develop and encourage such policies.

Subsec. (e). Pub. L. 90-407 redesignated former subsec. (b) as (e), substituted "the foregoing subsections" for "subsection (a) of this section", "strengthen research" for "strengthen basic research", and struck out reference to the territories and possessions of the United

Subsec. (f). Pub. L. 90-407 redesignated former subsec. (c) as (f) and struck out provision requiring the report to include the minority views and recommendations if any, of members of the Board.

1959—Subsec. (a)(2). Pub. L. 86–232 clarified the Foundation's authority to support programs to strengthen scientific research potential.

1958—Subsec. (a)(9). Pub. L. 85-510 added par. (9).

#### TRANSFER OF NATIONAL SCIENCE FOUNDATION PROGRAMS

For transfer of all programs relating to science education of the National Science Foundation or the Director thereof under this chapter, with certain exceptions, to the Secretary of Education, see section 3444 of Title 20, Education.

NSF STUDY AND REPORT ON THE "DIGITAL DIVIDE"

Pub. L. 106-313, title I, §109, Oct. 17, 2000, 114 Stat. 1255, provided that:

"(a) STUDY.—The National Science Foundation shall conduct a study of the divergence in access to high technology (commonly referred to as the 'digital divide') in the United States.

(b) REPORT.—Not later than 18 months after the date of enactment of this Act [Oct. 17, 2000], the Director of the National Science Foundation shall submit a report to Congress setting forth the findings of the study conducted under subsection (a)."

IMPROVING UNITED STATES UNDERSTANDING OF SCIENCE, ENGINEERING, AND TECHNOLOGY IN EAST ASIA

Pub. L. 105-244, title VIII, §831, Oct. 7, 1998, 112 Stat. 1820, which provided for an interdisciplinary program of education and research on East Asian science, engineering, and technology, was repealed by Pub. L. 110-315, title IX, §931(3), Aug. 14, 2008, 122 Stat. 3456.

STATUS OF SCIENTIFIC INSTRUMENTATION; CURRENT AND PROJECTED NEEDS FOR SCIENTIFIC AND TECHNO-LOGICAL INSTRUMENTATION; DEVELOPMENT OF INDI-CES, CORRELATES, OR OTHER SUITABLE MEASURES OR INDICATORS

Pub. L. 96-44, §7, Aug. 2, 1979, 93 Stat. 334, provided that: "In partial fulfillment of the established statutory requirement that the National Science Foundation evaluate the status of and current and projected need for scientific resources (section 3(a)(5) and (6) of Public Law 81-507, as amended [subsec. (a)(5) and (6) of this section]), the National Science Foundation shall develop indices, correlates, or other suitable measures or indicators of the status of scientific instrumentation in the United States and of the current and projected need for scientific and technological instrumentation.

### FLOOD HAZARD MITIGATION STUDY

Pub. L. 96-44, §8, Aug. 2, 1979, 93 Stat. 334, directed National Science Foundation to conduct a Flood Hazard Mitigation Study and report to Congress with specific program recommendations by end of fiscal year

#### AUTHORIZED USE OF FUNDS UNDER SCIENCE AND SOCIETY PROGRAM

Section 5 of Pub. L. 95-99 provided that:

"(a) From the funds authorized under the program 'Science and Society', the National Science Foundation is authorized to provide support which is designed to-

"(1) improve public understanding of public policy issues involving science and technology;

"(2) facilitate the participation of qualified scientists and engineers and of undergraduate and graduate students in public activities aimed at the resolution of public policy issues having significant scientific and technical aspects; and

"(3) assist nonprofit, citizens, and bona fide public interest groups to acquire necessary scientific and technical expertise in order to improve their comprehension of scientific and technical aspects of public policy issues.

"(b) Awards made pursuant to this section shall, to the extent feasible, include support for-

"(1) qualified scientists and engineers to work on public policy issues with significant scientific and technical components in conjunction with units of State and local government, nonprofit organizations, or bona fide public interest groups;

"(2) internship programs for science and engineering undergraduate or graduate students to work on public policy issues with significant scientific and technical components in conjunction with units of State and local government, nonprofit organizations,

or bona fide public interest groups as part of their academic training;

"(3) forums, conferences, and workshops on public policy issues with significant scientific and technical components:

"(4) training in the presentation of scientific and technical studies in a manner which (A) improves public understanding of the ways in which science and technology influence contemporary life, (B) improves public access to the results of scientific and technical research, (C) encourages and facilitates interaction between laypersons and scientists on public issues with important scientific and technological components, and (D) increases public knowledge and understanding of the ethical and value implications of scientific and technological developments;

"(5) new and existing programs using radio or television to increase public understanding of public policy issues with significant scientific and technical components; and

"(6) bona fide public interest groups to acquire necessary scientific and technical expertise relating to the scientific and technical aspects of public policy issues and to enable such groups to bring together in appropriate forums experts whose research has been directed to the resolution of such issues."

ESTABLISHMENT OF "SCIENCE FOR CITIZENS PROGRAM"
CONDUCTED IN CONJUNCTION WITH "PUBLIC UNDERSTANDING OF SCIENCE PROGRAM"

Pub. L. 94-471, §5, Oct. 11, 1976, 90 Stat. 2054, provided that:

"(a) The National Science Foundation is authorized and directed to conduct an experimental 'Science for Citizens Program' and an augmented Public Understanding of Science Program under which funds will be available for pilot projects to:

"(1) improve public understanding of science, engineering and technology and their impact on public policy issues;

"(2) facilitate the participation of experienced scientists and engineers as well as graduate and undergraduate students in helping the public understand science, engineering and technology and their impact on public policies; and

"(3) assist nationally recognized professional societies and groups serving important public purposes in conducting a limited number of forums, conferences, and workshops to increase public understanding of science and technology, and of their impact on public policy issues, after consideration of the following eligibility factors:

"(A) the extent to which the proposal of the society or group will contribute to the development of facts, issues, and arguments relevant to public policy issues having significant scientific and technical aspects, and

"(B) the ability of the society or group, using its own resources, to conduct such forums, conferences, and workshops.

"(b) One or more review panels shall be established for the purpose of evaluating applications for awards under this section. The membership of each review panel shall have balanced representation from the scientific and nonscientific communities and the public and private sectors.

"(c) No contract, grant or other arrangement shall be made under this Section without the prior approval of the National Science Board.

"(d) To assist the Congress in evaluating activities initiated pursuant to this Section, the Director of the National Science Foundation, in consultation with a review panel having a balanced representation from the scientific and nonscientific community and the public and private sectors, is directed to prepare a comprehensive analysis and assessment of such activities to be submitted to the House Committee on Science and Technology [now Committee on Science, Space, and Technology] and the Senate Committee on Labor and Public Welfare [now Committee on Health, Education,

Labor, and Pensions], not later than October 31, 1977. An interim report is required no later than March 1, 1977."

DEVELOPMENT OF PROGRAM PLAN FOR CONTINUING EDUCATION IN SCIENCE AND ENGINEERING

Section 6 of Pub. L. 94-471 required the National Science Foundation to develop a program plan for continuing education in science and engineering and, not later than Oct. 31, 1977, provide specific committees of the House of Representatives and Senate a report on the plan developed with recommendations for implementation in fiscal year 1978.

DENIAL OF FINANCIAL ASSISTANCE TO CAMPUS DISRUPTERS

Section 7 of Pub. L. 93–96, Aug. 16, 1973, 87 Stat. 316, provided that:

(a) If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending, or employed by, such institution, that such individual has been convicted by any court of record of any crime which was committed after the date of enactment of this Act [Aug. 16, 1973] and which involved the use of (or assistance to others in the use of) force, disruption, or the seizure of property under control of any institution of higher education to prevent officials or students in such institution from engaging in their duties or pursuing their studies, and that such crime was of a serious nature and contributed to a substantial disruption of the administration of the institution with respect to which such crime was committed, then the institution which such individual attends, or is employed by, shall deny for a period of two years any further payment to, or for the direct benefit of, such individual under any of the programs specified in subsection (c). If an institution denies an individual assistance under the authority of the preceding sentence of this subsection, then any institution which such individual subsequently attends shall deny for the remainder of the two-year period any further payment to, or for the direct benefit of, such individual under any of the programs specified in subsection (c).

"(b) If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending, or employed by, such institution, that such individual has willfully refused to obey a lawful regulation or order of such institution after the date of enactment of this Act [Aug. 16, 1973], and that such refusal was of a serious nature and contributed to a substantial disruption of the administration of such institution, then such institution shall deny, for a period of two years, any further payment to, or for the direct benefit of, such individual under any of the programs specified in subsection (c).

"(c) The programs referred to in subsections (a) and (b) are as follows:

"(1) The programs authorized by the National Science Foundation Act of 1950 [this chapter]; and

"(2) The programs authorized under title IX of the National Defense Education Act of 1958 [sections 1876 to 1879 of this title] relating to establishing the Science Information Service.

Science Information Service.

"(d)(1) Nothing in this Act [Pub. L. 93–96], or any Act amended by this Act, shall be construed to prohibit any institution of higher education from refusing to award, continue, or extend any financial assistance under any such Act to any individual because of any misconduct which in its judgment bears adversely on his fitness for such assistance.

"(2) Nothing in this section shall be construed as limiting or prejudicing the rights and prerogatives of any institution of higher education to institute and carry out an independent, disciplinary proceeding pursuant to existing authority, practice, and law.

"(3) Nothing in this section shall be construed to limit the freedom of any student to verbal expression of individual views or opinions."

Similar provisions were contained in the following National Science Foundation Authorization Acts:

Pub. L. 92–372, 7, Aug. 10, 1972, 86 Stat. 527. Pub. L. 92–86, 7, Aug. 11, 1971, 85 Stat. 309.

Pub. L. 91-356, §5, July 24, 1970, 84 Stat. 471.

CONTINUATION OF AUTHORIZATION FOR WEATHER MODIFICATION PROGRAMS; REPEAL

Section 11(1) of Pub. L. 90–407 provided in part that the authorization for the programs initiated under former subsec. (a)(9) of this section shall continue in effect until Sept. 1, 1968 for the purposes of section 1872a of this title.

CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Section 16 of Pub. L. 90-407 provided that: "Except as otherwise specifically provided therein, the amendments made by this Act [enacting section 1864a of this title, amending sections 1862 to 1866, 1868 to 1870, 1872 to 1875, and 1877 of this title, sections 5313, 5314, and 5316 of Title 5, Government Organization and Employees, repealing sections 1867 and 1872a of this title, and enacting provisions set out as a note under section 5313 of Title 5] are intended to continue in effect under the National Science Foundation Act of 1950 [this chapter] the existing offices, procedures, and organization of the National Science Foundation as provided by such Act. [this chapter] part II of Reorganization Plan Numbered 2 of 1962, and Reorganization Plan Numbered 5 of 1965 [set out as a note under section 1861 of this title]. From and after the date of the enactment of this Act [July 18. 1968], part II of Reorganization Plan Numbered 2 of 1962, and Reorganization Plan Numbered 5 of 1965, shall be of no force or effect; but nothing in this Act shall alter or affect any transfers of functions made by part I of such Reorganization Plan Numbered 2 of 1962.

INVESTIGATION OF NEED FOR GEOPHYSICAL INSTITUTE IN TERRITORY OF HAWAII

Act Aug. 1, 1956, ch. 865, 70 Stat. 922, directed the National Science Foundation to conduct an investigation into the need for and the feasibility and usefulness of a geophysical institute located in the Territory [now State] of Hawaii. The Foundation was required to report the results of its investigations, together with its recommendations based thereon, to the Congress not later than 9 months after Aug. 1, 1956.

Ex. Ord. No. 10521. Administration of Scientific Research

Ex. Ord. No. 10521, Mar. 17, 1954, 19 F.R. 1499, as amended by Ex. Ord. No. 10807, §6(b), Mar. 13, 1959, 24 F.R. 1899, provided:

SECTION 1. The National Science Foundation (hereinafter referred to as the Foundation) shall from time to time recommend to the President policies for the promotion and support of basic research and education in the sciences, including policies with respect to furnishing guidance toward defining the responsibilities of the Federal Government in the conduct and support of basic scientific research.

SEC. 2. The Foundation shall continue to make comprehensive studies and recommendations regarding the Nation's scientific research effort and its resources for scientific activities, including facilities and scientific personnel, and its foreseeable scientific needs, with particular attention to the extent of the Federal Government's activities and the resulting effects upon trained scientific personnel. In making such studies, the Foundation shall make full use of existing sources of information and research facilities within the Federal Government.

SEC. 3. The Foundation, in concert with each Federal agency concerned, shall review the basic scientific research programs and activities of the Federal Government in order, among other purposes, to formulate methods for strengthening the administration of such programs and activities by the responsible agencies, and to study areas of basic research where gaps or undesirable overlapping of support may exist, and shall

recommend to the heads of agencies concerning the support given to basic research.

Sec. 4. As now or hereafter authorized or permitted by law, the Foundation shall be increasingly responsible for providing support by the Federal Government for general-purpose basic research through contracts and grants. The conduct and support by other Federal agencies of basic research in areas which are closely related to their missions is recognized as important and desirable, especially in response to current national needs, and shall continue.

SEC. 5. The Foundation, in consultation with educational institutions, the heads of Federal agencies, and the Commissioner of Education of the Department of Health, Education, and Welfare [now Secretary of Education], shall study the effects upon educational institutions of Federal policies and administration of contracts and grants for scientific research and development, and shall recommend policies and procedures which will promote the attainment of general national research objectives and realization of the research needs of Federal agencies while safeguarding the strength and independence of the Nation's institutions of learning.

SEC. 6. The head of each Federal agency engaged in scientific research shall make certain that effective executive, organizational, and fiscal practices exist to ensure (a) that the Foundation is consulted on policies concerning the support of basic research, (b) that approved scientific research programs conducted by the agency are reviewed continuously in order to preserve priorities in research efforts and to adjust programs to meet changing conditions without imposing unnecessary added burdens on budgetary and other resources, (c) that applied research and development shall be undertaken with sufficient consideration of the underlying basic research and such other factors as relative urgency, project costs, and availability of manpower and facilities, and (d) that, subject to considerations of security and applicable law, adequate dissemination shall be made within the Federal Government of reports on the nature and progress of research projects as an aid to the efficiency and economy of the overall Federal scientific research program.

SEC. 7. Federal agencies supporting or engaging in scientific research shall, with the assistance of the Foundation, cooperate in an effort to improve the methods of classification and reporting of scientific research projects and activities, subject to the requirements of security of information.

SEC. 8. To facilitate the efficient use of scientific research equipment and facilities held by Federal agencies:

(a) the head of each such agency engaged in scientific research shall, to the extent practicable, encourage and facilitate the sharing with other Federal agencies of major equipment and facilities; and

(b) a Federal agency shall procure new major equipment or facilities for scientific research purposes only after taking suitable steps to ascertain that the need cannot be met adequately from existing inventories or facilities of its own or of other agencies; and

(c) the Interdepartmental Committee on Scientific Research and Development shall take necessary steps to ensure that each Federal agency engaged directly in scientific research is kept informed of selected major equipment and facilities which could serve the needs of more than one agency. Each Federal agency possessing such equipment and facilities shall maintain appropriate records to assist other agencies in arranging for their joint use or exchange.

SEC. 9. The heads of the respective Federal agencies shall make such reports concerning activities within the purview of this order as may be required by the President.

SEC. 10. The National Science Foundation shall provide leadership in the effective coordination of the scientific information activities of the Federal Government with a view to improving the availability and dissemination of scientific information. Federal agencies

shall cooperate with and assist the National Science Foundation in the performance of this function, to the extent permitted by law.

#### EXECUTIVE ORDER NO. 10807

Ex. Ord. No. 10807, Mar. 13, 1959, 24 F.R. 1897, as amended Ex. Ord. No. 11381, Nov. 8, 1967, 32 F.R. 15629, which established the Federal Council for Science and Technology, provided for a chairman and membership, specified the functions of the Council, provided for assistance from other Federal agencies and the establishment of standing committees and panels, revoked Ex. Ord. No. 9912 of Dec. 24, 1947, entitled "Establishing the Interdepartmental Committee on Scientific Research and Development", and amended Ex. Ord. No. 10521, set out above, was omitted from the Code in view of Pub. L. 94–282, title IV, §402, May 11, 1976, 90 Stat. 472, set out below, which abolished the Federal Council for Science and Technology.

# Abolition of Federal Council for Science and Technology

Pub. L. 94–282, title IV, § 402, May 11, 1976, 90 Stat. 472, provided that: "The Federal Council for Science and Technology, established pursuant to Executive Order No. 10807, Mar. 13, 1959, 24 F.R. 1897, as amended by Executive Order No. 11381, Nov. 8, 1967, 32 F.R. 15629, is hereby abolished."

## § 1862a. Findings and purpose

- (a) The Congress finds that—
- (1) the fundamental research and related education program supported by the Federal Government and conducted by the Nation's universities and colleges are essential to our national security, and to our health, economic welfare, and general well-being;
- (2) many national research and related education programs conducted by universities and colleges are now hindered by obsolete research buildings and equipment, and many institutions lack sufficient resources to repair, renovate, or replace their laboratories;
- (3) the Nation's capacity to conduct high quality research and education programs and to maintain its competitive position at the forefront of modern science, engineering, and technology is threatened by this research capital deficit, which poses serious and adverse consequences to our future national security, health, welfare, and ability to compete in the international marketplace;
- (4) a national effort to spur reinvestment in research facilities is needed, and national, State, and local policies and cooperative programs are required that will yield maximum return on the investment of scarce national resources and sustain a commitment to excellence in research and education; and
- (5) the Foundation, as part of its responsibility for maintaining the vitality of the Nation's academic research, and in partnership with the States, industry, and universities and colleges, must assist in enhancing the historic linkages between Federal investment in academic research and training and investment in the research capital base by reinvesting in the capital facilities which modern research and education programs require.
- (b) It is the purpose of sections 1862a to 1862d of this title to assist in modernizing and revitalizing the Nation's research facilities at institutions of higher education, independent non-prof-

it research institutions and research museums, and consortia thereof, through capital investment.

(Pub. L. 100-570, title II, §202, Oct. 31, 1988, 102 Stat. 2873.)

#### References in Text

Sections 1862a to 1862d of this title, referred to in subsec. (b), was in the original "this title", meaning title II of Pub. L. 100–570, Oct. 31, 1988, 102 Stat. 2873, known as the Academic Research Facilities Modernization Act of 1988, which enacted sections 1862a to 1862d of this title, repealed former sections 1862a and 1862b of this title, and repealed provisions set out as a note under section 1861 of this title. For complete classification of this Act to the Code, see Short Title of 1988 Amendments note set out under section 1861 of this title and Tables

#### CODIFICATION

Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

#### PRIOR PROVISIONS

A prior section 1862a, Pub. L. 100–418, title VI, §6402, Aug. 23, 1988, 102 Stat. 1542, related to establishment of National Science Foundation Academic Research Facilities Modernization Program, prior to repeal by Pub. L. 100–570, §206.

# $\S$ 1862b. Establishment of Program

## (a) Establishment; purpose

- (1) To carry out sections 1862a to 1862d of this title, the Director shall establish and carry out a new Academic Research Facilities Modernization Program (hereafter in sections 1862a to 1862d of this title referred to as the "Program"), under which awards are made to institutions of higher education, independent nonprofit research institutions, and research museums, and consortia thereof, for the repair, renovation, or, in exceptional cases, replacement of obsolete science and engineering facilities primarily devoted to research.
- (2) Such awards shall, consistent with the functions of the Foundation set forth in section 1862 of this title and through established Foundation selection procedures, serve to—
  - (A) promote the modernization of graduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines;
  - (B) assist those academic institutions that historically have received relatively little Federal research and development funds to improve their academic science and engineering infrastructures and broaden and strengthen the Nation's science and engineering base; and
  - (C) promote the modernization of undergraduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines.

# (b) Improvement projects; maximum amounts

(1) The Program shall be carried out through projects which involve the repair, renovation, or, in exceptional cases, replacement of specific science and engineering facilities devoted pri-