port 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 institu-

tions 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-profit research institutions and research museums, and consortia thereof, through capital investment.

(Pub. L. 100–570, title II,  $\S 202$ , 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.

### § 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 primarily to research at eligible institutions, or consortia thereof, and for which funds are awarded in response to specific proposals submitted by such eligible institutions or consortia in accordance with procedures prescribed by the Director pursuant to section 1862c of this title.
- (2) Awards made under the Program shall not exceed \$7,000,000 to any institution or consortium over any period of 5 years for the repair, renovation, or, in exceptional cases, replacement of academic research facilities.
- (3) The Director shall, in making awards under the Program, consider the extent to which that institution or consortium has received funds for the repair, renovation, construction, or replacement of academic facilities from any other Federal funding source within the 5-year period immediately preceding the application. The Director shall give priority to institutions or consortia that have not received such funds in the preceding 5 years
- (4) The Director shall, in awarding funds under sections 1862a to 1862d of this title, consider the distribution of funds among institutions of different sizes and geographical locations.

## (c) Criteria for award of funds

Criteria for the award of funds to any institution for a project under the Program shall include—

- (1) the quality of the research and training to be carried out in the facility or facilities involved;
- (2) the need for the proposed repair, renovation, or, in exceptional cases, replacement based on an analysis of the age and condition of existing research facilities and equipment;
- (3) the congruence of the institution's research and training activities with the future