

AC-0935

**TECHNOLOGY ASSESSMENT BOARD**

EDWARD M. KENNEDY, MASS., CHAIRMAN  
CHARLES A. MOSHER, OHIO, VICE CHAIRMAN

ERNEST F. HOLLINGS, S.C.	JOHN W. DAVIS, GA.
HUBERT H. HUMPHREY, MINN.	OLIN E. TEAGUE, TEXAS
CLIFFORD P. CASE, N.J.	MORRIS K. UDALL, ARIZ.
RICHARD S. SCHWEIKER, PA.	CHARLES S. GUBSER, CALIF.
TED STEVENS, ALASKA	MARVIN L. ESCH, MICH.
EMILIO Q. DADDARIO	

**Congress of the United States**

**OFFICE OF TECHNOLOGY ASSESSMENT**

WASHINGTON, D.C. 20510

EMILIO Q. DADDARIO

DIRECTOR

DANIEL V. De SIMONE

DEPUTY DIRECTOR

January 27, 1975

The Honorable Carl Albert  
The Speaker of the House  
of Representatives  
Washington, D. C. 20515

Dear Mr. Speaker:

Having served as Vice Chairman of the new Technology Assessment Board for the 93rd Congress, I think it appropriate to offer several personal observations which I believe should be reported to you and to the House, concerning our experience with OTA thus far. It is my intent, with your permission, to send copies of this letter to the Committee Chairmen and Ranking Minority Members of both Houses, Members of the Technology Assessment Board, its Advisory Council and others whom I believe will find this useful or of particular interest.

It has been a unique privilege for a Minority member to serve as Vice Chairman of the new Board, the policy-making body which oversees the activities of the Office of Technology Assessment, created by the Congress in 1972.

Under the law, the Chairmanship of the Board alternates between the House and Senate. During the last Congress the Chairman of the Board was Senator Edward Kennedy of Massachusetts, and at this point I think it is timely to point out that the Board operated in a thoroughly bipartisan manner, and very effectively. I congratulated Senator Kennedy for the skill with which he got the Board off to a good start, and for his complete cooperation with the Minority members on the Board.

It is my expectation and hope that in this 94th Congress, with the Chairmanship of the Board shifting to the House for the first time, the Board Chairman will be our

good friend and respected colleague from Texas, "Tiger" Teague. This past year we established a precedent that the OTA Board Chairman shall be of the Majority party, and the Vice Chairman shall be of the Minority. It is expected the Senate members will name Senator Case of New Jersey Vice Chairman for this Congress.

The Office of Technology Assessment is still in its infancy and it must, necessarily, crawl before it walks or runs. For all practical purposes, it has been in business really for only about eight months.

What is OTA's record? What are its strengths and constructive progress, what weaknesses or mistakes... what opportunities or obstacles can we anticipate immediately ahead, or in the longer term?

Viewed in the perspective of the confusions and difficult growing pains characteristic of every new government unit, I believe OTA's record to date deserves high marks. I believe it has earned confident, continuing support by the Congress, with full reason to expect from it increasingly useful, constructive results of great practical value. Those of us who are close to it are confident that the OTA is a productive investment that will pay excellent dividends.

But we also invite objective evaluation, and especially constructive criticism, from all interested observers.

What really is the Office of Technology Assessment? Exactly what kinds of dividends are expected from it?

It is a new arm of the Congress, created by the Congress, responsible only to it; it is unique, unprecedented, though somewhat analagous to the General Accounting Office and the Library of Congress in that they also are of, by and for the Congress, even though not a part of Congress per se...they all perform an intimate service for the Legislative Branch.

The principal purpose of OTA is to respond to the increasingly urgent needs of the Senate and House Committees for adequate, accurate, evaluated information; it is expected to provide expert and objective data and useful information concerning problems, questions and opportunities in areas of science and technology. Today,

in almost every policy decision required of the Congress there are baffling technological questions. Many Members of both Houses have long felt an urgent need for a much more adequate source of expert and independent information, independent of the Executive Branch and responsive only to the Congress. We definitely need a more accurate, confident understanding of the consequences of technological proposals and opportunities before we decide, not only the probable immediate consequences, but perhaps more importantly, the broader secondary and tertiary consequences. Thus we may better define and understand our options and the alternatives.

It was to meet such basic needs that OTA finally was created by statute in October, 1972, after going through a gestation period of more than six years. But it was November, 1973, before this new Office was funded and former Congressman Emilio Q. Daddario became its Director. It had little really usable office space until March, 1974, and no significant staffing until April of that year. Hence, only eight busy months have passed since the Office became operational.

#### Record to Date

By the time the Board held its final meeting of the 93rd Congress, in December, the Office had received 43 requests for assessments of varying kinds; six had been funded or had received beginning funding; funds had been earmarked for an additional six; and still another half dozen were in the organizational stage; one had been completed.

Merely to suggest their great diversity, note that our first assessments being attempted address a wide range of subjects, from drug bioequivalence to problems of coastal oil drilling, to solar energy, auto emissions, food production systems, automated mass transportation problems...and what next?

From the time of its first meeting in April of 1973, to the present the OTA Board itself has "shaken down" considerably. It is, nevertheless, still in the process of determining its internal procedures and its methodology for setting priorities.

In my opinion, the Board has done remarkably well in maintaining its politically bipartisan approach without serious conflicts. I suppose no better example of this exists than the fact mentioned above, that it now appears the Board will follow in the 94th Congress the precedent we established this year of having its Chairman from the Majority party and its Vice Chairman from the Minority party.

Similarly, the Technology Assessment Advisory Council, after some understandable early uncertainty as to its mission, now has begun to carve out a useful and much needed supportive role in cooperation with the Board.

In addition, each of OTA's assessment programs includes a special Consulting Advisory Committee of expert private citizens in the field to be covered. We are grateful to those who have provided such assistance to OTA so far. They have worked hand-in-hand with the OTA staff and have made invaluable contributions.

#### Limitations

(1) Budgets -- OTA's beginning budgets are relatively small: \$2 million for fiscal year '74; \$4.6 million for fiscal '75; \$6.5 million is being requested for '76. This limitation, of course, works both ways and as yet it should not be considered a handicap. It does keep OTA from moving too fast, from being easily "pressured;" it forces us to be carefully selective. On the other hand, and in order to provide some perspective to our budget, let me point out that before OTA came into being, the government spent \$20 million or so on a largely incomplete and meaningless assessment of the SST before abandoning it. Also the Project Independence energy assessment cost over \$10 million for a six month period, more than 20 times the amount OTA has available for energy assessments on a half year basis. Similarly, the assessment for an Alaska Pipeline ran somewhere between \$10 to \$16 million, depending on whose figures are used. These figures are useful in suggesting to Members the real modesty of the OTA program.

(2) Space -- While many people felt it desirable for OTA to have, or at least predicted it would have a staff of 90 or more by this time, the actual staff today is

about half that size. Undoubtedly, it still should grow, but I insist slowly and very selectively, only on the basis of fully justified need.

OTA is for the moment effectively locked in because of space limitations. When additional staff help is needed in the months ahead, we must recognize the importance, especially for this sort of organization, to avoid having the working staff physically scattered. Yet there simply seems nowhere to go at the present time! This is a handicap and could become a serious one.

OTA is presently located in a few rooms on the top floor of the old Immigration Building on D Street, a somewhat discouraging, inefficient, inconvenient working environment. In my view it is very important that we succeed now in reserving for OTA appropriate space in the new Madison Building now going up near the Library.

(3) Staff Role -- The role and technique of the OTA's staff, I suggest, need further definition and study. As planned from the beginning, our assessments are done mainly out-of-house; and while the present system of bringing in specialists to serve as principal investigators for the duration of any particular assessment seems to be working well, there is nonetheless continuing need for high quality assistance from the OTA staff. This means that internal staff functions are demanding; flexibility, versatility, managerial skills, and a variety of professional experience are required; and also an understanding of legislative politics, procedures and policies is very desirable.

#### Problems That Need Attention

(1) Appropriate relationships must be achieved for effective liaison and assistance with both the Congressional Research Service and the General Accounting Office. A good start appears to have been made here in the time thus far available, but it is clear that maximum utility of these agencies as they interrelate with OTA has yet to be realized.

(2) Another very important working relationship is that between OTA and the National Science Foundation,

especially as to the utilization of the latter in the techniques and methodologies of technology assessment. The organic act creating OTA provided specifically for this sort of reciprocity with NSF. It may be that before long OTA will wish to create a permanent division devoted exclusively to promotion of assessment techniques which are as yet uncertain, unproved.

(3) We must also be aware that OTA has a statutory responsibility under P.L. 93-344 to assist the new Congressional Budget Office in review and analysis of the Federal R&D budget.

And OTA must work closely with Executive agencies to assemble relative and available facts. It is my impression at this point that this liaison has been very constructive thus far.

(4) I think it imperative that the relationships between the Technology Assessment Board and the Advisory Council be mutually helpful and effective, including a better understanding between them regarding procedures, assignments and authority. Again, a good deal has been accomplished but much remains to be done. This is particularly important in view of the rotation of terms of Advisory Council members, and inevitable changes in the Board, which require awareness and effort to maintain continuity in healthy relations between the two groups.

(5) I suggest that we House Members on the OTA Board have not, as yet, participated as fully and effectively in the Board's decisions as we should. In the OTA's first year the Senate definitely was the dominate partner.

I am not suggesting that OTA Board members should ever think of themselves primarily as spokesmen for the House or Senate respectively. Quite the opposite! I believe every member of the Board should attempt to avoid all parochialism, should be concerned primarily for the best interests of the Congressional process and the national interest as a whole. But I do emphasize the need for a healthy balance between Senate and House Members, working together, in the OTA Board's operations, initiatives and decisions, a balance that so far is lacking.

I hope and expect that we House Members will correct our deficiencies under the leadership of Chairman Teague.

(6) I also suggest that the Board, in its sense of priorities in approval of assessments, tends too easily to ignore the smaller assessment requests and concentrates largely on those which are directed toward the bigger, more compelling issues of the moment. This is understandable, but I believe some of the less conspicuous, less "fascinating" requests are of considerable importance and usefulness to the Congress, and perhaps a certain percentage of OTA funds in the future should be earmarked for such smaller purposes.

Necessarily, we must be very selective in our Board approvals; and I believe it essential that we constantly emphasize above all else our basic, all important mission, to serve the needs of the Committees of Congress.

#### Dangers

It is not difficult to conjure up a variety of pitfalls lying in OTA's path. I am especially concerned about three.

(1) A possibility that the OTA may choke itself by succumbing to pressures to accept tasks that are at present too vast, complex and difficult, or inappropriate. Examples of the former might include efforts to assess the nation's general socio-technological growth patterns and alternate policies which might be used to control them, or assessments of the impacts of nuclear weapons or other major military systems. Examples of the latter might include such problems as land-leasing policies arising from environmental difficulties, or assessment of the general or special impacts of taxation.

(2) The matter of adequate liaison between OTA and Congressional committees and their staffs. If we look at the assessment requests made thus far of OTA, it is clear that a large proportion have come through Board members themselves or their own Committee Chairmen colleagues. Hopefully this will continue. Yet it is important that there be an increased percentage of

requests that originate through sources not so directly connected with the Board, especially requests which genuinely originate in the Congressional committees.

There is no ducking the fact that, while recognition of the OTA has been increasing, a very large part of the Congress still knows very little about it, or cares. This seems to be true especially at the Committee staff level. Ordinary tact and prudence dictate that this situation, to whatever extent it exists, be corrected. Staff awareness and understanding is vital. I believe they have been improving significantly as assessments have picked up, a trend which must continue.

(3) Most important, the Board-Director-Council functions and relationships. As I have indicated, it takes time to develop relationships in an organization such as OTA, particularly to develop and understand the appropriate roles among the statutory elements of OTA: the Board, the Director, and the Advisory Council.

An effective enterprise can have only one Board of Directors; in OTA, this function is vested exclusively in its Congressional Board. The Director of OTA is the chief executive officer of this enterprise. He can be effective in marshalling resources and executing the broad policies and decisions of the Board, only if he has sufficient authority and discretion. OTA's Director must not be subjected to multiple lines of direction; he must be responsible solely to the Congressional Board. Members of the Board, particularly its Chairman and Vice Chairman, should insure that, having laid down broad policies, authority remains in the Director to execute these policies.

The Advisory Council performs a very necessary, valuable function for OTA, providing expert advice, guidance and constructive criticism. As I have said, this kind of relationship is developing and will improve as OTA matures. I also believe the Advisory Council is the key to providing a forum for public participation in technology assessment. I hope it will be possible for the Council to incorporate the participation of public interest and other groups into its activities. This will take a great deal of work on the Council's part, but it is a vitally important task.

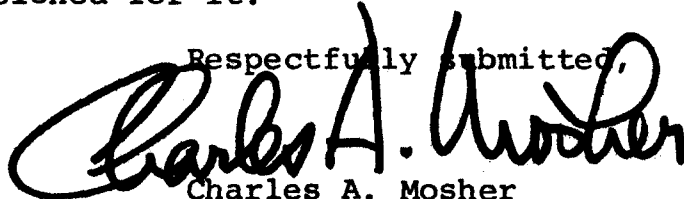


The Outlook

Yes, Mr. Speaker, in our new OTA there are these several important and difficult problems. But I am optimistic, and with good reason. I interpret the total situation as consisting of many more pluses than minuses. And if there is one thing which I believe merits special emphasis it is this: in the Office of Technology Assessment, the Legislative branch has a new tool of great potential. But those of us who are in Congress must keep in mind that we are all just learning to use it. This is going to require trial and error practice on the part of OTA, and patient support from Congress and the public. It is also going to require some faith on the part of each of us.

Given a reasonable effort in these matters, there is no doubt in my mind that OTA will become what its progenitors envisioned for it.

Respectfully submitted,

A large, stylized handwritten signature in black ink, which appears to read "Charles A. Mosher". The signature is written in a cursive, flowing style with large loops and a prominent initial "C".

Charles A. Mosher  
Representative to Congress