SCIENCE

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

ROBERT L. BOWMAN JOSEPH W. CHAMBERLAIN JOHN T. EDSALL EMIL HAURY ALEXANDER HOLLAENDER WILLARD F. LIBBY GORDON J. F. MACDONALD

EVERETT I. MENDELSOHN NEAL E. MILLER JOHN R. PIERCE KENNETH S. PITZER ALEXANDER RICH DEWITT STETTEN, JR. CLARENCE M. ZENER

Editorial Staff

Editor

PHILIP H. ABELSON

Publisher DAEL WOLFLE Business Manager HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

Assistant Editors: ELLEN E. MURPHY, JOHN E.

Assistant to the Editor: NANCY TELMOURIAN

News and Comment: DANIEL S. GREENBERG. JOHN WALSH, ELINOR LANGER, LUTHER J. CARTER, MARION ZEIGER, JANE AYRES

Europe: Victor K. McElheny, Flat 3, 18 Ken-Court Place, London, (Western 5360)

Book Reviews: SARAH S. DEES

Editorial Assistants: ISABELLA BOULDIN, ELEA-NORE BUTZ, BEN CARLIN, SYLVIA EBERHART, GRAYCE NANCY HAMILTON, OLIVER HEATWOLE. ANNE HOLDSWORTH, KONSLYNNIETTA HUTCHINSON, KATHERINE LIVINGSTON, HELEN MACOTSIN, DIR-GHAM SALAHI, BARBARA SHEFFER

Advertising Staff

Director

Production Manager RAYMONDE SALAMA

EARL J. SCHERAGO

Sales: New York, N.Y., 11 W. 42 St. (212-PE-6-1858): RICHARD L. CHARLES, ROBERT S. BUGBEE Scotch Plains, N.J., 12 Unami Lane (201-889-4873): C. RICHARD CALLIS

Chicago, Ill. 60611, 919 N. Michigan Ave., Room 426 (312-DE-7-4973): Herbert L. Burklund

Los Angeles 45, Calif., 8255 Beverly Blvd. (213-653-9817): Winn Nance

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phone: 202-387-7171. Cable: Advancesci, Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. ADVERTISING CORRESPONDENCE: Rm. 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE 6-1858.

Penny Wise, Pound Foolish

The United States enjoys world leadership and is confident of its role. More precisely, we are overconfident. The spirit of urgency that followed Sputnik has evaporated. A mood of relaxation has taken over that perhaps will not be broken until again we feel mortally threatened.

The spirit of the times is manifested in many ways; one of them is in the support of scientific research. The nation is willing to gamble future scientific leadership in order to "save" a few hundred million dollars. Every field of science is feeling the consequences of budgetary tightening. Many competent scientists cannot obtain support for their research. The morale of the scientific community has been damaged.

A glaring example of our willingness to fumble away world leadership is recent action on the Mohole project. A House of Representatives Appropriations subcommittee headed by Representative Joe L. Evins has eliminated funds for the drilling platform from the National Science Foundation budget for fiscal 1967 (Science, 13 May). Last month a Senate committee considered the matter further, but even if it reports favorably, a determined fight will be necessary if the project is to be saved.

On the surface, what is involved is a delay on a contract for a drilling platform. This would "save" about \$20 million in fiscal 1967. In fact, what is involved is forfeiture of world leadership in exploration and exploitation of the deep-sea bottom. What is at stake are trillions of dollars worth of resources. We are aware of a tremendous resource of manganese nodules on the bottom (Science, 7 Feb. 1964). What is beneath the crust-ocean interface could be fabulous. It does not require much imagination to visualize exploitation by completely automated mining and concentrating operations on the sea bottom, with energy derived from underwater nuclear power stations.

Ostensibly the Mohole drilling platform is being constructed mainly to permit drilling to the Mohorovičić discontinuity, but the platform would create another exciting capability—the possibility of obtaining exploratory cores of the deep-sea bottom generally. It would create an opportunity to evaluate economic potentials beneath the bottom and to explore a host of scientific questions concerning the history of the earth.

The Mohole project is highly visible, and, hopefully, the appropriations cut will be restored, but our basic position will be good only if we are excellent on a thousand frontiers. The larger and more important issue is whether we have the wisdom to support "little science." In the past we have harnessed a reasonable fraction of our potential. We have been leaders in fundamental research. We have been able to attract some of the best talent from abroad. We were able to support many of the world's top scientists in their homelands. Associated with academic research has been the training of industry's and government's scientific talent. A by-product of the grants system has been development of a great instrumentation industry helpful to all segments of science, including industry, and beneficial to our balance of payments. Coupled with our competence in science has been technological strength, which is at the core of financial and military strength.

Support of research has produced disproportionately large benefits. The nation should ask itself, "Is the 'saving' of a few hundred million dollars worth the endangering of world scientific leadership?"

—PHILIP H. ABELSON