SCIENCE AND TECHNOLOGY: RESEARCH COLLECTIONS IN U.S. PUBLIC POLICY

General Editor: Alex Roland

THE PAPERS OF THE PRESIDENT'S SCIENCE ADVISORY COMMITTEE, 1957–1961

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Microfilmed from the holdings of the Dwight D. Eisenhower Library

Edited and compiled by Robert E. Lester

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INTRODUCTION

The role of the President's Science Advisory Committee (PSAC) in the Eisenhower administration marked a climax in the spread of science and technology into public life. Prior to World War II, the U.S. government supported and exploited science erratically. The military services and the Department of Agriculture used and supported science as their missions dictated; the Smithsonian Institution and the National Academy of Sciences were the only national institutions that dealt with science in general. They scarcely sufficed to bring national policy into consonance with the needs and potentials of science. Calls in the first four decades of the twentieth century to establish a department of science met with little encouragement in Congress or the executive branch.

The change began in World War II. Appropriately called the physicists' war, this unparalleled struggle witnessed in the United States the harnessing of "scientists against time," as the official historian of the enterprise called it. Countless weapons and innovations flowed from laboratories and research centers around the country, from radar to the proximity fuse to new techniques in antisubmarine warfare to amphibious vehicles. The greatest of these wartime research endeavors, the Manhattan Project, finally produced the weapon that ended the war in the Pacific and ushered in an entirely new era in warfare.

This achievement won for the scientific community in general and the physics community in particular unprecedented popular acclaim and access to the halls of government. Veterans like J. Robert Oppenheimer sat in the councils that decided on the use of the atomic bomb and then took seats on the General Advisory Board of the new Atomic Energy Commission (AEC) to shape policy on the employment of this new power in the postwar world. Never before had scientists in the United States had such resources at their disposal; never before had their advice carried such weight.

Vannevar Bush had led the scientific endeavor in World War II. An electrical engineer from the Massachusetts Institute of Technology, Bush had first mobilized the nation's scientists and engineers under the umbrella of the National Defense Research Committee. Soon this organization was subsumed by the more broadly focused Office of Scientific Research and Development, encompassing within its charter medical research as well as the physical sciences and engineering. Asked by President Franklin Roosevelt near the end of the war to propose a plan for postwar exploitation of this newly discovered national resource, Bush recommended a National Research Foundation. Arguing that science and technology would be essential to national security and prosperity in the future, Bush proposed an institutional arrangement that would guarantee a high degree of autonomy to his colleagues. Scientists, he reasoned, were the best judges of their own agenda.

Bush's plan floundered on the issue of autonomy, and in the late 1940s the influence of the scientific community began to fragment. The national military establishment created its own scientific advisory bodies, such as the short-lived Research Board for National Security and the hardly more efficacious National Research and Development Board. The services responded in kind with boards and committees of their own, such as the Office of Naval Research and the Air Force Scientific Advisory Board. The result was a co-opting of scientific advice, now bent to the disparate purposes of the various services, and a scattering of military funding to often overlapping and conflicting research projects.

Similar results were obtained within the civilian sector of the government. The AEC empaneled its own scientific advisers and chose its own research agenda. The National Institute of Health grew so rapidly in the late 1940s it had to pluralize its name to prevent confusion with the numerous subsidiary institutes springing up under its institutional umbrella. By the time Bush's National Research Foundation was finally modified to become the National Science Foundation (NSF), it served a broad

constituency but a narrow purpose—the funding of basic research. Bush himself left office, unable to establish the rapport with Harry Truman that he had enjoyed with Franklin Roosevelt. One of the great lessons of his experience with the two presidents was that a science adviser needed a close personal relationship with his boss.

In Bush's place arose yet another committee designed to do what he and his colleagues had done in World War II—serve as a scientific advisory staff to the president. Truman established the Scientific Advisory Committee in 1951. It reported to the Office of Defense Mobilization (1951–1957), thus insulating it from the president by several layers of bureaucracy. In fact, Truman seldom consulted his committee and the committee itself seldom volunteered any advice. This striking contrast with the experience during World War II and immediately thereafter reflected the declining influence of the scientific community in the late 1940s and early 1950s. This decline was accelerated by the bitter and divisive dispute within the scientific community over the lifting of Oppenheimer's security clearance. As the scientists fought among themselves, divided their service and their counsel among a plethora of government committees, and lost their easy entry to the oval office, their impact on policy declined apace.

Sputnik changed all that. Immediately after the launch of the Russian satellite on 4 October 1957, President Eisenhower consulted with Detlev Bronk, the president of the National Academy of Sciences. Within a week he met with the Science Advisory Committee and agreed to appoint a science adviser; he suggested as well that he might need a scientific advisory body analogous to his Council of Economic Advisors. On 3 November, Eisenhower announced publicly the appointment of Massachusetts Institute of Technology president James R. Killian as special assistant to the president for science and technology. On 21 November, he announced the transfer of the Science Advisory Committee to the White House, with the new title—President's Science Advisory Committee (PSAC). The layers of bureaucracy that had grown up between the president and his science advice disappeared with the stroke of a pen.

Thus began, in the waning years of the Eisenhower administration, a collaboration between president and scientists that has not been witnessed in this country before or since. Eisenhower liked and trusted "my scientists," as he called them. He presented them a succession of crucial national problems, first on space, then on national security in general and arms control in particular. In a period when most supplicants struck President Eisenhower as special pleaders for parochial interests, the scientists seemed wise, impartial, and useful. He believed they came to Washington to serve the national interest, not their own, and he valued their counsel accordingly.

Largely on the basis of their advice, he took a number of steps to respond to the crisis posed by *Sputnik*. His first priority was to limit the interservice rivalry that had compromised national security throughout his presidency and to thwart the designs of what he first called "the delta of power"—the military services, Congress, and the defense industry—and what he finally came to call the military-industrial complex. In January 1958 he created the Advanced Research Projects Agency to take temporary charge of the national space program and eventually to take over from the individual services preliminary research on the most esoteric and speculative weapons development programs. Eisenhower appointed Herbert York, a PSAC member, to be the first chief scientist of the Advanced Research Projects Agency.

Also on the advice of the PSAC, he proposed to Congress that the country's civilian space program be housed in a separate agency built around the nucleus of the National Advisory Committee for Aeronautics (NACA). The goals here, on which both Eisenhower and his scientists agreed, were to head off further expansion of the military establishment and to preclude the militarization of space. With the proposed Space Act, Eisenhower also sent to Congress the Defense Reorganization Act of 1958. Among the many reforms initiated by this legislation was the centralization of science and technology within the Department of Defense in the newly created office of Director of Defense Research and Engineering. PSAC member Herb York moved from the Advanced Research Projects Agency to assume this critical position. Finally, the Eisenhower administration presented to Congress what became the National Defense Education Act, dramatically increasing federal funding for higher education in science and technology.

With these far-reaching institutional changes in place by the summer of 1958, the PSAC turned its attention more directly to the formulation and conduct of national security policy. Exploiting a network of working groups on topics such as reconnaissance, arms control, missiles, early warning, etc., the PSAC was able to give President Eisenhower a succession of recommendations on disarmament, choices among competing weapons systems, aerial and space-based reconnaissance, and banning of nuclear weapons tests. In these troubled areas the problems proved more intractable than space and education had been in the first hectic year of the committee's existence. In fact the scientists made little tangible progress toward the safer world that Eisenhower hoped to achieve. Technical advice and information were essential, but they were not enough. Furthermore, the scientists themselves were able to achieve little consensus, especially on the frustrating issue of test ban verification, which divided the scientific community and the PSAC.

Subsequent administrations valued the PSAC less highly than Eisenhower did and accorded it less influence. John Kennedy consulted often with his science adviser, Jerome Wiesner, but he cared less for staff work and more for personal involvement with individuals at all levels of his administration. Lyndon Johnson found the PSAC elitist for his tastes, an inclination accelerated when some members spoke out against U.S. policy in Vietnam. For similar reasons, Richard Nixon made comparatively little use of the committee, finally disbanding it in 1973. Subsequent presidents have had in-house science advisers, but they have been reluctant to reestablish the PSAC within the White House.

The PSAC in the Eisenhower administration remains the clearest example of scientific advice at its best and most effective. The committee and its members were trusted by the president, largely because they were apolitical, competent, and responsible in their advice. If the scientists were more self-serving when it came to issues of science policy, they nonetheless gave, as one expert has put it, "expertise without parochialism."

The records of the PSAC in the Eisenhower administration are thus important in two very different ways. First, they shed light on a multitude of vital historical issues, ranging from arms control and disarmament through nuclear power, space, medical research, and particle physics. The PSAC considered all of these issues and more and probably carried more weight with the president than any other single institution of government. Second, and perhaps equally important, these records suggest how science advice can work at its best. As Eisenhower always believed, the PSAC members in his administration really seemed to have placed public service above self-service. He trusted and valued them and they seem to have responded by giving him the best, most accurate, and most impartial advice of which they were capable. Though their recommendations were not free of error, and their counsel was not always unanimous, they nonetheless helped to create, at a critical juncture in U.S. history, many of the ideas and institutions to which we still try to adjust our national policy —the rapidly developing and increasingly important fields of science and technology.

The records of the PSAC included in this microform publication were drawn from the collection at the Dwight D. Eisenhower Library in Abilene, Kansas. They are arranged as they were in the Eisenhower administration, allowing ease of access and simplicity of use. The first set of records contains meeting notes, from December 1957 through December 1960, arranged chronologically by month. The second set, perhaps the most useful, is the subject files, arranged alphabetically by subject title and chronologically therein. The final set, the alphabetical file, consists mostly of correspondence and memoranda, arranged alphabetically by correspondent and chronologically therein.

Alex Roland Professor of History Duke University

SCOPE AND CONTENT NOTE

On 29 November 1957, President Dwight D. Eisenhower elevated the Science Advisory Committee of the Office of Defense Mobilization to the White House level. The Science Advisory Committee was reconstituted, enlarged, and redesignated the President's Science Advisory Committee (PSAC). Earlier in November 1957, President Eisenhower had appointed James R. Killian to the newly created post of special assistant to the president for science and technology. PSAC members chose Dr. Killian to be the chairman of PSAC, a position he held until June 1959 when he resigned as Eisenhower's special assistant for science and technology. Dr. George B. Kistiakowsky was then appointed to that position and served as PSAC chairman from July 1959 to 1961.

The PSAC set up small panels of its members to study specific matters of interest. After each panel completed a study, usually based upon consultation with other scientists and engineers from industry, education, quasi-governmental agencies, and the government itself, it would present a detailed report to the PSAC for dissemination to appropriate government agencies. Members of the PSAC's staff served as technical assistants to each of these panels and helped to coordinate their activities. David Z. Beckler served as the PSAC's executive officer and provided overall day-to-day guidance for the staff.

The question of how science could support U.S. national security objectives and concerns occupied about half of the panels' studies. For example, the creation of the Arms Limitation and Control, Limited Warfare, and Space Science panels reflected the national security concerns of the PSAC. Major topics covered were the establishment of National Aeronautics and Space Administration (NASA) and National Aeronautics and Space Council (NASC), missile development, satellites, nuclear weapons, and arms control.

Another major area of study was the strengthening of science and engineering in the United States and allied nations. Panels in this area studied basic research, graduate education, life sciences, scientific information, and science and foreign affairs. These panels dealt with such matters as exchanges of scientific information with North Atlantic Treaty Organization (NATO) countries, encouragement of basic research and graduate education in the sciences, high-energy physics, oceanography, radio astronomy, and the proposed creation of an executive-level department of science and technology.

Two important themes common to many of the studies are the budgetary problems of funding projects and the Eisenhower administration's concern over successfully competing with the USSR in science and technology. As a subsidary theme the collection documents the administration of the PSAC, including its establishment, personnel matters and concerns, and routine office matters.

Meeting Notes

The PSAC records included in this micropublication are divided into three distinct series. The first series, Meeting Notes, consists primarily of typescript minutes and agendas from the PSAC's regular monthly meetings. (There were no meetings held during August.) This series also contains handwritten and typescript notes for the 1958–1960 annual meetings with President Eisenhower. These meeting notes were compiled and maintained by David Z. Beckler. The folders in this series are arranged in chronological order. University Publications of America (UPA) has made an effort to include as many as possible of the original handwritten notes.

Subject Files

The second and largest series, the Subject Files, is composed primarily of correspondence, memoranda, and reports. This correspondence includes original incoming letters and carbon copies of outgoing material. Other types of material in this series include: the PSAC panel and ad hoc committee reports, background studies, meeting minutes, records of action, and agenda; public opinion mail; speeches; various reports and studies from relevant executive departments and agencies and congressional committees; and various studies, reports, and correspondence from quasi-governmental agencies and foundations. There are also miscellaneous calendars of documents, briefing papers, and press reports.

The folders in this series are arranged alphabetically by subject title. These subject titles appear as they were on the original folders at the time of deposit at the Eisenhower Library. Annotations appearing in brackets after the folder title were added by UPA, and include additional title clarifications. The documents within each folder are arranged in reverse chronological order. In the front of most folders, a calendar of documents, highlighted by the PSAC document control numbers, can be found.

Alphabetical Files

The third series, the Alphabetical Files, consists primarily of correspondence and memoranda. This correspondence includes original incoming letters and carbon copies of outgoing material from such individuals as the PSAC members David Z. Beckler, James R. Killian, Jr., and George B. Kistiakowsky; President Eisenhower; the PSAC consultant Emanuel R. Piore; NSF president Alan T. Waterman; Senator Henry M. Jackson; and presidential adviser General Andrew J. Goodpaster.

The folders in this series are arranged in alphabetical order; material is filed by the last name of the principal correspondent, usually the person from whom the letter or the memorandum was received or the person to whom the PSAC addressed the correspondence. The documents within each folder are arranged in reverse chronological order.

SOURCE AND EDITORIAL NOTE

The material included in this micropublication is from the holdings of the Dwight D. Eisenhower Library. This material is a component of the Records of Presidential Committees, Commissions and Boards (RG 220), deposited in the Eisenhower Library in August 1966.

The records of the President's Science Advisory Committee have been microfilmed in their entirety. The folder titles and alphabetical and chronological arrangement of these records were not altered by University Publications of America (UPA) during microfilming. In the case of the Meeting Notes, UPA has made an effort to include as many as possible of the original handwritten notes. Many of the original handwritten notes for the monthly meetings have not been declassified by the Defense Department, as the department has determined that they are unreadable.

KEY TO NAMES

The following key identifies the position(s) held by each person appearing in this guide.

Adams, Sherman

Special assistant to the president

Bacher, Robert F.

Physics professor, California Institute of Technology; member, PSAC; associate,

Space Technology Laboratories

Bardeen, John

Physics professor, Physics Department, University of Illinois; consultant, PSAC

Beckler, David Z. Executive officer, PSAC

Berkner, L. V.

Member, PSAC Panel on Science and

Foreign Affairs

Bethe, R. A. [Hans]

Science writer, Atlantic Monthly

Bevis, Howard L.

Chairman, President's Committee on

Scientists and Engineers

Briber, Robert M.

Assistant to the special assistant to the president for science and technology

Chance, Britton

Member, PSAC; director, Johnson Biophysics Foundation, University of Pennsylvania

Medical School

Dierassi, Carl

Professor, Department of Chemistry, Stanford

University; consultant, PSAC

Doolittle, James H.

Vice president, Shell Oil Company

Fisk, James B.

President, Bell Telephone Laboratories

Ford, Vincent T.

Technical assistant, PSAC Panel on Scientific

Information

Glennan, T. Keith

Administrator, NASA

Goodpaster, Andrew J.

Staff secretary, White House

Hartgering, James B.

Technical assistant, PSAC

Herter, Christian A.

Secretary of state

Hopkins, William

Staff member, White House

Horsfall, James G.

Director, Connecticut Agricultural Experiment

Station, Agricultural Research Service, U.S.

Department of Agriculture

Humphrey, Hubert H.

Chairman, Senate Subcommittee on

Reorganization and International

Organizations

Hyland, L. A.

Vice president and general manager, Hughes

Aircraft Company

Jackson, Henry M.

U.S. senator, Washington; member, Joint

Committee on Atomic Energy

Johnson, Lyndon B.

U.S. senator, Texas

Johnston, S. Paul

Staff member, White House

Keeny, Spurgeon M., Jr.

Technical assistant, Office of Special

Assistant for Science and Technology; staff

member, PSAC

Killian, James R., Jr.

Special assistant to the president for science and technology; chairman, PSAC [1957–1959]

Kistiakowsky, George B.

Special assistant to the president for science

and technology; chairman, PSAC [1959-1961]

Kreidler, Robert N.

Executive secretary, PSAC

Lederer, Edgar

Physics professor, Faculty of Sciences,

University of Paris [France]; consultant, PSAC

Loeb, Robert F.

Professor of medicine; member, National

Science Board; chairman, Medical Review

Board of AEC

Loomis, Henry

Staff director, Office of Special Assistant for Science and Technology

Lord, Douglas R.

Technical assistant, Ad Hoc Panel on "Man-in-Space" Program, Space Science Board; technical assistant, Office of Special Assistant for Science and Technology

McCone, John A.

Chairman, AEC

McDaniel, Paul W.

Director, Division of Research, AEC

Mares, Joseph R.

Consultant, Office of Special Assistant for

Science and Technology

Murphy, Robert

Deputy undersecretary of state

Naughten, Frank G.

Technical assistant, PSAC; member, PSAC

Panel on Scientific Information

Piland, Robert O.

Technical assistant, Office of Special Assistant for Science and Technology; staff member, PSAC

Piore, Emanuel R.

Research director, IBM; chairman, PSAC Panel on High Energy Accelerator

Robertson, H.P.

Chairman, PSAC Panel on Techniques for Limited Warfare

Skolnikoff, Eugene B.

Technical assistant, Office of Special Assistant for Science and Technology; staff member, PSAC

Smith, Cyril Stanley

Metallurgy professor, Institute for the Study of Metals, University of Chicago; consultant, PSAC

Tukey, John W.

Assistant director of research, Bell Telephone Laboratories

Waterman, Alan T.

Physicist; director, National Science Foundation; consultant, PSAC; member, NASC

Weiss, Paul A.

Member, Rockefeller Institute

Westrate, J. Lee

Technical assistant, PSAC

Wiesner, Jerome B.

Director, Research Laboratory of Electronics, Massachusetts Institute of Technology;

consultant, PSAC

Zinn, W. H.

President, General Nuclear Engineering Corporation

ACRONYMS AND INITIALISMS

The following abbreviations are used frequently throughout this guide and are listed here for the convenience of the researcher.

AEC Atomic Energy Commission

AICBM Anti-Intercontinental Ballistic Missile

ARGUS Project High-altitude nuclear test project regarding the military use of

relativistic electrons trapped in the earth's magnetic field

ASW Antisubmarine warfare

H.R. House of Representatives resolution

NACA National Advisory Council for Aeronautics

NASA National Aeronautics and Space Administration

NASC National Aeronautics and Space Council

NATO North Atlantic Treaty Organization

NSF National Science Foundation

PSAC President's Science Advisory Committee

U.K. United Kingdom of Great Britain and Northern Ireland

USSR Union of Soviet Socialist Republics

REEL INDEX

Entries in this index refer to specific file folders within this micropublication. The frame number on the far left indicates where a file folder begins. The folders are grouped by year; years appear in boldfaced-type directly above applicable frame numbers in this index. In the interest of accessing material, this index denotes the principal science and technology policies, discussion topics, programs, plans, actions, and events during President Dwight D. Eisenhower's administration. These programs, plans, etc., are noted under the heading *Principal Topics*. Individuals who authored large amounts of correspondence are highlighted in the reel index. These individuals are noted under the heading *Principal Correspondents*, where applicable.

Reel 1

File Folder Frame #

Meeting Notes

Meeting Notes		
1957		
0001	December 9–11. 17pp. Principal Topics: National Commission on Outer Space; aerial reconnaissance; AICBM; NACA; NATO Space Project.	
1958		
0018	January 2–3. 12pp. Principal Topics: Strategic Air Command; NSF; space development and national defense policy; NACA; Vanguard rocket; U.S. Army rocket program.	
0030	February 7–8. 18pp. Principal Topics: Magnetic field experiments; space vehicles; national space program; proposed U.S. space agency; International Geophysical Year; aerial reconnaissance.	
0048	March 1–12. 11pp. Principal Topics: Missiles; space research and Congress; NASA; National Science Research Laboratory; Advanced Research Projects Agency.	
0059	April 8–10. 8pp. Principal Topics: Missiles; space program.	
0067	May 19. 7pp. Principal Topics: National Security Council on space program; satellite communications.	
0074	June 17–18. [Includes notes from meeting with President Dwight D. Eisenhower.] 22pp. <i>Principal Topics:</i> Nuclear weapons testing; Soviet satellites; federal research capabilities and the Panel on Basic Research; science education.	
0096	July 21. 5pp. Principal Topics: Science education; "Surprise Attack" problem; NATO Science Committee; Panel on Basic Research; Panel on Limited Warfare.	
0101	September 15–16. 10pp. Principal Topics: Arms control; federal research activities; space science activities; U.SUSSR cooperation in space; satellite communications; International Geophysical Year.	

0111 October 20-21, 4pp. Principal Topics: Nuclear testing; science education; research activities; warfare discussions. 0115 November 16-17, 4pp. Principal Topics: Panel on Education; nuclear testing; research activities; Meteorological Institute. 0119 December 15-16. 4pp. Principal Topics: Panel on Education; PSAC Annual Report; nuclear testing; "Surprise Attack" problem; research activities. 1959 0123 January 21-22, 17pp. Principal Topics: "Surprise Attack" problem; nuclear testing; Los Alamos Research Center; ARGUS Project and declassification problem; PSAC organizational matters; space travel; nuclear propulsion; Nuclear Reactor Program. 0140 February 16-17. 4pp. Principal Topics: Nuclear testing; missile defense systems; "Surprise Attack" problem; research and small business; NATO Science Committee. 0144 March 16-17, 5pp. Principal Topics: Early warning defense systems; ARGUS Project; oceanography; nuclear testing; arms limitations. 0149 April 20-21, 5pp. Principal Topics: Military research and development planning; Missiles Panel; National Range Problem; early warning defense systems; Ad Hoc Panel on Biological Warfare/Chemical Warfare; nuclear testing; civil defense; Federal Council for Science and Technology. 0154 May 18-19. [Includes meeting with President Dwight D. Eisenhower.] 17pp. Principal Topics: Defense appropriations and military technology; nuclear testing; U.S. public attitude and science; arms control; U.S.-foreign scientific research cooperation. 0171 June 16-17, 5pp. Principal Topics: Panel on Biological Warfare/Chemical Warfare: Panel on Science and Foreign Affairs; Federal Council for Science and Technology; U.K. Advisory Council on Scientific Policy. 0176 July 20-21. 5pp. Principal Topic: Activities of various PSAC research panels. 0181 September 15-16. 4pp. Principal Topic: Activities of various PSAC research panels. 0185 October 19-20, 19pp. Principal Topics: Military research and development plans; aircraft development; supersonic aerodynamics; NASA space program and public attitude; space vehicle: Space Tracking Program; NASA Lunar Program; missile program; science and private industry. 0205 November 9-10. 12pp. Principal Topics: International Geophysical Year; NASA Lunar Program; rocket program; U.S.-Soviet "space race"; space vehicles; NSF-NASA relations; U.S. space program. 0217 December 14-15, 11pp. Principal Topics: International scientific cooperation; NSF; science budget; scientific manpower utilization; Soviet space science activities; NASA program; U.S. rocket program.

January 18-19. 6pp.

Principal Topics: Universities and space research; Space Telescope Project; air defense problem.

0234 February 14-16. 7pp.

Principal Topics: ARTEMIS Project and ocean surveillance; Space Telescope Project; NASA program and conflicts with academic community; NASA bioscience program; high-energy physics research and the AEC.

0241 March 13-15. 3pp.

Principal Topic: Withdrawal sheets.

0244 April 18-19. 5pp.

Principal Topics: Panel on Basic Research; international science problems; atmospheric science activities: PSAC panels activities.

0249 May 16-17, 4pp.

Principal Topic: activities of various PSAC research panels.

0253 June 27–28. 3pp.

Principal Topic: Withdrawal sheet.

0256 July 25-26. 5pp.

Principal Topics: Airborne alert and early warning system funding; Television Infrared Observation Satellite Program; Defense Department-NASA division of responsibility; Panel on Limited Warfare; U.S. bombers and Communist China.

0261 September 19-20. 6pp.

Principal Topics: NASA program; space vehicles and the Lunar Program; civil defense and Central Intelligence Agency; PSAC and military budget; space budget.

0267 October 17. 3pp.

Principal Topic: Withdrawal sheet.

0270 November 14-15. 7pp.

Principal Topics: "Man-in-Space" Program; medical community on space travel; U.S. public attitude and Apollo Program; NASA space program.

0277 December 18–20, 4pp.

Principal Topic: PSAC Executive Committee activities.

Subject Files

O281 Administrative. November 1957–December 1960. 16pp.

Principal Topics: PSAC organization, personnel, budget, and functions; Office of Defense Mobilization.

Principal Correspondents: David Z. Beckler; George B. Kistiakowsky; James R. Killian, Jr.; William Hopkins.

0297 Air Defense—AICBM. May 1959-August 1960. 17pp.

Principal Topics: Air Defense Panel and need for an early warning system; NIKE-ZEUS Missile Program and the U.S. Army; AICBM Panel on nuclear fallout. Principal Correspondents: George B. Kistiakowsky; R. A. [Hans] Bethe.

0314 Arms Control. February 1959-October 1960. 22pp.

Principal Topics: U.S. Disarmament Administration; Seismic Analysis Study; arms control proposals; disarmament proposals; National Academy of Sciences activities; Panel on Seismic Improvement.

Principal Correspondents: Dwight D. Eisenhower; George B. Kistiakowsky; Spurgeon M. Keeny, Jr.

0336 Basic Research. November 1959-October 1960. 77pp. Principal Topics: Research budget; NSF research programs; AEC research programs; National Bureau of Standards research programs; U.S. Geological Survey research programs: NASA research programs: Defense Department research programs; Basic Research and Graduate Education Committee; science education: federal support. Principal Correspondent: J. Lee Westrate. 0413 Chemical Panel, October 1955; June 18-April 1960, 29pp. Principal Topics: Agriculture Department research programs; Congress on agricultural research: Agriculture Department budget. Principal Correspondent: James G. Horsfall. 0442 High Energy Physics. October 1958-January 16, 1961. 79pp. Principal Topics: NSF; High Energy Physics Program; scientific manpower supply and demand; AEC support; PSAC-General Advisory Committee Panel on High Energy Accelerator Physics reports; international cooperation; universities support of activities. Principal Correspondents: George B. Kistiakowsky; John A. McCone; Emanuel R. 0521 International [Activities] (1). August 1960-January 1961. 79pp. Principal Topics: Panel on Science and Foreign Affairs; international science conferences; technical assistance to underdeveloped countries; U.S. funding of international organizations; NATO-U.S. scientific exchanges. Principal Correspondents: George B. Kistiakowsky; Edgar Lederer; Carl Djerassi; Christian A. Herter; Eugene B. Skolnikoff. 0600 International [Activities] (2), June 1959-July 1960, 123pp. Principal Topics: Technical Assistance Panel; science and foreign aid programs; U.S.-USSR scientific exchanges; atomic energy; scientific assistance program in Egypt; science and foreign affairs; International Cooperation Administration. Principal Correspondents: Eugene B. Skolnikoff: George B. Kistiakowsky. 0723 International [Activities]—Clark Proposal. April 1959–March 1960. 53pp. Principal Topics: E. M. Clark; P.L. 480 funds; Panel on Science and Foreign Affairs; Free World scientific cooperation. Principal Correspondents: George B. Kistiakowsky; Eugene B. Skolnikoff. Meeting with the President, July 12, 1960. July 1960. 35pp. 0776 Principal Topics: Federal support of Basic Research; arms limitation; science, technology, and industry; military research; science and foreign affairs. Miscellaneous Correspondence (1). July 1960-January 1961, 63pp. 0811 Principal Topics: Federal support of Basic Research; arms control; peace strategy conference; proposed federal department of science and technology; Conference on Peace Research. Principal Correspondent: George B. Kistiakowsky. Miscellaneous Correspondence (2). October 1958-December 1960. 94pp. 0874 Principal Topics: Federal Council for Science and Technology; NIKE-ZEUS Missile Program; Strategic Target Planning Staff; NASA and use of intercontinental ballistic missiles; Conference on Research and Development Management: conservation and natural resources: proposed department of science and technology; seismology; engineering education; science budget; federal management of research resources. Principal Correspondents: George B. Kistiakowsky; David Z. Beckler; Robert N. Kreidler.

National Academy of Sciences. May 1958-November 1960. 43pp.

Principal Topics: Federal Council for Science and Technology; federal support of science; Space Science Board meetings; basic research and space exploration; MOHOLE Project; Project NEEDLES and communications; astronomy; nuclear energy and space; International Council of Scientific Unions activities.

Principal Correspondents: George B. Kistiakowsky; James R. Killian, Jr.; Robert O. Piland.

1011 NASA-NASC (1). July 1958-June 1960. 67pp.

Principal Topics: H.R. 12049; House Committee on Astronautics and Space Exploration; NASC organization; H.R. 12575 and civilian control of space research; U.S.-USSR meeting on cooperation in space research; NASC meetings; NASA organization.

Principal Correspondents: David Z. Beckler; Lyndon B. Johnson; T. Keith Glennan; James R. Killian, Jr.; Robert O. Piland.

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0001 NASA-NASC (2). March-June 1958. 69pp.

Principal Topics: H.R. 12575; S. 3609; Lyndon B. Johnson; NASA Bill; U.S. space program; military use of long-range rockets; NACA.

Principal Correspondents: James R. Killian, Jr.; S. Paul Johnston.

0070 NASA-NASC (3). December 1957-March 1958. 144pp.

Principal Topics: [PSAC] Space Science and Technology Panel; space exploration; civilian space program; proposed federal space agency; U.S.-USSR cooperation in space; NACA.

Principal Correspondent: S. Paul Johnston.

0214 National Medal for Science. October 1959–October 1960. 38pp.

Principal Topics: P.L. 86-209; NSF; H.R. 6288.

Principal Correspondents: George B. Kistiakowsky; David Z. Beckler.

0252 National Resources, April 1959-March 1960, 20pp.

Principal Topics: American Geophysical Union; hydrologic research; conservation and natural resources; World Meteorological Organization Congress.

Principal Correspondents: David Z. Beckler; George B. Kistiakowsky.

0272 National Science Foundation (1). December 1958–June 1960. 77pp.

Principal Topics: Budget and appropriations; Office of Special Studies; National Science Board.

Principal Correspondents: George B. Kistiakowsky; Alan T. Waterman.

National Science Foundation (2). November 1957–December 1958. 69pp.

Principal Topics: Budget; National Science Board; research and development policy; Nininger Meteorite Collection; PSAC Research Panel funds; research and development and industry; science and the antirecession program; science appropriations.

Principal Correspondents: Alan T. Waterman; James R. Killian, Jr.

0418 National Security Council. May 1959-March 1960. 10pp.

Principal Topics: Federal Council for Science and Technology; aircraft development.

Principal Correspondents: George B. Kistiakowsky; James R. Killian, Jr.

0428 Naval Problems—Antisubmarine Warfare. Undated. 3pp.

Principal Topic: Withdrawal sheet.

0431 North Atlantic Treaty Organization, December 1957—July 1960, 78pp. Principal Topics: Science Committee; Armand Report: NATO-Organization for European Economic Cooperation scientific cooperation; NATO military research and development; science program; Ford Foundation support. Principal Correspondents: Eugene B. Skolnikoff: David Z. Beckler: George B. Kistiakowsky; Robert Murphy; Henry Loomis. 0509 Nuclear [Energy]—PLOWSHARE [Program]. January 1959-January 1960. 15pp. Principal Topics: Radioactivity; Trans-Isthmian Canal; Lyndon B. Johnson and the civilian atomic energy program. Principal Correspondent: David Z. Beckler. 0524 Nuclear Research. August 1959-December 1960. 14pp. Principal Topics: AEC Controlled Thermonuclear Research Program: AEC-Office of Naval Research Nuclear Physics Program; U.S. Navy Controlled Thermonuclear Research Program. Principal Correspondent: Paul W. McDaniel. 0538 Nuclear Weapons, March 1958-December 1960, 16pp. Principal Topics: Ad Hoc Panel on Nuclear Test Requirements; radioactive fallout; AEC on level of nuclear weapons. Principal Correspondents: George B. Kistiakowsky: James R. Killian, Jr. 0554 Oceanography, July 1959-November 1960, 90pp. Principal Topics: Inter-Agency Committee on Oceanography; Bureau of the Budget review of Inter-Agency Committee on Oceanography; national oceanography program and the Ewing Panel: Federal Council for Science and Technology; Ad Hoc Panel on Oceanography; Indian Ocean international oceanographic expedition. Principal Correspondents: Robert N. Kreidler; George B. Kistiakowsky. 0644 Operations Coordinating Board, January 1958–May 1960, 15pp. Principal Topics: Project Missile Defense Alarm Systems; U.S. Air Force research and development activities; satellite program; psychological effects of research activities. 0659 President's Committee on Scientists and Engineers. December 1957-February 1959. 78pp. Principal Topics: Reports; Soviet scientific and engineering progress; Joint Government-Industry Program to Expand Scientific Research; National Committee for the Development of Scientists and Engineers; Office of Defense and Civilian Mobilization. Principal Correspondents: Howard L. Bevis: Robert M. Briber; James R. Killian, Jr. 0737 President's Science Advisory Committee (1). March 1959-July 1960. 95pp. Principal Topics: Organization; consultants; meetings; organization of science in the federal government; national science program; Camp David Science Meeting; atmospheric sciences program. Principal Correspondents: David Z. Beckler; George B. Kistiakowsky. President's Science Advisory Committee (2). January-December 1959. 121pp. 0832 Principal Topics: Organization; meetings; military research and development; ARGUS Project; missile programs; AICBM development; seismic research; "Surprise Attack" problem; science and foreign affairs; basic research; Panel on Scientific Information: conservation and natural resources; research facilities. Principal Correspondents: George B. Kistiakowsky; David Z. Beckler; James R. Killian, Jr. 0953 President's Science Advisory Committee (3). March 1957-December 1958. 111pp. Principal Topics: Organization; personnel; meetings; ASW Program; "Surprise Attack" study; Geneva Arms Limitation Conference; high-energy accelerator program; missile programs; life sciences; NATO scientific cooperation; U.S.

Principal Correspondents: James R. Killian, Jr.; David Z. Beckler.

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O001 President's Science Advisory Committee—Agenda and Correspondence regarding Meetings. August–December 1960. 43pp.

Principal Topics: Personnel: science and foreign affairs: technical aid programs

Principal Topics: Personnel; science and foreign affairs; technical aid programs; Basic Research; graduate education; organization of research in the federal government; national science program; life sciences research; proposed department of science and technology.

Principal Correspondents: George B. Kistiakowsky; David Z. Beckler.

0044 Radar and Radio Astronomy. March 1959–September 1960. 36pp.

Principal Topics: Radio telescope; International Telecommunications Union and radio frequencies; International Astronomical Union; NATO communications; radar contact with Venus.

Principal Correspondents: George B. Kistiakowsky; David Z. Beckler; L. V. Berkner; James R. Killian, Jr.

0080 Radiation. July 1958-January 1961. 40pp.

Principal Topics: Military medical research programs; Federal Radiation Council; nuclear accidents; radiation contamination and National Consumers League; nuclear weapons testing; radiation preservation of food.

Principal correspondents: James B. Hartgering; James R. Killian, Jr.; David Z. Beckler; L. V. Berkner.

O120 Records of Action and Meetings. December 1957–March 1960. 101pp.

Principal Topics: Organization of science in the federal government; national science program; Aircraft Nuclear Propulsion Program; Panel on Biological Warfare/Chemical Warfare; AICBM Program; science and foreign affairs; nuclear testing; national space policy; U.S.-USSR scientific cooperation; Ballistic Missile Early Warning System; ARGUS Project; arms limitations; materials research; ASW Panel; science education; atomic energy; disarmament; Advance Research Projects Agency; NATO scientific cooperation; basic research; missile programs; "Missile Gap"; "Surprise Attack" Board.

0221 Research, February 1958-March 1960, 11pp.

Principal Topics: Research facilities; Research Panel; Federal Council for Science and Technology; Defense Department research funds.

Principal Correspondent: George B. Kistiakowsky.

O232 Research—President's Science Advisory Committee. May 1957–December 1958. 65pp.

Principal Topics: Federal government support of research; Defense Department research and development; research facilities; Research Panel; Commerce Department; Health, Education, and Welfare Department; NSF; AEC; Interior Department; role of Congress in federal science support.

Principal Correspondents: Emanuel R. Piore; Robert N. Kreidler; John A. McCone.

0297 Scientific Information (1). January 1959-August 1960. 76pp.

Principal Topics: Dissemination of scientific information; NSF and the Commerce Act; federal indexing of research projects in the physical sciences; research expenditures and medical schools; E.O. 10521.

Principal Correspondents: George B. Kistiakowsky; David Z. Beckler; Robert N. Kreidler; Hubert H. Humphrey; James R. Killian, Jr.; Alan T. Waterman.

0373 Scientific Information (2). May-December 1958. 79pp.

Principal Topics: Dissemination of scientific information; Soviet student exchanges; NSF; Science Information Service; Panel on Scientific Information. Principal Correspondents: Frank G. Naughten; David Z. Beckler; Alan T. Waterman; James R. Killian, Jr.

0452 Scientific Information (3). November 1957–May 1958, 106pp. Principal Topics: Panel on Scientific Information; NSF; National Scientific Information Program; National Technical Information Center proposal; Commerce Department; National Library of Science; scientific cooperation. Principal Correspondents: David Z. Beckler; Alan T. Waterman; Vincent T. Ford; Henry Loomis; James R. Killian, Jr. 0558 Small Business Administration, January-June 1959, 22pp. Principal Topics: Research and development assistance program; Scientific Working Board. Principal Correspondents: Joseph R. Mares; David Z. Beckler; James R. Killian, Jr. 0580 Solar Furnace. December 1958. 5pp. Principal Topic: U.S. Air Force project. Principal Correspondent: James R. Killian, Jr. 0585 Solid Propellants. March 1958. 4pp. Principal Topics: Rocket programs; Polaris Program. Principal Correspondent: James R. Killian, Jr. 0589 Space. January 1958-December 1960, 66pp. Principal Topics: Space Science Panel; satellites; NASA program; Ad Hoc Panel on "Man-in-Space" Program; rocket programs; NOVA Program; meteorology; communications; Satellite-Missile Observation Satellite Program. Principal Correspondent: Douglas R. Lord. 0655 Telecommunications and Radio Astronomy. April-August 1959. 18pp. Principal Topics: International Telecommunications Union; radio frequencies; telecommunications facilities. Alphabetical Files 0673 Correspondence—"B", (1), April 1957-February 1959, 82pp. Principal Topics: Science training legislation; government-sponsored research programs; Panel on Science and Foreign Affairs; U.S.-USSR scientific exchanges. Principal Correspondents: L. V. Berkner; David Z. Beckler. 0755 Correspondence—"B". (2). February-December 1959. 76pp. Principal Topics: Federal Council for Science and Technology; [NSF] Scientific Information Service; military research and development budget; AEC; Atomic Energy Act of 1954; Space Technology Laboratories, Inc. and the U.S. Air Force missile program. Principal Correspondents: L. V. Berkner; George B. Kistiakowsky; Robert M. Briber: Robert F. Bacher 0831 Correspondence—"B". (3). August 1959-December 1960. 105pp. Principal Topics: International cooperation in space; meteorology; nuclear weapons testing; Linus Pauling; U.S.-USSR scientific exchanges; explosives research: NASA space program; rockets; satellites. Principal Correspondents: George B. Kistiakowsky; David Z. Beckler; Dwight D. Eisenhower; R. A. [Hans] Bethe; John Bardeen; Robert N. Kreidler. 0936 Correspondence—"C". March 1959-January 1960. 23pp. Principal Topics: Engineering education; "Surprise Attack" problem; "genetic immortality"; nuclear attack issue; biological and medical research support; Federal Council for Science and Technology. Principal Correspondents: Britton Chance; David Z. Beckler; George B. Kistiakowsky. 0959 Correspondence—"D". March 1958-October 1960. 10pp. Principal Topic: NASC. Principal Correspondents: James H. Doolittle; David Z. Beckler; Henry Loomis.

0969 Correspondence—"F". December 1957-February 1960. 7pp. Principal Topics: Satellites; Defense Science Board; Ballistic Missile Early Warning System; ASW; Geneva Arms Limitation Conference; Federal Council for Science and Technology. Principal Correspondents: James B. Fisk; James R. Killian, Jr. Correspondence—"H". September 1959. 4pp. 0976 Principal Topic: Hughes Aircraft Company. Principal Correspondent: L. A. Hyland. Correspondence—"K". (1). May 1958-December 1960. 44pp. 0980 Principal Topics: Geneva Arms Limitation Conference; U.S.-U.K. missile talks: high-energy accelerator program; technical assistance to Sub-Saharan Africa; education bill; Defense Department research problems; ASW; "conflicts-ofinterest" problems; Federal Council for Science and Technology; organization of science in the federal government. Principal Correspondents: James R. Killian, Jr.; Robert N. Kreidler; George B. Kistiakowsky. 1024 Correspondence—"K". (2). May-June 1958. 53pp. Principal Topics: Defense Department's Quantico Secretaries' Conference: military research and development; national science program; research education and facilities. Principal Correspondent: James R. Killian, Jr. 1077 Correspondence—"L". October 1959-May 1960. 20pp. Principal Topics: Satellites; national security policy and science. Principal Correspondents: Henry M. Jackson: Dwight D. Eisenhower: David Z. Beckler; Robert F. Loeb. Correspondence—"M". February 1960. 2pp. 1097 Principal Topic: James W. McRae. Principal Correspondent: David Z. Beckler. 1099 Correspondence—"P". January 1958-November 1960. 16pp. Principal Topics: Defense Department research program: U.K. on U.S. management of science and technology; high-energy physics; nuclear weapons program. Principal Correspondents: James R. Killian, Jr.; Emanuel R. Piore; Spurgeon M. Keeny, Jr.; George B. Kistiakowsky. 1115 Correspondence—"R". February-December 1959, 13pp. Principal Topics: U.S.-USSR scientific exchanges; Panel on Techniques for Limited Warfare. Principal Correspondents: Andrew J. Goodpaster; David Z. Beckler; H. P. Robertson. 1128 Correspondence—"S". December 1957-November 1959. 10pp. Principal Topics: Federal biological and medical research; Materials Advisory Board. Principal Correspondents: Sherman Adams; Cyril Stanley; Dwight D. Eisenhower. Correspondence—"T". December 1959-February 1960, 6pp. 1138 Principal Topic: Nuclear weapons testing and seismology. Principal Correspondent: John W. Tukey. Correspondence—"W". November 1958-May 1960, 20pp. 1144 Principal Topics: U.S. Information Agency and scientific publications; natural resources; genetics research; population explosion; basic research. Principal Correspondents: George B. Kistiakowsky: Jerome B. Wiesner; Paul A. Weiss: Dwight D. Eisenhower. Correspondence---"Z". June 1960. 4pp. 1164 Principal Topic: Seismic improvement program. Principal Correspondent: W. H. Zinn.

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