
Science Legislation

Text of the New Kilgore-Magnuson Bill

A bill to promote the progress of science and the useful arts, to secure the national defense, to advance the national health and welfare, and for other purposes.

DECLARATION OF POLICY

SEC. 2. The Congress hereby finds that a full development and application of the Nation's scientific and technical resources is essential for the national defense, national prosperity, and the national health and welfare. The Congress declares it to be the purpose of this Act among other things to provide support for scientific research and development, to enable young men and women of ability to receive scientific training, to promote the conservation and use of the natural resources of the Nation, to correlate the scientific research and development programs of the several Government agencies, to achieve a full dissemination of scientific and technical information to the public, and to foster the interchange of scientific and technical information in this country and abroad. The Congress finds it essential for these purposes to create a central scientific agency within the Federal Government.

NATIONAL SCIENCE FOUNDATION

SEC. 3. (a) There is hereby established an independent agency of the Federal Government to be known as the National Science Foundation (hereinafter referred to as the "Foundation"), and administered by an Administrator (hereinafter referred to as the "Administrator") who shall be appointed by the President, by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The President, before appointing an Administrator, shall consult with and receive the recommendations of the National Science Board created in section 4 (and hereinafter referred to as the "Board"). The Administrator shall appoint a Deputy Administrator, who shall perform the functions of the Administrator during his absence or when there is a vacancy in the office of the Administrator, and shall perform such other duties as may be delegated to him by the Administrator. The Deputy Administrator shall receive compensation at the rate of \$12,000 per annum.

(b) There shall be within the Foundation a Division of Mathematical and Physical Sciences, a Division of Biological Sciences, a Division of Social Sciences, a Division of Health and Medical Sciences, a Division of National Defense, a Division of Engineering and Technology, a Division of Scientific Personnel and Education, a Division of Publications and Information, and such additional divisions, not to exceed three in number, as the Administrator may from time to time establish after receiving the advice of the Board. The functions of each division shall be prescribed by the Administrator after receiving the advice of the Board, except that until the Administrator and the Board have received general recommendations from the Division of Social Sciences regarding the support of research through that Division, support of social science research shall be limited to studies of the impact of scientific discovery on the general welfare and studies required in connection with other projects supported by the foundation. Each division shall be headed by a Director, who shall be appointed by the Administrator and shall receive compensation at the rate of \$12,000 per annum.

(c) Except as provided in section 4, the Administrator shall appoint and fix the compensation of such personnel as he may deem necessary to carry out the provisions of this Act. Such appointments shall be made and such compensation shall be fixed in accordance with the provisions of the civil-service laws and regulations and the Classification Act of 1923, as amended, except that, when deemed necessary by the Administrator for the effective administration of this Act, expert scientific, technical, and professional personnel, including part-time personnel, may be employed without regard to the civil-service laws, and their compensation fixed without regard to the Classification Act of 1923, as amended.

NATIONAL SCIENCE BOARD AND DIVISIONAL SCIENTIFIC COMMITTEES

SEC. 4. (a) The Administrator, in exercising his authority under this Act, shall consult and advise with a National Science Board and, through the Directors of the several divisions, with divisional scientific committees, on all matters of major policy,

program, or budget. The Board shall consist of nine members appointed by the President, by and with the advice and consent of the Senate, from among persons who are especially qualified to promote the broad objectives of this Act, plus the chairman of the several divisional scientific committees. The scientific committee for each division, except the Division of National Defense, shall consist of not less than five and not more than fifteen members appointed by the Administrator, with the advice and approval of the Board, except that the initial members of each such divisional scientific committee shall be appointed by the Administrator with the advice and approval of the Board members appointed by the President.

The scientific committee for the Division of National Defense shall consist of not more than forty persons, of whom at least half shall be civilians appointed by the Administrator, with the advice and approval of the Board, and the remaining members shall be divided equally between such chiefs of such services and divisions of the War Department and such chiefs of such bureaus and offices of the Navy Department as the Secretary of War and the Secretary of the Navy, respectively, may from time to time designate. There shall be within the divisional scientific committee for the Division of National Defense a five-man executive committee consisting of the chairman of the divisional scientific committee, as chairman; two civilian members elected annually by the civilian members of the divisional scientific committee; together with one Army officer, and one naval officer, each of whom should be charged in their respective Departments with the coordination of research, designated by the Secretary of War and the Secretary of the Navy, respectively.

Each divisional scientific committee shall be reasonably representative of the major scientific interests and functions of its division. Members of the Board appointed by the President and members of the divisional scientific committees appointed by the Administrator shall serve for three-year terms, except that (1) at least one-third of such members originally appointed shall be appointed for one-year terms, and at least another third for two-year terms, and (2) any member appointed to fill a vacancy occurring prior to the expiration of the term of his predecessor shall be appointed for the remainder of such term. No person thus appointed to serve as a member of the Board or any divisional scientific committee shall be eligible again to serve as a member of the same group until the expiration of one year after his term has expired, except that a member appointed for a term of less than three years may be appointed for a succeeding three-year term.

(b) The Board and each divisional scientific committee shall annually elect its own chairman from among its own members, and shall devise its own rules of procedure. The Board and each such committee shall meet at the call of its own chairman or at such times as may be fixed by itself, but not less than six times each year, including at least once each calendar quarter. Vacancies in the membership of the Board or of any divisional scientific committee shall not impair the authority of the remaining members to execute its functions, and a majority of the members of the Board or any divisional scientific committee as constituted at any given time shall constitute a quorum.

The Board shall appoint and prescribe the duties of an executive secretary of its own selection who shall receive compensation at a rate, not exceeding \$12,000 per annum, to be fixed by the Board. The Administrator shall pay the compensation of such executive secretary and may furnish the Board and the divisional scientific committees such additional personnel, and such facilities, services, and supplies as may be necessary for the proper performance of the functions of the Board and the divisional scientific committees.

(c) The Board shall continuously survey the activities and management of the Foundation, and shall periodically evaluate the achievements of the Foundation in accomplishing the objectives of this Act. Each divisional scientific committee shall survey continuously the scientific field which it encompasses, shall undertake to determine the specific scientific needs of such field, and shall evaluate proposed programs and projects. The Board and each divisional scientific committee shall, upon its own initiative or upon request by the Administrator, make appropriate recommendations and reports relating to its duties and findings. The Board and each such committee shall have full access to all information in the possession of the Foundation.

(d) The Administrator shall render an annual report to the President and the Congress, summarizing the activities of the Foundation, together with such recommendations as he may deem appropriate. The Board shall annually and at such other times as it deems necessary, make such recommendations to the President and the Congress as in its opinion will further the objectives of this Act. The annual report shall include such independent recommendations concerning the budget, organization, and management of the Foundation, and such other recommendations as the Board and the divisional scientific committees may deem necessary to better effectuate the purposes of

this Act. The annual report shall include whatever dissenting opinions may be submitted for that purpose by individual members of the Board or of the divisional scientific committees. The Administrator shall, whenever requested by the Board or any divisional scientific committee, publish and disseminate widely any recommendations or reports prepared by the Board or such committee.

(e) Members of the Board and of the divisional scientific committees shall receive compensation at the rate of \$50 for each day engaged in the business of the Foundation, and shall be reimbursed for their necessary travel and other expenses incurred in the work of the Board or of any such committee. Persons holding other offices in the executive branch of the Federal Government may serve as members of the Board or any divisional scientific committee, but they shall not receive remuneration for their services as such members during any period for which they receive compensation for their services in such other offices, nor, except for representatives of the War and Navy Departments on the scientific committee for the Division of National Defense, shall they in their services as such members serve as representatives of the Government agency by which they are employed.

(f) Members of the Board and of any divisional scientific committee established under the provisions of this Act, and any other officers or employees of the Foundation, shall be chosen without regard to their political affiliations and solely on the basis of their demonstrated capacity to carry out the purposes of the Foundation and their fitness to perform the duties of their office.

(g) The Administrator may create such specialized additional advisory committees or employ the services of such advisory personnel as he may deem necessary to better effectuate the objectives of this Act. Persons so employed shall be reimbursed for their necessary travel and other expenses incurred in the work of the Foundation. Such persons may be noncompensated or may receive compensation at a rate not to exceed \$50 for each day of service. Members of the Board and of the divisional scientific committees, and any other person serving in an advisory capacity, pursuant to this section, may serve as such without regard to the provision of sections 109 and 113 of the Criminal Code (18 U. S. C., secs. 198 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such person from receiving compensation in respect of any particular matter which directly involves the Foundation or in which the Foundation is directly interested.

SUPPORT OF RESEARCH AND DEVELOPMENT

SEC. 5. (a) The Administrator is authorized to enter into contracts or other arrangements pursuant to which he will finance, in whole or in part, or otherwise support, research and development activities to be carried on by other Government agencies or by other organizations.

(b) Of the funds appropriated to the Foundation for research and development activities, not less than 15 per centum shall be available only for expenditure for research and development, pursuant to contracts or other financial arrangements made by the Administrator under this section, including contracts or arrangements to which subsection (c) is applicable, in each of the following fields: (1) National defense and (2) health and the medical sciences.

(c) Of the funds appropriated to the Foundation for research and development activities (excluding funds expressly appropriated for national defense), not less than 25 per centum shall be apportioned among the States as follows: Two-fifths shall be apportioned among the States in equal shares, and the remainder shall be apportioned among the States in the proportion that their respective populations bear to the population of all the States, determined according to the last preceding decennial census; and the amounts so apportioned to each State shall be expended only for carrying on research and development activities in the facilities of tax-supported colleges and universities, including the land-grant colleges, within such State pursuant to contracts or other financial arrangements made by the Administrator under this section. In making such contracts or other financial arrangements, the Administrator shall give each individual institution the widest latitude in its selection of individual research and development projects, but the Administrator shall not be required to expend funds in any institution unless it submits proposals for the expenditure of such funds which the Administrator finds to be consistent with such general program and standards as he may, after receiving the advice of the Board, establish in order to carry out the objectives and provisions of this Act. For purposes of this section the term "State" includes Alaska, Hawaii, and Puerto Rico. Of the funds appropriated to the Foundation for research and development activities (excluding funds expressly appropriated for national defense), an additional amount of not less than 25 per centum shall be expended in the facilities of nonprofit organizations without regard to the above limitations relating to State quotas or the tax-supported character of the organization. In meeting the requirements of this subsection, the Administrator may take into account whatever funds may be ex-

pended by the Foundation for facilities to be operated by the land-grant, tax-supported, or other nonprofit organizations, even though the title or ownership rights of such facilities remain with the United States.

(d) The activities of the Foundation shall be construed as supplementing and not superseding, curtailing, or limiting any of the functions or activities of other Government agencies authorized to engage in scientific research and development. Funds allocated by the Administrator to other Government agencies shall be utilized for projects approved by the Administrator and undertaken on behalf of the Foundation, and shall be in addition to, and not in lieu of, funds regularly appropriated to such other Government agencies.

(e) In all research and development activities financed or otherwise supported by the Foundation, the Administrator shall make every effort to eliminate restraints upon the free expression of scientific views and to insure full freedom in the exercise of creative talents, in the development of new ideas, and in the methods of research. Any person engaged in such research and development activities shall not be precluded from independently discussing, writing, or publishing his own views and conclusions relating to such research and development.

SCHOLARSHIPS AND FELLOWSHIPS

SEC. 6. The Administrator is authorized to award scholarships and fellowships to persons for scientific study or scientific work in any field of science, including but not limited to the mathematical, physical, biological, medical, and social sciences at nonprofit institutions of higher education, or other institutions, selected by the recipient of such aid, for such periods as the Administrator may determine, in the United States or in foreign countries. Persons shall be selected for such scholarships and fellowships solely on the basis of aptitude, within the limits of such quotas as may be established to insure an equitable selection of such persons from among the States and territories. Persons selected for such scholarships and fellowships may include employees of the Federal Government and such employees selected and detailed for scientific study or training shall not lose their status or seniority ratings for reason of absence from regularly assigned duties during the course of such study or training.

REGISTER OF SCIENTIFIC PERSONNEL

SEC. 7. The Administrator shall maintain a register of scientific and technical personnel and in other ways provide a central clearinghouse for information concerning all scientific and technical personnel in the United States and its possessions. No individual shall be listed in such register without his consent.

USE AND DISSEMINATION OF RESEARCH FINDINGS

SEC. 8. (a) The Administrator shall make and maintain an inventory of all current federally financed research and development projects. In cooperation with the Commissioner of Patents, the Administrator shall establish a central register of all inventions, discoveries, patents, patent rights, and findings, including references to related data, in which the United States or any agency thereof has any right, title, or interest, or which pursuant to this section have been freely dedicated to the public. The Administrator shall record, collect, index, and promptly publish or cause to be published significant data on all inventions and discoveries and other findings produced in the course of federally financed research and development activities, or arrange with other Government agencies for such publishing, recording, collecting, and indexing. In consultation and collaboration with the Library of Congress and other Government agencies, the Administrator shall take such steps as he may deem necessary to make such information and other available significant scientific and technical information accessible to the public, including the preparation and distribution of reports, periodic catalogs, inventories, abstracts, translations, bibliographies, and microfilm and other reproductions thereof; and for such purposes the Administrator may utilize the facilities of Government agencies and other organizations to the extent that he deems necessary or desirable, and may contract for the expenditure of funds for such purposes without regard to the provisions of section 87 of the Act of January 12, 1895 (28 Stat. 622), and section 11 of the Act of March 1, 1919 (40 Stat. 1270) (U. S. C., title 44, sec. 111).

(b) Each contract or other arrangement for federally financed research or development entered into between any Government agency and any organization shall provide that such organization will make available to such agency full data on all inventions, discoveries, patents, patent rights, and findings produced in the course of such research or development, including such reports with respect thereto as may be required by such agency. Each Government agency, upon the request of the Administrator, shall make available to him such data and such reports with respect to research and development activities financed by such agency, as may be necessary for the purposes of this section.

(c) All inventions, discoveries, or findings in which the United States (or any Government agency), now or hereafter, hold any rights, including patent rights, shall be made available to the public on a nonexclusive and on a royalty-free basis to the extent the United States or such agency is entitled to do so under the

rights held by it. Except as provided hereafter in this subsection and in subsection (d), any invention, discovery, or finding hereafter produced in the course of federally financed research and development shall, whether or not patented, be made freely available to the public and shall, if patented, be freely dedicated to the public. The requirements of this subsection, to the extent that they require modification of contracts or other financial arrangements already entered into by the United States (or any Government agency) shall not go into effect until one hundred and twenty days after the date of enactment of this Act.

(d) The head of any Government agency financing by contract, or otherwise administering, federally financed research and development activities, may, by stipulation in the contract or by other advance agreements with any organization, provide for the retention by the organization, or by the inventor, or by their assignees of such patent rights based on discoveries, inventions, or findings produced in the course of such research and development as the head of such Government agency deems fair and equitable, and consistent with the national interest: *Provided*, That (1) the head of such Government agency shall, before entering into any such contract or agreement, make a finding that the agency has made every reasonable effort to arrange for the conduct of the necessary research and development without entering into a contract containing such provision; (2) the organization shall contribute or shall have contributed substantially to the development of the particular inventions, discoveries, or findings for which patent rights are retained through earlier or current research and development activities financed by the organization; (3) in every case, the contract or agreement shall provide for at least an irrevocable, nonexclusive, royalty-free license for governmental purposes to the United States; and (4), in the case of any nonprofit organization, the head of such Government agency further determines (A) that the research and development is essential in the field of national defense or in such other fields as the President may specify for such purpose and (B) that the patent rights retained will not be used to serve the special benefit of any organization conducted for profit or of any individual, and will be made available or licensed to applicants on a nonexclusive, uniform, and reasonable royalty basis.

In the administration of the provisions of this subsection, the head of any Government agency shall be guided by such rules and regulations as the President may deem necessary and prescribe by Executive order.

(e) The Administrator shall make a quarterly report to the President and to the Congress concerning contracts and agreements containing the provisions authorized by subsection (d). This report shall in-

clude a list of all contracts and agreements containing such a provision entered into by any Government agency during the preceding quarter, the reasons supporting the approval of such provision in each case, the amount of Federal funds expended or to be expended under each contract or agreement containing such a provision, the name of the organization with which the contract or agreement was made, and the general nature of the patent rights reserved for private use in each case. The report shall also include a list of all inventions, discoveries, or findings in which patent rights were permitted to be retained pursuant to the provisions of subsection (d) and which were first recorded or finally authorized during the preceding quarter, identification of the contract or agreement under which such inventions, discoveries, or findings were produced, and the nature of the rights retained. The report shall also include the Administrator's recommendations, if any, for such further Executive or legislative action as he may deem necessary.

(f) Notwithstanding any other provision of this Act, the President, or any person designated for that purpose by him, may exempt from the provisions of this Act relating to dedication to the public, publication, dissemination, or making available, any scientific or technical information, data, patents, inventions, or discoveries produced in the course of federally financed research or development or in which the United States holds any rights, if and so long as the President or such designated person determines that such exemption is essential in the interest of national security.

INTERNATIONAL COOPERATION

SEC. 9. (a) The head of any Government agency is hereby authorized, with the approval of the President and through the Department of State, to conclude reciprocal agreements with foreign governments or agencies thereof, relating to the interchange of scientific and technological information (including models and samples for information purposes), and the use and availability of patents and patent rights owned or controlled by the respective governments.

(b) The Administrator is hereby authorized, with the approval of the President and through the Department of State, to cooperate in any international research or development activities consistent with the purposes or provisions of this Act and to expend for such international research activities such sums within the limit of appropriated funds as the Administrator may deem desirable.

(c) The Administrator may defray the expenses of representatives of Government agencies and other organizations and of individual scientists to accredited international scientific congresses and meetings when-

ever he deems it necessary in the promotion of the objectives of this Act.

INTERDEPARTMENTAL COORDINATION

SEC. 10. (a) There is hereby established an Interdepartmental Committee on Science, to consist of the Administrator, as Chairman, and the heads (or their designees) of such Government agencies engaged in or concerned with the support of scientific activity to a substantial degree as the President may from time to time determine. The Interdepartmental Committee shall meet whenever the Chairman so determines, but not less than once a month.

(b) The Interdepartmental Committee shall advise and assist the Administrator in gathering and correlating data relating to the scientific research and development activities of the Federal Government; shall study and evaluate such data in relation to the program of the Foundation and the scientific research and development programs of the other Government agencies; and shall make such recommendations to the Foundation and other Government agencies as in the opinion of the Committee will serve to aid in effectuating the objectives of this Act and other legislation providing for Federal support of scientific research and development. The Administrator, in consultation with the Interdepartmental Committee, shall, from time to time, make recommendations to the President for the achievement of maximum effectiveness in the conduct of all federally financed research and development.

MISCELLANEOUS

SEC. 11. (a) To enable the Administrator to carry out his powers and duties, there is hereby authorized to be appropriated annually to the Foundation, out of any money in the Treasury not otherwise appropriated, such sums as may be necessary to carry out the provisions of this Act. The funds appropriated to the Foundation, as herein authorized, and funds hereafter appropriated to any Government agency for scientific research or development, as herein defined, shall, if obligated during the fiscal year for which appropriated, remain available for expenditure for four years following the expiration of the fiscal year for which appropriated. After such a four-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

(b) The materials or equipment purchased by Federal funds or furnished by the Federal Government in connection with research and development activities shall be the property of the United States. The Administrator shall not, however, through the Foundation or its own employees, operate any laboratories, pilot plants, or other such scientific or technical facilities which he may acquire.

(c) In carrying out his functions under this Act, the Administrator is authorized—

(1) to prescribe such rules and regulations as he may deem necessary to govern the manner of the operations of the Foundation and its organization and personnel;

(2) to make such expenditures as may be necessary for carrying out the provisions of the Act;

(3) to enter into contracts, or amendments or modifications of contracts, without performance or other bonds, and without regard to section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) in the case of all contracts which relate to scientific research or development;

(4) to make advance, progress, and other payments which relate to scientific research or development without regard to the provisions of section 3648 of the Revised Statutes (U. S. C., title 31, sec. 529);

(5) to acquire by purchase, or otherwise, hold and dispose of by sale, lease, loan, or otherwise, real and personal property of all kinds necessary for, or resulting from, scientific research or development; and

(6) to prescribe, with the approval of the Comptroller General of the United States, the extent to which vouchers for funds expended under contracts for scientific research and development shall be subject to itemization or substantiation prior to payment, without regard to the limitations of other laws relating to the expenditure of public funds and accounting therefor.

(d) The provision of the Reorganization Act of 1945 shall be applicable with respect to the Foundation, and with respect to the transfer of agencies and functions to and from the Foundation, without regard to the provisions of section 5 (e) of such Act.

(e) The Office of Scientific Research and Development, and its constituent committees shall be transferred to the Foundation; together with such of the powers, functions, duties, personnel, property, records, funds (including all unexpended balances of appropriations, allocations, or other funds now available), contracts, assets, and liabilities as may be determined by the President. The National Roster of Scientific and Specialized Personnel shall be transferred from the Department of Labor to the Foundation, together with such of the personnel, records, property, and balances of appropriations as have been utilized or are available for use in the administration of such roster as may be determined by the President. The transfers provided for in this subsection shall take effect at such time or times as the President shall direct.

(f) If any provision of this Act, or the application of such provision to any person or circumstance, is held invalid, the remainder of this Act, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

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