Tax Concession to Encourage Basic Research

Representative Richard M. Simpson (R.-Pa.) and Representative Thomas B. Curtis (R.-Mo.), members of the tax-writing House Committee on Ways and Means, have announced the joint sponsorship of identical bills to amend the Internal Revenue Code so as to "encourage basic research in science by the allowance of a tax credit for contributions and other expenditures for basic research in science." The bill would provide a tax concession for contributions for basic research to universities and nonprofit organizations, as well as a tax concession to industries that conduct basic research.

The concession in the case of contributions would take the form of a tax credit of 90 percent of the contributions made, with a further limitation that the credit may not exceed 5 percent of the tax. In the case of basic research activity by industry, the credit would be limited to 75 percent of the expenditures, with the limitation that the credit not exceed 3 percent of the tax. The cosponsors of this legislation have indicated that the proposed amendments to the Internal Revenue Code would give effect to the National Science Foundation recommendation to increase basic research that was contained in the NSF *Report to the President on Basic Research* of October 1957.

Industrial Development of Reactors

The U.S. atomic industry during 1957 completed the construction of 16 nuclear reactors, including seven power-type reactors and nine reactors for research and test purposes. Of the seven power-type reactors, one is a privately owned power-producing reactor, four are prototype power plants built for the U.S. Atomic Energy Commission, and two are for the propulsion of naval submarines. Of the nine research and test reactors, six are located abroad, one is privately owned in the U.S., and two are owned by the AEC.

In addition to the completed reactors, U.S. industry during the year had 59 reactors under construction, 35 of which are power–type reactors, 24 research and test reactors. Of the 35 power–type reactors, 28 are reactors or reactor prototypes for the propulsion of naval vessels, four are power reactors for private U.S. owners, one is a power reactor for export, one is a power prototype to be owned by the AEC, and one is for the propulsion of a merchant ship which will be owned by the U.S. Government. Of the 24 research and test reactors, 13 are for export, six are for ownership by the U.S. Government, and five are for private U.S. buyers.

During the year industry also received contracts for the construction of 10 additional reactors, including two power reactors for private U.S. owners, one power reactor for ownership by the AEC and operation by a local government organization, one power reactor for export, one prototype reactor for the propulsion of naval vessels, three research and test reactors for export, and two research reactors for private U.S. buyers.

These are in addition to 28 small research, training, and exhibit reactors that were built or under construction by U.S. industry during 1957 for purchasers in the U.S. and abroad. (The totals given here do not include reactors being constructed or completed by Atomic Energy Commission Laboratories.)

Population

Population growth in the United States continued at a record level during 1957, amounting to about 3 million persons, according to estimates recently completed by the Bureau of the Census, Department of Commerce. There were an estimated 172,790,000 persons in our population at the beginning of this year, compared with 169,800,000 a year earlier. For the second year in succession, population growth was approximately 3 million. In each year since 1947 population growth has exceeded 2½ million and the rate of increase has approximated 1.7 percent. In the 8-year period since the beginning of this decade the increase in population exceeded 22 million, a population gain 3¼ million greater than that which occurred during the entire 1940 decade.

The sustained high level of births has been the primary factor in the continued rapid growth of the population. There were 4,302,000 babies born in 1957, the largest number on record. About 32 million babies have been born during the past 8 years, or more than the total number born in the whole decade of the 1940's.

News Briefs

Japan is establishing a central documentation center for science and technology. It will have its headquarters in Tokyo and will be known as the Japan Information Center of Science and Technology. A semi-official organization, it will be supported both by government and private funds.

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The American Medical Association has announced that it will soon publish a new, 16-page tabloid newspaper called the *A.M.A. News* that will be distributed every 2 weeks to approximately 200,000 physicians. The first issue is expected to be ready for release at the annual A.M.A. convention in San Francisco, 23–27 June.

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Argonne National Laboratory has been authorized by the Atomic Energy Commission to construct a Fuels Technology Center at the laboratory site, near Lemont, Ill. The new center is expected to cost about $10 million.

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The governing body of the World Health Organization, the World Health Assembly, will hold its 11th session beginning 28 May in Minneapolis, Minn., on the invitation of the U.S. Government and the city of Minneapolis. The meeting is expected to last 3 weeks. The World Health Assembly, composed of delegations from WHO's 88 member states, decides the organization's policies, program, and budget. It is not a conference or a convention but a business meeting that makes the decisions necessary for continuing the organization's work.

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The Max Planck Institute for Physics of the Stratosphere and Ionosphere in Lindau, Kreis Northeim, Germany, has been renamed the Max Planck Institute for Aeronomy (Max-Planck-Institut für Aeronomie).

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A translation of a report on Russia's 5-year plan for research in pharmacology is available at the National Institutes of Health. The report cites successes attained in pharmacologic research during the period 1950–55 and discusses expectations for the period 1956–1960. Copies of the translation, *Problems Involved in Five-Year Plan for Research in Pharmacology for 1956–1960,* are available from the Publications and Reports Section of the Scientific Reports Branch, National Institutes of Health, Bethesda 14, Md.

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Polish scientists have prepared twilight tables to the year 2020 as a contribution to the International Geophysical Year. The tables provide a means for calculating the interval during which the atmosphere is illuminated after sunset and before sunrise. The tables are continuations of earlier ones prepared in Poland in 1932–34. They have been published under the auspices of the Polish Academy of Sciences and are accompanied by explanations in English, French, Russian and Spanish.

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Non–Conventional Technical Information Systems in Current Use is a new report, prepared by the National Science Foundation's Office of Scientific Information, that describes 25 representative

technical information systems of new design—some manually operated and some mechanized. Of the systems covered, the majority are found within the chemical industry. Copies of the report may be obtained by writing to the National Science Foundation, Washington 25, D.C.

Proposed Legislation

S 2916. Provide for grants to states to assist them to increase salaries of teachers of science in secondary schools and provide necessary equipment to use in connection with instruction of scientific subjects in such schools. Thye (R-Minn.). Senate Labor and Public Welfare.

S 2917. Promote general welfare of U.S. by providing program of scholarships for college undergraduate and graduate level education to be administered by Commissioner of Education. Thye (R-Minn.). Senate Labor and Public Welfare.

S 2956. Amend Vocational Education Act of 1946 to promote scientific education. Monroney (D-Okla.), Kerr (D-Okla.), McNamara (D-Mich.). Senate Labor and Public Welfare.

S 2957. Advance national security and welfare; promote progress of science by establishment of a U.S. Science Academy. Thurmond (D-S.C.). Senate Labor and Public Welfare.

S 2967. Provide for establishment of National Science Academy, a program of scientific scholarships; encourage study of mathematics and science by assisting States in providing science education. Gore (D-Tenn.). Senate Labor and Public Welfare.

HR 9620. Amend P.L. 874, 81st Congress, re assistance for maintenance and operation of schools in federally impacted areas, extend its effectiveness for two additional years. Auchincloss (R-N.J.). House Education and Labor.

HR 9634. Expedite utilization of television facilities in our public schools and colleges, and in adult training programs. Boggs (D-La.). House Education and Labor.

HR 9635. Provide for establishment of national program of science scholarships; provide for establishment of a program of loans to educational institutions to aid in providing adequate science facilities. Brooks (D-Tex.). House Education and Labor.

HR 9692. Provide for a scholarship program to aid in maintaining and strengthening U.S. leadership in certain fields of science and technology. Martin (R-Mass.). House Education and Labor.

HR 9830. Authorize appropriation of funds to assist States and Territories in financing a minimum foundation education program of public elementary and secondary schools, and in reducing inequalities of educational opportunities through public elementary and secondary schools, for general welfare. Perkins (D-Ky.). House Education and Labor.

HR 9905. Authorize Secretary of Defense to grant scholarships and fellowships in scientific fields to promote defense and security of U.S. Dingell (D-Mich.). House Armed Services.

S 2994. Provide for holding a White House Conference on Aging to be called by President of U.S. before 31 December 1958, to be planned and conducted by Special Staff on Aging of the U.S. Department of Health, Education and Welfare with assistance and cooperation of other agencies of that department and of other departments and agencies represented on Federal Council of Aging; assist several states in conducting similar conferences on aging prior to White House Conference on Aging. Neuberger (D-Ore.), Kefauver (D-Tenn.). Senate Labor and Public Welfare.

Scientists in the News

ARTHUR W. MARTIN has been named program director for regulatory biology, Division of Biological and Medical Sciences, National Science Foundation. He is on leave of absence from the University of Washington, where he is professor and executive officer, department of zoology. Martin has done extensive research in physiology: cellular metabolism, muscle atrophy in mammals, blood circulation in fish, excretory processes in mollusks, and pharmacological actions of barbiturates and their antagonists.

G. B. KISTIAKOWSKY, Russian-born physical chemist who is chairman of the department of chemistry at Harvard University and a leader in the development of long-range missile propellants, has received Dickinson College's Priestley Memorial Award. The award, a Wedgewood medallion of Priestley and $1000, is conferred each year upon a scientist for research, discovery, or production benefiting mankind.

C. N. YANG of the Institute for Advanced Study, Princeton, N.J., and 1957 Nobel prize winner in physics, and JULIAN SCHWINGER of Harvard University will spend this summer at the University of Wisconsin as members of the physics staff.

ALBERT C. ZETTLEMOYER, professor of chemistry at Lehigh University and director of the National Printing Ink Research Institute, will discuss "Molecular Interactions with the Surfaces of Solids" as a Sigma Xi national lecturer at a number of colleges and universities during April and May. Another Sigma Xi lecturer for the same period is JOSEPH W. BEARD of Duke University School of Medicine, whose subject will be "Viruses as a Cause of Cancer."

BARRY G. KING, formerly research executive of the Medical Division, Civil Aeronautics Administration, has been named vice president, life sciences, at Operations Research Incorporated, Silver Spring, Md.

WILLIAM F. ASHE, chairman of the department of preventive medicine at the Ohio State University College of Medicine, has been named director of a 10-member team of U.S. specialists to conduct a nutrition survey in Spain at the request of the Spanish government. The survey, which will be made this spring, is the seventh of its kind to be conducted under the supervision of the Interdepartmental Committee on Nutrition for National Defense in cooperation with nations of the free world as part of the U.S. technical assistance program. The ICNND is a federal agency whose membership includes the departments of State, Defense, Agriculture, and Health, Education and Welfare; the International Cooperation Administration; and the Atomic Energy Commission.

FRANK P. McWHORTER, plant pathologist of Oregon State College, has been appointed by the Food and Agriculture Organization of the United Nations to serve as virologist to the Philippine Government to investigate the Cadang Cadang disease of coconuts. Cadang Cadang is a serious virus-like disease of unknown cause. McWhorter has had more than 25 years of experience in the study of virus diseases in Oregon and the Northwest, and in addition has made a 3-year study of plant diseases in the Philippines. His address beginning in April will be United Nations Building, Manila.

WILLIAM W. WILLMARTH, senior reseach fellow at California Institute of Technology and consultant to the Rand Corporation, Santa Monica, Calif., has been appointed associate professor of aeronautical engineering at the University of Michigan.

ALEXANDER SILVERMAN, professor emeritus of the University of Pittsburgh, has received the eleventh Albert Victor Bleininger Memorial Award of the Pittsburgh section of the American Ceramic Society. Silverman, noted as an educator and an international authority on the chemistry of glass, is being honored for his contributions to the ceramic industry.