

TO:

PRIME MINISTER

FROM:

KENNETH CLARKE

1 February 1988

SPACE

Following the European Space Agency's Ministerial Meeting at The Hague last November, I informed colleagues that I would be reviewing our policy on space. I wish now to bring you up to date with my thinking. ESA timetables require that we notify them of certain decisions by 10 February.

Conclusions of Review

2 I have carried out a thorough analysis of the various space projects on offer to us and I have had discussions with the major companies interested in expanding our space programme. I am quite satisfied that there is no case at the moment on industrial or commercial grounds for entering into any of the major new projects - Ariane V and the Columbus Space Platform

from ESA, Radarsat from Canada or HOTOL from British Aerospace. There is, of course, a serious political and diplomatic judgement to be made if we act now on these conclusions. I am, however, persuaded of the case for announcing a commitment to an Earth Observation Data Centre for which there is a strong technical (and potentially commercial) justification and which I can afford from within my existing departmental budget. I am also prepared to give further consideration to Earth Observation space projects generally and the INMARSAT Aramis communications project.

Wider Considerations

3 I give detailed comments on each of the programmes below (with a financing schedule at Annex A) but there are some key points that must be remembered in order to understand my pessimistic judgements:

- (i) there is no prospect of significant private sector funding for any of the major projects listed above because there is no prospect of a worthwhile commercial return based on revenue from users within a reasonable timescale;

- (ii) none of the projects is market or even user led. They are driven by scientists, technologists and the providers of equipment who hope that users will eventually come along;
- (iii) a commitment now to any of these projects will almost inevitably lead to further commitment in the future at ever higher cost as further steps flow from a programme to which we will morally be binding ourselves. This is particularly true of HOTOL which is a classic Concorde project - the next step looks temptingly cheap and avoids a row but it leads to subsequent strides which will get larger and larger until future Governments will face formidable costs in the 1990's and beyond.

4 Politically I would be willing to buy peace by entering into one of these programmes if colleagues would prefer that. I would not be prepared to raid the budget of my Department's research and development programmes to do so. If money were on offer from the Reserve I would probably plump cynically for the next step on HOTOL at some £42m over five years as the most popular gesture with broad public appeal. However, in my opinion, there are some key political points to be made. Firstly, the lobbying, although powerful, comes almost exclusively from those with a commercial or political interest in the contracts at stake. It is the companies involved and

their lobbyists and constituency MPs who make all the running. No disinterested member of the public has ever lobbied me on space throughout my entire political career - even since I took over responsibility for it last June. Secondly, the lobbies are already prepared for the worst because of the outcome at the Hague and my comments before and since. My worst handling difficulties arise because my predecessor, for honourable reasons, allowed such high expectations to be aroused before the General Election that most of the companies acted until recently in the expectation that we would enter into all these programmes.

Proposals for Future Programmes

(a) Communications

5 We should cut back on support from public funds for communications projects. The UK has been successful in communications in the past, but the technology is now mature, and the communications world is increasingly commercial. There is no need for any policy pronouncement but we should in practice look to the private sector for funding of most future projects. I will examine the Aramis project further, which is within ESA and for which Marconi may be prepared to meet 25% of the cost, but no announcement is required on this for the present.

(b) Earth Observation

6 The UK might consider increasing its efforts in future in this area. It involves the capture of data by satellite, the processing of that data and its provision to end-users for weather forecasting, management of natural resources, oil exploration, etc. This is not a commercial activity, however, and will never be so unless a market can be created by persuading end-users, including Government agencies, to pay for data that they currently expect to get for free.

7 I am certainly not persuaded that we should proceed at this stage on some non-commercial 'industrial policy' ground with any of the international projects being considered - neither ERS-2, nor Radarsat, nor the Columbus Polar Platform. They have to be considered together and there is little or no agreement among our space companies, let alone potential users of the data, on any preferred strategy. Few users show any interest in putting money up front to pay for the data which the space community claim is so valuable to them. That said, it would be sensible to continue study of the options in discussion with companies, particularly those with user interests. I do not rule out the possibility that I may invite my colleagues at some stage to support a programme whose costs cannot wholly be accommodated within the existing provision for space. But I certainly have no such proposition to table at present.

8 I therefore propose to indicate to ESA that we cannot commit ourselves to participation in the Columbus programme. Similarly, I shall soon inform the Canadian Government that we are not ready to take any decision on the Radarsat programme. In taking these steps, we should accept that the Columbus Polar Platform may not proceed or that the Columbus project as a whole may proceed without UK participation and that, if we subsequently wanted to join, we would have lost some ability to influence the project's direction.

9 At the same time, however, I intend to announce that we will go ahead with the Earth Observation Data Centre. We are already funding, through ESA, the ERS-1 project. Data is expected to start being transmitted from this satellite by the early 1990's. It could not be processed satisfactorily without the new Data Centre, in which case we would be open to serious criticism. I hope to use this decision to stimulate interest on the part of users. Total funding is estimated at £4m pa over the next 5 years. There will be sufficient headroom in the BNSC budget to meet this from 1989/90 onwards. For 1988/89 I am prepared to meet the cost from elsewhere in my Departmental budget.

(c) Launchers

10 I have decided to inform ESA that we will not be participating in the Ariane V programme. Launcher activity has been a low priority, effectively ever since we pulled out of Blue Streak in the early 1970s, and there are no compelling arguments for behaving otherwise now. Ariane development has provided work for UK companies, but the "spin-off" has not been exceptional. We should not underestimate the political criticism we will face in not participating in Ariane V (just as our non-participation in the first Ariane programme was criticised) but I see no industrial, commercial or scientific case for spending £10m-plus each year in this area.

11 I do not think there is any case other than populist politics for entering in to further commitments on HOTOL. "Proof of concept" studies (since last summer fully funded by industry) have yielded some interesting results, which will need to be confirmed over the next three years by engineering work at relatively low cost. If at that stage a decision were taken to go ahead, the cost of the project, even on an international basis, would be enormous (possibly costing the UK taxpayer alone at least £70m pa by the mid 1990s). The project has so far been driven by scientists and technologists. There is no clear evidence of a potential commercial demand.

12 I propose to inform British Aerospace and Rolls Royce that industry will have to fund the next three-year phase of HOTOL from its own resources, though first indications from Rolls-Royce are that they will not be prepared to do so. Furthermore, I shall make clear that we can give no commitment, implied or otherwise, of subsequent Government funding for the project.

(d) National Programme

13 Research and Development support from DTI under the national programme is at present focussed through a joint technology programme with MOD which also provides support for international projects. I recommend that such support should in future concentrate primarily on Earth Observation and, exceptionally, Communications. We should also re-assess the DTI/MOD technology programme to achieve a higher overall private sector contribution.

Conclusion

14 I am satisfied that there is a case for continuing Government expenditure on space at present levels. It is an expanding and, in the longer term, possibly profitable area of economic activity, despite the substantial technological risks and high entry costs. It can be a technology driver, stretching

companies' capabilities, and it helps the diffusion of the benefits of technological advance throughout the economy. I do not believe that any increase in spending now on any major new project would be cost-effective or politically worthwhile. I invite you and colleagues to endorse my approach.

15 I am copying this minute to Nigel Lawson, Geoffrey Howe, George Younger, Kenneth Baker and to John Fairclough and Sir Robin Butler.

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* Assumes 3% inflation and no exchange rate changes

£ MILLION CASH*
5-YEAR
TOTAL

	88/89	89/90	90/91	91/92	92/93
Budget	72	67	69	70	72
Committed	72	59	47	42	36
HEADROOM **	0	8	22	28	36
					94

** 1988/89 figure incorporates £7M extra Estimates provision recently sought from Treasury. These figures assume that the national programme remains constant at £13M per year throughout the period.

How individual programmes now under discussion would take up the headroom:

Earth Observation Data Centre	4	4	4	4	4	20
Communications (Aramis project)	2	6	6	6	0	20
Earth Observation#						
ERS-2	0	7	8	8	8	31
Radarsat	1	12	24	25	22	84
Columbus - space	5	20	29	36	39	129
- ground	0	2	3	6	8	19
Launchers						
Ariane V	6	11	11	12	13	53
HOTOL	3	5	6	8	20	42
National ## Programme						

see footnote opposite

Assumes 18% participation in ERS-2 and 10% participation in Columbus.

No change is assumed in national programme. Any assumption that an increased private sector contribution might permit reductions in DTI funding would prove optimistic if there were no UK participation in the main ESA programmes.

European Space Agency

4.27 pm

The Chancellor of the Duchy of Lancaster and Minister of Trade and Industry (Mr. Kenneth Clarke): I should like to make a statement on the outcome of the European Space Agency council meeting that I attended at The Hague on 9-10 November.

The 13 European Space Agency member states met to discuss wide-ranging proposals for the agency's future development. This was the first ministerial meeting since the Council in Rome in 1985 when members agreed on a balanced long-term plan for the next decade with the aim of moving by measured stages towards a wider European space capability. We have since underlined our commitment to ESA by the significant increased funding we have provided—no less than £85 million this year alone.

Since the Rome ministerial meeting, our commitment to European co-operation in space has not changed. What has changed, however, is the scale of ESA's aspirations. Overall, the total cost of the proposals put to us at The Hague would increase spending on space by more than two and half times over the next five years. For the United Kingdom, agreement to those programmes would have meant an increase to more than £200 million—the equivalent of more than a dozen new NHS hospitals—every year from now on.

Our objection is, however, not solely that the bill is so huge. We recognise that space research is expensive, but we cannot see sufficient scientific, industrial or commercial benefits to justify such a huge increase. My approach at the Council was therefore to press for a reassessment of priorities under present-day conditions, and to develop a strategy designed to achieve worthwhile aims which would yield solid and worthwhile returns.

Three major new optional programmes were presented by ESA: Ariane 5, a new heavy-lift launcher capable of putting three satellites into orbit; Columbus, the European involvement in the international space station project; and, at French insistence particularly, the Hermes manned spaceplane. I made it clear at the outset, as we had done in the preparation for the meeting, that I could not endorse the grandiose ambitions of the Hermes programme to put man in space by the year 2000. At enormous expense this would only achieve capabilities which the United States had achieved 20 years previously. There was considerable sympathy for my view from a number of other member states and it remains to be seen whether they will formally sign up to the programme in its entirety. At the moment, only six countries out of 13 have firmly committed themselves to making a contribution to the first phase of development.

On the Columbus space station programme, there has been no satisfactory conclusion yet to negotiations with the Americans about European participation. I declined to agree to proposals that Europe should in any event go ahead with a separate and autonomous version of the Columbus programme if agreement with the United States could not be reached. I said that we would consider further the proposal for a polar platform associated with Columbus, which would be an unmanned space vehicle, primarily for earth observation, that would be complementary to a similar United States platform. Our final position on that will depend on further discussions I shall

be holding with United Kingdom companies about the financial contribution they would be prepared to make to ensure their participation either in contracts to which they attach significance or as users of the platform.

My approach to the Ariane 5 launcher proposal was that emphasis should be given to ensuring that the European Space Agency has a fully commercial launch capability—for satellites, in particular. It is important to give European industry ready access to a launcher for telecommunications and other satellites. Again, however, I had to question the increase that some other members wanted solely in order for Ariane 5 to be man-rated, and to enable it to launch spaceships as well as satellites.

The European Space Agency executive also brought forward proposals for increases in the mandatory science and general budgets, which had already enjoyed major increases since the Rome ministerial meeting. The science budget will have increased by about 27 per cent in real terms—over and above inflation—between 1985 and 1989. European Space Agency proposed a further increase of 5 per cent. per annum in real terms up until 1992. Professor Bill Mitchell, the chairman of the Science and Engineering Research Council, and I had to make it clear that there could be no justification for such a proposal. In our opinion, the European Space Agency could and should achieve the agreed scientific objectives within the currently agreed funding level. I could therefore not endorse the proposed increase.

Throughout the proceedings, I emphasised the need to take a fresh look at some of the new and hugely expensive European Space Agency proposals, which largely derive from a new desire to follow the Americans into manned space craft. I confirmed our substantial support for those parts of the established programme that gave due weight to industrial, economic, commercial and scientific considerations. I also argued for greater involvement of industry and users in the planning and financing of programmes. There was support from other Ministers for these aims, several of which were incorporated in the final Council resolution.

The United Kingdom remains one of the major participants in European space programmes. We have a budget of more than £110 million a year, and we shall continue to ensure that it is used as effectively as possible. We shall continue to play a constructive role with our European partners, and I shall be holding meetings with United Kingdom companies to see how that can best be achieved.

Mr. Bryan Gould (Dagenham): Will the Minister accept that what we have just heard is not so much a statement, more an admission of failure? First, it is an admission of political failure because, even in terms of the right hon. and learned Gentleman's own stated objectives, he completely failed to bring about any reassessment of priorities within the European space programme, and found himself wholly isolated. He is reported as having said that he at least came back with his money still in his pocket. It might be nearer the truth to say that he came back with his tail between his legs and a flea in his ear.

Is it not true that, while the Government may be correct in describing some of the ESA programme as over-ambitious, they have no alternative future programme to suggest for the European Space Agency? Is it not the case that, however modest and sensible the ESA's expansion, the British Government would have opposed it on

[Mr. Bryan Gould]

principle? Can the Minister assure the House that we shall at least participate in the Columbus programme and try to secure the lead role in the polar platform satellite project?

Is not this decision the worst possible news for the no fewer than 300 United Kingdom firms that are involved in space? Will they not now inevitably fail to win contracts, and will they not face a new brain drain of top scientists to Europe? What chance do we have of retaining those scientists and programmes when all the worthwhile and advanced work is being done elsewhere?

Did the Government try to win ESA support for investment in the Hotol project? Will the right hon. and learned Gentleman amplify his teasing, unsatisfactory remarks about the possible Japanese funding of Hotol? How do the Government expect the private sector—it must be their expectations—to make up the gap in space spending? What mechanisms has the Chancellor of the Duchy of Lancaster arranged for private sector contribution to the ESA? How can that possibly match the contribution that the Government—unlike 12 other Governments—have refused to make?

Is not the failure to back a British contribution to the European space agency symptomatic of a wider failure to back science in this country? Has the Minister seen the article in today's issue of *Nature*, which describes how British science is falling behind in metallurgy, biomedical engineering, solid state physics, civil and mechanical engineering, and material science? Those are all areas of weakness, and disciplines of great importance to our industrial future. Which of them will be hit by the Minister's opting out of the space programme in Europe?

Is the Minister aware that the Autumn Statement of a week or so ago promises real cuts in science spending over the next two years? Was his attitude at The Hague merely a reflection of that financial priority? Is he aware that his attitude at The Hague was a prime example of Thatcherism in action, characterised by short-term considerations—anti-investment, and-scientist—and, in the end, uniting everyone else against us in opposition to the position that he took?

Mr. Clarke: First, I obviously do not accept the hon. Gentleman's diagnosis of the meeting. It is fashionable when reporting European meetings to describe them in terms of rows, failures, or successes, with people coming away saying that they gave each other bloody noses, or failed to, as the case may be. However, the atmosphere at the meeting was extremely friendly. My colleagues, Dr. Heinz Riesenhuber of Germany and Alain Madelin of France, are people with whom I am on friendly, satisfactory terms and with whom I usually agree on politics. We share a belief in strong European co-operation in this and as many other matters as possible. We discussed optional programmes to be added to the mandatory programmes, to which we are a strong contributor. We exercised our option to decline to join in projects which are essentially led by the Hermes spacecraft project—a new addition since the Rome meeting.

If the hon. Gentleman inquires among the British industrial and scientific communities, he will find remarkably little support there for Hermes—the name of the proposed spaceship—and much sympathy with my view that the desire to get into manned spacecraft has

been distorting the balance of the ESA programme. The only reason that I abstained at the end from supporting the resolution as a whole was not that I wanted to stop anybody going in for Hermes. If the French and the Germans want to pay for Hermes, I wish them success. I hope that Hermes succeeds eventually—if it matches their priorities.

I am worried that going in for the manned spacecraft will distort the balance of the whole programme, and perhaps damage the programmes in telecommunications and Earth observation which are our principal interests and which we think ought to be at the forefront of the programme. As Hermes gets into difficulties, I am sure that we will come back to the alternative that I put forward, that we should reassess priorities, and especially reassess what Ariane 5 was for, and get back to an assessment of the scientific and industrial objectives upon which we all started.

Mr. Gould: It did not happen.

Mr. Clarke: I agree that it did not altogether happen, but that was because the French put so much money into ESA. With the French prepared to put up almost half the cost, a decision was taken, to which only six member states firmly adhered, to press on with putting this spaceship in the centre of the programme. That was the position in which we were placed.

On alternatives, the hon. Gentleman mentioned the polar platform. I agree that that is an extremely interesting concept that has attractions for British industry and would enable valuable Earth observations to be conducted. Further discussions are required with the Americans, because to get the best value we must ensure that it relates to a similar American polar platform. In addition to the discussions that I have already had and which did not go very far, further discussions are required with British Aerospace and others who are interested in the polar platform to see upon what basis Government and industry might contribute if the Columbus programme goes forward in the way that we wish it to go forward.

What does this decision mean for firms? It means that we have decided not to go into these huge additional programmes, but it does not imply any reduction in our existing effort in space or in our existing contribution to the European Space Agency.

The hon. Gentleman asked about Hotol, the very ambitious programme put forward in particular by British Aerospace and Rolls-Royce for a re-usable spacecraft. That was not on the agenda at the ESA meeting and was scarcely mentioned. There was no prospect of ESA adopting it as a project and, so far, it has not been so adopted. I think that the French regard it as a competitor to the Ariane-Hermes project, which at the moment they have succeeded in promoting within the agency.

Hotol must be worked up to a serious project and we need to consider what international collaborators are available, because such collaborators are certainly required. That requires further discussions between British industry and the industries in the countries that are interested, and between the Government and British Aerospace and others about the next step in working up Hotol. There was never a snowball's chance in Hades that Hotol would be taken up by the European Space Agency at the Hague meeting. Sensibly, that was not put on the agenda.

Mr. Rhodri Morgan (Cardiff, West) *rose*—

Mr. Clarke: With respect, the hon. Gentleman cannot intervene now. He may ask a question in a moment. We are interested in more private sector funding on those aspects of space work that produce a commercial return. Not all space research can do that, but some can, and we have succeeded in getting private sector funding in the development work on a number of programmes. I shall give an example. With the agreement of practically every other member state represented at the meeting, I strongly stressed that the proposed data relay satellite is of such commercial potential that we should contemplate making it largely a private sector project. There would be strong British participation in that.

That matter was not clearly resolved because some member states, notably Italy, insisted that to a large extent it should be financed by Governments. I suspect that that sort of argument comes from countries that are not sure that their industries will get a large part of the work if it is left to the private sector to develop it and to British and other industries to compete on fair terms for the work that they can do best. We are interested in more private sector involvement, and that was put in the resolution. All the other 12 states agreed that we had to go further in getting private sector contributions.

The hon. Gentleman asked whether there was an increase in ESA's science budget. The answer to that is that there is. Professor Bill Mitchell, the chairman of the Science and Engineering Research Council went with me to the meeting. The hon. Gentleman would find that if my right hon. Friend the Secretary of State for Education and Science were to say that an additional £10 million was available for science and engineering research, Professor Mitchell would say that it should not be spent on space research because that is done very well and is not the highest priority.

The £200 million that the hon. Gentleman says we should spend each year on ESA—if he says that we should have signed up—is almost one third of the total amount that all the research councils at the moment put into the funding of all university and polytechnic programmes. It would be a huge slice from the scientific budget and the Science and Engineering Research Council and the Government and I had to decide whether that was a justifiable use of huge resources on what I regarded as largely non-scientific objectives.

Sir Geoffrey Pattie (Chertsey and Walton): While I support my right hon. and learned Friend in his desire for realistic programmes in space, is he not aware that Government spending on space has declined in real terms in the last few years? Is he not concerned that every country with a space capability is increasing its expenditure, while we appear to be cutting ours?

Mr. Clarke: Just making comparisons with what other countries spend does not take one far in many policy areas unless one asks on what those countries are spending money and if we are comparing like with like. When one looks at comparisons with other countries one finds that they are sometimes spending, not always very successfully, on quite different types of space programmes. They are not the kind of objectives that were on offer to us in ESA. We have to make a sensible appraisal of what is on offer.

If, in my discussions with British industry and in further council meetings of the European Space Agency, people

come forward with well-judged projects of proven commercial, industrial and scientific value, we will consider them, analyse them and put them alongside other scientific and commercial priorities. I should be happy to discuss such projects with my right hon. Friend the Chief Secretary or with anybody else. When we are faced with a take-it-or-leave-it optional programme by an agency such as ESA, there is no point in saying that Britain has only one option and must choose to take what is on offer and go into things that I do not believe are in the interests of Britain's scientific or industrial community.

Mr. Malcolm Bruce (Gordon): Will the Minister accept that there is considerable resentment about the very strong position that he has taken against co-operating with the 12 other countries in Europe? His comment that was widely reported and, I think, broadcast on television—that, "If these countries want to frolic in space on their own, that is their affair"—has been properly and rightly resented as a demonstration of hostility to the idea and principle of European co-operation on the frontiers of technology.

Does he not accept that his view is totally inconsistent with the Government's active encouragement to British companies to get involved in research for the star wars project for which the technology and the final implementation is dubious and over which the Government have no control whatever? In this instance, he has turned down the opportunity to be involved in a technological development in which the Government would be actively involved and in which British companies would be guaranteed a stake in advance.

Apart from further damaging our relationships with our European partners with whom technological co-operation is vital, this decision will exclude many British companies from access to a vital market. Many of those companies are already investing substantial amounts of money. I understand that British companies have invested over £100 million in space technology. Therefore, the Government's suggestion that there is inadequate support from the private sector does not stand.

Does the Minister not acknowledge that, at the end of the day, the space programme and space technology will be developed in Europe and that British companies which have made that investment will be shut off from full participation and involvement in the spin-off? Is that not a disgraceful betrayal of securing Britain's role in the future development of some of the highest technologies that will be advanced in Europe?

Mr. Clarke: The comment to which the hon. Gentleman took exception arose out of my attempt at the end of the meeting to describe to lay journalists the difference between the mandatory programmes to which we are fully committed and in which we actively participate, the optional programmes in which we choose to take part—especially those programmes in telecommunications and Earth observation—and these new optional programmes related to this spaceship. I used a figure of speech that I took from a different legal connotation and described the French and one or two others as having gone of on a frolic of their own in exercising this option. As I said, they are paying for it and I wish them success, but we were not obliged to join it.

I do not understand the reference to star wars. No hon. Member has suggested that the Government should put

[Mr. Clarke]

hundreds of millions of pounds into star wars. We are not doing that. We are aware that private companies in Britain are trying to win contracts. That is what private companies are doing in space. The relationship between the space programme and interested companies in Britain is very important. The Government are putting money into space not simply so that British companies should get the money from the contracts and profit from the work, although we are glad when that happens. The justification of the Government's contribution is that in addition to the commercial profit there is some general economic spin-off and benefit to the nation, through technological advancement or access to other markets in other parts of the world.

That has to be a judgment. The judgment of supporters of some parts of the ESA programme is quite uncritical. Those wider economic benefits are not available from participation in this rather ill-judged project.

Several Hon. Members rose—

Mr. Speaker: Order. I realise the importance of this statement. I will endeavour to call every right hon. and hon. Gentleman who wants to put a question to the Minister, but could I ask for brief questions, as we have a heavy day ahead of us.

Sir Ian Lloyd (Havant): I am sure that I would be doing my right hon. and learned Friend a disservice if I did not convey my disappointment and dismay at some of his recent announcements on this subject, having recently returned from the Johnson space flight centre at Houston and having seen something of the industrial, commercial and scientific significance of space.

Does he agree that there are essentially three major groupings in the world capable of taking technology further to the general benefit of all—the United States, the Soviet Union and western Europe. Is it not perfectly clear that none of the old great powers of western Europe, including Britain can possibly do that on their own? Therefore, there is only one possible way in which it can be done, and that is by a united, effective western European effort—which this country should lead.

Mr. Clarke: We are party to such a united effort, and always have been, through the European Space Agency. It is important that we stay at the forefront of space science and reap the technological benefits it can bring to a wider range of industries. That has been and remains our object throughout.

We need international collaboration, but we have to collaborate with those who are taking the right route to those major benefits. My hon. Friend would be the first person with any knowledge of the subject with whom I have spoken who thinks that the Hermes spaceship is the right route. I thought it was wrong that France, as the dominant contributor to ESA, should determine that the central thrust of the organisation should be turned to getting a manned spaceship into space at the turn of the century.

Dr. John Marek (Wrexham): Is the right hon. and learned Gentleman aware that many Opposition Members feel that it is a pity that the only words he can use are about industry—though that is necessary—and commercial return, and that words such as education,

research, knowledge and long-term progress seem unable to pass his lips? It does not matter how many highly misleading statistics and figures he gives—he gave us enough in his statement today—he will not get away from the fact that Britain is worse in space and scientific space research than any other developed country. What advice can he give to me, and to scientists in Britain who are deeply ashamed every time we meet scientists from abroad, of the policies of the Government and his philistine friends?

Mr. Clarke: Professor Bill Mitchell and I spent our entire time talking about science, industry and technology as well as the benefits that should come to European society from what we are doing. We also talked about devoting considerable sums of money but had to weigh up the advantages of spending it on other educational and scientific matters. We were being asked to pay £200 million a year into the project, which is nearly half as much again as total Government spending on medical research of all kinds in Britain.

We were arguing about science and, with respect to many of our critics, we are facing wooley stuff about the 21st century and the need to put a man into space, and general not quantified or clearly targeted talk about technological collaboration with our partners. We were keeping our eyes on the ball. By the time our partners have got three years further into this singularly ill-judged attempt to get a man into space, because the Americans did 30 years before, they will come back and start talking to us again.

Sir T. H. H. Skeet (Bedfordshire): Does my right hon. and learned Friend recognise that the formula that he is using of commercial use could be used against other important subscriptions to Europe — CERN in Switzerland and Grenoble in France? Does he not also recognise that the major industrial countries — West Germany, France and Italy—support Hermes and that flowing from all those contracts will be important orders going to manufacturers, and that we stand a chance of losing the lot?

Mr. Clarke: As my hon. Friend said, we engage in much international big science, and it is important that we do. Space research is merely one of several areas where international collaboration is necessary and essential. We will get nowhere on our own, and we all understand that. If my hon. Friend talked to those in the academic and scientific community, I think that he would find that they agree that international big science should still be well targeted and properly run and that it cannot be allowed to run away with too high a proportion of total budgets that are much in demand in other academic areas. I cannot remember my hon. Friend's second point about contracts.

Sir T. H. H. Skeet: We will lose orders from Europe that will naturally go to European countries and not to the United Kingdom.

Mr. Clarke: We will, but my hon. Friend should not forget that we were only being offered in Ariane about 3 per cent. of the total project. Ariane 5 is 45 per cent. French and they are insisting that 45 per cent. of the work goes to French companies. It was designed for French political purposes and no large participation was offered to us.

Mr. Ernie Ross (Dundee, West): The Minister has rightly said that not many people disagree with his summation on Hermes. If we are to accept what the Minister has said today, he must answer a number of questions. He has to tell us what his alternative projects are. He has to identify those projects so that we can see exactly what our commitment will be to the European space initiative. He must also tell us how the reorganised British National Space Centre will operate. We have heard nothing about it today. At present, private industry is putting money into space research in the proportion of 3:1. How much more does he expect private industry to put in without knowing the extra support that he may or may not give it? He also has to make clear that he is prepared to stand up and to fight for British industry. If he will fight for our industry, we need to know the various projects that he will fight for and give his support to.

Mr. Clarke: The alternatives are being looked at. The alternative that we think is required and that we were pressing is a launcher that is likely to be competitive in the 1990s, with the key role of launching satellites. There will be several such launchers in the world by the time Ariane 5 comes on stream. It is not wise to spend so much additional money on Ariane—in raising its payload and its safety levels to carry man—to put a spaceship into orbit, because other rockets will be designed more cost-effectively to put launchers up. Our great strength is in satellites and telecommunications. We are interested in cost-effective launchers and not one designed for political purposes.

I have discussed the data relay satellite, which is extremely important and an area in which we hope to go forward. We are still having discussions on Hotol. We are to have discussions with the industry, and if out of those discussions come some well-judged projects which, if they are justified, offer value for money across all the criteria we have to apply to space projects, we will consider backing them.

Mr. Kenneth Warren (Hastings and Rye): Has my right hon. and learned Friend sensed the fear that is abroad in industry and commerce that we are standing on the threshold of a vast commercial breakthrough in the use of space transportation and that the Government are afraid to cross that threshold? I think it would be most helpful if he could reassure the House and the country that he understands the dimensions of those opportunities and will visit the space facilities to see what we can do. Lastly, would he please tell the House, and reassure me, that it is not a philosophy of how little we need to spend but how much we must spend that should guide him?

Mr. Clarke: I think that we have rather a good position in some areas of space at the moment, particularly as users of space facilities, telecommunications and satellites, and in some aspects of Earth observation. When we look at the polar platform, we will be looking at its value for Earth observation and what we might derive from that. I do not believe that someone with my hon. Friend's knowledge of the industry would disagree with my proposition that we must not be drawn into purely political choices of objectives. Having a spaceship with one's flag on is a political objective that is in danger of distorting the whole European space effort.

Mr. Rhodri Morgan (Cardiff, West): In advising the House that the Hotol project did not have a cat in hell's

chance of being adopted, is the right hon. and learned Gentleman confirming that the British Government were not going to propose it and that therefore the private promoters of Hotol have to wait for the Dutch or Portuguese Governments to propose British projects at ESA meetings?

Mr. Clarke: My right hon. Friend the Member for Chertsey and Walton (Sir G. Pattie) raised it at the Rome meeting. Everyone in ESA knows about Hotol, but there is no interest in taking it on. It is not meant to be a criticism of my French colleagues, with whom I get on very well, but at the moment it is perceived by the French and the Germans as a competitor, and they do not want Hotol to go forward. *[Interruption.]* We have to consider with our own industry how to proceed, and it is not through the route of ESA at The Hague. I have encouraged British Aerospace to have discussions with the Germans and the Japanese, whose industries are interested. We will have further discussions but, as every hon. Member has urged upon me, there is no point in going it alone on a project like Hotol. If the European Space Agency is not a collaborator, there is no point in my throwing money down the drain into ESA on the Hermes project, which is a competitor. I have to continue the exploration for other international collaborators who might be interested in taking Hotol further.

Mr. Robert Rhodes James (Cambridge): Is my right hon. and learned Friend aware that the Government have got this totally wrong? Is he prepared to accept—I am not—that our nation will become a division 3 country, and that research and development in space will be relegated in the way that he has suggested? If that is the course that he will pursue, my constituents and I will not.

Mr. Clarke: With great respect to my hon. Friend, who is an old friend and colleague of mine, he is making the widest possible assertions based on the glossier public relations that surrounds the space industry—that this is somehow the future and the forefront of science. It could be, and parts of it are, and it is those bits on which we will collaborate. However, I remind my hon. Friend that the sum of money that we were being asked to contribute is a third of the total amount of all the research councils' funding of research of all kinds in all our universities and polytechnics. The amount represented the entire bill for school textbooks for England and Wales in every secondary school, or more than half as much again than what we are spending on medical research.

My hon. Friend, who is deeply concerned about science, ought to take note of the opinion of those in the Science and Engineering Research Council. That council said that it was quite unjustified to go into research on that scale, to the obvious detriment of the claims of the rest of the scientific and academic community.

Mr. Michael Grylls (Surrey, North-West): Is my right hon. and learned Friend aware that many people in private industry who pay taxes and are therefore concerned how taxpayers' money is spent will welcome his insistence on value for money and agree that just throwing money at space is not the right way? What I believe he is saying is that expenditure and effort should be targeted in the direction where it is most likely to be successful. That is a hard-headed, not a hard-hearted, approach, which I believe will appeal to those industries that will have to pay the bill.

Mr. Clarke: Yes, we were dealing with the optional programmes, where there are choices to be made. We have opted to play a full part in user programmes, those concerned with telecommunications, which is probably the most dramatic area of all, and Earth observation. We wanted the users and industry to be more closely associated with the planning than they are. The ESA is another great governmental agency that is driven by Governments and the officials of the agency, and it does not have close enough contact with industry and users. Users includes the scientific community. That is what we are arguing for.

I still think that the ESA will have to come back to that eventually because the Germans, as an hon. Member mentioned earlier, have got themselves in the curious position of backing Hermes but saying that it should cost 20 per cent. less. I cannot imagine how they will get on with that. In my opinion, the estimated cost of Hermes is a gross under-estimate. Before they get the spaceship in the air, it will cost far more than they are talking about at the moment.

If the Germans think that they can go on without us and spend less money than they are being asked for at the moment, the German Government are in for a big surprise.

Mr. Roger Sims (Chislehurst): Does my right hon. and learned Friend accept the clout that Britain carries in this sphere and that the extent to which British companies can play their part in space projects depends inevitably on the extent to which we are willing to make cash contributions towards their costs? Does he also agree that space technology involves not only the big companies but some 300 small companies, such as SIRA in my constituency, which are all doing a variety of work in space technology which has enormous potential in many areas apart from space? Does he agree that this work will be endangered and will not be able to continue unless we continue to play a realistic part in the European Space Agency programme? Will he take that into account?

Mr. Clarke: I will and do take that into account. Obviously I spend most of my time encouraging companies to fight for contracts. Among the reactions to the present news is the disappointment of the companies that expected contracts if we had gone into Ariane, Hermes and so on. We will have to have more discussions with the industry and continue to explore ways for further international collaboration. Meanwhile, we are not cutting back on what we are doing. We remain heavily engaged in space industry of all kinds.

Mr. Richard Page (Hertfordshire, South-West): Although I understand the call to get industry more closely involved, can my right hon. and learned Friend say how we can ask companies to make long-term commercial judgments, bearing in mind their responsibilities to their shareholders, in areas that are by their very nature exploratory, where the benefits will be long-term and where those benefits might necessarily be unprotected? Other companies and countries within the ESA range are not asked to make such a contribution. Is it fair that we should do so? Bearing in mind that Columbus discovered America on state aid, should we not do the same?

Mr. Clarke: Columbus was not taking part in an international project so he probably had fewer problems

at the planning stage. What we are asking is fair in certain parts of the space programme. People tend to go on about space without defining clearly what objectives they are after. There is a mixture. Some is pure scientific research, research and inquiry. Some is to try to get spin-off from technological advances that might be applicable in other areas. Some is for pure commercial return. It can be extremely profitable to go into large sections of the satellite and communications data relay business. When satellite development has obvious commercial benefits, it is right to expect commercial contributions. Technological spin-off is more difficult because it is difficult to get clear figures. Most researchers tend to be full of enthusiasm about potential technological spin-off but are not always clear about what it is. In pure science, we have to weigh up the claims on the budget with the claims of other areas. Pure research in space has seen a bigger increase in real terms in the last three years than any other area of pure science in this country. It is the combination of those things that one has to apply. That is what we are doing. I do not think that what was on offer at The Hague passed any of those tests satisfactorily.

Several Hon. Members rose—

Mr. Speaker: Order. May I again ask for brief questions, please?

Mr. Michael Stern (Bristol, North-West): Does my right hon. and learned Friend agree that the ESA subscription is far from being the be-all and end-all of the Government's involvement in space research? Does he agree that the firm control which he is rightly exercising over that subscription creates room for worthwhile bilateral projects, such as Radarsat in Canada, which will themselves give British industry a greater depth of experience towards the ESA programmes like Columbus and the polar platform?

Mr. Clarke: I do. My hon. Friend is right; we have a national space programme as well. We are heavily committed to keeping in the forefront of space exploration and research and industrial applications. At The Hague meeting, a Canadian observer was pressing on me again, as the Canadian Minister had already done, the prospects of collaborating in Radarsat into which the Canadian Government are prepared to put a large amount of money and in which it wants British participation. There are endless projects of that kind but I ask the House to accept that we must choose. The bulk of British industry will probably agree that our choice at The Hague not to go into Hermes was correct. We should all get together now and find better alternatives.

Mr. Timothy Wood (Stevenage): Is my right hon. and learned Friend aware that some of us are sceptical of the value of certain French-inspired space projects? Is he also aware that it is vital for the British space technology industry that we have a positive lead from the Government on the approach that should be taken by this country in space activities?

Mr. Clarke: As I say, we will have continuing discussions with the industry. I hope we can respond to my hon. Friend's challenge.

Mr. Rob Hayward (Kingswood): Is it not the case that the development of the air-breathing engine for Hotol is progressing? Can my right hon. and learned Friend assure

the House that, if that development comes to fruition in the near future, he would be in a position to put Hotol on the agenda at the ESA with the backing of some money?

Mr. Clarke: Work is progressing on the unique propulsion system of Hotol because the Government have been helping to finance it. That is how we have got to where we are on Hotol. The next stage will be more expensive, because it is enlarging the investigations. I think that we agree with the companies involved that we need international collaborators. If the ESA would collaborate on Hotol, we would have discussions with it. Meanwhile, we have to explore the position with others.

I expressed strong scepticism a moment ago about whether the European Space Agency would take Hotol on board. Apart from anything else, it has spent miles over the limit already—[*Interruption.*] I do not think the hon. Gentleman understands. The hon. Member for Dundee, West (Mr. Ross), who understands these things very well, knows that the French will not put money into Hotol because they see it as a competitor to Ariane and to Hermes. The Opposition are urging me to put money into the principal competitor of Hotol, which is what we were being asked to do at The Hague meeting earlier this week.

Mr. Phillip Oppenheim (Amber Valley): My right hon. and learned Friend is obviously aware that space is currently the fashionable area for public expenditure. I am sure that he will bear in mind also that every pound that we commit to speculative space projects is a pound less for other parts of industry, particularly the rest of the aerospace industry, in which we recently overtook French production and exports. Will he therefore bear in mind the fact that there are many demands on public expenditure and that we should not wade head first into unsatisfactory projects just because they are in a fashionable area?

Mr. Clarke: I agree. I also agree with my hon. Friend's point about the importance of committing ourselves to the British aerospace industry. We are heavily committed to Airbus, where we are working with the French, the Germans and the Spanish to ensure that Europe retains its own capacity to make large civil airliners. We are close together in discussions with the Americans to make sure that that is not thwarted. We are interested in a European fighter aircraft. I find that a very attractive suggestion. We are working on that with the Germans and the Italians. I regret that the French are inclined to go it alone and not join in on the European fighter aircraft.

If that aircraft does not go forward, we will have to look to the American industry to provide the bulk of all military aircraft for Europe. Those are areas where we are collaborating. Before we get too excited about what happened this week, it just happens that we do not agree with our French and German friends on this occasion that a spaceship should be added to the list of our other commitments to the aerospace industry or to the scientific community.

Mr. Michael Colvin (Romsey and Waterside): My right hon. and learned Friend should be aware that the free enterprise culture which has done so much to restore our

economy does not yet apply to the business of space? With a Government lead it will, if it does not do so yet. He is aware that over 300 companies and most of our universities and research establishments are involved in space. In order to ensure that there is maximum effort in the right place, and no duplication of effort, will he please, under the auspices of his Department, arrange for proper co-ordination? If that co-ordination requires additional resources, can he assure us that those resources will be forthcoming?

Mr. Clarke: There are parts of the space effort with great commercial returns. There is private sector investment already in this country. There is a lot of private sector investment in America. There are areas where returns can be won. In other areas, the return is longer-term and Governments need to fund it. Frankly, other areas are not worth it because the commercial returns are nil and the scientific aims are illusory. We have to make a choice between them. Certainly we will have discussions with companies and others to try to co-ordinate our effort and make sensible choices.

Mr. Frank Cook (Stockton, North): Will the Minister confirm that had the decision this week been different, it would have meant more work for British industry and British institutes of technology? I apologise for having had to leave the Chamber on urgent business in the middle of questions on the statement. Will the Minister explain how he would square that with the hapless and hopeless readiness of the Government to agree immediately to contribute towards President Reagan's SDI programme, and to scuttle around Europe trying to persuade our European partners to do likewise? Is the Minister not leaning greatly towards American projects rather than to those which we share with our European partners?

Mr. Clarke: I have already referred to star wars. We are encouraging British companies to look for contracts there, but the programme will be paid for by the Americans, so that is a false analogy. My attitudes this week were not in any way governed by pro-American, anti-European feelings. I am an extremely enthusiastic supporter of closer European co-operation in this and many other respects. It was simply a difference of opinion about whether these were the correct optional programmes.

The hon. Gentleman asked what would have happened if I had agreed earlier this week. I suspect that the next time that he had a claim to make on behalf of Stockton, his region or shipbuilding, and I had started pleading difficulties with resources, he would have pointed out how cheerily I had just agreed to put £120 million a year into a spaceship programme because the Europeans were demanding it. I am not sure whether I would have won either way with some hon. Members.

Mr. Robert Hayward (Kingswood): On a point of order, Mr. Speaker.

Mr. Tony Marlow (Northampton, North): On a point of order, Mr. Speaker.

Mr. Speaker: No, I will take first the matter raised under Standing Order No. 20.

Nursing Staff (Intensive Care)

5.17 pm

Mr. Mark Fisher (Stoke-on-Trent, Central): I beg to ask leave to move the Adjournment of the House, under Standing Order No. 20, for the purpose of discussing a specific and important matter that should have urgent consideration, namely, "the shortage of specialist nursing staff in intensive care units in west Midlands hospitals, affecting infants needing heart surgery".

This matter is specific because a north Staffordshire baby, David Barber, 34 days old and suffering from a hole in the heart and a missing valve, has now had his heart operation cancelled five times. The excellent Birmingham children's hospital has operating theatres available. It has surgeons who are ready and anxious to perform the operation. It has beds in the intensive care unit, but it cannot make use of those beds which lie empty because it has not the specialist nursing staff to service those beds.

This matter is important because it concerns not only the misery and anxiety which must face David Barber's family, but also the terrible choices facing hospital staff in deciding on which babies to operate. Above all, it concerns the crisis of nurse shortages which are facing the National Health Service after eight years of Government cuts and neglect. We know that 30,000 nurses leave the National Health Service every year because of a combination of low pay, poor conditions and very inflexible hours, and the Government are doing little or nothing about it.

This matter is urgent because, unless David Barber and other babies like him get the surgery which they so desperately need, his and their condition will inevitably deteriorate. Hon. Members on both sides of the House and members of the public will be appalled that the Government have allowed the National Health Service to decline to the point at which infants needing heart surgery are denied treatment. For that reason, I beg to ask leave to move the Adjournment of the House.

Mr. Speaker: The hon. Member for Stoke-on-Trent, Central (Mr. Fisher) asks leave to move the Adjournment of the House for the purpose of discussing a specific and important matter that he thinks should have urgent consideration, namely, "the shortage of specialist nursing staff in intensive care units in west Midlands hospitals, affecting infants needing heart surgery".

I have listened with the greatest care and concern to what the hon. Gentleman has said and I also listened to him earlier this morning on the radio. I regret that I cannot find that this matter should take precedence over the Orders for today, but I hope that he may have other opportunities of raising it.

Points of Order

5.19 pm

Mr. Robert Hayward (Kingswood): On a point of order, Mr. Speaker.

Mr. Tony Marlow (Northampton, North): On a point of order, Mr. Speaker.

Mr. Speaker: I have been notified of a point of order from the Opposition Front Bench.

Mr. Donald Dewar (Glasgow, Garscadden): On a point of order, Mr. Speaker. I understand that, earlier this afternoon, the hon. Member for Tayside, North (Mr. Walker) made some gratuitously offensive allegations about some of my hon. Friends. At this stage, it is not appropriate for me, or for any hon. Members, to debate the issues raised in the recent television programme in Scotland. I do not want to follow the hon. Member for Tayside, North in his reckless course of conduct in that respect.

It should be put on record that no specific allegations were made about hon. Members in the programme. The procurator fiscal, who has the proper responsibility for these matters, has been asked to investigate any matters that may arise from the programme. Indeed, he was asked to do so some weeks ago by members of the Dundee Labour party and by my hon. Friends who were referred to in the outburst made by the hon. Member for Tayside, North.

I rise to make this point because I hope that you, Mr. Speaker, will advise the House, as I am sure that you would want to, that it would be better in these circumstances if hon. Members—even the hon. Member for Tayside, North—showed a proper and decent restraint and were not tempted into making irresponsible speculation and provocative suggestions which can only complicate the task of those who are properly looking into the issues that have been raised. Such behaviour reflects no credit on the House or on any hon. Member responsible for such opportunism.

Mr. Speaker: I accept what the hon. Member has said about the matter. I hope that we can conduct the affairs of this House on the basis of mutual respect and mutual honour. I trust that we will not have allegations of that kind made across the Floor of the Chamber.

The Lord Privy Seal and Leader of the House of Commons (Mr. Wakeham): There was a suggestion earlier that there was a planted question on this point. I owe it to the House to explain the position, and I can do that perfectly easily. The position is that any hon. Member who tables an early-day motion in the House is entitled to expect the Government to consider it and that, when the Leader of the House comes to the House for business questions, he should come with an answer to that early-day motion. My hon. Friend the Member for Tayside, North (Mr. Walker) raised a question specifically on early-day motion 281. The hon. Member for Halifax (Mrs. Mahon) raised a question on early-day motion 282 and the hon. Member for Islington, South and Finsbury (Mr. Smith) raised a question about early-day motion 214. I came prepared with answers to all early-day motions on the Order Paper and naturally I try to help the House. To do less would be a discourtesy.

Mr. Speaker: I hope that the House will leave it at that.

Lord Kilmarnock: My Lords, the Minister's reassurances are certainly encouraging. Does not the Minister agree that there is a great strain imposed on the finances of the Riverside authority by its leading role in the treatment of AIDS, particularly at St. Stephen's? Does not the Minister further agree that if sufficient money is not provided for this purpose it will have an adverse effect on the authorities of other hospitals and this could possibly feed through, in the long run, to Westminster?

The Earl of Arran: My Lords, with respect, the Question on the Order Paper relates to the possible closure of the Westminster Hospital.

Lord Grimond: My Lords, is the Minister aware that there are more than two noble Lords who have survived the attentions of my noble friend Lord Winstanley? Speaking as one who has benefited greatly from this excellent hospital, will the Minister bear in mind that not only is it excellent in itself but it covers a considerable part of London and a very large transient population of patients who have benefited greatly from it?

The Earl of Arran: My Lords, I am indeed aware of what the noble Lord, Lord Grimond, has just said.

Schools: Pupil Governors

3.24 p.m.

Lord Dean of Beswick: My Lords, I beg leave to ask the Question standing in my name on the Order Paper.

The Question was as follows:

To ask Her Majesty's Government whether students in sixth form colleges will be able to be members of the governing bodies of their colleges.

The Parliamentary Under-Secretary of State, Department of Education and Science (Baroness Hooper): My Lords, the Government have no plans to change the requirements of the Education (No. 2) Act 1986 concerning the composition of school governing bodies, which means that only in circumstances where pupils are co-opted will there be pupil governors in sixth form colleges.

Lord Dean of Beswick: My Lords, I thank the Minister for that reply. Is she aware of the disappointment that that will create among sixth form students? Does she agree that the Government are missing an excellent chance by not giving them the right to places on the governing bodies in a day and age where we are constantly telling young people to take more responsibility and be better citizens for it? Will it not be a tragedy if the Government miss this chance to show that they have faith in the younger people of this generation?

Baroness Hooper: My Lords, the Government's view, which was stated on a number of occasions during the passage of the 1986 Act, is that it is not generally appropriate for school pupils to be

members of the governing body of their schools. Were they to become members, it would be necessary to exclude them from consideration of a substantial number of issues and this would detract from the principle that the governing body should act collectively.

Baroness David: My Lords, is the Minister aware that the position of students in sixth form colleges is slightly different from those in other schools? Student governors are probably appointed in their second year of the sixth form when they may very well be 18 and considered responsible enough to vote at that age? They consider that it is quite insulting that they are not going to be allowed to be made governors. Is the Minister aware that I am a governor of a sixth form college? The students are extremely cross that they are no longer going to be able to be governors and I hope that with the new Education Bill coming up there will be a chance to rectify that.

Baroness Hooper: My Lords, I am delighted that the noble Baroness is able to speak from her own practical and personal experience. I am sorry to hear that there is this feeling among the students at sixth form colleges. Nevertheless, we believe that the decision (which as I have said was fully debated during the 1986 Act) was the correct one. However, we feel that schools should encourage the participation of senior students as much as possible in the general running and considerations of the welfare of schools.

Baroness David: My Lords, is the Minister aware that the students like to have a vote?

Baroness Hooper: My Lords, I feel sure of that and I hope that once they are 18 they will exercise that vote in the many opportunities that are available to them.

European Space Agency Meeting, 9th-10th November

3.27 p.m.

Lord Denham: My Lords, with the leave of the House, I shall arrange for a Statement on the European Space Agency meeting on the 9th and 10th November, which is to be made in another place this afternoon, to be printed in the *Official Report*.

Following is the Statement by The Chancellor of the Duchy of Lancaster and Minister of Trade and Industry (The Right Honourable Kenneth Clarke):

"With permission, Mr. Speaker, I should like to make a statement on the outcome of the European Space Agency Council meeting at The Hague on 9th-10th November.

"The 13 ESA members states met to discuss wide-ranging proposals for the agency's future development. This was the first Ministerial meeting since the Council in Rome in 1985 when members agreed on a balanced long-term plan for the next decade with the aim of moving by measured stages towards a wider European space capability. We

areas has its own individual problems and I shall draw the comments of the noble Lord to the attention of my right honourable friend the Secretary of State.

Lord Campbell of Alloway: My Lords, can my noble friend the Minister say why he says that the question put by the noble Lord, Lord Marsh, is wide of the Question on the Order Paper?

The Earl of Arran: My Lords, with respect, because I deemed it to be so.

Lord Underhill: My Lords, is not the point of my noble friend's original Question illustrated by the sad news, which was announced on a radio programme this morning, of the young lad who has been called for an operation on five occasions. Five times the operation could not be carried out because, although the consultants and technical staff were available, there were insufficient nursing staff in the emergency wards. Is not that one of the problems raised by my noble friend's Question?

The Earl of Arran: My Lords, I regret I do not know the exact and precise circumstances of the case which is mentioned. Of course it is regrettable, but once again I must repeat that there are regrettable circumstances across the country. Each district authority is aware of them and is doing its best to put them right.

Lord Wallace of Coslany: My Lords further to the point made by my noble friend, is the Minister not aware that the problem of waiting lists will never be properly solved until adequate steps are taken to provide good accommodation, pay and conditions for nurses and a stop is put on the wastage of NHS-trained nurses to the private sector?

The Earl of Arran: My Lords, I think it is clearly understood that everyone is aware of the nurses' situation. At all times my right honourable friend the Secretary of State is looking at those particular circumstances to see whether, and if so what, improvements can be made.

Noble Lords: Next Question!

Lord Wells-Pestell: My Lords, does the Minister accept that there is a vast army of men, women and children awaiting operations who should have been operated on not weeks ago but months ago?

The Earl of Arran: My Lords, the situation is this. Of those who require admission into hospital 50 per cent. are admitted immediately and the remaining 50 per cent. are admitted within eight weeks. It is the final 50 per cent. to which we are giving special attention.

Westminster Hospital

3.20 p.m.

Lord Ennals: My Lords, I beg leave to ask the second Question standing in my name on the Order Paper.

The Question was as follows:

To ask Her Majesty's Government whether they will give an assurance that the Secretary of State for Social Services will not approve any proposal to close the Westminster Hospital.

The Earl of Arran: No, my Lords. If such a proposal comes to be decided by Ministers, it would only be endorsed after the most careful scrutiny.

Lord Ennals: My Lords, I am grateful to the Minister for giving that assurance. Is the noble Earl aware of the outstanding record of Westminster Hospital as a centre of excellence, being efficient, economic and caring? Is he aware that over the past 10 years, to my knowledge, there have been repeated proposals for the closure of this great hospital which successive Secretaries of State have refused? Does he understand the very serious problem of morale in the hospital when it is constantly being suggested that its future is uncertain?

The Earl of Arran: My Lords, I am, indeed, aware of the great contribution that the Westminster Hospital makes to London. The simple point is that no decision has yet been made about the closure of the hospital and in those circumstances I think it is difficult to answer more questions on that point.

Lord Winstanley: My Lords, is the Minister aware of the fact that I, in a professional capacity, have had occasion to send several noble Lords to the Westminster Hospital, and I am delighted to see two of them here today fully restored to health and vigour? In those circumstances, does not the noble Lord accept that any closure of the Westminster Hospital will have very serious consequences for your Lordships' House?

The Earl of Arran: My Lords, I am indebted to the noble Lord, and I am very much aware of the great services that the Westminster Hospital gives to the Palace of Westminster.

Lord Wise: My Lords, is my noble friend aware that I can verify the remarks of the noble Lord, Lord Winstanley, because this time last week I was in fact lying in the Westminster Hospital after being taken there hurriedly from this building during the morning? Is my noble friend aware also that the care and attention I received and the kindness shown to me during the whole of my stay there could not have been bettered anywhere in the world?

The Earl of Arran: My Lords, I am aware of the many wonderful, similar circumstances that my noble friend has mentioned and I hear of circumstances the whole time which bear out precisely what he has said.

have since underlined our commitment to ESA by the significant increased funding we have provided—no less than £85 million this year alone.

"Since the Rome Ministerial meeting, our commitment to European co-operation in space has not changed. What has changed, however, is the scale of ESA's aspirations. Overall, the total cost of the proposals put to us at The Hague would increase spending on space by more than two and a half times over the next five years. For the UK, agreement to these programmes would have meant an increase to over £200 million—the equivalent of more than a dozen new NHS hospitals—every year.

"Our objection is, however, not solely that the bill is so huge. We recognise that space research is expensive. It is that we cannot see sufficient scientific, industrial or commercial benefits to justify such a huge increase. My approach at the Council was therefore to press for a re-assessment of priorities under present day conditions and to develop a strategy designed to achieve worthwhile aims which would yield solid returns.

"Three major new optional programmes were presented by ESA: Ariane 5, a new heavy lift launcher capable of putting three satellites into orbit; Columbus, the European involvement in the international space station project; and, at French insistence, the Hermes manned spaceplane. I made clear at the outset that I could not endorse the grandiose ambitions of the Hermes programme to put man in space by the year 2000. At enormous expense this would only achieve capabilities which the United States would have achieved 20 years previously. There was considerable sympathy for my view from a number of other member states and it remains to be seen whether they will formally sign up to this programme in its entirety. At the moment only six countries out of 13 have committed themselves to making a contribution to the first phase of development.

"On the Columbus space station programme there has been no satisfactory conclusion yet to negotiations with the Americans about European participation. I declined to agree to proposals that Europe should in any event go ahead with a separate and autonomous version of the Columbus programme if agreement with the US could not be reached.

"I said we would consider further the proposal for a polar platform associated with Columbus. This would be an unmanned space vehicle, primarily for earth observation, that would be complementary to a similar US platform. Our final position on this will depend on further discussions I shall be holding with UK companies, including the financial contribution they would be prepared to make to ensure their participation either in contracts to which they attach significance or as users of the platform.

"My approach to Ariane 5 launcher proposal was that emphasis should be given to ensuring that ESA has a fully commercial launch capability. It is important to give European industry ready access to a launcher for telecommunications and other

satellites. Again, however, I had to question the increase that some other members wanted to see solely in order for Ariane 5 to be man-rated and to enable it to launch spaceships as well as satellites.

"The ESA Executive also brought forward proposals for increases in the mandatory science and general budgets. These had already enjoyed major increases since the Rome Ministerial. The science budget will have increased by some 27 per cent. in real terms between 1985 and 1989. ESA proposed a further increase of 5 per cent. per annum in real terms up until 1992. Professor Mitchell, the Chairman of SERC, and I had to make clear that there could be no justification for such a proposal. In our opinion, ESA could and should achieve the agreed scientific objectives within the currently agreed funding level. I could therefore not endorse the proposed increase.

"Throughout the proceedings I emphasised the need to take a fresh look at some of the new and hugely expensive ESA proposals which largely derive from a desire to follow the Americans into manned space craft. I confirmed our substantial support for those parts of the established programme which gave due weight to industrial, economic, commercial and scientific considerations. I also argued for greater involvement of industry and users in the planning and financing of programmes. There was support from a number of other Ministers for these aims—indeed several of them were incorporated within the final Council resolution.

"The UK remains one of the major participants in European space programmes. We have a budget of over £110 million a year and we will continue to ensure that this is used as effectively as possible. We will continue to play a constructive role with our European partners and I shall be holding meetings with UK companies to see how this can best be achieved".

Business of the House

The Lord President of the Council (Viscount Whitelaw): My Lords, I beg to move the Motion standing in my name on the Order Paper.

Moved, That the debate on the motion in the name of the Lord Sheffield set down for 18th November shall be limited to 5 hours and that Standing Order 35 and paragraphs 10 to 13 of the Rules for the Conduct of Short Debates shall apply to the debate with the substitution of "5 hours" for "2½ hours" and "25 minutes" for "20 Minutes".—(Viscount Whitelaw.)

On Question, Motion agreed to.

Income and Corporation Taxes Bill [H.L.]

3.28 p.m.

The Lord Advocate (Lord Cameron of Lochbroom): My Lords, on behalf of my noble and learned friend the Lord Chancellor, I beg to move that this Bill be now read a second time.

[LORD CAMERON OF LOCHBROOM.]

This Bill is a pure consolidation of certain enactments relating to income and corporation tax and is the first consolidation on this subject since 1970.

With the permission of your Lordships, I should like to take a moment to pay tribute to some of those involved in the preparation of this Bill. First, I should like to thank the draftsmen who, I understand, have been working on the consolidation for some four years or more. The exercise has been extraordinarily difficult in that each year a new and massive Finance Act has had to be incorporated, culminating this year in a pre-election Act and followed by a further large Act after the election. I am sure your Lordships will agree that to have completed the consolidation of such an enormous body of complicated and constantly changing law at all is a phenomenal achievement.

Secondly, and more unusually, I should like to thank Her Majesty's Stationery Office which presented us with what I believe to be the largest Bill in recent times, numbering well over a thousand pages and running into three volumes. This has been a major test of the new technology now in operation in the Stationery Office and the sheer logistics of handling a Bill of this size have been formidable. Nevertheless, the Bill was ready. If your Lordships give this Bill a Second Reading, it will be referred in the usual way to the joint committee on the consolidation of Bills. I beg to move.

Moved, That the Bill be now read a second time.—(*Lord Cameron of Lochbroom.*)

3.30 p.m.

Lord Bruce of Donington: My Lords, we on this side of the House would like to associate ourselves with the tributes that have been paid by the noble and learned Lord to the draftsman and to all those who have participated in this mammoth task of consolidation. That, of course, includes members of the committee which dealt with it as well as the other officers of the House.

It may be permissible to say that the Bill is 1,041 pages long. I can well remember in my early professional career having to deal with the Income Tax Act 1918, as amended in subsequent Acts, which resulted in a small text book half an inch thick. It dealt with the whole of our tax affairs until the outbreak of war. We now have this colossal Bill. And the text books occupy roughly a yard instead of half an inch.

I respectfully suggest that when the Government get down to the whole question of taxation simplification they should bear in mind these physical matters and the tremendous complexity of the clauses. Those of your Lordships who have been associated with taxation statutes will agree that our taxation laws are among the most complicated in the world. That situation, we hope, will soon be rectified.

Lord Diamond: My Lords, we should like to associate ourselves with this valuable consolidation.

Lord Houghton of Sowerby: My Lords, I apologise for intruding when noble Lords are awaiting the main business of the day. I shall not carry on the debate for more than a moment or two. I understood that consolidated Bills were taken formally. I was getting ready to make a full apology to the House for speaking at all.

This is a unique Bill. It is worthy of notice on any count. The noble and learned Lord who introduced the Bill referred to its size and weight. It must be the heaviest Bill of this century. I do not remember anything approaching its size. I hope that noble Lords will not walk about the House with it because it is a safety hazard. It weighs 2.5 kg. It costs £2.45 to send by parcel post. I do not think that there has been anything like it before.

One feature worthy of note concerning this biggest ever Bill is that your Lordships played no part whatever in its contents. Everything, from beginning to end, was held in the bondage of the Parliament Act 1911. Your Lordships sat in the House as helpless observers while the biggest piece of legislation—fiscal expropriation—was passed. Your Lordships had no power to alter it by a jot or a tittle. I cannot get over the shame that the Liberal Government of 1911, aided and abetted by the Irish Nationalists, inflicted it upon Parliament. We have suffered from it ever since.

Another feature of the Bill is that the Taxes Management Act 1970 is not included. I understand that. The Taxes Management Act is not a charging taxation Act; it is a management and enforcement Act. At the time, it was not a money Bill. It was dealt with by your Lordships' House, but successive governments have included in successive Finance Bills amendments to the Act on enforcement and the liberty of the subject. They have thereby excluded your Lordships from discussing draconian powers which are placed in the hands of the taxing authorities.

With VAT, a great collection of new weapons was in the hands of the Customs and Excise. Indeed, the Customs and Excise has a law of its own. If the House is confronted with the recommendations of the Keith Committee on income tax, we shall have another large incursion into individual liberty which we shall not be able to touch if included in a Finance Bill.

As the Bill has taken so long to prepare, I wonder whether it is the time to be consolidating at all. I thought that we were on the threshold of major tax reforms. We have waited 17 years for this Bill. I am not surprised that it has taken four years to prepare. We should offer our deepest sympathy to all who have been engaged in this tedious task. It is the most complicated legislation in the world. It constitutes a serious obstacle to the conduct of business and normal relations between the citizens and bureaucracy.

Another point about the Bill is that when a consolidation Bill is introduced, practitioners, both in the department and outside, have to begin to learn chapter and verse all over again. The income tax Acts are like a Bible to practitioners and the profession. They always want to be able to quote chapter and verse. If we present them with a revised version of