

Section I.-Statements by the Chairman and Vice Chairman of the Board, TAAC Chairman, and the Director of OTA

CHAIRMAN'S STATEMENT- CONGRESSMAN MORRIS K. UDALL

The year 1983 was very productive for the Office of Technology Assessment. OTA made substantive contributions to about 60 different committees and subcommittees. They ranged from major, comprehensive reports to testimony and special analyses. Considering the complex and controversial nature of the issues OTA must deal with, it is commendable that its work continues to be given uniformly high marks for quality, fairness, and usefulness.

During 1983, OTA was active in such diverse areas as hazardous and nuclear waste management, acid rain analyses, cost containment of health care, technology and trade policy, Love Canal, wood use, and polygraphs. The evidence of testimony, briefings, other requests for assistance, as well as reception of OTA's products by committees emphasizes the contribution made by OTA to the legislative process.

VICE CHAIRMAN'S STATEMENT- SENATOR TED STEVENS

The lives of our citizens and the issues of government have increasingly been influenced by science and technology. Congressional committees and Members are drawn into the complexity of science and the controversies involving technology as they face the necessary decisions of government. OTA serves as a shared resource of technical and analytical expertise for all committees. OTA's organization and procedures enable it to draw on diverse outside sources of information and advice. This enables OTA to bring to committees a synthesis of national wisdom about key issues, and alternative options for Congress to consider.

The problems faced by Congress are getting increasingly complicated and technical. Over its first decade of existence, OTA has developed and tested a way of providing information that now makes it an essential tool of Congress.

TAAC CHAIRMAN'S STATEMENT- CHARLES N. KIMBALL

During 1983, the Technology Assessment Advisory Council (TAAC) examined several current and recently completed assessments, reconfirming that OTA effectively uses information and advice from across the Nation in carrying out its analyses and critically reviewing its work before publication. TAAC also reviewed the various activities associated with "delivery" of OTA's work, mainly to Congress.

In this regard it is important to note that, from the outset, effective communication with interested committees needs to be maintained. Delivery is far more than transmittal of a document; it is a process that begins with scoping of the work plan, continues in the form of briefings, testimony, and some interim documents, is formalized in publication of the formal report, and then is further employed (sometimes for years) in the form of selected deliveries and follow-on analyses.

Thus OTA's relatively small staff plays several key roles: formulation of studies, organization of work, analysis and synthesis of results, and delivery to Congress. We believe that no other Federal organization is comparably organized in this way, and that the agency is thus uniquely able to serve Congress in wrestling with complex sociotechnical issues.

TAAC has given some thought to the kinds of issues that continue to merit OTA's attention. These include:

1. long-term implications of advances in life sciences and their application to health care and biotechnology;
2. the general condition of science and technology in the United States, e.g., as it affects long-term economic competitiveness;
3. physical infrastructure issues, including transportation and utilities; and
4. national security questions, especially the impacts of technology.

During 1984, in response to TAB's invitation, TAAC will examine in more detail the kinds of issues we from outside Congress believe merit OTA's attention. At this point it is our impression that the present agenda of work is extraordinarily broad, clearly relevant to public policy questions, and of unusually high quality.

DIRECTOR'S STATEMENT-JOHN H. GIBBONS

“A sense of the future is behind all good politics. Unless we have it, we can give nothing—either wise or decent—to the world.”

C. P. Snow

By the time this report is printed we'll be well within Orwell's year. Of course Orwell picked 1984 rather arbitrarily—his famous novel was written in 1948 so he simply reversed the last two digits. But it serves to remind us of an enigma—the importance of thinking ahead, yet the impossibility to predict the long-term future of the human enterprise with any precision.

OTA was not created to predict the future, but rather to provide a perspective of implications for the future of alternative present actions, and to maintain for Congress a *sense* of the future and implications of emerging developments in science and technology.

The rapidly unfolding saga of science and technology was never more apparent than in 1983, and no abatement appears on the horizon. As usual, there is bad news along with the good. The microscopic world of cells, molecules, and solids of various kinds, combined with human scholarship and inventiveness, is yielding improved ways to communicate, save energy and other resources, diagnose and treat disease, better our crops, and entertain ourselves. But it also makes warfare all that more terrifying, undermines privacy, and revolutionizes our workplace in troublesome ways.

Since Orwell wrote “1984,” the molecules of heredity have been discovered. The understanding of the splendid and spectacular mysteries of living things is growing at a blistering pace. We now know the complete chemical structure of some viruses, and are within striking distance of determining the total genetic specification of bacteria. The implications of the extraordinary advance in knowledge are a continuing activity at OTA.

While new knowledge merits a lot of investment and attention, existing resources and institutions are also keys to our survival, growth, and quality of life. Therefore OTA devotes considerable effort to analyzing the state and health of such resources as air and water quality, land productivity, materials, energy, international competitiveness of U.S. industry, the quality and cost effectiveness of health care, and critical areas of national defense.

It is neither possible nor desired that OTA be the fount of wisdom on such a broad array of topics. Therefore, by design, OTA is organized to catalyze and synthesize information on controversial technical issues and to present the facts and alternative options to Congress. Since these issues are of interest to many different congressional committees, OTA acts as a shared, nonpartisan resource for Congress and, through Congress, for the American people.