

## APPENDIX A

### National Science Board, Staff, Committees, and Advisory Panels

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*Terms expire May 10, 1962*

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\*JULIUS A. STRATTON, President, Massachusetts Institute of Technology,  
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N.Y.

*Terms expire May 10, 1964*

- DETLEV W. BRONK (Chairman of the Board), President, The Rockefeller  
Institute, New York, N.Y., and President, National Academy of  
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Botanical Laboratory, Yale University, New Haven, Conn.  
ERNEST H. VOLWILER, Chairman of the Board, Abbott Laboratories,  
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MALCOLM M. WILLEY, Vice President, Academic Administration, University  
of Minnesota, Minneapolis, Minn.

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\*Member of the Executive Committee.

Terms expire May 10, 1966

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CONRAD A. ELVEHJEM, President, The University of Wisconsin, Madison, Wis.

THE REVEREND THEODORE M. HESBURGH, C.S.C., President, University of Notre Dame, Notre Dame, Ind.

WILLIAM V. HOUSTON, Chancellor, William Marsh Rice University, Houston, Tex.

JOSEPH C. MORRIS, Vice President, Tulane University, New Orleans, La.

E. R. PIORE, Vice President for Research and Engineering, International Business Machines Corp., New York, N.Y.

WILLIAM W. RUBEY, Professor of Geology and Geophysics, Department of Geology and Institute of Geophysics, University of California, Los Angeles, Calif.

ERIC A. WALKER, President, The Pennsylvania State University, University Park, Pa.

\* \* \* \* \*

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<i>Special Assistant</i> -----	J. WALLACE JOYCE
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\*\*As of December 1, 1961

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<i>Section Head for Course Content Im- provement.</i>	CHARLES A. WHITMER
<i>Section Head for Scientific Personnel and Education Studies.</i>	THOMAS J. MILLS
<i>National Register of Scientific and Technical Personnel.</i>	MILTON LEVINE
<i>Manpower Studies (Clearinghouse)</i> --	ROBERT W. CAIN

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JOHN W. MAUCHLY, Mauchly Associates, Inc., Ambler, Pa.

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DON R. SWANSON, Manager, Synthetic Intelligence Dept., Ramo-Wooldridge, a Division of Thompson Ramo-Wooldridge, Inc., Canoga Park, Calif.

\*JOHN W. TUKEY, Department of Mathematics, Princeton University, Princeton, N.J.

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FOSTER E. MOHRHARDT, Director of the Library, U.S. Department of Agriculture, Washington, D.C.

L. QUINCY MUMFORD, The Librarian of Congress, Library of Congress, Washington, D.C.

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\*New Member, appointed to 4-year term, March 31, 1961

\*\*New Member, appointed to fill unexpired term of William O. Baker now on National Science Board—2-year term, March 31, 1961



**FRANK B. ROGERS**, Director, National Library of Medicine, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C.

*Advisory Committee for Economic and Statistical Studies on Science and Technology*

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**WAYNE E. KUHN**, Manager, Technical and Research Division, The Texas Company, New York, N.Y.

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**JOHN RAY DUNNING**, Dean, Faculty Engineering, Columbia University, New York, N.Y.

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**GEORGE ANDREW HAWKINS**, Dean of Engineering, Purdue University, Lafayette, Ind.

**ROBERT WORTH HIATT**, Dean, Graduate School and Director of Research, University of Hawaii, Honolulu, Hawaii

**FRANK WILLIAM PUTNAM**, Head, Department of Biochemistry, College of Medicine, University of Florida, Gainesville, Fla.

**DAEL WOLFLE**, Executive Officer, American Association for the Advancement of Science, Washington, D.C.

## ADVISORY PANELS

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HOMER G. BARNETT, Department of Anthropology, University of Oregon, Eugene, Oreg.  
JOSEPH H. GREENBERG, Department of Anthropology, Columbia University, New York, N.Y.  
ROBERT WAUCHOPE, Middle American Research Institute, Tulane University, New Orleans, La.  
J. LAWRENCE ANGEL, The Jefferson Medical College of Philadelphia, Philadelphia, Pa.

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BERNARD F. BURKE, Carnegie Institution of Washington, Washington, D.C.  
ARTHUR D. CODE, Washburn Observatory, Madison, Wis.  
WALLACE J. ECKERT, Watson Scientific Computing Laboratory, New York, N.Y.  
JOHN W. EVANS, Sacramento Peak Observatory, Sunspot, N. Mex.  
THOMAS GOLD, Department of Astronomy, Cornell University, Ithaca, N.Y.  
JOHN S. HALL (Chairman), Lowell Observatory, Flagstaff, Ariz.  
EUGENE N. PARKER, Enrico Fermi Institute, University of Chicago, Chicago, Ill.

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WALTER H. MUNK, Professor of Geophysics, University of California, La Jolla, Calif.  
ALAN H. SHAPLEY, Radio Propagation Physics Division, National Bureau of Standards, Boulder, Colo.  
VERNER E. SUOMI, Professor of Meteorology, University of Wisconsin, Madison, Wis.  
ARTHUR H. WAYNICK (Chairman), Director, Ionosphere Research Laboratory, Pennsylvania State University, University Park, Pa.

E. J. WORKMAN, President, New Mexico Institute of Mining and Technology, Campus Station, Socorro, N. Mex.

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RALPH W. GERARD, Director of Research, Mental Health Research Institute, University of Michigan, Ann Arbor, Mich.  
LESLIE SILVERMAN, Professor of Engineering in Environmental Hygiene, Harvard University, Cambridge, Mass.  
E. F. OSBORN, Vice President for Research, Pennsylvania State University, University Park, Pa.  
CHARLES C. PRICE, Director, John Harrison Laboratory of Chemistry, University of Pennsylvania, Philadelphia, Pa.  
FRANK E. MYERS, Associate Director for Education, Argonne National Laboratory, University of Chicago, Argonne, Ill.  
DONALD TAYLOR, Department of Industrial Administration, Yale University, New Haven, Conn.  
RAYMOND L. WILDER, Department of Mathematics, University of Michigan, Ann Arbor, Mich.

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- A. W. ADAMSON, Department of Chemistry, University of Southern California, Los Angeles, Calif.  
GILBERT AYRES, Department of Chemistry, University of Texas, Austin, Tex.  
BRYCE L. CRAWFORD, Jr. (Chairman), Dean, The Graduate School, University of Minnesota, Minneapolis, Minn.  
DONALD D. DEFORD, Department of Chemistry, Northwestern University, Evanston, Ill.  
WILLIAM VON E. DOERING, Department of Chemistry, Yale University, New Haven, Conn.  
JOHN D. FERRY, Department of Chemistry, University of Wisconsin, Madison, Wis.  
CLYDE A. HUTCHISON, Jr., Department of Chemistry, University of Chicago, Chicago, Ill.

NELSON J. LEONARD, Department of Chemistry, University of Illinois, Urbana, Ill.

M. S. NEWMAN, Department of Chemistry, Ohio State University, Columbus, Ohio

O. K. RICE, Department of Chemistry, University of North Carolina, Chapel Hill, N.C.

GILBERT STORK, Department of Chemistry, Columbia University, New York, N.Y.

HARRY H. SISLER, Department of Chemistry, University of Florida, Gainesville, Fla.

#### *Advisory Panel for Developmental Biology*

A. C. CLEMENT, Department of Biology, Emory University, Atlanta, Ga.

ANTON LANG, Division of Biology, California Institute of Technology, Pasadena, Calif.

CLAUDE A. VILLEE, Department of Biological Chemistry, Harvard University, Boston, Mass.

ALFRED J. COULOMBRE, Department of Anatomy, School of Medicine, Yale University, New Haven, Conn.

CLEMENT L. MARKERT, Department of Biology, Johns Hopkins University, Baltimore, Md.

ARTHUR H. WHITELEY, Department of Zoology, University of Washington, Seattle, Wash.

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JULIAN R. GOLDSMITH (Chairman), Department of Geology, University of Chicago, Chicago, Ill.

CHARLES B. HUNT, U.S. Geological Survey, Federal Center, Denver, Colo.

LEON KNOPOFF, Institute of Geophysics, University of California, Los Angeles, Calif.

HENRY W. MENARD, Jr., Scripps Institution of Oceanography, La Jolla, Calif.

FRANCIS J. PETTIJOHN, Department of Geology, Johns Hopkins University, Baltimore, Md.

ROBERT R. SHROCK, Department of Geology and Geophysics, Massachusetts Institute of Technology, Cambridge, Mass.

JOHN VERHOGEN, Department of Geology, University of California, Berkeley, Calif.

WILLIAM S. VON ARX, Woods Hole Oceanographic Institution, Woods Hole, Mass.

#### *Advisory Panel for Economics*

DONALD R. HODGMAN, Department of Economics, University of Illinois, Urbana, Ill.

WALTER ISARD, Wharton School of Economics, University of Pennsylvania, Philadelphia, Pa.

CARL KAYSEN, Department of Economics, Harvard University, Cambridge, Mass.

TJALLING KOOPMANS, Department of Economics, Yale University, New Haven, Conn.

PAUL WEBBINK, Vice President, Social Science Research Council, New York, N.Y.

#### *Advisory Panel for Engineering Sciences*

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CHARLES E. CUTTS, Head, Department of Civil Engineering, Michigan State University, East Lansing, Mich.

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H. B. GOTAAS, Dean, Technological Institute, Northwestern University, Evanston, Ill.

MERK HOBSON, Dean, School of Engineering and Architecture, University of Nebraska, Lincoln, Nebr.

OSCAR T. MARZKE, Vice President for Fundamental Research, United States Steel Corporation, Pittsburgh, Pa.

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WILLIAM G. SHEPHERD, Head, Department of Electrical Engineering, University of Minnesota, Minneapolis, Minn.

CYRIL S. SMITH, Institute for the Study of Metals, University of Chicago, Chicago, Ill.

D. W. VER PLANCK, General Atomic Division, General Dynamics Corporation, San Diego, Calif.

WALTER G. VINCENTI, Professor, Aeronautical Engineering, Stanford University, Stanford, Calif.

*Advisory Panel for Environmental Biology*

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THEODORE BULLOCK, Department of Zoology, University of California, Los Angeles, Calif.  
JOHN CANTLON, Department of Botany and Plant Pathology, Michigan State University, East Lansing, Mich.  
DAVID G. FREY, Department of Zoology, Indiana University, Bloomington, Ind.  
BOSTWICK KETCHUM, Woods Hole Oceanographic Institution, Woods Hole, Mass.  
CHARLES E. OLMSTEAD, Department of Botany, University of Chicago, Chicago, Ill.  
FRANK A. PITELKA, Museum of Vertebrate Zoology, University of California, Berkeley, Calif.  
FREDERICK E. SMITH, Department of Zoology, University of Michigan, Ann Arbor, Mich.

*Advisory Panel for Genetic Biology*

- WILLIAM BAKER, Department of Zoology, University of Chicago, Chicago, Ill.  
ROLLIN D. HOTCHKISS, Laboratory of Genetics, Rockefeller Institute, New York, N.Y.  
I. MICHAEL LERNER, Department of Genetics, University of California, Berkeley, Calif.  
STANLEY G. STEPHENS, Department of Genetics, North Carolina State College, Raleigh, N.C.  
H. D. STALKER, Department of Zoology, Washington University, St. Louis, Mo.  
CARL P. SWANSON, Department of Biology, John Hopkins University, Baltimore, Md.  
ROBERT P. WAGNER, Department of Zoology, University of Texas, Austin, Tex.

*Advisory Panel for Graduate-Level Facilities in the Life Sciences*

- KENNETH E. CLARK, Dean of College of Arts and Sciences, University of Colorado, Boulder, Colo.  
JACKSON W. FOSTER, Department of Bacteriology, University of Texas, Austin, Tex.  
STERLING B. HENDRICKS, Bureau of Plant Industry, U.S. Department of Agriculture, Beltsville, Md.

- JOHN I. LACEY, Fels Research Institute, Antioch College, Yellow Springs, Ohio  
GEORGE LEFEVRE, Jr., Director, Biological Laboratories, Harvard University, Cambridge, Mass.  
LOUIS LEVIN, Dean of Science and Associate Dean of Faculty, Brandeis University, Waltham, Mass.  
ARTHUR W. MARTIN, Jr., Chairman, Department of Zoology, University of Washington, Seattle, Wash.  
JOHN A. MOORE, Department of Zoology, Columbia University, New York, N.Y.  
AUBREY W. NAYLOR, Department of Botany, Duke University, Durham, N.C.  
HOWARD M. PHILLIPS, President, Alabama College, Montevallo, Ala.  
C. LADD PROSSER, Department of Physiology, University of Illinois, Urbana, Ill.  
ALFRED W. WILHELMI, Department of Biochemistry, Emory University, Atlanta, Ga.

*Advisory Panel for Graduate-Level Facilities in the Physical Sciences*

- STANLEY J. CRISTOL, Department of Chemistry, University of Colorado, Boulder, Colo.  
FRANK K. EDMONDSON, Chairman, Department of Astronomy, Indiana University, Bloomington, Ind.  
JOHN W. IRVINE, Jr., Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Mass.  
THOMAS F. JONES, Jr., Head, School of Electrical Engineering, Purdue University, Lafayette, Ind.  
A. RICHARD KASSANDER, Jr., Director, Institute of Atmospheric Physics, University of Arizona, Tucson, Ariz.  
E. F. OSBORN, Vice President for Research, Pennsylvania State University, University Park, Pa.  
KENNETH G. PICHA, School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, Ga.  
FREDERICK D. ROSSINI, Dean, Graduate School, University of Notre Dame, Notre Dame, Ind.  
S. TOWN STEPHENSON, Dean of Faculty, Washington State University, Pullman, Wash.  
L. C. VAN ATTA, Hughes Research Laboratories, Malibu, Calif.  
KURT F. WENDT, Dean, College of Engineering, University of Wisconsin, Madison, Wis.  
D. J. ZAFFARANO, Department of Physics, Iowa State University, Ames, Iowa

*Advisory Panel for Mathematical Sciences*

- LIPMAN BERS (Chairman), Institute of Mathematical Sciences, New York University, New York, N.Y.
- MAHLON M. DAY, Department of Mathematics, University of Illinois, Urbana, Ill.
- EDWIN E. FLOYD, Department of Mathematics, University of Virginia, Charlottesville, Va.
- GILBERT HUNT, Department of Mathematics, Princeton University, Princeton, N.J.
- NATHAN JACOBSON, Department of Mathematics, Yale University, New Haven, Conn.
- IVAN NIVEN, Department of Mathematics, University of Oregon, Eugene, Oreg.
- HANS SAMELSON, Institute for Advanced Study, Princeton, N.J.
- HENRY SCHEFFE, Statistical Laboratory, University of California, Berkeley, Calif.
- I. M. SINGER, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Mass.

*Advisory Panel for Metabolic Biology*

- EDWARD A. ADELBERT, Department of Microbiology, Yale University, New Haven, Conn.
- DANIEL BILLEN, M. D. Anderson Hospital and Tumor Institute, University of Texas, Houston, Tex.
- RALPH I. DORFMAN, Worcester Foundation for Experimental Biology, Shrewsbury, Mass.
- MARTIN GIBBS, Department of Biochemistry, Cornell University, Ithaca, N.Y.
- MANFRED M. MAYER, Department of Microbiology, Johns Hopkins University, Baltimore, Md.
- SYDNEY C. RITTENBERG, Department of Bacteriology, University of Southern California, Los Angeles, Calif.
- JOHN R. TOTTER (Chairman), Division of Biological Sciences, University of Georgia, Athens, Ga.
- I. ZELITCH, The Connecticut Agricultural Experiment Station, New Haven, Conn.

*Advisory Panel for Molecular Biology*

- ANDREW A. BENSON, Department of Agricultural and Biological Chemistry, College of Agriculture, The Pennsylvania State University, University Park, Pa.

WALTER D. BONNER, Jr., Professor of Physical Biochemistry and Plant Physiology, The Johnson Foundation, University of Pennsylvania, Philadelphia, Pa.

- JEROME GROSS, Massachusetts General Hospital, Boston, Mass.
- MATTHEW S. MESELSON, The Biological Laboratories, Harvard University, Cambridge, Mass.
- MANUEL F. MORALES, Cardiovascular Research Institute, Department of Biochemistry, University of California, San Francisco, Calif.
- AARON NOVICK, Institute for Molecular Biology, University of Oregon, Eugene, Oreg.
- HAROLD A. SCHERAGA, Department of Chemistry, Cornell University, Ithaca, N.Y.
- S. JONATHAN SINGER, Department of Physical Chemistry, Yale University, New Haven, Conn.
- JONATHAN B. WITTENBERG, Department of Physiology, Albert Einstein College of Medicine, Yeshiva University, New York, N.Y.

*Advisory Panel for Physics*

- TOM W. BONNER, Department of Physics, The Rice Institute, Houston, Tex.
- JOHN G. DAUNT, Department of Physics, The Ohio State University, Columbus, Ohio
- ROBERT H. DICKE, Department of Physics, Princeton University, Princeton, N.J.
- LESLIE L. FOLDY, Department of Physics, Case Institute of Technology, Cleveland, Ohio
- W. CONYERS HERRING, Bell Telephone Laboratories, Murray Hill, N.J.
- GEORGE E. PAKE, Department of Physics, Stanford University, Stanford, Calif.
- ROBERT G. SACHS, Department of Physics, University of Wisconsin, Madison, Wis.
- EMILIO G. SEGRE, Department of Physics, University of California, Berkeley, Calif.
- ROBERT R. WILSON (Chairman), Department of Physics, Cornell University, Ithaca, N.Y.

*Advisory Panel for Psychobiology*

- CLETUS J. BURKE, Department of Psychology, Indiana University, Bloomington, Ind.

VINCENT G. DETHIER, Department of Zoology, University of Wisconsin, Madison, Wis.

JOHN T. EMLÉN, Department of Zoology, University of Wisconsin, Madison, Wis.

NORMAN GUTTMAN, Department of Psychology, Duke University, Durham, N.C.

HAROLD W. HAKE, Department of Psychology, University of Illinois, Urbana, Ill.

HOWARD H. KENDLER, Department of Psychology, New York University, New York, N.Y.

CARL PFAFFMANN, Department of Psychology, Brown University, Providence, R.I.

FLOYD RATLIFF, The Rockefeller Institute, New York, N.Y.

#### *Advisory Panel for Radio Telescopes*

RONALD N. BRACEWELL, Department of Electrical Engineering, Stanford University, Stanford, Calif.

BERNARD F. BURKE, Carnegie Institution of Washington, Washington, D.C.

PAUL CHENEY, Division of Engineering Sciences, Purdue University, Lafayette, Ind.

L. J. CHU, Department of Electrical Engineering, Massachusetts Institute of Technology, Cambridge, Mass.

RICHARD M. EMBERSON, Associated Universities, Inc., New York, N.Y.

WILLIAM E. GORDON, Department of Electrical Engineering, Cornell University, Ithaca, N.Y.

DAVID S. HEESCHEN, National Radio Astronomy Observatory, Green Bank, W. Va.

R. MINKOWSKI, Mt. Wilson & Palomar Observatories, Pasadena, Calif.

JOHN R. PIERCE (Chairman), Bell Telephone Laboratories, Inc., Murray Hill, N.J.

GEORGE W. SWENSON, Jr., The Observatory, University of Illinois, Urbana, Ill.

JAMES H. TREXLER, Naval Research Laboratory, Washington, D.C.

JOHN G. BOLTON (Consultant), California Institute of Technology, Pasadena, Calif.

#### *Advisory Panel for Regulatory Biology*

ALBERT E. DIMOND, Department of Plant Pathology and Botany, Connecticut Agricultural Experiment Station, New Haven, Conn.

PAUL J. KRAMER, Department of Botany, Duke University, Durham, N.C.

GILBERT H. MUDGE, Department of Pharmacology and Experimental Therapeutics, Johns Hopkins University, Baltimore, Md.

ERLING J. ORDAL, Department of Microbiology, University of Washington, Seattle, Wash.

WILBUR H. SAWYER, Department of Pharmacology, Columbia University, New York, N.Y.

ROBERT D. TSCHIRGI, Department of Physiology, University of California, School of Medicine, Los Angeles, Calif.

WILLIAM VAN DER KLOOT, Department of Pharmacology, New York University, New York, N.Y.

#### *Advisory Panel on Scientific Manpower Information*

JAMES W. COLE, Jr., School of Chemistry, University of Virginia, Charlottesville, Va.

HAROLD GOLDSTEIN, Chief, Division of Manpower and Employment Statistics, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.

ALBERT KAY, Director, Office of Manpower Supply, Department of Defense, Washington, D.C.

CHARLES V. KIDD, Associate Director of Institutional Relations, National Institutes of Health, Bethesda, Md.

RAY W. MAYHEW, Owens-Illinois Glass Company, Columbus, Ohio

JAMES C. O'BRIEN, Director of Personnel, Department of Health, Education, and Welfare, Washington, D.C.

PHILIP N. POWERS (Chairman), Head, Department of Nuclear Engineering, Purdue University, West Lafayette, Ind.

M. H. TRYTTEN, Director, Office of Scientific Personnel, National Research Council-National Academy of Sciences, Washington, D.C.

J. FLETCHER WELLEMAYER, (Private Consultant), Washington, D.C.

DAEL WOLFFLE, Executive Officer, American Association for the Advancement of Science, Washington, D.C.

#### *Advisory Panel for Short-Term Research by Medical Students*

SHERWIN J. COOPERSTEIN, Department of Anatomy, Western Reserve University, Cleveland, Ohio

GEORGE A. FEIGEN, School of Medicine, Stanford University, Stanford, Calif.

- ROBERT A. MOORE, President, State University of New York Medical Center, Brooklyn, N.Y.
- JOHN L. PATTERSON, Department of Medicine, Medical College of Virginia, Richmond, Va.
- GUY P. YOUMANS, Department of Bacteriology, Northwestern University, Chicago, Ill.

*Advisory Panel for Sociology*

- HARRY ALPERT, Dean of the Graduate School, University of Oregon, Eugene, Oreg.
- RICHARD CHRISTIE, Department of Psychology, Columbia University, New York, N.Y.
- ELIHU KATZ, Department of Sociology, University of Chicago, Chicago, Ill.
- WILLIAM W. LAMBERT, Department of Psychology, Cornell University, Ithaca, N.Y.
- FREDERICK F. STEPHAN, Department of Economics and Social Institutions, Princeton University, Princeton, N.J.
- JOHN THIBAUT, Department of Psychology, University of North Carolina, Chapel Hill, N.C.

*Advisory Panel for Specialized Biological Facilities*

- H. O. HALVORSON, Department of Bacteriology, University of Illinois, Urbana, Ill.
- ARTHUR D. HASLER, Department of Zoology, University of Wisconsin, Madison, Wis.
- CARL L. HUBBS, Scripps Institute of Oceanography, La Jolla, Calif.
- EMIL M. MRAK, Chancellor, University of California, Davis, Calif.
- CONRAD G. MUELLER, Department of Psychology, Columbia University, New York, N.Y.
- WILLIAM C. STEERE, Director, New York Botanical Garden, New York, N.Y.
- KARL M. WILBUR, Department of Zoology, Duke University, Durham, N.C.

*Advisory Panel for Special Projects in Science Education*

- R. H. BING, Department of Mathematics, University of Wisconsin, Madison, Wis.
- JULIAN HILL, Executive Secretary, Committee on Fellowships and Grants, E. I. DuPont de Nemours and Company, Wilmington, Del.

- MARCUS HOBBS, Dean, Duke University, Durham, N.C.

- JAMES JENSEN, Provost, Iowa State University, Ames, Iowa.

- FREDERICK LINDVALL, Division of Engineering, California Institute of Technology, Pasadena, Calif.

- JOSEPH L. MCCARTHY, Dean, The Graduate School, University of Washington, Seattle, Wash.

- ROBERT MACVICAR, Vice-President, Academic Affairs, Dean, Graduate School, Oklahoma State University, Stillwater, Okla.

- HOWARD M. PHILLIPS, President, Alabama College, Montevallo, Ala.

- JOSEPH PLATT, President, Harvey Mudd College, Claremont, Calif.

- F. W. SEARS, Department of Physics, Dartmouth College, Hanover, N.H.

- OSWALD TIPPO, Provost, University of Colorado, Boulder, Colo.

- H. GRANT VEST, Director, Coordinating Council of Higher Education, Salt Lake City, Utah

- SAMUEL WILKS, Department of Mathematics, Princeton University, Princeton, N.J.

*Advisory Panel for Systematic Biology*

- LEWIS E. ANDERSON, Department of Botany, Duke University, Durham, N.C.

- GEORGE F. EDMUNDS, Division of Biology, University of Utah, Salt Lake City, Utah

- CHARLES B. HEISER, Department of Botany, Indiana University, Bloomington, Ind.

- PAUL L. ILLG, Department of Zoology, University of Washington, Seattle, Wash.

- HAROLD W. MANTER, Department of Zoology, University of Nebraska, Lincoln, Nebr.

- GEORGE W. MARTIN, Department of Botany, State University of Iowa, Iowa City, Iowa

- ALDEN H. MILLER, Museum of Vertebrate Zoology, University of California, Berkeley, Calif.

- BOBB SCHAEFFER, American Museum of Natural History, New York, N.Y.

*Advisory Panel for University Computing Facilities*

- NICHOLAS C. METROPOLIS, Department of Physics, University of Chicago, Chicago, Ill.

**PHILIP M. MORSE**, Department of Physics, Massachusetts Institute of Technology, Cambridge, Mass.

**EDWARD NOVITSKI**, Department of Biology, University of Oregon, Eugene, Oreg.

**J. BARKLEY ROSSER** (Chairman), Institute for Defense Analyses, Princeton, N.J.

**HERBERT A. SIMON**, Santa Monica, Calif.

**CHARLES V. L. SMITH**, National Aeronautics & Space Admin., Goddard Space Flight Center, Washington, D.C.

**FREDERICK T. WALL**, Dean, Graduate School, University of Illinois, Urbana, Ill.

*Advisory Panel for Weather Modification*

**EUGENE BOLLAY**, Borg-Warner Corporation, Goleta, Calif.

**MICHAEL FERENCE, JR.**, Executive Director, Scientific Laboratory, Ford Motor Company, Dearborn, Mich.

**REUBEN G. GUSTAVSON** (Chairman), University of Arizona, Tucson, Ariz.

**OSCAR KEMPTHORNE**, Department of Statistics, Iowa State University of Science and Technology, Ames, Iowa

**SVERRE PETTERSEN**, Department of Meteorology, University of Chicago, Chicago, Ill.

**STEPHEN E. REYNOLDS**, State Capitol, Santa Fe, N. Mex.