

s t a t e m e n t  
*of the TAB chairman—Arno Houghton*

CONGRESSIONAL RECORD. EXTENSION OF REMARKS

*[In Memoriam: The Office of Technology Assessment, 1972-95. Hon. Arno Houghton of New York, in the House of Representatives, September 28, 1995]*

Mr. HOUGHTON. Mr. Speaker, the Congressional Office of Technology Assessment [OTA], which served the Congress with such great distinction for more than 20 years, will close its doors on September 29, 1995. On behalf of all the Members of this body, I would like to express my deep appreciation to the more than 200 dedicated and talented individuals at OTA who have served us so selflessly. And I want to share with you a brief summary of their accomplishments.

As you know, OTA's job was to provide the Congress with an objective, thorough analysis of many of the critical technical issues of the day. And that it did, examining cutting edge science in medicine, telecommunications, agriculture, materials, transportation, defense, indeed in every discipline and sector important to the United States. The agency appraised the costs and benefits of diverse technological systems: The computerization plans of Federal agencies;

satellite and space systems; methods for managing natural resources; systems for disposing of wastes. The list is endless. But to mention just a few more:

OTA evaluated the environmental impacts of technology and estimated the economic and social impacts of rapid technological change. The agency offered sound principles for coping with, reaping the benefits of, that technological change—in industry, in the Federal Government, in the workplace, and in our schools. The agency took on controversial subjects, examining them objectively and comprehensively for our benefit. It helped us to better understand complex technical issues by tailoring reports for legislative users. It provided us with early warnings on technology's impacts and it enabled us to better oversee the science and technology programs within the Federal establishment.

While pulling issues down to practical grounds, OTA has usually erred on the optimistic side. For example, OTA regularly spelled out its belief in the power of technology to improve our lives and help solve the Nation's problems. It worked through a basic understanding of how technology works, how institutions need to change to accommodate new technology, how resistant to change such institutions can be when the conditions are wrong, and how swiftly they can adapt when the conditions are right. OTA helped us discover the conditions for change.

*[A Scope Wide and Deep]*

Once OTA was well underway, it had 30-60 projects in progress, published up to 55 reports, and started approximately 20 new projects each year. Its work ran the gamut of subject matter, with approaches tailored for each topic and congressional request. For example:

[▲]In 1975, one OTA program began a comprehensive policy analysis of the Nation's energy future, which it

provided incrementally throughout the energy crisis.

[▲]Between 1975 and 1980, another OTA group set the stage for today's booming industry in the technology assessment of health care by demonstrating the inadequacy of information on which decisions about technology were made; laying out the strengths and weaknesses of methods to evaluate technology; and crystallizing the process by which economic tradeoffs could be incorporated in decisions.

[▲]In 1979, OTA expanded its work in agriculture to include all renewable resources and laid the foundation for others' efforts on sustainable development and, later, ecosystem management.

[▲]One OTA group examined each key mode of transportation in turn, focusing especially on urban transportation; better and less expensive ways to move goods; and technologies which used less petroleum. Another OTA program tracked materials through their total life-cycle—from

exploration and extraction through production to use, reuse, and eventual disposal. A third investigated policies related to the private use of Federal public lands and other resources, addressing questions of public equity, the responsibility of industry, and the long-term protection of the environment. In sum, OTA brought new, old important science into the center of many congressional discussions. At times, OTA took part in high-profile debates on major pieces of legislation such as the 1980 Energy Security Act; Superfund; the Clean Air Act; and the Foreign Assistance Act. Also, the agency contributed to specific technical issues that puzzled nontechnical congressional staff—from risk reform to long-term African development; from acid rain to dismantling nuclear weapons; from the Strategic Defense Initiative to police body armor. One study on global climate change helped Congress evaluate more than 131 pieces of legislation. At its busiest, OTA's testimony for various

committees averaged more than once a week.

The executive branch and State governments were not outside the OTA reach. OTA published the landmark work on computers in schools. This eventually led to support for teachers as the way to make the best investment in technology—a key policy change in education. OTA's repeated work on the farm bill prompted important changes in the U.S. Department of Agriculture. And OTA's comprehensive series of analyses on nuclear waste management set out issues of technology and policy for both industry and the military.

*[Careful Analysis, Shared With the World]*

In the course of every study, OTA accumulated vast amounts of raw information. By a project's completion, OTA had created a report with 'value-added.' OTA staff excelled at identifying the principal strands of analysis, weighing the evidence of each, and synthesizing essential pieces. The creed of OTA was to come

as close as possible to objective analysis. It was a point of pride when reports were cited both by an issue's defenders and its detractors, as happened most recently in debates regarding the North American Free Trade Agreement and Oregon's Medicaid program.

The public and private sectors have recently discovered the benefits of organizing work around functional teams. OTA started with this model. It was used in every project. Team members came from different disciplines and backgrounds, with different experiences and perspectives, yet they always seemed to share a commitment to their product and not incidentally to the American people.

When work took OTA into new subject areas, staff broke ground for new intellectual pursuits. This was true in risk policy. And it was true when OTA developed the analytical methods to identify priorities for agricultural conservation. During OTA's lifetime, 'international interdependence' changed from slogan to reality. OTA was ahead of the

curve, conducting international case studies and exploring previously ignored aspects of international security. In fact, between 1985 and 1990, OTA's studies of the impacts of technology on the economy, environment, and security of the U.S.S.R. and Eastern Europe made clear that the demise of centrally planned economies was inevitable.

As a result of all this, OTA gradually became recognized worldwide as the top institution of its kind. Representatives from about one-third of the world's nations visited OTA one or more times to learn how OTA worked; how it became so valuable to Congress and the American people; and how these foreign nations might develop their own "OTA's." Austria, Denmark, the European Community, France, Germany, Great Britain, the Netherlands, and Sweden have copied or adapted the OTA style. Similar organizations are being discussed or formed in Hungary, Japan, Mexico, the People's Republic of China, Russia, Switzerland, and Taiwan.

The above is simply the most visible aspect of OTA's international impact. Visitors from other countries stopped by OTA almost every week to discuss specific technologies or technology-related issues. Several OTA staff spoke frequently about OTA in other countries. A number accepted temporary details to academic or government positions overseas. And still others traveled abroad to teach short courses on technology assessment.

*[The Written Word]*

In its 24 years, OTA published nearly 750 full assessments, background papers, technical memoranda, case studies, and workshop proceedings. OTA reports were recorded as being "remarkably useful," "thorough," "comprehensive," "rigorous." At their best, OTA reports were among the most cited references on their subjects. "Landmarks," they were called, "definitive," and the "best available primers." From 1992 to 1994, twelve assessments won the National Association for Government

Communicator's prestigious Blue Pencil Award, successfully competing against as many as 850 other publications in a single year. In the same 3 years, 12 additional reports were named among the 60 Notable Government Documents selected annually by the American Library Association's Government Documents Round Table—representing the best Federal, State, and local government documents from around the world.

In typical comments, the Journal of Foreign Affairs claimed that, "The Office of Technology Assessment does some of the best writing on security-related technical issues in the United States." A former Deputy U.S. Trade Representative called OTA's 1992 report on trade and the environment, "the Bible." A Senator described OTA's work on the civilian impacts of defense downsizing as "\*\*\* a superb study and the standard by which all similar efforts will be judged." And the head of one state's plant protection agency described OTA's study of

non-indigenous species as “ \* \* \* a benchmark which will be the most heavily referenced document for years to come.”

OTA's reports were often bestsellers at the Government Printing Office and the National Technical Information Service: GPO sold 48,000 OTA reports in 1980 alone.

Commercial publishers reprinted at least 65 and translated two reports all or in part. The Superintendent of Documents selected 27 OTA reports to display in the People's Republic of China in 1981. And OTA itself reissued reports that had unusual staying power. For example, OTA's 1975 report on tanker safety and the prevention of oil spills was reissued in 1990 after the Exxon Valdez accident. Likewise, OTA combined the summaries of two particularly popular reports—on tropical forests and biological diversity—and reprinted them in 1992.

*[The People Behind the Projects]*

OTA staff represented every major field of science and technology, ranging from board-certified internists

to Ph.D. physicists. OTA staff were sought out to serve their respective professional associations.

A number were elected to offices or boards—the International Society for Technology Assessment, the International Association for Impact Assessment, the Association for Women in Development, the Ecological Society of America, etc. Two staff formed the Risk Assessment and Policy Association and others went on to found their own companies.

Above all else, OTA staff were teachers. As a result of their efforts, hundreds of thousands of people are better informed not only about science and technology but also about the structure and function of Congress. OTA served 30-60 congressional committees and subcommittees each year. Thirty-one Senators and Representatives had the privilege to serve on OTA's Technology Assessment Board and we became among the Congress' most knowledgeable members on issues of science and technology.

Each year, at least several hundred advisory panelists and workshop participants also took part in OTA's work. Some years, OTA tapped as many as 1,500 leaders from academia, non-governmental groups, State and local governments, and industry. OTA's advisors valued the experience and said it made them more fit for decisionmaking in their own fields. Some were experts; some were stakeholders. Still others were members of the larger public. As early as 1975, OTA incorporated public participation and stakeholder involvement into a major study of offshore energy development. Nearly 15,000 people were involved. Later approximately 800 African farmers and herders were included in an evaluation of the United States-funded African Development Foundation.

In addition, OTA provided 71 scientists and engineers with a challenging and memorable year on Capitol Hill as Morris K. Udall Congressional Fellows or congressional fellows in health policy. Many of

OTA's younger employees gained a taste for research—and for public service—at OTA and went on to graduate school to become the next generation of business leaders, scientists, engineers, and policy analysts.

OTA's record depended upon remarkable support staff as much as it did on the agency's analytical staff. Their work was the standard against which other Government agencies were measured—and often found lacking. People came from around the world to attend OTA meetings—and often commented that OTA's workshops were the most well supported, best organized, and most productive they had ever attended. Contractors were gratified by the ease with which their travel arrangements and invoices were handled. OTA processed hundreds of security clearances efficiently and without incident—without which OTA could not have done its work in national defense. Reports sped through OTA's publishing process

and grew steadily more attractive through the years. The staff of OTA's Information Center could find even the most obscure research material—and provided a friendly agencywide gathering place.

The Information Center, the technical support office, and the agency's electronic dissemination program kept OTA at the cutting edge of technology for research and for public access to the agency's work.

OTA was a small agency. It was a generous place. For some, colleagues became like second families and these relationships extended to committee and personal staffs. Friendship, joy, and grief seemed to be shared without regard to job description. Many at OTA value this legacy as much as any other. But of course, OTA was not perfect. At times, its greatest strengths—flexibility, tolerance, the preponderance of technical skills—became its biggest weaknesses. One outsider looked at OTA's work and commented,

'You must have just about the most interesting job there is.' I know that many at OTA, for much of their time, felt exactly that way.

Although OTA closes on September 29, 1995, the Congress will continue to benefit from its work. Stark evidence of the dedication of OTA staff is the fact that they continued working to the end. More than 30 reports will be delivered to requesting committees even after the doors are closed.

OTA soon will be a memory, and we will discover what is lost. But we can salvage something. Those of us who have used OTA reports know that most of them have long shelf lives. The really important issues—the issues OTA worked on—do not get solved and go away in one Congress. In January 1996, all of OTA's reports will be issued on CD-ROM—OTA's final legacy. We should be proud of it.