

✓ See Mr Dupond
Would K.T. have
brief discussion with
me about this
P.M.

Prime Minister had Poll
Agree subject to
Other Ministers' views?
(This project was
mentioned in the
RR discussions last
Oct/Nov/Dec)

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Qa 04407

To: PRIME MINISTER
From: SIR KENNETH BERRILL

Rolls Royce: Collaborative Agreement with Japan

1. This note recommends that Rolls Royce should be authorised to carry out the initial stage of their proposed agreement with the Japanese on the RB 432 engine. It is suggested that this authorisation be agreed subject to the views of Ministers on this note. 24/1

Background

2. You will recall that Ministers briefly discussed collaboration with Japan on the 432 in MISC 22 in November. You then agreed that, subject to further examination by officials, Rolls Royce should be allowed to take the next step so as to keep options open for the new management. Since then an Official Group under my chairmanship has looked at the proposals in more detail. The main background points to the proposals are:

(a) The Government will not have to decide on the expensive 'full launch' phase of the project until probably well into 1981. What is at issue now is the initial launch phase costing Rolls Royce around £5m.-£10m. Rolls Royce and the Japanese signed an agreement in December, but the agreement will not come into force unless Government approval on both sides is signified by 31 January. The agreement is in two parts. The first is for an 'initial launch phase' which covers technical developments and work to establish whether there is a market to justify full development. This phase will last initially until the end of 1980, though it could well be extended into late 1981. The date when the manufacturers will wish to move from this preliminary phase to the subsequent 'full launch phase' will depend on when the airframe manufacturers confirm they will use the engine: under the agreement at least one airframe manufacturer must do this before full launch begins. In addition, both Rolls Royce and the Japanese must each be satisfied of the project's viability and have secured the necessary finance.



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(b) Rolls Royce's preliminary market assessment suggests there is a need for a new engine for use in 120-160 seat aircraft. The main customers for the engine so far identified are Boeing (in a new version of the Boeing 737) and Fokker (the latter through their own collaboration with the Japanese in development of a new aircraft - the F29). Boeing and Fokker will each be carrying out their own studies over the next few months; so by late 1980 the size of the market for the engine should become clearer. Rolls Royce's present assumption is that they will get their engine in 50 per cent of the Boeing 737s sold and in up to 65 per cent of the Fokker aircraft. Rolls are also assuming significant sales to the Chinese. Rolls are assuming that the remaining engine sales to Boeing and Fokker will be met by General Electric, in collaboration with SNECMA: Pratt & Whitney are unlikely to enter the market.

(c) The basis of funding the project is that Rolls Royce and the Japanese each pay 50 per cent of the costs. If the project eventually goes into 'full launch' the total negative cash flow for Rolls Royce on the 432 is estimated at about £150m. over the next five years. But the present issue is not the £150m. but the expenditure needed to reach a position of greater clarity about the prospects for the project - the initial launch phase. In 1980 the initial launch phase is likely to cost Rolls Royce about £4m. (of which, however, about £3m. is planned to be spent anyway, largely on component research, and already provided for in the company's advanced engineering budget). If the initial launch phase were extended into 1981, Rolls might need to spend a further £5m.-£6m. in this phase, particularly on long-lead materials if an entry into service date of early 1987 were needed. Alternatively, if Boeing wanted to accelerate the timetable for their 737 aircraft, Rolls might commit an extra £3m. this year in addition to the £4m.

(d) During the initial phase the transfer of technology to the Japanese will be fairly limited. If the full launch goes ahead, Rolls will be 'compensated' for the technology transfer, mainly in the form of guaranteed participation in future Japanese engine projects.


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Assessment

3. Rolls Royce's estimates at this stage show a discounted cash flow rate of return from the whole project of 5.7 per cent, though this is no more than a working assessment so far. The Board of Rolls Royce have explicitly stated that while they regard the figures as adequate to justify a decision to enter the initial launch phase, the estimates are not firm enough to be the basis for more substantial decisions and have not been approved by it. Although this figure exceeds (just) the Required Rate of Return for nationalised industries, we would look for a higher figure for a project subject to such uncertainty. Rolls argue that some of the assumptions on which it is based - e.g. warranty and manufacturing costs - are pessimistic, so the actual rate could be higher. Against this the market assessment must be regarded as speculative at this stage, particularly the projected sales to the Chinese. The actual rate of return is also sensitive to changes in the exchange rate - though Rolls Royce's estimates assume, as we asked them to, a rate of \$2 to £1.

4. However, the question which at present arises is whether the agreement should be allowed to enter into force, and the initial phase thus be started on the understanding - as laid down in the agreement - that a separate decision would be needed before embarking on the full launch phase. Officials consider they should be so authorised. This is partly in order to keep options open for the new management - a point already endorsed by Ministers. But, in addition, the initial period will give time for the market prospects - and especially Boeing's intentions - to become very much clearer as a result of the separate work being conducted by the airframe manufacturers. During this period the estimates will probably be revised in any case. It also seems valuable to preserve the principle of co-operation with Japan in this field. Finally, there is no obvious alternative means of keeping the project alive. By nursing the prospects of the 432 together with the additional market prospects provided by Japanese investment, Rolls Royce's negotiating position may be strengthened in any future discussions about collaboration in other areas with the American manufacturers.

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Conclusions

5. We therefore recommend that Rolls Royce should be authorised to bring the 'initial phase' agreement into force, making clear that this is without any commitment to the full launch phase and that they will have to make out a stronger case before authorisation for the full launch phase would be given. (A draft letter of authorisation for the Secretary of State for Industry to send to Rolls Royce is annexed.)
6. We shall be seeking Ministerial decisions on the Rolls Royce Corporate Plan as a whole in about a month's time.
7. I am sending copies of this minute to the members of MISC 22, and to Sir Robert Armstrong.

KR

23 January 1980

Att

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DRAFT LETTER FOR THE SECRETARY OF STATE FOR INDUSTRY TO SEND TO
THE CHAIRMAN OF ROLLS ROYCE

Following signature of the Rolls Royce/Japan Collaboration Agreement and an examination of the information provided by the Company on the prospects for the collaborative development of the RB432, the Government is content that the Agreement on the Initial Launch Phase should enter into force.

I recognise that the Board of Rolls Royce has not yet taken any decisions whether it wishes to go beyond the Initial Launch Phase. You will equally appreciate that this approval does not imply in any way that the Government will give authority for full development of the engine. I think I should add that taking into account the very great uncertainties of the aero-engine business, on the information so far available to me the prospective rate of return from the project does not look adequately attractive.

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Prime Minister

ROLLS ROYCE: COLLABORATIVE AGREEMENT WITH JAPAN

I have seen Sir Kenneth Berrill's note to you dated 23rd January about the proposed agreement between Rolls Royce and the Japanese on the RB 432 engine.

I accept that Rolls Royce should be allowed to take the next step and bring the "initial phase" agreement into force and endorse the recommendations in his note.

I am sending copies of this minute to the members of MISC 22, to Sir Kenneth Berrill and to Sir Robert Armstrong.

JK

30th January 1980

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30 JAN 1980

