PRIME MINISTER

INTERVIEW WITH "SHE" MAGAZINE

You are to be interviewed tomorrow afternoon by Joyce Hopkirk, Editor-in-Chief of "She" magazine and Deputy Editor Bill Williamson.

The magazine has over one million AB1 female readers in their late 30s, two-thirds of whom are said to be in aspiring managerial jobs.

The interviews will be for the magazine's Christmas edition.

The magazine has asked if they can take some portrait shots of you.

- 1. Content for photographs to be taken in the White Room before the interview (about 10 minutes)?
- 2. Content for the interview to take place in the study?

Joyce Hopkirk will put the following questions to you:

- Q1. Do you think there should be more incentives to companies to help working women?
- Q2. In view of the future imbalance amongst the working and pensionable population, what measures would you advise to help those over the age of 65 to be self sufficient? Could you also tell us more about your Golden Years scheme?
- Q3. Speaking at the Institute of Directors on November 9, Mr Parkinson said that you would like to stay in power until the National Debt had been eliminated and that this may take 17 years. Do you agree with this time scale, and, if so, do you feel you could be in power in 2005?
- Q4. The environmental question is obviously very much to the forefront of all political parties these days. How do you feel the Conservative Party could encourage companies to be more ecologically aware - and how do we put pressure on European partners?

When you addressed the Royal Society on 27 September you said that three changes in atmospheric chemistry had become familiar subjects of concern. Below are extracts:

"The first is the increase in the greenhouse gases - carbon dioxide, methane, and chlorofluorocarbons - which has led some to fear that we are creating a global heat trap which could lead to climatic instability.

The second matter under discussion is the discovery by the British Antarctic Survey of <u>a large hole in the ozone layer</u> which protects life from ultra-violet radiation. We don't know the full implications of the ozone hole nor how it may interact with the greenhouse effect. Nevertheless it was commonsense to support a worldwide agreement in Montreal last year to halve world consumption of chlorofluorocarbons by the end of the century. As the sole measure to limit ozone depletion, this may be insufficient but it is a start in reducing the <u>pace</u> of change while we continue the detailed study of the problem on which our (the British) Stratospheric Ozone Review Group is about to report.

The third matter is <u>acid deposition</u> which has affected soils, lakes and trees downwind from industrial centres. Extensive action is being taken to cut down emission of sulphur and nitrogen oxides from power stations at great but necessary expense.

We have an extensive research programme at our meteorological office and we provide one of the world's four centres for the study of climatic change.

We must ensure that what we do is founded on good science to establish cause and effect.

In the past when we have identified forms of pollution, we have shown our capacity to act effectively. The great London Smogs are now only a nightmare of the past. We have cut airborne lead by 50 per cent. We are spending £4 billion on cleansing the Mersey Basin alone; and the Thames now has the cleanest metropolitan estuary in the world.

Even though this kind of action may cost a lot, I believe it to be money well and necessarily spent because the health of the economy and the health of our environment are totally dependent upon each other.

The Government espouses the concept of sustainable economic development.

Stable prosperity can be achieved throughout the world provided the environment is nutured and safeguarded.

Protecting this balance of nature is therefore one of the great challenges of the late Twentieth Century and one in which I am sure you advice will be repeatedly sought."

The Queen said in her speech for the Opening of Parliament that the Government would continue to attach very great importance to protecting the environment, both nationally and internationally.

The United Kingdom has signed the Montreal Protocol on the limitation of ozone depleting chemicals and is pressing for a further world-wide reduction of at least 85 per cent. The Government is implementing the agreement reached at the Second North Sea Conference on measures to protect the North Sea Environment.

It has agreed to a package of EC proposals to limit vehicle exhaust emissions and has agreed to the EC Large Plants Directive which will progressively reduce emissions of sulphur-dioxide by 60 per cent by 2003 and oxides of nitrogen by 30 per cent by 1998.

In April 1987 the Government set up Her Majesty's Inspectorate of Pollution and on 28 July this year published proposals for legislation to reform the system of control over industrial pollution ("Integrated Pollution Control"). In June this year the Government announced its intention to reform the law on waste disposal.

Nicholas Ridley announced on 14 November 1988 that he and his Ministerial colleagues would be making a series of statements over the next few weeks on a range of key environmental issues. These will set out the latest scientific advice, the Government's current position and proposed future action.

Further legislation will probably be introduced in the 1989/90 Parliamentary Session following consultation, as necessary.

- Q5. What would you like your entry in the history books to say?
- Q6. Bernice Weston, founder of Weight Watchers, is currently being invited by the Russians to imbue some of her expertise in their country. Is this an unusually enlightened attitude, or under the Grobachev aegis merely

modern thinking for the population's health and well being?

- Q7. 'Clothing is as much a part of the human body language as posture' (Desmond Morris). Do you agree?
- Q8. If rumour has it right, you are not now contemplating life in Dulwich, but Regent's Park. Can you tell us why?
- Q9. How can we persuade parents to take more responsibility for their children's behaviour?
- Q10. How much are you looking forward to the arrival this coming spring of the new family baby?
- Q11. Can you tell us something about the custom of the Prime Minister's official portrait? Are you allowed very much your own say in how you wish to see yourself portrayed for future generations?
- Q12. Of the young female entrepreneurs, who do you admire in present day commerce?

T.J.P

TERRY J PERKS 22 November 1988



PRIME MINISTER

INTERVIEW WITH 'SHE' MAGAZINE

Terry's attached brief gives you some fairly full information on the question. 'She' magazine will raise on the environment. You should also know that Mr Ridley will be announcing tomorrow the international conference on the protection of the ozone layer next March and that you will participate. (You are to address it on 7 March.) A text of the written PQ to accompany Mr Ridley's announcement is attached at Flag A.

Also in your folder is a spare copy of your Royal Society speech.

DOMINIC MORRIS 22 November 1988



REVISED ARRANGED QUESTION

QUESTION: To ask the Secretary of State for the Environment what further action he intends to take internationally to protect the ozone layer and if he will make a statement?

DRAFT ANSWER

My Rt Hon Friend, the Prime Minister and I propose to call a major international conference on the protection of the ozone layer early next year. It will be in London in March. The Prime Minister will participate. It will be held in association with the United Nations Environment Programme (UNEP) under whose auspices the Montreal Protocol was successfully developed.

I shall be inviting Ministers from developed and developing countries, world industry and international organisations. I want the conference to demonstrate that industry has already developed, or soon will, new products and processes that will enable all countries quickly to reduce the use of chlorofluorocarbons (CFCs) and move to a CFC free world.

The House is already aware that we are calling for world-wide emissions of CFCs to be reduced by at least 85%, and as soon as possible. I was convinced of this urgent need by the latest scientific evidence. My Noble Friend, the Minister for Housing, Environment and Countryside, will today/tomorrow, at the Environment Council, be urging our European colleagues to make these reductions by the turn of the century and to agree that the Montreal Protocol must be strengthened to this effect. This further action is essential not only to protect the ozone layer but also because CFCs are powerful greenhouse gases which contribute to the risk of global warming and consequent climate change. The Montreal Protocol will come into force on New Year's Day. Our conference in March will give a political boost to the important first meeting of the Parties in Finland the following month which will begin the formal process of reviewing the



protocol. I have told the Executive Director of UNEP that the United Kingdom would like to host the second meeting of the Parties when we hope the reductions we are demanding will be agreed. This will be in April 1990.

It is not enough for the United Kingdom or even the European Community to take action on its own. A clear commitment is needed from all world governments, including those who have not yet signed the Protocol, if we are to have any chance of preventing further damage to the ozone layer. It is not enough to set objectives. Our London Conference must show how they will be achieved in practice.

PRESS OFFICE PRIME MINISTER'S OFFICE 10 DOWNING STREET LONDON SW1

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TUESDAY 27 SEPTEMBER 1988

ON

AT A ROYAL SOCIETY DINNER

THE RT HON MARGARET THATCHER FRS MP

TEXT OF A SPEECH

GIVEN BY THE PRIME MINISTER

PRIME MINISTER'S SPEECH TO THE ROYAL SOCIETY

Mr President, Your Excellencies, Fellows of the Royal Society, Ladies and Gentlemen.

It was at your annual dinner of 1972 that I had the privilege of speaking to your Society in my capacity as Secretary of State for Education and Science.

This is my first opportunity as Prime Minister to address our Society of which I am so proud to be a Fellow.

I confess that I am quite pleased that I didn't continue my work on glyceride monolayers in the early 1950s or I might never have got here at all!

But I am reminded of a reviewer of Solly Zuckerman's recent autobiography who said that as a rule scientists rarely make successful politicians!

From my experience let me say this: in today's world it is very good for politicians to have had the benefit of a scientific background.

And not only politicians.

Those who work in industry, in commerce, in investment. Indeed, so important has it become that I believe we are right to make science a compulsory subject for all schoolchildren.

Over its 343 year history, the Royal Society has become the leading British academy of science with over 1,000 Fellows and, in keeping with your international tradition and standing, nearly 100 foreign members.

As you know Mr. President we have tried in Number 10 Downing Street to recognise the enormous contribution that scientists have made and are making to our prosperity and intellectual reputation as a people, by showing prominently, portraits of eminent scientists among our pictures of those who have done so much for our country. And so we have Michael Faraday in the hall. We have Isaac Newton in the dining room, and paintings of Robert Boyle, Humphrey Davy, Edmund Halley and Dorothy Hodgkin in our other rooms. Indeed we have just redecorated No. 10 and have changed some of the other pictures so there are several spaces vacant! I should like to fill them during my years of office by more of today's scientists. Alas we have found that many distinguished scientists do not devote time to being painted by distinguished artists on canvasses of the right size! I should be grateful if you could rectify this state of affairs.

Everyone here and no one more than myself, will support Whitehead's statement that a nation which does not value trained intelligence is doomed.

Science and the pursuit of knowledge are given high priority by successful countries, not because they are a luxury which the

prosperous can afford; but because experience has taught us that knowledge and its effective use are vital to national prosperity and international standing. But we need to guard against two dangerous fallacies: first that research should be driven wholly by utilitarian considerations; and second, the opposite, that excellence in science cannot be attained if work is undertaken for economic or other useful purposes. We should not forget that <u>industry</u> has had its share of Nobel prizes. AT and T for the transistor; IBM for warm super-conductors. EMI for X-Ray Tomography. It is time we won some more.

In a January White Paper and on various occasions since, this Government has made it clear that the <u>commercial</u> development of scientific principles should mainly be the task of industry.

It is in industry's own interest to pursue the research needed for its own business, collaborating with partners as necessary.

Industry could also help our academics to spot commercial applications when they arise unexpectedly during the course of more basic work. There are too many stories of British discoveries being published without patent protection, only to make money for foreign lands.

Industry is becoming more scientific-minded: scientists more industry-minded. Both have a responsibility to recognise the practical value of the ideas which are being developed.

Basic science

In your Dimbleby lecture on knowledge and its power, Mr President, you stressed the importance of basic science in a challenging way. You will know from our joint attendance at the new Advisory Council on Science and Technology (ACOST), that this is a view which I share.

It is mainly by unlocking nature's most basic secrets, whether it be about the structure of matter and the fundamental forces or about the nature of life itself, that we have been able to build the modern world. This is a world which is able to sustain far more people with a decent standard of life than Malthus and even thinkers of a few decades ago would have believed possible. It is not only material welfare. It is about access to the arts, no longer the preserve of the very few, which the gramophone, radio, colour photography, satellites and television have already brought, and which holography will transform further.

Of course, the nation as a whole <u>must</u> support the discovery of basic scientific knowledge through Government finance. But there are difficult choices and I should like to make just three points.

First, although basic science can have colossal economic rewards, they are totally unpredictable. And therefore the rewards cannot be judged by immediate results. Nevertheless the value of Faraday's work today must be higher than the capitalisation of all the shares on the Stock Exchange! Indeed it is astonishing how quickly the benefits of curiosity

driven research sometimes appear. During the Great War, our then President, J.J. Thompson, cited the use of X-rays in locating and assessing the damage of bullet wounds.

The value of the saving of life and limb was beyond calculation yet X-rays had only been accidentally discovered in 1895!

Second, no nation has unlimited funds, and it will have even less if it wastes them.

A commitment to basic science cannot mean a blank cheque for everyone with - if I may put it colloquially - a bee in his bonnet.

That would spread the honey too thinly.

So what projects to support? Politicians can't decide and heaven knows it is difficult enough for our own Advisory Body of Scientists to say yea or nay to the many applications. I have always had a great deal of sympathy for Max Perutz's view that we should be ready to support those teams, however small, which can demonstrate the intellectual flair and leadership which is driven by intense curiosity and dedication.

A good researcher is keenly competitive and wants to be first.

The final stage of the race for the DNA structure was as exciting as any Olympic marathon. The natural desire of gifted people to excel and gain the credit for their work must be harnessed. It is a great source of intellectual energy.

We accept that we cannot measure the value of the work by economic output but this is no argument for lack of careful management in the way specific projects are conducted. The money is not for top-heavy administration but for research.

If only we could cut some £20 million from very large scale projects - where the non-scientists sometimes outnumber the scientists - that money could provide support for hundreds of young researchers whose requirements are measured in thousands of pounds.

My third point is that, despite an increase in the basic science budget of 15 per cent in real terms since 1979, the United Kingdom is only able to carry out a small proportion of the world's fundamental research and that of course is true of most countries.

It is therefore very important to encourage our own people to be aware of the work that is going on overseas and to come back here with their broadened outlook and new knowledge. It is also healthy to have overseas people working here.

We already do much to encourage international travel and teamwork.

The Royal Society has 44 exchange agreements with learned societies overseas, leading to 1000 exchanges a year. Through SERC (the Science and Engineering Research Council), the Government funds some 120 post doctoral fellowships, half of which are tenable overseas for one year and often more.

The recent visits of the Presidents of the Soviet and Chinese Academies and the increased exchanges to which they will lead are most welcome. The Society's work in promoting internationalism has my strongest support.

Mr. President, this country will be judged by its contribution to knowledge and its capacity to turn that knowledge to advantage. It is only when industry and academia recognise and mobilise each other's strengths that the full intellectual energy of Britain will be released. In this respect we greatly appreciate your work and that of Sir Francis Tombs, Chairman of ACOST.

The environment

Mr. President, the Royal Society's Fellows and other scientists, through hypothesis, experiment and deduction have solved many of the world's problems.

- Research on <u>medicine</u> has saved millions and millions of lives as you have tackled diseases such as malaria, smallpox, tuberculosis and others. Consequently, the world's population which was 1 billion in 1800, 2 billion in 1927 is now 5 billion souls and rising.

- Research on <u>agriculture</u> has developed seeds and fertilizers sufficient to sustain that rising population contrary to the gloomy prophesies of two or three decades ago. But we are left with pollution from nitrates and an enormous increase in methane which is causing problems.

- Engineering and scientific advance have given us transport by land and air, the capacity and need to exploit fossil fuels which had lain unused for millions of years. One result is a vast increase in carbon dioxide. And this has happened just when great tracts of forests which help to absorb it have been cut down.

For generations, we have assumed that the efforts of mankind would leave the fundamental equilibrium of the world's systems and atmosphere stable. But it is possible that with all these enormous changes (population, agricultural, use of fossil fuels) concentrated into such a short period of time, we have unwittingly begun a massive experiment with the system of this planet itself.

Recently three changes in atmospheric chemistry have become familiar subjects of concern. The <u>first</u> is the <u>increase in the greenhouse gases</u> - carbon dioxide, methane, and chlorofluorocarbons - which has led some to fear that we are creating a global heat trap which could lead to climatic instability.

We are told that a warming effect of 1°C per decade would greatly exceed the capacity of our natural habitat to cope. Such warming could cause accelerated melting of glacial ice and a consequent increase in the sea level of several feet over the next century.

This was brought home to me at the Commonwealth Conference in Vancouver last year when the President of the Maldive Islands reminded us that the highest part of the Maldives is only six feet above sea level.

The population is 177,000.

B

It is noteworthy that the five warmest years in a century of records have all been in the 1980s - though we may not have seen much evidence in Britain!

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The third matter is acid deposition which has affected soils, lakes and trees downwind from industrial centres. Extensive action is being taken to cut down emission of sulphur and nitrogen oxides from power stations at great but necessary expense.

In studying the system of the earth and its atmosphere we have no laboratory in which to carry out controlled experiments. We have to rely on observations of natural systems. We need to identify particular areas of research which will help to establish cause and effect. We need to consider in more detail the likely effects of change within precise timescales. And to consider the wider implications for policy - for energy production, for fuel efficiency, for reforestation. This is no small task, for the annual increase in atmospheric carbon dioxide alone is of the order of three billion tonnes. And half the carbon emitted since the Industrial Revolution remains in the atmosphere. We have an extensive research programme at our meteorological office and we provide one of the world's four centres for the study of climatic change. We must ensure that what we do is founded on good science to establish cause and effect.

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Peroration

I have spoken about my own commitment to science and to the environment.

And I have given you some idea of what government is doing. I hope that the Royal Society will generate increased popular interest in science by explaining the importance and excitement of your work.

When Arthur Eddington presented his results to this Society in 1919, showing the bending of starlight, it made headlines. It is reported that many people could not get into the meeting so anxious were the crowds to find out whether the intellectual paradox of curved space had really been demonstrated. Should we be doing more to explain why we are looking for the Higgs Boson at CERN and trying to decode the human Genome. This is a golden age of discovery and new thought. The natural world is full of fascination providing the doors of understanding are opened. I applaud our Royal Society for its manifold achievements and

I applaud our Royal Society for its manifold achievements and congratulate you Mr President on your splendid leadership. I ask you to drink a toast to the Royal Society.