

Confidential Filing

PM's Meeting with Sir George Porter,
President of the Royal Society

Science &
Technology

May 1986

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10 DOWNING STREET

THE PRIME MINISTER

5 August 1986

Dear Sir George.

Thank you for your letter about a National Science Advisory Council and a merit awards scheme for university scientists. I think the latter is a very interesting idea, and I am pleased that you intend to pursue it with the Department of Education and Science and the University Grants Committee.

I am very sympathetic to the Royal Society's general approach on science and technology and I welcome the work which you are already undertaking in looking at the health of the basic sciences and in promoting the public understanding of science. Vigorous debate about scientific advance and also the application of new technologies should take place and I have sought to promote this in a number of meetings with scientists and industrialists. But I am not convinced that a National Science Advisory Council is the most sensible way of achieving the objectives which we both share.

The Government has, as you know, taken very substantial steps to strengthen the central machinery for considering science and technology matters and Ministers have regular interdepartmental discussion with advice from the Chief Scientific Adviser and from ACARD in the Cabinet Office as well as the advisory machinery which exists within Departments. A major and continuing theme of these discussions is improvement in the contribution made by publicly-funded research and development to strengthening the UK economy. A particular current initiative, whose

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implementation I await with interest, is ACARD's recommendations for a forum, outside Government, which would bring together industry, the scientific community and Government to identify exploitable areas of science for the future. I see this initiative as complementary to the strengthened machinery within Government. I hope that the Royal Society will be active participants in the ensuing debate.

I set great store on the Society's independence and would want to see this fully upheld in all of its dealings with Government. At the same time I am anxious to ensure that Government is enabled, at high level, to learn of the Society's views on scientific and technological matters of public import. I note the substantial input which you already make to the work of the ABRC and the Research Councils. I have suggested to the Secretary of State for Education and Science that, in addition, he might seek periodic discussions with the Society, to give an opportunity for matters to be raised which the scientific community believe should be on the science policy agenda. I believe that it is through such channels that a productive dialogue can take place.

Since you have also put your proposal for a National Science Advisory Council forward in your evidence to the House of Lords Select Committee Sub-Committee on Civil R&D further careful consideration will, I know, be given to it and I will maintain an open mind on the issue until we receive the Select Committee Report.

Yours sincerely
Margaret Thatcher

Sir George Porter, P.R.S.



10 DOWNING STREET

Prime Minister:

Attached is a
draft reply to Sir
George Ponter about the
Royal Society and its
involvement in policymaking,
prepared by the Chief Scientific
Adviser. As you will see he
(and RTA) are against ex-
officio places on ACARD —
there would be a whole
series of claimants. The
advice from Mr Farrelough
is at page A

W



W0145

MR ADDISON

1 August 1986

PROPOSED NATIONAL SCIENCE ADVISORY COUNCIL

I attach a revised draft reply to Sir George Porter's letter of 1 July. It has been prepared in consultation with the Department of Education and Science. Mr Baker has agreed the reference to periodic discussions which he would hold with the Royal Society (RS). The Society already makes a substantial input into the work of the Advisory Board for Research Councils (ABRC) and the individual Research Councils. It is already open to Sir George Porter to sit on ABRC should he so wish. His predecessors have preferred to nominate an officer (Sir John Mason, Treasurer) in order, I understand, to maintain some distance from the formal machinery of Government. Sir George may decide to adopt a different line and I believe that Sir David Phillips will discuss this with him informally. A formal invitation would therefore not be appropriate at this juncture. In addition to ABRC membership the RS has an assessor on each Research Council who is normally a Fellow of the Society in a relevant area of science.

2. ACARD has three members who are FRS's, as are two of the Chief Scientific advisers who attend. Its membership is *ad hominem* and this principle has been strongly defended when representative membership has been sought - most recently by the TUC.

3. It would be inadvisable to breach that principle for the RS, which is concerned in the main with basic science, without recognising the claims of other bodies, such as the Fellowship of Engineering, which are more relevant to applied R & D. Sir George Porter would similarly not have a high claim to personal membership since his scientific strength is not at the applied end of the spectrum. The one exception to the *ad hominem* rule is Sir David Phillips who sits on ACARD as Chairman of ABRC but this is reciprocal and the two bodies have a joint Secretariat. I therefore counsel against Sir George Porter being invited to sit on ACARD.

4. Sir David Hancock has proposed that Sir George be invited to the Permanent Secretaries seminar at Sunningdale in October to open a discussion on Science Policy. I have supported that proposal which Sir Robert Armstrong has accepted.

5. I truly believe that the RS is not looking for direct involvement within the machinery of Government but is seeking to broaden the forum for debate and advice taken into account in reaching decisions on science policy. I think it is a plea for the scientific community to have a stronger influence over the decisions being made which effect its own future development and the contribution which it believes it can make to the economic health and welfare of the country. This is an issue which could usefully be explored and the Sunningdale Conference will provide an important opportunity to discuss it.

6. Because the Royal Society has put the proposal for a new Council forward in its evidence to the House of Lords Select Committee Sub-Committee on Civil R & D I suggest that the proposal should not be flatly rejected at this stage but a strong note of scepticism should be sounded.

7. I am copying this letter to Rob Smith (Department of Education and Science), John Mogg (Department of Trade and Industry), Michael Stark and Brian Unwin here.



JOHN W FAIRCLOUGH
Chief Scientific Adviser

DRAFT LETTER FROM THE PRIME MINISTER TO SIR GEORGE PORTER

SEATED

Thank you for your letter about a National Science Advisory Council and a merit awards scheme for university scientists. I think the latter is a very interesting idea, and I am pleased that you intend to pursue it with the Department of Education and Science and the University Grants Committee.

I am very sympathetic to the Royal Society's general approach on science and technology and I welcome the work which you are already undertaking in looking at the health of the basic sciences and in promoting the public understanding of science. Vigorous debate about scientific advance and also the application of new technologies should take place and I have sought to promote this in a number of meetings with scientists and industrialists. But I am not convinced that a National Science Advisory Council is the most sensible way of achieving the objectives which we both share.

The
My Government has, as you know, taken very substantial steps to strengthen the central machinery for considering science and technology matters and Ministers have regular interdepartmental discussions with advice from ^{the} Chief Scientific Adviser and from ACARD in the Cabinet Office as well as the advisory machinery which exists within Departments. A major and continuing theme of these discussions is improvement in the contribution made by publicly-funded research and development to strengthening the UK economy. A particular current initiative, whose implementation I await with interest, is ACARD's recommendations for a forum, outside Government, which would bring together industry, the scientific community and Government to identify exploitable areas of science for the future. I see this initiative as complementary to the

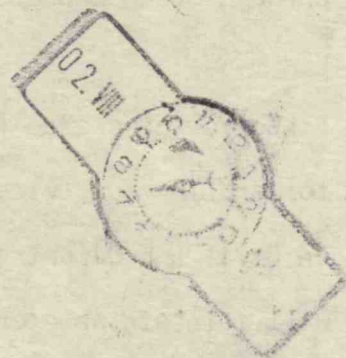
strengthened machinery within Government. I hope that the Royal Society will be active participants in the ensuing debate.

I set great store on the Society's independence and would want to see this fully upheld in all of its dealings with Government. At the same time I am anxious to ensure that Government is enabled, at high level, to learn of the Society's views on scientific and technological matters of public import. I note the substantial input which you already make to the work of the ABRC and the Research Councils. I have suggested to the Secretary of State for Education and Science that, in addition, he might seek periodic discussions with the Society, to give an opportunity for matters to be raised which the scientific community believe should be on the science policy agenda. I believe that it is through such channels that a productive dialogue can take place.

Since you have also put your proposal for a National Science Advisory Council forward in your evidence to the House of Lords Select Committee Sub-Committee on Civil R & D further careful consideration will, I know, be given to it and I will maintain an open mind on the issue until we receive the Select Committee Report.

Sir G. Porter: SCI & TECH.

May 186.



Sir G. PORTER

DG2AJC
(Back-up)



10 DOWNING STREET

From the Private Secretary

28 July 1986

The Prime Minister has seen your minute to me of 17 July about Sir George Porter's letter, and the Royal Society proposal for a National Science Advisory Council.

Ry // The Prime Minister has commented that some way must be found of finding a role for the Royal Society within the existing machinery before she replies to Sir George, possibly by putting its President ex officio on one of the scientific committees - perhaps ACARD or the ABRC. I should be grateful for urgent advice from you, in consultation with Rob Smith at the Department of Education and Science, as soon as possible.

The Prime Minister has noted the point you make about science seminars and confirmed that the idea should be pursued.

I am sending a copy of this letter to Rob Smith (Department of Education and Science), John Mogg (Department of Trade and Industry), Michael Stark (Cabinet Office) and Brian Unwin (Cabinet Office).

Mark Addison

J. W. Fairclough, Esq.,
Cabinet Office.

CJ



10 DOWNING STREET

THE PRIME MINISTER

Thank you for your letter about a National Science Advisory Council and a merit awards scheme for university scientists.

On the proposed National Science Advisory Council, the Government has, as you know, taken substantial steps to strengthen the central machinery for considering science and technology matters, the most recent being the establishment of the new Science and Technology Assessment Office which was announced on 2 July. In addition to the advice which I receive from ACARD, and from the Chief Scientific Adviser in the Cabinet Office, there are regular meetings of Chief Scientists. The Annual Review of Government Funded R & D provides an overview which is considered by Ministers and officials, both of whom have frequent occasions to discuss science and technology matters interdepartmentally. I am also awaiting with interest the outcome of the discussions on ways of implementing ACARD's recommendation for a forum, outside Government, which would bring together industry, academia and Government to identify exploitable areas of science for the future.

So, while I fully appreciate the Royal Society's concern, and while the Government greatly values the opportunities for discussion with the scientific community, I am not convinced that there is a gap in our central machinery which would justify setting up a further advisory body.

On your second proposal, I think the idea of a merit awards scheme for university scientists is an interesting one, and I am pleased that you intend to pursue it with the Department of Education and Science and the University Grants Committee.

Sir George Porter, P.R.S.

PRIME MINISTER

Sir George Porter came to see you last month to talk about two ideas he had:

- (i) for a new national science advisory council;
- (ii) for increased rates of pay for some science professors in universities.

Your inclination was that yet another advisory body in the science area was not required, but that it would be worth looking into Sir George's ideas on pay. John Fairclough's note, at Flag A, is very much in line with your reaction. Also attached at Flag B is a note from DES. A draft reply to Sir George's letter, at Flag C, which he sent in following the meeting is attached for your signature at Flag D.

MEAT

MEA

25 July 1986

JALAZG

*I think he needs to
find a way to improve
the F.R.S. in play by
finding a role for them.
before we reply to Sir George
and*



DEPARTMENT OF EDUCATION AND SCIENCE

ELIZABETH HOUSE YORK ROAD LONDON SE1 7PH

TELEPHONE 01-934 9000

FROM THE SECRETARY OF STATE

Mark Addison Esq
10 Downing Street
LONDON SW1

*Pls
Mark*

23 July 1986

Dear Mark,

SIR GEORGE PORTER'S LETTER OF 1 JULY TO THE PRIME MINISTER

You sent me a copy of your note to John Fairclough of 7 July about the Royal Society's proposal for a National Science Advisory Council (NSAC) and Sir George Porter's ideas about how to tackle the brain drain. I understand that Sir Robert Armstrong is considering a suggestion that that Sir George Porter might be invited to the October Sunningdale conference of Permanent Secretaries for an agenda item on science policy.

My Secretary of State welcomes this suggestion. Although, as I indicate below, we have some reservations about a NSAC, he thinks it important to maintain dialogue with the Royal Society and if possible to understand better what lies at the root of their concern. He has asked Sir David Phillips to probe this further in informal discussion with Sir George Porter. Hence we think a somewhat temporising reply would be appropriate for now.

As to the NSAC there seem to be two main objectives - to foster public appreciation of the importance of science and technology and to help the UK develop a coherent national approach to the planning and exploitation of science and technology. We wholeheartedly endorse these objectives; as you know they feature strongly in a good deal of the Department's work in this area. The doubt is whether a NSAC would be an appropriate or useful piece of machinery.

Although it is probably not apparent to the outside world, in practice there is considerable - and increasing - co-ordination of Government policies in science and technology. The establishment of E(RD) and E(RD)(0), and the development of the work of the Chief Scientific Adviser and his secretariat in the Cabinet Office (notably through the Annual Review of R and D) are major steps towards achieving more coherent policies on R and D. As to the fuller involvement of industry (suggested as one of the objectives of the NSAC) the Government already has plans to do this through the machinery for generating debate about science and technology

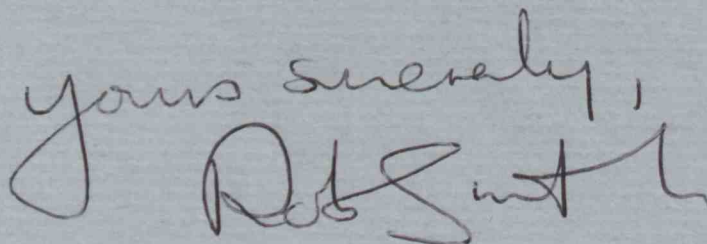
priorities which ACARD recommended in its report "Exploitable Areas of Science".

Quite apart from these new developments, there is a considerable number of existing bodies - not just ABRC, ACARD and other Departmental advisory bodies, but also (apart from the Royal Society) the Fellowship of Engineering, the Engineering Council, the British Association for the Advancement of Science, the Council for Science and Society, and the Select Committees of the two Houses. Given this collection it is not clear what a NSAC would distinctively add. This is one of the matters which we hope Sir David can illuminate from his further talk.

Sir George's letter also mentions the idea of a merit award scheme for reducing the brain drain. In principle the idea is attractive, although we note that the evidence from Sir David Phillips's 1985 enquiry was that it was the facilities that tempted British scientists overseas rather than higher salaries. A merit award scheme also raises difficult issues of selection and funding. Sir George mentioned the idea to Mr Walden recently and we have subsequently written to Sir George for further information. We suggest that all the Prime Minister need say in response to Sir George is that she understands that he has already taken up the idea with DES and they will be pursuing it with him.

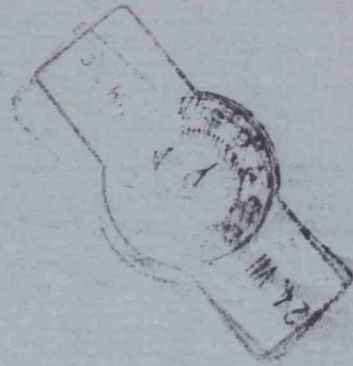
You also asked for advice on ways of improving the presentation of the Government's science policy. One point here, which I think Mr Fairclough is already addressing, is that the establishment of the new Ministerial Committee E(RD) is subject to the Cabinet committee confidentiality rules. We think it would be desirable to make its existence known as evidence of the Government's interest and concern in these matters. We hope that an exception might be made in this particular case. On presentation more generally, Mr Baker will be looking, over the next six months, for an opportunity to make a major speech on science policy. We are also considering the possibility of the Department producing a short booklet about the Government's policies in HE and science. And in 1987 Mr Baker expects to receive strategy advice from the ABRC - which he would expect to publish for wider discussion, and on the basis of which the Department will formulate policies on such major matters as strategic subject priorities for the DES-supported science base.

I am copying this letter to Mr Fairclough and to John Mogg and Brian Unwin.

yours sincerely,


R L SMITH
Private Secretary

SCI + TECH
SIRG. PORTER
5/26



W0145

MR ADDISON

ROYAL SOCIETY PROPOSAL FOR A NATIONAL SCIENCE ADVISORY COUNCIL.

Your minute of 7 July covering Sir George Porter's letter of 1 July refers.

I deal first with Sir George Porter's two specific proposals, for a National Science Advisory Council (NSAC) and a national merit awards scheme, and then with the more general issue of presentation of the Government's science policy.

Sir George has not made a strong case for an NSAC. The case, such as it is, seems to rest on the belief that the arrangements for considering science and technology matters centrally across departmental boundaries are too weak. In fact, they have been considerably strengthened during the past year by the creation of the Ministerial Sub-Committee on Research and Development (E(RD)) and its supporting official committee (E(RD)(O)), and by the establishment of the Assessment Office. When these are added to the existing central bodies, notably ACARD, the Sub-Committee of Chief Scientists, and my own Secretariat, and when account is taken also of the arrangements that are likely to be established outside Government as a result of the ACARD report on Exploitable Areas of Science, I do not believe that a gap remains which justifies the creation of a further advisory body with the wide role which Sir George envisages. This view is strengthened by the fact that, to do its proposed job at all sensibly, the NSAC would need a substantial Secretariat and almost certainly a system of sub-committees or working groups. Sir George's letter was written before the Assessment Office was announced, and he will naturally be unaware of E(RD) and E(RD)(O), and I therefore recommend that the Prime Minister's reply refers to these developments, in suitably guarded language.

The merit award scheme is at first sight a more promising proposal. There are issues of selection and funding which Sir George has not yet addressed, but if these could be overcome it might indeed have a morale-raising effect among academic scientists, as well as the direct financial encouragement it will give

Handwritten notes:
Dandy - I agree that we must pursue the idea of further revision. But the merit award is not a viable thing to do for the F.R.S. - possibly by putting it on some special committee
17 July 1986
at Harp

Handwritten: C132

them to remain in the UK. I understand that it is being considered seriously within DES, the UGC and the Research Councils, and, as Sir George suggests, they are the appropriate channel through which he should pursue this proposal.

I attach a draft response to Sir George.

So far as the presentation of the Government's science policy is concerned, it seems to me that there are two misconceptions that we need to tackle. The first is that Government has no proper central machinery for looking at science and technology issues as a whole; this relates closely to Sir George Porter's NSAC proposal. The second is that Government does not care about science, and particularly about basic science which cannot be shown to be of short term economic value. The basic science lobby is particularly vociferous, and this misconception has tended to poison the reception given to any Government science and technology initiative. An example is some of the coverage of the Assessment Office, which displayed a suspicion that it was intended as a weapon with which to attack basic science. I believe we need to quieten this lobby if we are to be able to get a sensible public discussion on other important issues, for example the low level of research and development financed by industry.

The announcement of the Assessment Office has helped to overcome the first misconception, though we still need to take opportunities to repeat the message and to emphasise that both Ministers and officials do discuss science and technology matters frequently on an interdepartmental basis. The second will need more sustained attention, and I consider that at the same time we should take the opportunity to raise related issues, such as R & D spend by industry.

The most obvious vehicle for presenting the Government's science policy is Ministerial speeches, particularly by the Prime Minister, the Lord President, and the Secretaries of State for Education and Science and Trade and Industry. A major speech on science policy by any of these, though preferably the Prime Minister, would be of great benefit. I should be happy to offer drafting help. This, I believe should be supported by shorter references in other relevant Ministerial speeches (for example Industry Year speeches) on which again I should be happy to assist. Interviews with science journalists would provide a

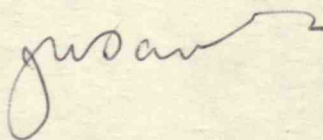
valuable back-up, but I suggest these should follow rather than precede Ministerial statements, in order that the discussion should be more on ground of the Government's own choosing.

Another important signal of interest is Ministerial attendance at major science events, such as facility openings, and I suggest that any such events over the remainder of this year should have priority in Ministerial diaries, particularly events with a basic science slant.

In addition, the Prime Minister's science seminar in 1983 was generally regarded as successful, and DTI have suggested building on this with an annual event, perhaps chaired by myself but with Ministerial participation. This would allow the Government's policy to be presented to an interested and influential audience, and would also give the science community the feeling that their voice was being heard. The risk is that it would become primarily an occasion for criticism of the Government, but I believe this risk could be minimised in the planning. Such an event might be slightly distanced from Government by being held under the joint auspices of ABRC and ACARD, and a role might be found for the Royal Society.

Finally, I consider that I have now been in post long enough to become rather more visible publicly, and, subject to Sir Robert Armstrong's agreement, I propose to begin to make myself available for interview by selected journalists.

This minute, which I am copying to Sir Robert Armstrong, incorporates views from DES, DTI and the Economic Secretariat; I understand that DES will also be making their views known direct in a Private Secretary letter.



JOHN W FAIRCLOUGH
Chief Scientific Adviser

JALAZH

DRAFT LETTER FROM THE PRIME MINISTER TO SIR GEORGE PORTER

Thank you for your letter about a National Science Advisory Council and a merit awards scheme for university scientists. ^{On your second proposal} I think ~~the latter~~ ^{is a very} interesting ^{idea}, and I am pleased that you intend to pursue it with the Department of Education and Science and the University Grants Committee. ^{for university scientists}

^{On it}
~~So far as the~~ proposed National Science Advisory Council is concerned, ~~my~~ the Government has, as you know, taken ~~very~~ substantial steps to strengthen the central machinery for considering science and technology matters, the most recent being the establishment of the new Science and Technology Assessment Office which was ^{announced} ~~made public~~ on 2 July. In addition to the advice which I receive from ACARD, and from the Chief Scientific Adviser in the Cabinet Office, there are regular meetings of Chief Scientists. The Annual Review of Government Funded R & D provides an overview which is considered by Ministers and officials, both of whom have frequent occasions to discuss science and technology matters interdepartmentally. ^{also} ~~In addition,~~ I am awaiting with interest the outcome of the discussions on ways of implementing ACARD's recommendation for a forum, outside Government, which would bring together industry, academia and Government to identify exploitable areas of science for the future.

~~In the light of all this, I am far from convinced that there remains a gap in the central machinery which would justify setting up a further advisory body.~~

" So, while I fully appreciate the Royal Society's concerns, ~~I~~
I am not convinced that there is a gap in our central machinery which would justify setting up a further advisory body.

while the best practice remains the opportunity for discussion with the scientific community,



SCIENCE + TECHNOLOGY — PM'S
meeting with Sir George Porter — MAY '86

cc/b/s

P 02158

1. MWA free
2. j.c.

From: J B UNWIN
8 July 1986

MR FAIRCLOUGH

cc Mr Wiggins
Dr Walker


PROPOSED NATIONAL SCIENCE ADVISORY COUNCIL

Some immediate reactions to the letter to the Prime Minister from Sir Georger Porter to which Mr Addison has asked for a draft reply.

at that

2. On the substance, there are two main issues. First, the proposed new Council; and second the suggestion of a merit award scheme for university scientists and technologists.
3. On the Council, I must confess to being sceptical about the utility of yet another advisory body. My impression is that we have no shortage of advice in the science and technology field; the problem lies in finding the resources to implement advice, and to persuade Departments of the need to cooperate and if necessary to subordinate their particular departmental interests to the wider interests of the Government as a whole. MOD R&D is, of course, the classical and most important case of this. Sir George Porter's note (paragraph 8) states that his proposal does not involve any immediate changes in existing advisory bodies. I suggest, however, that the offsetting savings principle should apply. At the very least, we ought to review the need for all the existing bodies before setting up another one.
4. The point about merit awards is on the face of it an attractive one, which would not cost much in overall terms. But it could have repercussions elsewhere, and you will need to obtain Treasury views on this.
5. The other main point raised by Mr Addison is that of the presentation of the Government's science policy. This is in fact just the point I raised recently in my minute to you of 24 June. I am not sure that the establishment of a new Council has much to do with this. But I remain of the view that the Government are not getting near enough credit for the way they are tackling the main issues in this area, and I hope it will be possible to find new vehicles for remedying this. Mr Addison told me the other day that it did not look as if there would be a suitable speech by the Prime Minister in the near future.

Other Ministers could, however, be tried - for example, the Lord President or the Secretary of State for Trade and Industry. It might also be possible to persuade the Treasury to include an article on science policy (necessarily with an expenditure angle) in one of the forthcoming Economic Progress Reports. As before, I should be glad to help further on this. It would, however, be instructive if someone could compile a check list of the initiatives that the Government have taken in the last two or three years, including the response to significant ACARD, House of Lord or other recommendations.



J B UNWIN

SCIENCE + TECH George Porter May 86





10 DOWNING STREET

From the Private Secretary

MR. JOHN FAIRCLOUGH
CABINET OFFICE

BF 1
Sir George Porter has now provided the Prime Minister with the note he promised at their meeting in May. This outlines the Royal Society's proposal for a National Science Advisory Council, and Sir George's ideas about how to tackle the brain drain.

I should be grateful for a draft reply for the Prime Minister to send Sir George, in consultation with other departments as necessary.

The Prime Minister believes that one of the reasons lying behind the Royal Society's proposal for a new Council may be a feeling that the presentation of the Government's science policy needs to be improved. The Prime Minister would accordingly be grateful for advice on what might be done more generally to get over more effectively the considerable amount of work which has gone on, and which is still under way, in the science policy area.

I am copying this minute to Rob Smith (Department of Education and Science), John Mogg (Department of Trade and Industry) and Brian Unwin.

Man Addison

MARK ADDISON

7 July 1986

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(2)

PRIME MINISTER

SIR GEORGE PORTER

When you met Sir George recently he put two proposals to you:

- (i) there should be a new National Science Advisory Council, preferably chaired by you, to advise on science policy and to report to Cabinet;
- (ii) a small number of university teachers should have their salaries increased by a significant amount for a set period to act as an incentive and to help stem the brain drain.

Sir George has now provided a note on his proposals, as he promised.

It is very difficult to see how a new National Science Advisory Council could be effective, and I think this was your reaction at the meeting. It would inevitably duplicate the work of the ABRC, ACARD and now the Cabinet Committee looking at Government expenditure on research and development. It would be a further drain on the time of key people in the field. It would fit uneasily into the Government machine - supposedly advising Cabinet, but being chaired by you. There would be problems of confidentiality and access to papers. John Fairclough and his Secretariat would not have the time to give it the service it would need. I believe, however, the real concern lying behind Sir George's proposal is his feeling that the presentation of the Government's science policy to the scientific community is not as good as it should be. A great deal of good work in Government is going on, but it is difficult to publicise it, and the "Save British Science" lobby is accordingly able to capture support.

On the second proposal, I had thought that Sir George was proposing that Chairs supported by the Royal Society should be halved in number, but the salaries doubled. The proposal in

his letter is a rather different one, and goes wider. (I rather think, too, Sir George has misunderstood your reference to "peanuts". I do not think you were referring to the extra public money that might be involved, but to the overall impact his scheme might have on the brain drain it was supposed to counter).

All this is for information at this stage. I shall ask the Cabinet Office to co-ordinate a reply to Sir George's proposals. If you agree, I shall also ask them to provide advice on what might be done to improve the presentation of the Government's science policy.

Agreed - but we must do it fairly soon, not

Mark Addison

Mark Addison

4 July 1986

From: Sir George Porter, P.R.S.

R417

CBG



The Royal Society

6 Carlton House Terrace, London, SW1Y 5AG

Telephone 01-839 5561 Ext 201 Telex 917876

1 July 1986

Our ref: PRS/CM

Dear Prime Minister,

When we spoke on 29 May I promised to provide a note on the Society's recent submission to the House of Lords proposing a National Science Advisory Council. I am sorry about the delay but I wanted to consult my colleagues on several points.

As a scientist yourself you appreciate the critical importance for our future of the UK's response to scientific advance, but this message has yet to be perceived by enough people in senior positions in Britain. Our proposal aims to generate well-informed debate and understanding between government, industry and the scientific and engineering community and hence to provide a focus of broadly-conceived advice to Ministers. I enclose a brief paper 'National Science Advisory Council' which outlines the proposal.

I also promised to write further about a possible means of discouraging the loss of some of our best scientists to other countries, particularly the USA. Although a number of factors contribute to this one cannot avoid the conclusion that the very high salaries which some other countries are prepared to pay for top brains and the virtual absence of differentials in the UK universities is a major incentive to emigration. My suggestion was that a merit award scheme for university scientists and technologists, somewhat similar to that already operated for consultants in the national health service, be introduced. I have in mind a relatively small number of university teachers and a merit award of up to 50% of salary for five years.

As you said, the total money involved is 'peanuts' and I was encouraged by your response. Such a scheme would of course be quite separate from general salary scale improvements at present being considered.

The follow up on the merit award scheme is something that we can pursue with the University Grants Committee and the Department of Education and Science. The follow up on the National Science Advisory Council would, of course, be a matter for Government, though I would of course be happy to discuss it with you further.

Yours sincerely,

President

The Rt Hon. Margaret Thatcher, M.P., F.R.S.
10 Downing Street,
LONDON, SW1A 2AA

NATIONAL SCIENCE ADVISORY COUNCIL

1. Science and technology are the major engine for change in the world today. New knowledge raises new social expectations and, conversely, may call into question existing public policies. New opportunities are created for improving standards of living and social welfare. Science is an expanding resource through which new markets can be identified and satisfied through the application of science and technology in engineering.
2. Successful nations in future will be those that best harness the power of that engine. The process is complex and the timeframe in which science and technology are translated into wealth is highly variable. A large number of decisions by diverse parties in industry, academia and government are involved. It is a necessary but not sufficient condition that individuals and organizations recognize and respond to the challenge; but governments too need to help create the pre-conditions and climate for the successful exploitation of scientific and technical advance.
3. Two things follow. First, that the people at large at all levels and in all capacities must be aware of the impact and importance of science and technology and have some understanding of its role in a modern society. This issue of the public understanding of science is one to which the Royal Society is applying increasing attention and resources, we believe in the national interest.
4. Second, to us it follows that a coherent national approach is needed in the exploitation of S & T and to its impact upon policies for industry, trade, environment, health, agriculture and defense; an approach comparable to that in determining public expenditure. Many of our competitors have recognized this. They have adopted a strategic approach which aims to achieve added value for the nation from individual and corporate effort by recognizing the different timeframes of the responsibilities, duties, incentives and constraints for individuals, corporations and the nation as a whole.
5. This is the background to our proposal to the House of Lords Select Committee on Science and Technology that in still further strengthening the consideration of these matters at the centre of Government, there would be substantial merit in creating a National Science Advisory Council. We have been supportive of the work of ACARD and welcomed the decision of your administration to implement an Annual Review of Government-funded R & D. As our Supplementary Evidence to their Lordships points out (copy at Annex) these could, with great advantage, be further built on.
6. First, the Prime Minister or a Senior Cabinet colleague without allegiance to one particular department chairing the Council would help put into proper perspective the dependence of the nation's prosperity upon its response to the advance of S & T. Second, the development of a relatively open forum for advice would elicit a wider spectrum of views than those present reaching Ministers on the areas likely to give the best return from private or public investment. Third, by taking a longer-term view than can either private companies or Government Departments, the Council would be a powerful tool in assisting Ministers to identify the essential requirements for successful national performance.

Finally, the Council should help foster the growing appreciation among industrialists and financiers of the significance of scientific and technological advance and should also help ensure that the UK science and engineering base has the capacity to respond to national demand.

7. We would see the Council composed of about twelve ad hominem members representing fundamental and applied science; industry, commerce and finance, and science education. The chief scientific adviser would attend as would Departmental ministers, as appropriate.
8. The proposal does not involve any immediate changes in existing advisory bodies and therefore the Council could easily be established for a trial period of, say, five years.

THE ROYAL SOCIETY

SUPPLEMENTARY EVIDENCE TO THE HOUSE OF LORDS SELECT COMMITTEE ON SCIENCE AND TECHNOLOGY

1. Since giving oral evidence to your Lordships on 26 March in connexion with your study on civil science and technology we have given further thought to a number of the issues raised. Most importantly, we have looked again at the case for a high-level advisory council.
2. There have, in the past 40 years, been a number of broadly-based science policy advisory bodies, notably the Advisory Council on Scientific Policy (ACSP) (1947-64) and the Central Advisory Council on Science and Technology (CACST) (1967-70). In your Lordships' own report in 1981 on Science and Government a Council on Science and Technology (CST) was proposed but the Government, in response, argued that greater individual strength and greater coordination of ABRC and ACARD met the needs identified as the basis for the CST. In our view this has not been the case. There is a need to develop, more comprehensively, a capacity for simultaneously bringing into focus both the scientific aspects of national policies and the implications for those policies of the nation's present and future scientific and technological capability and output. This is an altogether broader concept than ACARD and ABRC together embrace.
3. Science is all pervasive and we fully recognize the arguments for a sectoral system of Government support for science and technology. In this system it is the responsibility of each Department to consider the relevance of scientific developments to its own activities and the need for the Department to support research to underpin its own policies or the welfare of the bodies for which it has a sponsoring role, and to play proxy customer in the arrangements recommended in the report by Lord Rothschild (1971) and established by the Government of the day (Framework for Government R&D (Cmnd 5046), 1972).
4. Executive responsibility for the use, or support, of science and technology is not the same as responsibility for advice. Moreover, individual Departments are not and cannot be responsible (i) for reviewing the Government's overall effort; (ii) for monitoring value for money of the national portfolio of R&D; (iii) for identifying opportunities and needs outside their current areas of responsibility; (iv) for maintaining the national capacity in adequately qualified scientists, technologists or engineers, in facilities, in the necessary range of skills and expertise and in inter-sectoral scientific links; (v) for considering the structural organization of research, or (vi) for assessing the inter-relationship of international and national scientific endeavour.
5. Yet, without a source of advice on these and other common aspects of a nation's science and technology capability, Ministers cannot reasonably feel assured that the UK is gaining the best national return from its science and technology investment, that the demands from present and future customers for research will be met without recourse to the expensive import of know-how, that Government policies will be able to remain soundly-based scientifically, and that social, environmental, health and welfare matters of concern to the electorate will continue to receive adequate scientific and technological attention, or that the UK is making the most of the scientific and technological endeavours of other countries.

Science + Tech
MTG with G Pollock
5/16

6. We conclude, from the above, that there is a strong case for the Government to establish a National Science Advisory Council (NSAC). Its terms of reference would be:

- to review national expenditure on civil science and technology and to assess the efficiency and effectiveness of the use of the nation's scientific and technological resources, not least in comparison with other countries;
- to identify new opportunities and demands created by advances in science and technology and to advise on the implications for Government policies;
- to monitor the quality, scale and organization of the nation's scientific and technological resources (manpower and facilities) with particular reference to current and predicted demand upon them and implications for the educational system;
- to advise on Britain's role in international scientific and technological collaboration and the implications for national research expenditure and organization;
- to report to Cabinet;
- to make its findings public, where appropriate.

7. For this Council to be effective it would need to be chaired by a senior non-Departmental Minister, preferably by the Prime Minister. Members of the Committee, perhaps a dozen in number, would be appointed, ad hominem, one of whom would serve as Deputy Chairman. Following the general pattern adopted for ACARD, members would be drawn from research, industry, education and finance. They would need to recognize that this would be a substantial part-time commitment. The Council would have the support of the Chief Scientific Adviser's staff in Cabinet Office and would need to have access to Government papers. It would communicate with Ministers and officials through the normal channels of that Office. In this way, and through publications, it would generate that much broader, well-informed debate on science and technology policy that has hitherto eluded the UK and reduced its competitive thrust.

PTW/WP
15 May 1986

SUBJECT

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de CAS

cc Master



10 DOWNING STREET

From the Private Secretary

30 May 1986

Dear Rob

The Prime Minister yesterday met Sir George Porter, President of the Royal Society. He had two main points he wished to put to the Prime Minister.

The first related to the representation of scientists at a senior level in Government. The Royal Society, in its evidence to the House of Lords Select Committee, had concluded that there was little to be gained by changing the existing structure of committees, including the Research Councils, the Advisory Board for Research Councils, ACARD, and the Chief Scientific Adviser's Committee of Chief Scientists. In particular, the Society did not support the idea of a Minister for Science. Nonetheless, they were clear that there was a need for the scientists' voice to be heard more effectively. They accordingly proposed a new National Science Advisory Council. This would be composed entirely of practising scientists, educationalists or industrialists. It should be chaired preferably by the Prime Minister or by a non-Departmental Minister. It would be able to look in particular at the scientific issues which crossed Departmental boundaries. The Committee would be advisory only and would be kept small, about 12 members. The secretariat would be provided by the Chief Scientist's office.

Sir George saw the new committee acting as a fresh channel for scientists to make an input to Government policy making at a high level. Such a committee would also do a good deal to improve morale generally in the scientific community, and take off some of the pressure generated by such movements as "Save British Science".

The Prime Minister asked Sir George to set out a more detailed proposal on paper which she would then give careful consideration to. She noted, however, that there would need to be strong reasons for adding to the current committee structure; that scientists were already finding it difficult to devote enough time to working on the existing committees; that it would be important not to cut across the good work being done by Sir Peter Swinnerton-Dyer on the UGC and by Sir David Phillips on the ABRC; that it was not clear who would draw up the agendas and provide the necessary support (this would be a major extra burden for the Chief

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- 2 -

Scientific Adviser and his office); and that careful consideration would need to be given to the composition of the committee. Sir George noted the Prime Minister's concerns and agreed to put forward a paper setting out the Royal Society's ideas more fully.

Sir George's second main area of concern was the brain drain. Many of our best scientists were now working abroad, particularly in the United States. At Oxford university every professor's basic salary was £24,000, even though their market values and responsibilities varied widely. Such salaries did not offer an incentive to the country's top young scientists, who might be appointed to Chairs at 30 yet had no further salary increases to look forward to. By comparison with the Civil Service, City and industry salaries and pensions for scientists were inadequate. Sir George was not, however, asking for more money. The Royal Society supported 24 professors, on salaries which reflected the UK going rate. Sir George suggested that the Royal Society might halve the number of these professorships and double the salary. He wanted to know whether an initiative of that kind would have the Government's support.

The Prime Minister said that it would be difficult to match the level of American rewards until the enterprise culture had taken root properly in the UK, and the country could afford to pay its top scientists what they deserved. She agreed that the right kind of incentives were needed to develop the quality of British research, and to retain our best scientists here. She was sympathetic to Sir George's proposal but it could realistically only have a marginal effect. There would be difficulties too in paying the higher salaries for a fixed period of, say, 5 years, if the scientist thought that he might lose the extra payment after that. Sir George would include a note on this proposal in the paper he provides the Prime Minister on his proposals for a new Scientific Advisory Committee.

I am copying this letter to John Fairclough, the Chief Scientific Adviser, and to Michael Stark in Sir Robert Armstrong's office.

Le
Mark Addison

MARK ADDISON

R. L. Smith, Esq.,
Department of Education and Science

CONFIDENTIAL

PRIME MINISTER

MEETING WITH SIR GEORGE PORTER: 1815, THURSDAY 29 MAY

Lord Rothschild suggested that you might find it interesting and worthwhile to have a word with Sir George Porter about an idea of his. You agreed. You will need to leave No. 10 at 1900 hours for drinks with the de Rothschilds. So you have something like three-quarters of an hour for the meeting.

I have had a word with Sir George. He would like to talk generally about how the Royal Society might be able to play a larger part in Government discussions on science, and about how the Society might help improve general understanding of scientific research and education. Sir George also has two specific ideas he would like to put to you as well (which I think must be what Lord Rothschild had in mind when he wrote):

Proposal for a national advisory council for science

Sir George believes there is a fairly general feeling amongst scientists that their representation at senior levels in Government is inadequate. The Royal Society do not however go along with the Labour proposal for a Minister for Science. They believe departmental responsibilities should be left alone but that there is a need for a new committee of 10 scientists or so (not drawn from the chairmen of research councils and so on but to sit as independents). The council should preferably be chaired by you. The Chief Scientific Adviser and his office would provide the secretariat. The Royal Society would be willing to help in any way it could. The idea would be that the committee would act as an independent source of scientific advice but that it would also be able to field criticism from, e.g., the Save British Science movement. Sir George had in mind setting it up for an experimental period of three or four years.

You will not wish to be much drawn on this idea without looking at a detailed suggestion much more closely. But, quite apart from the difficulties of adding to the burden on your own time (if you were to chair it), adding yet another committee to the cluster of research councils, the Advisory Board, ACARD, and the committee of chief scientists, there also seems to be some question about whether the idea for this group to be primarily an arm of Government (to be used in some way to promote and defend Government policy on science and to get it over better) or to lobby Government - in all probability for more resources. Sir George might be asked to consider that point in particular.

Proposal to tackle the brain drain

The Royal Society will shortly be producing a report on the brain drain. This will establish that there is a serious leaking away of scientific talent from the UK. The problem is not so much numbers as that it is the top quality scientists who are going. The difficulty is money. The top Chair at Oxford pays £24,000 a year. Comparisons with City and Civil Service salaries cause resentment, and the much higher incomes being earned by scientists in the United States provides the magnet to pull scientists away.

Sir George does not, however, wish to ask for more money. But he believes there is a need for very large merit awards to be available to keep the best talent here. He suggests that Royal Society Professorships, where the incumbents are currently paid the same as other professors, might be halved in number, but pay double the salary. This would still not match US incomes, but it should provide the right kind of incentive for scientists and reduce the relative attractiveness of the other side of the Atlantic.

This proposal looks an interesting one, but seems to be very much a matter for Sir George and the Royal Society. He might find it worthwhile, however, to speak both to John Fairclough

and to Mr. Baker before taking any final decision. You will also wish to urge Sir George to keep DES and John Fairclough informed about the forthcoming Royal Society report on the brain drain.

More generally, you will wish to support the idea of closer co-operation between the Royal Society and Government (the Reception at No.10 was a great success). As a Fellow yourself, you would welcome that. It might be worth Sir George and John Fairclough working out one or two more specific proposals.

MEA

(MARK ADDISON)

28 May 1986

SRWAEC

~~MPA~~
What action now?



DA

10 DOWNING STREET

LONDON SW1A 2AA

From the Principal Private Secretary

23 May 1986

The Prime Minister has asked me to thank you for your letter of 22 May in which you suggested that the President of the Royal Society, Sir George Porter, should come to see her to explain a certain idea.

The Prime Minister has asked me to say that of course she will see Sir George and we will be making arrangements for their discussion. The Prime Minister has also noted that you may want to see her yourself towards the end of June.

6.15 offered to Sir George for 29/6

split to Sir George Peter Hannon

(N.L. WICKS)

The Lord Rothschild, G.B.E., G.M., F.R.S.

~~My Wicks.~~

To note that Sir George is coming in at 18.15 on Thursday 29/5.

MPA 27/5

SHW

Prime Minister!
Agree to see?

23 ST. JAMES'S PLACE

LONDON SW1A 1NH

01-493 4795

N.C.W.

22-5

Wed & Thursday
retraced?
not

22nd May 1986

Yes - Name
not

Dear Prime Minister,

The President of the Royal Society, Sir George Porter, and I had a talk today during the course of which he explained an idea he had had which I believe would be of personal interest to you and which, for what it is worth, I think is a good idea.

May I suggest that you ask him to come and see you to explain it?

Yes
Victor

Later, towards the end of June, there may be another matter to do with R & D which I think may interest you personally.

Grey Scale #13



A 1 2 3 4 5 6 **M** 8 9 10 11 12 13 14 15 **B** 17 18 19



Inches 1 2 3
Centimetres 1 2 3 4 5 6 7 8

Colour Chart #13

Blue Cyan Green Yellow

