CCBO

From: D Beattie, ESSD Date: 25 April 1986

PS

HERMES/HOTOL

A l. You asked for a short note on the attached press summary reporting a potential UK/France clash on funding for these two B projects. I attach the full "Financial Times" report.

- 2. The British National Space Centre have stressed in public that they do not see HOTOL as a direct competitor to Hermes. Hermes will be manned from the outset, and used primarily for a variety of earth observations and microgravity experiments; it is also planned to stay in space for up to 30 days. On the other hand HOTOL would, in the first instance, be unmanned and used primarily as an entirely re-usable (and therefore potentially inexpensive) satellite launcher.
- 3. Despite these differences, it is possible that both projects could eventually be competing for the same money from ESA. The French are seeking Europeanisation of the Hermes project by 1987, with a firm commitment of funds from ESA states. The BNSC have agreed to share the cost (£3 million) of a two year proof-of-concept study of HOTOL with BAe and Rolls Royce, with a review in about six months time. Until that review is completed, there is no question of BNSC seeking Europeanisation: although Mr Pattie is hoping to arrange presentations to the French and the FRG later this year. In the meantime, we and BNSC consider it unduly alarmist to suggest that we are on a collision course at the moment with France over the two projects. The likely extent of disagreement will become clearer when BNSC's national space plan and their assessment of HOTOL have been completed later this year.

4. Mr Denison-Edson has submitted separately some background material on HOTOL and Hermes. I attach, as requested, the earlier briefing on current space matters.

Mearine.

D Beattie

25 April 1986 Energy, Science and Space Department

24/4

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FT: Britain is heading along a potential collision course with France by stepping up efforts to win European funding for BAe's revolutioned.

by stepping up efforts to win European funding for BAe's revolutionary space aircraft, Hotol, which rivals the French Hermes project.

- London-Dublin air fares tumble as a new private Irish airline enters market.

Times Mnisters are expected to confirm this morning that the contract for the first AOE will go to Harland & Wolff and the second, possibly, to Swan Hunter.

- The cost of electricity is about to fall by up to 6%.

( La I have book ro not you we \* rech hip o Nems sti!)

Please let me have \* back for tonight's box, ith a short note on # note.

CRF-dd 25/4

# Britain's spaceplane on collision course with France

BY DAVID MARSH IN VENICE

Hermes project.

Mr Geoffrey Pattie, the British Minister for Industry and Information Technology, plans to consult European governments in the next few months ahead of a possible move this summer to enlist Hotel as a full international project backed by the 11-nation European Space Agency (ESA).

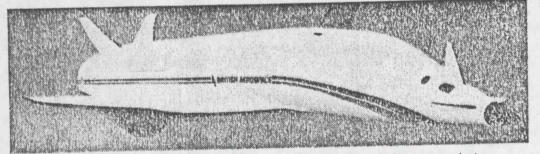
Hotol, which would travel into orbit frem a runway, like an ordinary aircraft, would need about £3bn-£4bn to develop over the next decade, 30 per cent of project.

British Aerospace has indicated

BRITAIN is heading along a informally that refusal by ESA potential collision course with to put money into the project France by stepping up efforts to could force Britain to develop win European funding for it with the US. Leading US British Aerospace's revolution- aerospace companies, among ary space-going aircraft, Hotol, them McDonnell Douglas, have which rivals the French-backed shown interest, while the Japanese space agency has also made informal approaches about collaboration.

The programme cuts directly across French attempts to secure European finance for the Hermes manned space vehicle. This would be lofted into orbit in the mid-1990s atop an Ariane rocket, but would be able to fly back independently like the US space shuttle.

Aerospatiale and Dassault- and with the launching of a ESA, said here yesterday that Breguet, the two leading much larger programme in the the agency could decide on ever, that the main reasons for destruction last Friday of an which could come from Britain French aerospace groups. But US. if it is authorised as an ESA France has faced difficulties in winning support for Hermes and other European countries, which has put off a decision propulsion technology is still Mr Peter Conchie, director of quickly reach the US which ing alternatives for the late until next year.



Hotol is in a race for development cash with the French Hermes project

supersonic space-going aircraft Defence. has risen considerably over the Design work on Hermes is by the British Government to Reimar already being carried out by back preliminary Hotol work German director-general of the considerably on launching costs.

> This is because its revolutionary on the US space station. classified as a military secret business development at British would be able to commercialise 1990s and beyond.

past 12 months with a decision over the project, Professor Europe a chance to win new Luest, the West space business by cutting down Hotol "as soon as we know the the classification were com- unmanned Titan US rocket, Hotol, however, has met con-little secret." He was speaking mercial rather than military. He have highlighted the risks of siderable scepticism in France, at an international conference said that if the veil of secrecy present space transportation

International interest in by the British Ministry of Aerospace's space and communications division, told the Indicating his own caution conference that Hotol gave-

were lifted, details would and increased interest in explor-

the technology much more quickly than Europe.

Hotol could carry satellites into orbit and service the US space station which is planned to be built with collaboration from Europe and Japan from 1994 onwards. It could carry people into space once it proved its security as an unmanned

The propulsion system allows Hotol in its early flight to breathe oxygen from the air like an ordinary jet. This would avoid the need to carry large reservoirs of fuel and liquid oxygen which weigh down conventional vertical rockets and increase the hazards for crews.

The US space shuttle disaster He implicitly admitted, how- in January, as well as the

### Daimler denies it is too powerful

By Jonathan Carr in Frankfurt

THE HEAD of Daimler-Benz, West Germany's blggest industrial group in sales

## UK-Irish air route challenge

BY HUGH CARNEGY IN DUBLIN

AIR FARES on the busy Luton at a return fare of 1£119. London-Dublin route tumbled airline, Ryanair, entered the launch, BA, Acr Lingus and market offering a no-restrictions Dan Air said they were lowerreturn fare which undercut ing their cheapest round-trip prices offered by the existing London Dublin fares by If4 to operators, British Airways, Aer 1195. But these are Super Apex Lingus and Dan Air.

fares which must be booked a month in advance and their Ryanair's move marks the other fares remain significantly first sten in what is likely to be more expensive than Ryanair's.

The company is determined In a flurry of price cutting to break down the price-fixing yesterday as a new private Irish hours before the Ryanair cartel on the London-Dublin route which travel agents say is one of the most expensive in Europe. Its May 23 launch date coincides with the planned start-up of daily low-fare services between Knock Airport in western Ireland and Stansted Airport.

### Dublin plans referendum on legalising divorce

BY OUR DUBLIN CORRESPONDENT

Church.

Ireland and Malta are the only European countries which

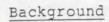
THE IRISH Government last the terms of follow-up divorce night announced plans to hold legislation to be introduced if a referendum, probably in late the amendment is approved in June, on removing the country's the referendum. Couples will constitutional ban on divorce, a have to have been separated for move trenchantly opposed by at least five years, including at the country's powerful Catholic least two years' judicial separation granted by a family court set up to conduct divorce proceedings. Special provision ban divorce and the issue has will be made for those separated

SECRETARY OF STATE'S MEETING WITH GENSCHER AT OECD, 17 APRIL

OUTER SPACE ISSUES

#### Line to Take

- 1. FRG should be in no doubt about UK commitment to European Space Agency (ESA): recent formation of British National Space Centre, and decision to launch Skynet 4C on Ariane, demonstrate our belief in European space activities.
- 2. Space Centre, and UK industry, considering participation in Hermes. In principle willing to contribute, but need to be careful not to press for early decisions at expense of programmes (Space Station and Ariane V) already agreed at ESA Ministerial Council in Rome last year.
- 3. Decisions on Hermes also linked to possible development of HOTOL, although UK does not see latter as a direct competitor. (HOTOL likely to be used as unmanned satellite launcher in first instance, while Hermes would be manned and used for earth observation and microgravity and other experiments.) Potential importance of project illustrated by British decision to fund proof-of-concept studies. Hope that Mr Pattie and BNSC can give presentation to FRG Ministers later this year.
- 4. Pleased that agreement on ESA participation in US Space Station project is near. Recognise need for European autonomy in space in due course: but essential to work with US in first instance.



### The Space Centre/Skynet 4C:

- 5. The British National Space Centre was established last year to strengthen the co-ordination of the UK's space activities; its first Director-General, Mr Roy Gibson, was the first Director-General of the European Space Agency.
- 6. The decision to lauchh Skynet 4C on Ariane was taken in the wake of the Shuttle disaster, but nonetheless is important evidence of the UK's support for the Ariane programme (an ESA programme). The MoD is still considering the launch vehicles for Skynet 4A and B.

### Hermes/HOTOL:

- 7. Hermes is a French proposal for a "mini space shuftle", to be launched on the disposable Ariane V, but which could return to a standard runway in Europe after manned flights of up to 30 days. The French are seeking Europeanisation of the project by 1987 with a view to launch in 1996/97. Chancellor Kohl has expressed agreement in principle to participate, but no new funds have yet been allocated by the FRG, from whom the French are seeking 20% participation. (Herr Stoltenberg says that new money cannot be made available.)
- 8. HOTOL (Horizontal Take-off and Landing Vehicle) is a BAe/Rolls Royce concept for a totally re-usable launch vehicle, based on a unique air-breathing concept and using a runway for take-off and landing. The Space Centre has agreed to share the costs (£3 million) of a proof-of-concept study with UK industry over the next two years. Although details of the engine are confidential, Mr Pattie is hoping to arrange presentations to his European counterparts later this year. Development of the vehicle would have to be with other countries in view of the costs involved; the

Americans have started research work on a similar project, known as 'The Orient Express'.

#### The Space Station:

- 9. NASA has refused, on safety and technical grounds, to allow ESA's Columbus module to be separable from the Space Station. The Germans alone have refused to concur with the (German) ESA Director-General's acceptance of NASA's arguments. However, following talks at ESA last week, the BNSC are now more optimistic that a compromise can be reached between the Germans and the rest of ESA, to allow the FRG to continue to plan for a separate module after the initial construction of the Space Station.
- 10. UK interests are so far largely unaffected by the FRG's disagreement with ESA, since the Agency has accepted that the UK's contribution will be concentrated on an unmanned observation platform in an entirely separate orbit from the Space Station.

