

**AMERICAN ASSOCIATION FOR  
THE ADVANCEMENT OF SCIENCE**

*Science* serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

**Editorial Board**

1981: PETER BELL, BRYCE CRAWFORD, JR., E. PETER GEIDUSCHEK, EMIL W. HAURY, SALLY GREGORY KOHLSTEDT, MANCUR OLSON, PETER H. RAVEN, WILLIAM P. SLICHTER, FREDERIC G. WORDEN

1982: WILLIAM ESTES, CLEMENT L. MARKERT, JOHN R. PIERCE, BRYANT W. ROSSITER, VERA C. RUBIN, MAXINE F. SINGER, PAUL E. WAGGONER, ALEXANDER ZUCKER

**Publisher**

WILLIAM D. CAREY

**Editor**

PHILIP H. ABELSON

**Editorial Staff**

**Managing Editor** ROBERT V. ORMES  
**Assistant Managing Editor** JOHN E. RINGLE  
**Business Manager** HANS NUSSBAUM  
**Production Editor** ELLEN E. MURPHY

**News Editor:** BARBARA J. CULLITON  
**News and Comment:** WILLIAM J. BROAD, LUTHER J. CARTER, CONSTANCE HOLDEN, ELIOT MARSHALL, COLIN NORMAN, R. JEFFREY SMITH, MARJORIE SUN, NICHOLAS WADE, JOHN WALSH

**Research News:** RICHARD A. KERR, GINA BARI KOLATA, ROGER LEWIN, JEAN L. MARX, THOMAS H. MAUGH II, ARTHUR L. ROBINSON, M. MITCHELL WALDROP

**Administrative Assistant, News:** SCHERRAINE MACK;  
**Editorial Assistants, News:** FANNIE GROOM, CASSANDRA WATTS

**Senior Editors:** ELEANORE BUTZ, MARY DORFMAN, RUTH KULSTAD

**Associate Editors:** SYLVIA EBERHART, CAITILIN GORDON, LOIS SCHMITT

**Assistant Editors:** MARTHA COLLINS, STEPHEN KEPPEL, EDITH MEYERS

**Book Reviews:** KATHERINE LIVINGSTON, *Editor*; LINDA HEISERMAN, JANET KEGG

**Letters:** CHRISTINE GILBERT

**Copy Editor:** ISABELLA BOULDIN

**Production:** NANCY HARTNAGEL, JOHN BAKER; ROSE LOWERY; HOLLY BISHOP, ELEANOR WARNER; MARY MCDANIEL, JEAN ROCKWOOD, LEAH RYAN, SHARON RYAN

**Covers, Reprints, and Permissions:** GRAYCE FINGER, *Editor*; GERALDINE CRUMP, CORRINE HARRIS

**Guide to Scientific Instruments:** RICHARD G. SOMMER  
**Assistants to the Editors:** SUSAN ELLIOTT, DIANE HOLLAND

**Membership Recruitment:** GWENDOLYN HUDDLE  
**Member and Subscription Records:** ANN RAGLAND

**EDITORIAL CORRESPONDENCE:** 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Area code 202. General Editorial Office, 467-4350; Book Reviews, 467-4367; Guide to Scientific Instruments, 467-4480; News and Comment, 467-4430; Reprints and Permissions, 467-4483; Research News, 467-4321. Cable: Advancesci, Washington. For "Information for Contributors," write to the editorial office or see page xi, *Science*, 27 March 1981.

**BUSINESS CORRESPONDENCE:** Area Code 202. Membership and Subscriptions: 467-4417.

**Advertising Representatives**

**Director:** EARL J. SCHERAGO

**Production Manager:** GINA REILLY

**Advertising Sales Manager:** RICHARD L. CHARLES

**Marketing Manager:** HERBERT L. BURKLUND

**Sales:** NEW YORK, N.Y. 10036: Steve Hamburger, 1515 Broadway (212-730-1050); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, ILL. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-337-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772); DORSET, Vt. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581).

**ADVERTISING CORRESPONDENCE:** Tenth floor, 1515 Broadway, New York, N.Y. 10036. Phone: 212-730-1050.

**Science Policy and Congress**

Some institutional innovations pay off. That is something to rejoice about, especially when they involve the performance of government in a public opinion climate that has made up its mind to be negative.

The Technology Assessment Act of 1972, fathered by then-Representative Emilio Q. Daddario, called for the creation of a professionalized center for studying the potentialities and impacts of emerging technologies. The Office of Technology Assessment (OTA) was established as an arm of Congress, designed to provide new depth and expertise to the work of committees of the House and Senate in dealing with technological controversy and risk, and complementing the efforts of the Congressional Research Service and the General Accounting Office.

Eight years later, OTA stands on its own feet as an effective and respected center of scientific and technological policy analysis. Its agenda is determined primarily by the questions put to it by committees and subcommittees charged with legislative responsibilities, although OTA has modest latitude to initiate studies under its own power. Quality control is seen to by a ten-member advisory council and an array of credentialed advisory panels, while a bipartisan congressional board of 12 members of the Senate and the House keeps OTA on target.

The roster of advisory panels provides a glimpse of the range of OTA's homework for Congress. The panels number 47 and cover a mind-boggling spectrum. There are panels on Advanced High-Speed Aircraft, Radio Frequency Use, Space Technology, Electronic Funds Transfer, National Information Systems, Technology and Oceanography, Strategies for Medical Technology, Population, Impacts of Applied Genetics, U.S. Industrial Competitiveness, MX Missile Basing, Soviet Energy, Nuclear Powerplant Standardization, and Energy from Biological Processes. All this produces an enviable knowledge base into which the responsible committees of Congress can dip when confronted with near-term and long-range problems of policy choice. Considering that the appropriation for OTA comes to eight-tenths of 1 percent of the congressional operating budget, it would seem a modest enough investment in legislative capacity building.

A further point of interest is that there is no pretense that OTA is in business to make policy. This is a distinction better understood and practiced in Congress than in the Executive Branch, where presidential staff units come to believe that they are policy instruments of the President and behave accordingly. A very good reason for this difference is that Congress remains emphatically pluralistic and has nothing of the policy discipline that is so admired by the Executive Branch. An Office of Technology Assessment in Congress would not last long if it were to push a line of its own.

For most of our constitutional history, the Presidency has had the advantage over Congress in depth of resources for policy research and initiative. More recently, the institutional capacities of Congress have become steadily more comparable. The striking modernization of the General Accounting Office, the solid performance of the Congressional Research Service, and the impressive outputs of the Congressional Budget Office and OTA are healthy signs for all who value the principle of separation of powers. Although there are critics of the growth of the legislative payroll, Congress is aware that guess and hunch make for flawed policy.

Within the present decade we will observe the bicentennial of the Constitution, an occasion for some festivities, perhaps, but even more an occasion for examining the workings of our political technology in an age of danger and risk. Institutions in good working order reflect the better side of government.—WILLIAM D. CAREY