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Confidential Filing

PM's meeting with Sir Trevor Skeet  
Sir Gerard Vaughan and Sir Ian Lloyd  
of the Parliamentary and Scientific  
Committee.

PRIME  
MINISTER

July 1986

| Referred to   | Date | Referred to | Date | Referred to | Date | Referred to | Date |
|---|------|-------------|------|-------------|------|-------------|------|
| <del>18.7.86</del><br><del>28.8.86</del><br>20.8.86 |      |             |      |             |      |             |      |
| <p>PREM 19/1897</p>                                 |      |             |      |             |      |             |      |



10 DOWNING STREET

CF

—  
Yesterday you found the file about  
scientific advice for MPs — it  
was cross-referenced under SKEETE.

Could you please find it again, and  
copy the letter reporting on the PM's  
meeting with SKEETE to Cathy Cunningham  
in John Fairbairn's office.

Thanks

done  
ES

Sm  
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CC: HMT  
D77  
DES

10 DOWNING STREET

THE PRIME MINISTER

20 August 1986

off? / P.O.?

Dear Sir,

When you, Gerard Vaughan and Ian Lloyd came to see me on 17 July you kindly left with me a Report by the Science and Technology Group of the Parliamentary and Scientific Committee on providing enhanced scientific support for Members of Parliament.

I have since had the opportunity to read it, and have noted with interest the comments on what is done for Congress and the proposals for a Parliamentary Office of Technology Assessment. As I said when we met, I think the assessment of the need, and general support, for any such addition to the existing Parliamentary information support resources must be primarily a matter for the two Houses. But I am sure that in making that assessment the Houses would wish to take account of the competing demands on financial resources, particularly in the light of the recent significant increase in the Office, Secretarial and Research Allowance. This has, of course, increased the amount available to individual Members for commissioning personal research. Since the Top Salaries Review Body is now reviewing this allowance and will, I am sure, be making arrangements to obtain the views of Members, you may like to let them know your views about the need for this type of facility for Members and how it might be financed.

As far as the specific point raised at our meeting is concerned, I am doubtful as to how far division of the

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Departmental Select Committee on Education, Science and Arts would facilitate the access which the Committee's Members already have to available scientific information and research. But no doubt you will be seeking the views of other Members on your proposals and this could be considered in that context.

I am sending a copy of the Group's Report, and of this letter, to the Cabinet colleagues referred to in the Conclusions and Recommendations (p.12).

Yours ever  
Haycraft

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Sir Trevor Skeet, M.P.



PRIME MINISTER

SCIENTIFIC ADVICE FOR MEMBERS OF PARLIAMENT

You will recall that Trevor Skeet, Gerard Vaughan and Ian Lloyd came to see you on 17 July to argue the case for improved support for Members of Parliament on scientific issues.

They wanted a Parliamentary Office of Technology Assessment with a budget they estimated of £250,000. You were sceptical about this. I have consulted the Lord Privy Seal who strongly agrees with your scepticism. He points out that:

- (i) the resources of the House Libraries and their Research Departments have increased fivefold in the last decade;
- (ii) the individual Select Committees can now employ specialist advisers;
- (iii) the research allowance has increased dramatically.

In these circumstances he advises that you should write back to the Members distancing yourself from this proposal and pointing out that the TSRB is looking into the facilities for research available to Members of Parliament. If you agree a draft letter is attached.

MEB

fu (Timothy Flesher)

7 August 1986

DCA.66

# THE PARLIAMENTARY AND SCIENTIFIC COMMITTEE

*An unofficial group of members of both Houses of Parliament and British members of the European Parliament and representatives of certain scientific and technical institutions and some science-based companies.*

## SCIENCE AND TECHNOLOGY GROUP

CHAIRMAN  
*Sir Gerard Vaughan M.P., F.R.C.P.*

16 GREAT COLLEGE STREET  
LONDON SW1P 3RX

VICE-CHAIRMAN  
*Dr. John Bleby J.P.*

TELEPHONE  
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TECHNOLOGY ASSESSMENT - AN EXPANDED ROLE

FOR THE PARLIAMENTARY AND SCIENTIFIC COMMITTEE

AT WESTMINSTER

REPORT BY The Chairman of the Parliamentary and Scientific Committee  
(SIR TREVOR SKEET, M.P.)

Chairman of the Science and Technology Group (SIR GERARD VAUGHAN, M.P.)

A Vice Chairman of the Parliamentary and Scientific Committee  
(SIR IAN LLOYD, M.P.) and

The Vice Chairman of the Science and Technology Group (DR. JOHN BLEBY, J.P.)  
who visited the Office of Technology Assessment in Washington  
in March, 1986.

JUNE 1986



SCIENCE AND TECHNOLOGY GROUP

TECHNOLOGY ASSESSMENT - AN EXPANDED ROLE

FOR THE PARLIAMENTARY AND SCIENTIFIC COMMITTEE

AT WESTMINSTER

I ORIGINS OF THE PROPOSAL

The concern over the development of science and its technological application to the United Kingdom has developed progressively under successive governments over a period of several decades and has now reached a point at which it is clear that a new emphasis, policy and thrust, is required if the nation's scientific genius is to continue to flourish and its industrial performance benefit from policies, which recognise the importance of the issue and address the solutions with conviction and imagination.

The Parliamentary and Scientific Committee has, since its inception in 1939, pursued the objective of providing an effective forum between Parliamentarians of both Houses and scientists. Since the growth of technology, particularly in the past decade, this unique institution has been faced at once with an opportunity and a challenge. Further, it is apparent that there must be constant assimilation of technological evaluation into the political system. Technology is regarded as crucial to the nation's recovery, for while innovation and technical change may engender job losses in old industries, these elements will nevertheless create fresh employment and added-value in new industries.

Most of the discussion and analysis has centred around the internal organisation of both public and private science, the appropriate balance between the two, the availability and distribution of resources, and the methods needed to establish an acceptable and effective profile for science in the domain of public discussion and resource allocation. The "Save British Science" campaign is the latest expression of this concern. At the highest level, there has been some discussion of the organisation of science at Ministerial and departmental levels, some of which has revolved around the issue of whether or not a Minister for Science should be appointed, with or without a seat in the Cabinet, and what departmental reorganisation should follow such an appointment.

Beyond the whole range of this important and necessary discussion lies the issue which this paper seeks to address and which gave rise to the formation in 1985 of the Science and Technology Group following the initiative of Sir Trevor Skeet, M.P., the Chairman of the Parliamentary and Scientific, and chaired by Sir Gerard Vaughan, M.P. The objectives, membership and achievements of the STG are contained in Appendix I.

Subsequently, the Group visited Washington to examine the Office of Technology Assessment and the overall mechanism employed by the US Congress to inform its judgement on scientific issues or legislation which had important technological implications.

The question is whether a satisfactory and effective policy for science and subsequent legislation can ever be satisfactorily achieved if the House of Commons, in particular, has to continue to be dependent upon the limited and inadequate scientific support currently available.



The present Prime Minister suggested, in a letter to Sir Ian Lloyd, M.P., who put forward the proposal that a British institution serving Parliament along the lines of the Office of Technology Assessment should be set up, that the Parliamentary and Scientific Committee should itself consider this issue and, if appropriate, seek to fill the gap by developing an institution which would serve Parliament under its overall control. This invitation was considered by the Committee and the Science and Technology Group (STG) decided to send a small delegation to Washington to examine the issue and provide the parent organisation with information on which their recommendation could be made to Parliament. During the Easter recess, Sir Trevor Skeet (Chairman, Parliamentary and Scientific Committee), Sir Gerard Vaughan (Chairman of Science and Technology Group), Sir Ian Lloyd (Vice President Parliamentary and Scientific Committee) and Dr. John Bleby, (Vice Chairman Science and Technology Group) visited Washington at their own expense. This paper is essentially a report based on that visit.

## II THE SCIENTIFIC SUPPORT AVAILABLE TO THE US CONGRESS

The Science and Technology delegation (referred to throughout as "the delegation") had three main objectives:-

- (i) To inform itself about the Office of Technology Assessment in particular.
- (ii) To gather general information about scientific and technological support for the US Congress.
- (iii) To examine what features of these organisations could be adapted, where effective, to the British parliamentary system and sustained by the level of resources which, in practical terms, could not be expected to exceed about one eighth of those available in the United States.

The delegation was impressed and surprised to discover the full extent of the scientific information base which the US Congress has built up to serve it. The Office of Technology Assessment is merely one of many major institutions, all of which deploy or have access to substantial scientific resources. These include:

- a) The Congressional Research Service (approx. 800 employees)
- b) The General Accounting Office ( " 5,400 " )
- c) The Library of Congress ( " 5,235 " )
- d) The Congressional Budget Office ( " 202 " )
- e) The Office of Technology Assessment ( " 171 " )

The Congressional Research Service of the Library of Congress, which has a considerable scientific staff is of course matched on a much smaller scale by the libraries of the Lords and Commons. We were surprised to discover, however, that both the Congressional Budget Office and the General Accounting Office each contained significant scientific sections to ensure that their advice was compatible with the best scientific judgement available on any particular issue when it arose, either centrally or marginally in more general policy recommendations. The Office of Technology Assessment is the most recent institution (1972) established by Act of Congress, and the scale and significance of its operation are not fully described by the comparatively small permanent staff, since its policy is to involve the relevant community of scientific or technological expertise on the broadest possible basis. What distinguishes the Office of Technology Assessment from the other institutions is that it tends to address long-term issues by conducting major enquiries, whereas the others tend to be "quick-response" organisations. The Congressional Research Service, for example, aims to respond to the vast majority of enquiries within a week.



If this is the base of the pyramid, the apex must be represented by the Committees and their support staffs in both Houses. Your delegation was staggered by the size of this component of the Congress, which comprises the following:-

|              | <u>HOUSE</u>         | <u>SENATE</u>        |
|--------------|----------------------|----------------------|
| <u>Staff</u> |                      |                      |
| Members      | 7102 (16 per elected | 4000 (40 per elected |
| Committee    | 2288 member)         | 1360 member)         |
| Support      | <u>1957</u>          | <u>1740</u>          |
|              | 11,347               | 7,000                |

Only a small proportion of these totals is obviously, directly related to the scientific concerns of Congress, but the scale may be judged by the Science and Technology Committee of the lower House, which has a "core" staff of 24, aided by 60 investigative staff who are hired/fired by the chairman of the Committee.

In addition, there are strong links between the National Academy of Sciences (established to serve the Federal administration within impartial scientific advice), the National Academy of Engineering (with a similar purpose) and the Congress. This was not, in our judgement, matched by any comparable input from any quarter of the scientific establishment in Britain to Parliament.

Of the total supporting staff of the Congress (some 40,000 individuals) it would be impossible to determine what proportions are either scientifically qualified or direct their activities specifically in that direction. But the number is evidently large. It would be surprising if it were less than 5% (2,000). If the range of expertise made available on a part-time basis to the Office of Technology Assessment and the committees alone were added, this figure would be very much higher. An example of this is given in Appendix II, in which full details are given of the panel of experts organised by the Office

of Technology Assessment, to advise its Energy and Materials programme. Whatever the figures may be, no comparable organisation or scientific input exists at Westminster.

The delegation was impressed by the fact that the Congress relied on several sources of scientific input and judgement, external and internal, that it had nevertheless judged the particular input of the Office of Technology Assessment to be required and that other congressional organisations, which may initially have resented and disputed the need for an Office of Technology Assessment, now considered that organisation to be indispensable. We were also struck by the fact that delegations from several European Parliaments had been examining the Office of Tehnology Assessment and that several domestic versions were about to be established in Europe. There have been substantial delegations from France, The Federal Republic, The Netherlands, Austria and Australia.

### III THE OFFICE OF TECHNOLOGY ASSESSMENT

The delegations spent two full days with the Director, Mr. Jack Gibbons, and his senior staff. They were most anxious to give us the benefit of their experience, highlight their failures as well as successes and suggest the most important caveats that we should observe in setting up any organisation with similar objectives within the parliamentary system.

The Office of Technology Assessment was established by Act of Congress in 1972, its first director being Congressman Daddario. Its offices are located some few minutes walk from the Capital. The annual budget is \$15 million and both the budget and programme are controlled by a Committee of both Houses, entitled the Congressional Technology Assessment Board, comprising six Senators and six Representatives, appointed by



the President of the Senate and the Speaker of the House. The posts of chairman and vice-chairman alternate between the Senate and the House with each Congress. The Director is the only non-elected member.

In addition, the scientific community is strongly represented in the Technology Assessment Advisory Panel, comprising ten members of the public who are "eminent in scientific, educational and technological fields", the Comptroller General of the US and the Director of the Congressional Research Service. This committee advises the Board on the balance, comprehensiveness and quality of the Office of Technology Assessment's work.

The Office of Technology Assessment responds to requests from any standing, special, select or joint committee of Congress, acting alone, or at the request of the ranking minority member of such a committee, or a majority of the members of a committee. It does not respond to any other member, but the Office of Technology Assessment Board itself and the Office of Technology Assessment Director, in consultation with the board, may initiate work. The allocation of research funds is entirely the responsibility of the Board. (See organisation chart in Appendix III).

There are three operating divisions whose staff represent a wide range of disciplines and backgrounds, encompassing physical, biological, environmental and social sciences, engineering, law and public administration.

The community is heavily involved in the Office of Technology Assessment's work in several significant ways:-

- a) Advisory panels set up for each project.
- b) Workshops - up to two days in length - to which appropriate experts are invited.
- c) Research commissioned in the private sector.
- d) Congressional Fellows.

The delegation was particularly struck by the flexibility inherent in the use of temporary staff, including bright young post-graduate scientists whose career pattern is considered to be greatly enhanced by their choice and appointment as a "Congressional Fellow" for twelve-fifteen months. Some 5-10% of these are eventually retained on the permanent staff. The fellowship scheme is one most effective mechanism whereby the Office of Technology Assessment maintains contact with industry and universities.

The objective of all Office of Technology Assessment reports is to inform Congress on the limits of scientific judgement or technical knowledge affecting any major issue before it. The reports are thorough, well researched, carefully vetted and make no recommendations. A copy is sent to every member of both Houses on publication. All reports are published and each major report is accompanied by a separate, published summary.

The Office of Technology Assessment attaches great importance to three objectives. The first is its political independence. This is



studiously maintained by its bi-partisan board and its avoidance of any obviously partisan recommendations. We were told that in many debates, material in Office of Technology Assessment reports is generously used by both sides. The integrity of the organisation's work is seldom questioned, though the contents of its reports are often unpredictable and politically embarrassing to particular partisan positions. The second main objective is quality. This objective is given the highest priority and on occasions major reports on which considerable expense has been incurred are shelved if their quality is considered inadequate. The third objective is relevance. Great care is taken over the choice of subject. A committee request is only that and can be the subject of discussion and negotiation if the Office of Technology Assessment itself considers that such an enquiry would be flawed in concept or difficult to complete in a manner which would meet the other criteria.

The scope of the organisation's work may be illustrated by the output during the fiscal year 1985 in which 45 published documents were made available to Congress, including 17 assessment reports, 2 special reports, 2 supplements, 5 technical memoranda, 1 background paper, 8 health technology case studies, 2 workshop proceedings and 8 administrative reports. The Office of Technology Assessment encourages private sector reprinting of its reports and 49 have so far been reprinted.

In 1985 the Government Printing Officer published 45,600 copies of Office of Technology Assessment publications and the Office of Technology Assessment itself attaches much importance to the general influence of its work on public opinion and the consequent rise in the level of informed judgement which is brought to bear on major issues as a result, outside as well as within Congress.

In the same year (1985) some 46 projects were in progress, including 6 new studies. These range from Technology and Structural Unemployment to Wastes within the Marine Environment, from High Technology Ceramics to Low Resource Agriculture in developing countries. The full list may be seen in Appendix IV.

The committee was also impressed by the use of the "workshop" technique, in which some 15-20 experts are invited to Washington as Office of Technology Assessment's guests, on an expenses paid basis, to meet perhaps three or four times from the initiation to the completion of a report. This is one of the methods employed to ensure not only that all points of view are considered, but also that the eventual report is not immediately condemned by some organisation or body of opinion which feels itself to have been excluded.

The average cost of an Office of Technology Assessment report is \$500,000, though they can range from as little as \$5,000 to \$750,000.

The delegation had very useful discussions with the Office of Technology Assessment staff on the question of "critical mass" for such an organisation. Their view, with which we concur, is that this involves a minimum of about ten "core" staff, plus some 5-10 temporary staff. Assuming our own organisation in the United Kingdom was to be established on this basis it would clearly involve acceptance of a much more severe restriction on the number and scope of any reports which were undertaken. It should have no effect whatever on the quality of the work.



IV CONCLUSIONS AND RECOMMENDATIONS

Your delegation's main conclusion is that the Congress is well served by the Office of Technology Assessment, that the principles underlying this organisation can be developed and applied without undue difficulty within the parliamentary system, that the operation can be conducted effectively on a smaller scale employing resources proportional to our national wealth and requirements, and that the Parliamentary and Scientific Committee provides a natural base on which an organisation of this kind can be built up. We are also of the opinion that the Parliamentary and Scientific Committee itself is likely to become increasingly irrelevant to the needs of Parliament, unless it is prepared to enlarge the scope and increase the relevance and authority of its in-house scientific advice to Parliament and Parliamentarians.

We recommend that:

(i) The Treasury should be asked to support a request from the House of Commons Commission to fund, on a guaranteed 5 year term, a budget of some £200 - £250,000 p.a. (3.85% of the current Science Budget) for the account of the Parliamentary and Scientific Committee to be controlled by a committee upon which both Houses and the Director of the new organisation should be represented. Funding thus constituted would maintain the political independence of the Parliamentary and Scientific Committee which has been cherished since its inception 47 years ago. It would also continue to be supported by subscriptions from its own members.

(ii) Consideration should be given as early as possible to the choice of a director for the new organisation as soon as new funding has been approved.

(iii) The existing secretariat should be retained to administer the general and broader functions of the Parliamentary and Scientific Committee.

(iv) The establishment of "Westminster Fellows" should be encouraged to associate the young scientific and technological community with the new organisation through participation, support and short-term appointments. Further, the Royal Society and other learned bodies should be invited to give their views and, in particular, the possibility of providing scholarships and grants for the funding of "Westminster Fellows".

We consider that official support should be secured and that the following steps should be taken:

(i) Well supported Early Day Motions or Motions should be tabled in both Houses, expressing strongly the view that an Office of Technology Assessment type organisation should be set up at Westminster, followed by a full day's debate in both Houses on the Scope, requirements and financing of such an organisation and mechanism whereby it could be appropriately and effectively integrated into the Westminster system.

(ii) A delegation from the Parliamentary and Scientific Committee should call on the Prime Minister, The Chancellor, The Secretary of State for Trade and Industry and The Secretary of State for Education and Science to seek their support for this development, particularly if legislation of any kind is thought to be necessary.



(iii) The full support of the Leaders of the main opposition parties should be sought to ensure that the non-partisan character of the Westminster mode of the Office of Technology Assessment model is established from the outset.

(iv) At an early date The Steering Committee of the Parliamentary and Scientific Committee should be consulted about the STG proposals, be given a clear analysis of approaches made under paragraph (ii) and (iii) hereof and be invited to give their views.

(v) The Parliamentary and Scientific Committee should arrange a press conference before the end of the present session at which the findings of the committee and recommendations arising from the report can be announced.

APPENDIX I

- (1) The Science and Technology Group is a sub-committee of the PARLIAMENTARY AND SCIENTIFIC COMMITTEE.
- (2) The objectives of the STG are as follows:
  - (2.1) To provide Members of Parliament with authoritative scientific information from time to time in connection with debates.
  - (2.2) To bring to the notice of Members of Parliament and Government Departments the results of scientific research and technological development which bear upon questions of current public interest.
  - (2.3) To arrange for suitable action through Parliamentary channels whenever necessary to ensure that proper regard is had for the scientific point of view.
  - (2.4) To examine all legislation likely to effect the above and take such action as may be suitable.
  - (2.5) To watch the financing of scientific and technological research, education and development.
  - (2.6) To provide its members and other approved subscribers with a regular summary of scientific matters dealt with in Parliament.
- (3) The current membership of the group is made up as follows:

Chairman: Sir Gerard Vaughan, M.P.

Vice Chairman: Dr. John Bleby, J.P.

Dr. M. Clark, M.P.

Lord Gregson

Michael Leonard, Esq.

Sir Ian Lloyd, M.P.

Lord Lloyd of Kilgerran

Sir David Phillips, F.R.S.

Lord Sherfield, G.C.B., G.C.M.G.

Mrs. René Short, M.P.

Dr. P.T. Warren

Professor Sir John Kingman, C.B.E., F.R.S.

Sir John Osbourne, M.P.

Lord Shackleton, O.B.E.

Professor E.W.J. Mitchell, C.B.E.



APPENDIX I continued

(4) Achievements to date - A series of meetings have been held covering a wide range of Scientific matters and papers have been issued on several topics:

- (1) Aids Virus.
- (2) Animal Experiments in Laboratories.
- (3) Chernobyl U.S.S.R. Nuclear Reactor and its Impact.
- (4) Brain Drain.
- (5) Human Embryo Research.
- (6) Career Prospects in Scientific Engineering.

In preparation:

## Energy and Materials Program

### U.S. Natural Gas Availability Advisory Panel

William Vogely, *Chair*  
Department of Mineral Economics  
Pennsylvania State University

Marc Cooper  
Research Consultant  
Consumer Energy Council of America

Lloyd Elkins  
Petroleum Consultant

Ed Erickson  
Professor  
Department of Economics and Business  
North Carolina State University

Daniel Grubb  
Vice President, Gas Supply  
Natural Gas Pipeline Co.

John Haun  
Professor of Geology  
Colorado School of Mines

Donald Kash  
Director  
Science and Public Policy Program  
University of Oklahoma

Harry C. Kent  
Director  
Potential Gas Agency  
Colorado School of Mines

Lawrence Moss  
Energy/Environmental Design and  
Policy Analysis

Roy E. Roadifer  
Chief Geologist  
Mobil Oil Corp.

Benjamin Schlesinger  
Principal  
Energy and Environment Division  
Booz, Allen & Hamilton, Inc.

John C. Sharer  
Assistant Director  
Unconventional Natural Gas  
Gas Research Institute

John Weyant  
Deputy Director  
Energy Modeling Forum  
Stanford University

### Ex Officio:

John Schanz  
Senior Specialist in Energy Research  
Policy  
Congressional Research Service  
Library of Congress

### New Electric Power Technologies: Problems and Prospects for the 1990s Advisory Panel

George Seidel, *Chair*  
Chairman, Department of Physics  
Brown University

Edward Blum  
Vice President  
Investment Banking Division  
Merrill Lynch Capital Markets

Byron R. Brown  
Consultant Manager  
Engineering Service Division  
Engineering Department  
E. I. du Pont de Nemours & Co.

Bill D. Carnahan  
General Manager  
City of Fort Collins Light & Power

Mark Cooper  
Research Director  
Consumer Energy Council of America

Brian E. Curry  
Director, Capacity Planning  
Northeast Utilities

Janice G. Hamrin  
Executive Director  
Independent Energy Producers

William B. Harrison  
Senior Vice President  
Southern Co. Services, Inc.

Eric Leber  
Director of Energy Research  
American Public Power Association

Paul Maycock  
President  
Photovoltaic Energy Systems

Charles McCarthy  
Vice President  
Advanced Engineering  
Southern California Edison



Serge Gratch  
Director, Vehicle and Powertrain  
Component Research Lab  
Ford Motor Co.

Kenneth L. Klierer  
Associate Director for Physical  
Research  
Argonne National Laboratory

Tom Moss  
Dean, Graduate Studies  
Case-Western University

James Mueller  
Department of Materials Science and  
Engineering  
University of Washington

William Nix  
Department of Materials Science and  
Engineering  
Stanford University

Rudolph Pariser  
Director, Polymer Science  
Central Research & Development  
Department  
E.I. du Pont de Nemours & Co., Inc.

William Slichter  
Executive Director, Research  
Materials Science Engineering Division  
AT&T Bell Laboratories

Morris Steinberg  
Vice President, Science  
Lockheed Corp.

J.E. Werner  
Director of Technology Transfer and  
Ventures  
Bethlehem Steel Corp.

**Workshop: Fine Ceramics**

Dennis Ready, *Chair*  
Chairman  
Ceramics Engineering Department  
Ohio State University

Charles Amann  
Head, Engine Research Department  
GM Research Laboratories

Robert Katz  
Chief, Ceramics Research Division  
Army Materials and Mechanics  
Research Center

William R. Prindle  
Director of Materials Research  
Corning Glass Works

Roy Rice  
Director of Materials Research  
W.R. Grace & Co.

David Richerson  
Supervisor, Advanced Materials  
Garrett Turbine Engine Co.

**Workshop: Composites**

Robert Kaiser  
Consultant  
Argos Associates, Inc.

Seymour Newman  
Senior Staff Scientist  
Plastics Development and Applications  
Ford Motor Co.

Ben Wilcox  
Assistant Director  
Materials Science Division  
Defense Advanced Research Projects  
Agency

Carl Zweben  
Advanced Technology Manager  
Space Systems Division  
General Electric Co.



## Appendix II

Anne F. Mead  
Commissioner  
New York State Public  
Service Commission

Alan Miller  
Associate  
World Resources Institute

Bruce W. Morrison  
Vice President  
Westinghouse Electric Corp.

Richard Nelson  
Professor  
Economics Department  
Yale University

Fred Schweppe  
Professor  
Electrical Engineering Department  
Massachusetts Institute of Technology

Jon Veigel  
President  
North Carolina Alternative Energy Corp.

Workshop: Regulatory Issues  
Affecting Developing Electric  
Generating Technologies

Sam Brown  
Senior Vice President  
Virginia Electric Power Co.

John E. Bryson  
Executive Vice President  
Southern California Edison Co.

George Knapp  
Attorney  
Nixon, Hargrove, Devans & Doyle

Therrell Murphy, Jr.  
Vice President and Treasurer  
Southern Company Services, Inc.

David Owens  
Director, Rate Regulation Department  
Edison Electric Institute

Elizabeth Ross  
Attorney  
Birch, Horton, Bittner, Pestinger and  
Anderson

Richard Schuler  
Associate Professor  
Department of Economics  
Cornell University

Andrew Varley  
Commissioner  
Iowa Commerce Commission

Jon Wellinghoff  
Consumer Advocate  
Office of the Attorney General  
State of Nevada

### Western Surface Mine Reclamation

James J. Stukel, *Chair*  
Vice Chancellor for Research &  
Graduate Dean  
The Graduate College  
University of Illinois at Chicago

George Davis  
Senior Hydrogeologist  
S. S. Papadopoulos & Associates

Robert Flagg  
Manager  
Technical and Research Services  
Mining and Reclamation Council of  
America

Tim Gallagher  
Assistant Administrator  
Energy Division  
Montana Department of Natural  
Resources and Conservation

L. Thomas Galloway, Esq.  
Galloway & Greenberg

Sheridan Glen  
Assistant Vice President  
Arch Mineral Corp.

Nick Golder  
Consultant

Pat Holderness  
Commissioner  
Routt County, Colorado

Carolyn Johnson  
Staff Geologist  
Natural Resources Defense Council

Frank Kottlowski  
Director  
New Mexico Bureau of Mines and  
Mineral Resources

George Land  
Director, Technology Assessment  
AMAX Coal Co.

Cyrus McKell  
Vice President, Research  
Native Plants, Inc.

Lyle Randen  
Administrator, Land Quality Division  
Wyoming Department of  
Environmental Quality

Patrick Sweeney  
Regional Director  
Western Organization of  
Resource Councils

Lauri M. Zell  
Director, Government Affairs  
Mining and Reclamation  
Council of America

*Ex Officio:*  
Marlene Berg  
Division of Ecological Services  
Fish and Wildlife Service  
U.S. Department of the Interior

Dan Kimball  
Environmental Protection Specialist  
Air and Water Quality Division  
National Park Service

Al Kloin  
Administrator, Western Technical Center  
Office of Surface Mining  
U.S. Department of the Interior

High-Technology Ceramics and  
Polymer Composites Advisory Board

Rodney W. Nichols, *Chair*  
Executive Vice President  
The Rockefeller University

Robert Buffenbarger  
Chairman, Bargaining Committee  
G.E. Aircraft Engine Group  
International Association of Machinists

Joel Clark  
Associate Professor of Materials  
Systems  
Director of Materials Systems  
Laboratory  
Massachusetts Institute of Technology

Laimonis Embrekts  
Vice President  
Manufacturing and Engineering

Samuel Goldberg  
President  
INCO-US Inc.

Sheldon Lambert  
Senior Vice President  
LTV Corp.

James W. Mar  
Director, Technology Laboratories for  
Advanced Composites  
Department of Aeronautics  
Massachusetts Institute of Technology

Arthur F. McLean  
Manager, Ceramics Research

Joseph Panzarino  
Director, Research and Development  
Advanced Ceramics  
Norton Co.

Norman L. Peterson  
Group Leader and Senior Scientist  
Materials Science and Technology  
Argonne National Laboratories

Dennis W. Readey  
Chairman  
Ceramics Engineering Department,  
Ohio State University

B. Walter Rosen  
President  
Materials Science Corp.

Amy L. Walton  
Member, Technical Staff  
Jet Propulsion Laboratory

Alvin S. Weinstein  
Professor  
Department of Engineering and Public  
Policy  
Carnegie Mellon University

Dick Wilkins  
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Structures and Design Department  
Fort Worth Division  
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Arden L. Bement, Jr.  
Vice President, Technical Services  
TRW Inc.

H. Kent Bowen  
Professor  
Ceramic and Electrical Engineering  
Massachusetts Institute of Technology

William F. Brinkman  
Vice President, Research  
Sandia National Laboratories

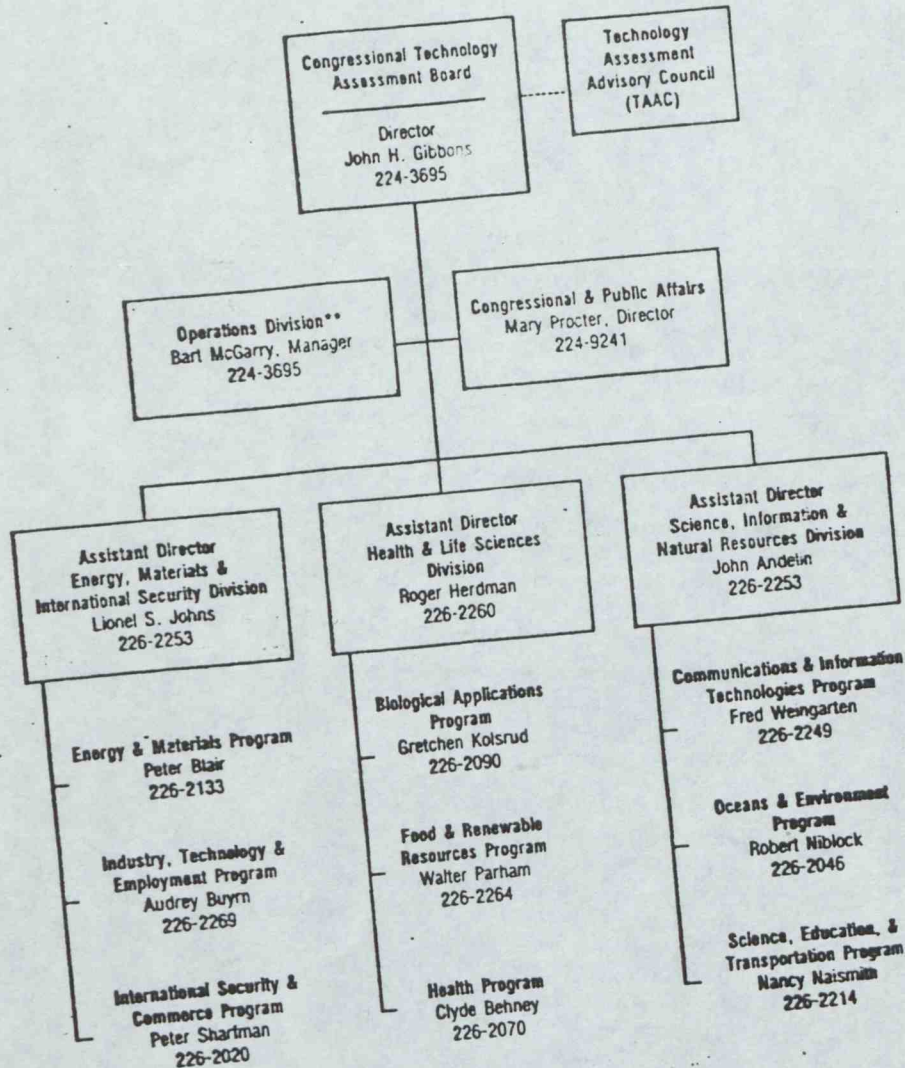
Morris Cohen  
Professor  
Department of Materials, Science, and  
Engineering  
Massachusetts Institute of Technology

George Dieter  
Dean of Engineering  
University of Maryland

Dean Eastman  
T.J. Watson Research Center  
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# OTA • ORGANIZATION CHART



\*Located at 600 Pennsylvania Ave., S.E., Washington, DC.

- Publication requests—224-8996.
- Personnel locator—224-8713.

\*\*Operations Division consists of the following units: Administrative Services, Budget and Finance Office, Information Center, Personnel Office, and Publishing Office.



## Section III.—Work in Progress

More than 46 projects were in progress during fiscal year 1985, including 6 new studies.

This section lists the titles of assessments underway or in press, as of September 30, 1985. For a full description of these projects, please refer to the current "Assessment Activities," OTA-PC-105. This booklet may be obtained from OTA by calling OTA's Publication Request Line (202) 224-8996.

### Energy, Materials, and International Security Division

Technology and the American economic transition

#### *Energy and Materials Program*

Western surface mine reclamation

High-technology ceramics and polymer composites

#### *Industry, Technology, and Employment Program*

Technology and structural unemployment: reemploying displaced adults

International competition in the service industries

#### *International Security and Commerce Program*

Technology transfer to China

Alternatives for improving NATO's defense response

### Health and Life Sciences Division

#### *Food and Renewable Resources Program*

Technology, public policy, and the changing structure of American agriculture

Technologies to maintain biological diversity

Integrated renewable resources management for U.S. insular areas

Low resource agriculture in developing countries

#### *Health Program*

Evaluation of agent orange protocol (mandated study)

Status of biomedical research and related technology for tropical diseases

Medicare's Prospective Payment System: strategies for evaluating cost, quality, and medical technology

Technology and Indian health care: effectiveness, access, and efficiency

Physician payment and medical technology under the Medicare Program

Technologies for detecting heritable mutations

#### *Biological Applications Program*

Alternatives to animal use in research, testing, and education

Reproductive health hazards in the workplace

Life-sustaining technologies and the elderly

Disorders causing dementia



**Science, Information, and Natural Resources Division**

**Communication and Information Technologies Program**

Automation and America's offices

Federal Government information technology: congressional oversight and civil liberties

Intellectual property rights in an age of electronics and information

New communications technology: implications for privacy and security

**Oceans and Environment Program**

Wastes in the marine environment: their management and disposal

Technologies to control illegal drug traffic

**Science, Education, and Transportation Program**

Hazardous materials transportation: technology issues



PRIVY COUNCIL OFFICE  
WHITEHALL, LONDON SW1A 2AT

5 August 1986

Dear Tim,

You wrote to David Morris on 18 July <sup>at 11.45</sup> about a meeting which the Prime Minister held on 17 July with Sir Trevor Skeet, Sir Gerard Vaughan and Sir Ian Lloyd concerning their proposals for enhancing the scientific support available to Members of Parliament.

The main aim of what is being sought here appears to be Government funding for at least five years, and on an annual budget of some 200,000 to £250,000, for a new Parliamentary Office of Technology Assessment to operate on behalf of both Houses and under the auspices of the Parliamentary and Scientific Committee, as part of a general extension of that Committee's work. This proposal follows a visit by Committee members to the United States Congress, and envisages a scaled-down version of the present American Office.

The Parliamentary and Scientific Committee, on whose behalf the delegation of Members saw the Prime Minister, comprises Members of both Houses and non-Members. It is not a formal Parliamentary body. One of its objects is 'to provide Members of Parliament with authoritative scientific information from time to time in connection with debates'.

The present scientific information support resources available to Members include:

- (a) the resources of the House Libraries and their Research Departments. These have greatly expanded in recent years (eg a fivefold increase in Commons Library operating costs between 1974-5 and 1983-4), and their developments and staffing reflects Members' demands in particular fields of Parliamentary interest.
- (b) the power of individual Select Committees (including, for example, the Select Committee on Education, Science and the Arts) to employ specialist advisers 'to supply information which is not readily available', and
- (c) the commissioning of personal research, or the employment of a research assistant, paid for out of the secretarial allowance, recently much increased, that is payable to individual Members.

. / . . .

Tim Flesher Esq  
Private Secretary to the  
Prime Minister



As the Prime Minister pointed out at the meeting, consideration of whether the existing sources of scientific information and research available to Members need to be supplemented, and if so, in what way, is essentially a matter for Parliament. If such supplementation on the lines suggested by the Parliamentary and Scientific Group was shown to be necessary, and was widely demanded, it would seem appropriate for it to be provided under the direct control of Parliament, in association with existing research resources; and, so far as the House of Commons was concerned, under the authority of the House of Commons Commission. The Lord Privy Seal is not aware of evidence of any such general demand.

On the specific suggestions made in the third paragraph of your letter, it would seem doubtful whether contributions from individual Members would provide a sufficiently secure financial basis for the establishment of the sort of Office which the Committee has in mind. Similarly, it is not clear how far the division of the Departmental Select Committee on Education, Science and Arts would facilitate the access which the Committee's Members already have to available scientific information and research.

In general, therefore, the Lord Privy Seal would suggest that the most appropriate way of handling this would be non-committal, leaving the onus for showing evidence of general support for their proposals with the Committee.

Accordingly, the Prime Minister may like to write to Sir Trevor Skeet as follows:

"When you, Gerard Vaughan and Ian Lloyd came to see me on 17 July you kindly left with me a Report by the Science and Technology Group of the Parliamentary and Scientific Committee on providing enhanced scientific support for Members of Parliament.

I have since had the opportunity to read it, and have noted with interest the comments on what is done for Congress and the proposals for a Parliamentary Office of Technology Assessment. As I said when we met, I think the assessment of the need, and general support, for any such addition to the existing Parliamentary information support resources must be primarily a matter for the two Houses. But I am sure that in making that

. / . . .

assessment the Houses would wish to take account of the competing demands on financial resources, particularly in the light of the recent significant increase in the Office, Secretarial and Research Allowance. This has, of course, increased the amount available to individual Members for commissioning personal research. Since the Top Salaries Review Body is now reviewing this allowance and will, I am sure, be making arrangements to obtain the views of Members, you may like to let them know your views about the need for this type of facility for Members and how it might be financed.

As far as the specific point raised at our meeting is concerned, I am doubtful as to how far division of the Departmental Select Committee on Education, Science and Arts would facilitate the access which the Committee's Members already have to available scientific information and research. But no doubt you will be seeking the views of other Members on your proposals and this could be considered in that context.

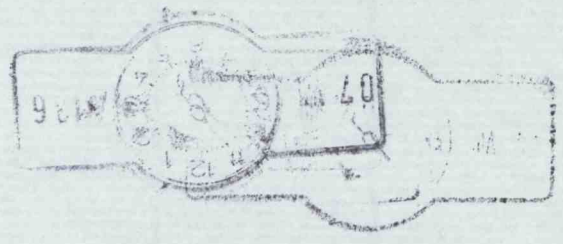
I am sending a copy of the Group's Report, and of this letter, to the Cabinet colleagues referred to in the Conclusions and Recommendations (p.12)."

*Yours,  
Alison*

ALISON SMITH  
Private Secretary



PM: Meeting with Sleet + Vaughan M's, July 8



Answer LPS  
reps

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PRIME MINISTER

You undertook to have a look at the paper which Sir Trevor Skeet et al presented during your meeting on Thursday. A closer look at what they propose does nothing to improve my view of the proposal. I really do not see why Members of Parliament need an in-House source of scientific advice. Once we accept the case for this we would have to accept the case for a whole range of other advisory bodies, no doubt at very considerable public expense.

This is of course not formally a matter for you and I do not know whether you will wish to follow up your meeting with a letter to Sir Trevor. If you think you should do so I have asked the advice of the Lord Privy Seal on the question of whether we might say that while taxpayers' money was unlikely to be available they might follow up their suggestion of using some of the massively increased research allowances which Members have just voted themselves.

*J*

*I think this is the only way to follow it up.  
ml*

Tim Flesher

18 July 1986



SUBJECT  
CC MASTER  
~~SECRET~~



6  
cc. C. Cunningham  
Ch. Scientific Adviser  
Off. Co.

10 DOWNING STREET  
LONDON SW1A 2AA

From the Private Secretary

18 July 1986

Dear David,

The Prime Minister saw Sir Trevor Skeet, Sir Gerard Vaughan and Sir Ian Lloyd yesterday at their request to discuss their proposals for enhanced scientific support for Members of Parliament. The three MPs handed over the attached report which the Prime Minister undertook to read.

During the discussion the Prime Minister pointed out to the Members that what they were proposing was essentially a matter for the House of Commons and indeed expressed a certain amount of scepticism about whether, following the vote to increase Members' allowances this week, further public money for such a purpose could be justified. It is clear that the Members are pursuing something of a campaign on this point and I know the Prime Minister would be grateful for the Lord Privy Seal's advice on how she should respond to the approach she has received.

EF 11

Particular points which arose during the discussion were whether the Parliamentary and Scientific Committee might approach individual Members to dedicate part of their enhanced research allowance for a new organisation of the kind they propose. Alternatively it was suggested that the Department of Education and Science Select Committee might be split so that Members interested in science would have more ready access to the resources available in the House of Commons.

I have no idea whether there is anything in these suggestions and, as I have said, I am sure that the Prime Minister will not want to encourage anything which smacks of empire building.

Perhaps you could seek the Lord Privy Seal's views.

Tim Flesher

David Morris, Esq  
Lord Privy Seal's Office.



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ms

PRIME MINISTER

MEETING WITH SIR TREVOR SKEET, SIR GERARD VAUGHAN AND  
SIR IAN LLOYD

Attached is a brief (Flag A) for your meeting with the above tomorrow. Their request to you for a meeting follows a visit which they paid to the United States to look at the role of the Office of Technology Assessment and the Congressional Research Services in providing back-up services for Senators and Congressmen. What they are seeking is set out in the Early Day Motion which is also attached at Flag B. What they want is a body within the precincts of Westminster to research and prepare reports and advise Parliamentarians on scientific matters independently of the executive.

I am not entirely sure why they are coming to see you since if it is a matter for the Government at all it is a matter for the Leader of the House. It is a pity that Sir Trevor, Sir Gerard and Sir Ian could not have approached Mr. Biffen rather than take up your time at such a busy period.

No doubt you will have a view as a Member of this proposal but points which occur to me are:

- (i) the objective seems to be to turn Members of Parliament into something closer to Senators and Congressmen with even more extensive access to Research Assistants, clerks, computers, libraries etc. All of this might flatter the egos of Members of Parliament but will not necessarily produce better government;



(ii) it is yet another step (of which Select Committees are the most obvious) along the road to building up the consensus model of politics over the Party model. We have seen the effects of putting together on Select Committees groups of disaffected Government backbenchers and able Opposition backbenchers with their own sources of advice and ambitious clerks writing reports based on minority points of view. I note from the brief that the Office of Technology Assessment provides "objective analysis of major public policy issues". I suspect that in our political system such an office would end up by acquiring its own political imperatives and supply objective political advice tailored to its own view of the world;

(iii) one should not underestimate the amount of help already available to Members. They have a substantial allowance; there are the facilities of the Library at their disposal; as Members of Select Committees they can employ Research Assistants and finally they can ask Parliamentary Questions and get the Government to do the work for them. There is no serious evidence that this is insufficient;

(iv) what the three Members propose would be very expensive. The US model (for considerably fewer Senators and Congressmen than there are MPs) has over 600 staff. At a time when (see the note at Flag C) the cost of running Parliament is increasing at well above the rate of inflation (10% last year) how can it possibly be justified for Members to vote themselves a substantial increase in support staff on only one facet of their work? And where on earth would they be put? The House already has difficulty accommodating the swollen army of Research Assistants who now inhabit it.

*Cost of Parliament up to £126m to £72 million.*

As you will see from the above I am not impressed by this proposal which seems to me to reinforce the notion of the House of Commons as an independent source of wisdom and advice entirely independent of the need to support or oppose

the Government of the day. This is all very well, but in the context of the American political system where that is precisely the role of Congress, but it is not what Parliament is about.

*TF*

(TIM FLESHER)

16 July 1986





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Qa 0524

MISS HOLE  
10 Downing Street

15 July 1986

PRIME MINISTER'S MEETING WITH MEMBERS OF THE PARLIAMENTARY AND SCIENTIFIC  
COMMITTEE - THURSDAY 17 JULY 1986

As requested I attach background briefing on the role of the Office of  
Technology Assessment and the Congressional Research Services in providing  
advice on scientific and technological issues to Congress. I also attach a  
short note about the recent visit to Washington by Sir Trevor Skeet, Sir Gerard  
Vaughan and Mr Ian Lloyd which has prompted their request to call on the Prime  
Minister. I am sending the information rather earlier than we agreed so that  
you can consider whether the Prime Minister would wish to have any further  
advice prior to the meeting.

T BUCHANAN

PRIME MINISTER'S MEETING WITH MEMBERS OF THE PARLIAMENTARY AND SCIENTIFIC COMMITTEE - THURSDAY 17 JULY 1986.

Background to Members' Visit to Washington - 31 March - 3 April 1986

The Chairman of the Parliamentary and Scientific Committee, Sir Trevor Skeet, together with Sir Gerard Vaughan (Chairman, Science and Technology Group, Parliamentary and Scientific Committee, Mr Ian Lloyd (Chairman, Select Committee on Energy) and Dr John Blaby (Vice Chairman of the Science and Technology Group, Parliamentary and Scientific Committee), visited Washington to examine the role of the Congressional Research Service (CRS) and the Office of Technology Assessment (OTA) in providing scientific and technological information to Congress. The Group said that their visit was prompted by a growing recognition in Parliament that science and technology was becoming an increasing component of legislation and that there was a need for MPs to understand it further.

Both OTA and CRS are funded by Congress and report only to Congress. For quick advice, comments and briefings, Congressmen look to the CRS, with OTA providing major assessments on the social, economic and political impact of technologies as required by Committee Chairmen. More detailed notes on the two bodies are attached. In all instances, the objectivity and bipartisan nature of the advice is considered paramount and advocacy of a particular position is avoided. A number of other countries with parliamentary systems - the FRG, Netherlands and Australia - are known to be examining ways in which the American model might be adopted to meet the needs of a parliamentary system.

The Embassy has reported that after the meetings the UK group left Washington envious of the scientific and technological advice that Congressmen receive. They were well aware of the differences between the two legislative systems but were convinced of the need for some hybrid organisation which could provide Members of Parliament with timely and concise information on scientific matters. They believed this should come from an objective and bipartisan body funded through some creative financing scheme to ensure that it was independent of Government.



## THE OFFICE OF TECHNOLOGY ASSESSMENT (OTA)

### 1. General

OTA founded in 1972 is a non partisan support agency that serves the United States Congress by providing objective analysis of major public policy issues related to scientific and technological change. It explores complex issues involving science and technology, helping Congress to resolve uncertainties and conflicting claims, identifying alternative policy options, and providing early warning of new developments that could have important implications for future Federal policies. OTA does not advocate policy or actions, but points out their pros and cons and sets out the facts.

### 2. OTA/Organisation

Congressional Technology Assessment (OTA's governing) Board

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(Six Senators

Six Representatives)

Director OTA non-voting member

Advisory Council (10 Public members includes

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Comptroller General of USA and

Director Congressional Research Service

of the Library of Congress)

9 Main Programme Areas

Energy and Materials

International Security and Commerce

Industry Technology and Employment

Food and Renewable Resources

Health

Biological Applications

Communications and Information Technologies

Oceans and Environment

Science, Education and Transportation

### 3. OTA/Operations

OTA's multidisciplinary staff (110 persons) plans, directs and drafts all assessments. It draws extensively on the resources of the private sector, including universities, research organisations, industry and public interest groups.

Requests for OTA assessments may be made by the Chairmen of any congressional committee acting for himself, or on behalf of a ranking minority member, or a majority of committee members; by the OTA Board; or by the OTA Director, in consultation with the Board.

The board decides whether or not OTA will undertake a requested assessment. The bulk of OTA's work centres on comprehensive assessments that may take one or two years to complete. OTA draws on past and current work to provide a variety of responses to meet immediate congressional needs, such as briefings, workshops, testimony and special reports.

e.g. Some Assessments in progress as of March 1986.

Technology Transfer to China.

Technology and the American Economic Transition

International Competition in the Service Industries

Reduction of Industrial Hazardous Wastes.

New developments in biotechnology

Federal Government Information Technology

### 4. Reports

Throughout each project OTA uses advisory panels of experts on a particular subject as a way of ensuring that reports are objective, fair and authoritative.

After a completed assessment has been approved by the Director copies of the formal report are sent to the Technology Assessment Board for review and for authorisation for release.



## The Congressional Research Service (CRS)

### 1. GENERAL

The Congressional Research Service is the department within the Library of Congress which, under its statutory charter, works exclusively as a reference and research arm for Members, committees, and staff of the United States Congress.

The Service makes such research available without partisan bias, in many forms including studies, reports, compilations, digests and background briefings. Upon request, CRS assists committees in analysing legislative proposals and issues, and in assessing the possible effects of these proposals and their alternatives. The Service's senior specialists and subject analysts are also available for personal consultations in their respective fields of expertise.

The Service currently responds to over 450,000 inquiries a year, the answers being provided by 587 research and information specialists, supported by 273 clerical and administrative staff. CRS had a budget for FY 1986 of \$38,963,000. The Service's personnel are professionals nationally recruited college graduates, the majority with advanced degrees, and the diversity of expertise is notable, including attorneys, economists, engineers, information scientists, librarians, defense and foreign affairs analysts, political scientists, public administrators, physical and behavioral scientists, and social program specialists, among others.

### 2. CRS/Organisation

The Service covers a much wider field than science and technology and is divided into seven Research Divisions:

- American Law
- Economics
- Education and Public Welfare
- Environment and Natural Resources

Foreign Affairs and National Defense  
Government  
Science Policy Research

3. CRS/Operations

The Service responds to inquiries from all Members, all committees and subcommittees, and staff in the Washington as well as the District or State offices of the Members). An inquiry may be as simple as a question on the population of California or as complex as a study of the possible ways to provide medical care to the aged. Average inquiries are answered within one to three days, and most research studies are delivered within two to four weeks. In addition to written products and tailored oral briefings, CRS staff present information to Members and staff of Congress in seminars and workshops. The Service averages two or three such seminars every week when Congress is in session.

4. Reports

The research product may take the form of brief, 2-3 page typed memoranda or extensive reports of several hundred pages, many of them issued as congressional publications e.g. floor statements in the Congressional Record, committee reports and House and Senate documents. Much of the research is available on-line in the computers (issue briefing papers and legislative digests) used in congressional offices.



B

1067 **ADVICE ON TECHNOLOGY FOR PARLIAMENTARIANS OF BOTH HOUSES**

Sir Trevor Skeet  
Sir Gerard Vaughan  
Sir Ian Lloyd  
Dr Jeremy Bray  
Mrs Renée Short  
Mr Paddy Ashdown

|                       |                     |                     |      |
|-----------------------|---------------------|---------------------|------|
| Dr Norman A. Godman   | Mr Laurie Pavitt    | Mr Alex Eadie       | ★ 50 |
| Mr David Knox         | Sir David Price     | Mr Peter Hardy      |      |
| Mr Nicholas Winterton | Mr Neil Thorne      | Mr Jack Thompson    |      |
| Sir Michael Shaw      | Sir Edward du Cann  | Mr Robert Banks     |      |
| Mr Gary Waller        | Mr Ian Gow          | Mr Paul Marland     |      |
| Sir John Osborn       | Dr Michael Clark    | Sir Kenneth Lewis   |      |
| Mr John Carlisle      | Mr Ken Weetch       | Sir Anthony Kershaw |      |
| Mr D. Heathcoat-Amory | Sir John Page       | Mr Tam Dalyell      |      |
| Mr Alfred Morris      | Mr Michael Marshall | Miss Janet Fookes   |      |
| Mr Neil Hamilton      |                     |                     |      |

That this House, while recognising the support and assistance granted to the United States Congress and Senate during the past thirteen years by the Office of Technology Assessment, acknowledging that a similar approach is currently being considered for establishment in France, the Federal Republic of Germany, the Netherlands, Austria and Australia to obtain well-informed and objective assessment, and in considering the rapid growth of technology in the past decade and its impact on economic development, health, environment and so forth, feels that where the need arises that there should be a body at Westminster to advise Parliamentarians of both Houses upon the implications and impact of scientific innovation, the identification of commercially exploitable areas of science, the correct evaluation of conflicting technical data, the collation of information secured from abroad, and the rational use of national resources ; and urges the House of Commons Commission or relevant authority to establish a body within the precincts of Westminster to research, prepare reports and advise Parliamentarians on scientific matters independently of the executive, while at all times subscribing to three crucial elements, namely, that it will accord with British Parliamentary traditions, be funded in part by the House of Commons Commission, and evolve out of the existing structure of the Parliamentary and Scientific Committee.

★ The figure following this symbol gives the total number of names of Members appended, including those names added in this edition of the Notices of Questions and Motions.

Grey Scale #13



**A**

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