Concorde criticism

Dear Sir—One should not be surprised, I suppose, to read of the support given to Concorde in your editorial (27th June 1974 *E&P*, p.487). After all, engineers should have faith in what they produce and electrical engineers have played as much a part in the realisation of Concorde as anyone else.

But what does come as a surprise is the combination of very questionable statements which make up the argument for the continuation of the project. For example, contrary to what you say, all the objections to Concorde which have prevented orders being placed have not been overcome. We still do not know what the effect of the aircraft will be on the upper atmosphere; airport and boom noise is still a problem; it is still very thirsty for fuel; and its range is shorter than that which is normally expected from an aircraft designed to work transcontinentally. Moreover, all the evidence points to the conclusion that every aircraft sold will lose money for both the seller and the buyer. No wonder the airlines are not rushing to buy but are cancelling their options instead.

The fact must be faced that we now live in a quite different world from that which existed when Concorde was first conceived. There is great public concern about the environment, oil is recognised as a precious commodity which must be conserved and the state of the economy in Britain and abroad leaves little room for extravagant enterprises of dubious social and economic value. In short, the problem of tomorrow is how to survive; in this situation, Concorde has no place.

No, we have not passed the point of no return, nor should we accept that such a point is ever reached in manmade projects such as Concorde. If it is wrong, then it must go, no matter what the immediate consequences are. Concorde has no future and we should have the courage to face the fact.—Yours faithfully,

J. F. GAMLIN
16 Thomson Drive, Bearsden
Glasgow G61 3NU, Scotland
16th July 1974

Concorde criticism
J. F. Gamlin, B.Eng., M.A., C.Eng., M.I.E.E.
G. ff. Bellairs, B.Sc.(Eng.), E.R.D., C.Eng., F.I.E.E.
J. E. Gamage, C.Eng., M.I.E.E.
E. W. Crew, B.Sc., C.Eng., F.I.E.E.

Marconi heritage
E. A. Payne *(Associate Member)*

Social responsibility
L. M. Birdseye *(Associate Member)*

Waste not, want not
J. A. Sumner, F.B.I.M., C.Eng., F.I.Mech.E., F.I.E.E.

Traffic-information broadcasting
R. S. Sandell, C.Eng., M.I.E.E.

'C.Eng.'
M. D. McMahon, B.Sc., *(Associate)*

Marconi progress
J. E. Head *(Associate Member)*

Journals available
K. Pittaway, C.Eng., F.I.E.E.

Dear Sir—I am afraid that your defence of the Concorde project exhibits a severe case of special pleading.

The profitability of this aircraft in commercial service is still extremely doubtful, otherwise, of course, most leading airlines would have ordered it. But even if this optimistic accountancy be conceded, there is little hope of Concorde becoming a net hard-currency earner when its fantastic fuel consumption is taken into account at present price levels.

There is no point in Britain continuing with delusions of international grandeur. Britain can no longer afford empires, either of the colonial or technological kinds. For many reasons, mainly stemming from gross overpopulation, the people of Britain have become incapable of earning their international living with the work of their own hands. We are borrowing about a $1 million per hour to meet our housekeeping bills. People in such a fix cannot afford to waste money on nonessentials. Concorde must be written off.

North Sea oil and gas will, we all expect, save the UK from economic disaster, but there will be little or nothing to spare. The fields are our collateral and by the time they are developed much, if not most, of the production will have to be exported to service and repay our debt. Our overdraft interest, already over £1 million per day, is growing rapidly. The fact that the USA and the USSR are both solvent and can afford to build supersonic aircraft if they wish is irrelevant to us.

Finally, what is the social object of the exercise? Britain has a queue of really important social improvements laying claim to our strictly limited supplies of capital. Enabling a handful of v.i.p.s to travel around the world at Mach 2 is not among them.—Yours faithfully,

G. ff. BELLAIRS
Largo Antonio Viana 3-1-E
Lisbon-2, Portugal
7th July 1974

Dear Sir—Your editorial makes a number of statements about Concorde which cannot be substantiated; for example:

- We have an aircraft that has exceeded many of the requirements.
- All the objections to Concorde have been overcome.
- The aircraft has proved it can be operated without deafening local inhabitants.
- Concorde can be operated as easily as a subsonic airliner.
- It is generally agreed that Concorde with a 50–60% payload would break even.
- It is not too late to recoup some, if not all, of our losses.

It can be argued that, having spent over £1000 million on developing Concorde, we would be foolish to stop now. It can also be argued that it would be wrong to cancel Concorde because that would throw a large number of skilled engineers and craftsmen out of work. It cannot be argued that, if we proceed, we may recoup some of our losses when Government, manufacturers and British Airways all agree that none of the development cost is recoverable.

According to a letter published in *The Director*,* P. E. Thornton, Secretary (Aerospace), UK Department of Trade & Industry, said, in answer to questions raised in the House of Commons Public Accounts Committee, that the price to BOAC and Air France for their Concordes was £13 million each at July 1971 prices and that, if 25 Concordes were built, the cost would be of the order of £23 million each. So how can we recoup our manufacturing losses?

If Concorde would break even with a payload of 50–60%, how is it that British Airways estimate operating losses up to £25 million a year? If all the objections to Concorde have been overcome, why have more machines not been sold? In fact, further modifications are already under discussion. As to operating without deafening local inhabitants, this has been possible only by flying at subsonic speeds over inhabited land. But, if Concorde is 'to fly to the far corners of the world in half the present scheduled times' it must fly at full speed over inhabited land, deafening people and leaving a trail of broken windows behind. And, if this is not acceptable to the local inhabitants, the time saving will be negligible.

In a recent issue (16th May 1974 *E&P*, p.355), you showed consideration for the conservation of energy. How then can you extol an aircraft which consumes many times the fuel per passenger, compared with wide-bodied subsonic aircraft, for the dubious benefit of saving a few hours by the privileged few?—Yours faithfully,

J. E. GAMAGE
11 Pegasus Court, Spencer Road
New Milton, Hants. BH25 6EJ
1st July 1974

*February 1974, 26, (8)

Dear Sir—No matter how much money has been spent on Concordes, they should be judged by their value to our civilisation, not by whether they can make a profit. Is it really necessary to reduce the relatively short flying time of international travel for a very small minority at the cost of greatly increased fuel consumption and considerably more noise than that made by improved types of subsonic aircraft?

The sensible answer is quite definitely no.—Yours faithfully,

E. W. CREW
26 St. David's Drive, Broxbourne
Herts. EN10 7LS, England
25th June 1974

Marconi heritage

Dear Sir—In the 30th May 1974 *E&P*, p.422, the President of The Radio Society of Great Britain pays tribute to the help that Marconi gave to amateurs; I hasten to add that Marconi also showed a keen interest in their activities too, and copies of *Wireless World* were often to be seen in his laboratories.

In the autumn of 1919, transatlantic tests were conducted between amateurs in Britain and in the USA, and signals of readable quality were heard by some of us. The wavelength, as we used to say in those days, was 200 m.

The success of these tests greatly impressed Marconi, and confirmed his belief that short waves could be used for long-distance communication.

He therefore applied for permission to conduct tests at 200 m, and, although this was refused on the grounds that commercial communication might be disturbed, the Postmaster-General did sanction the use of waves of 100 m and below.

A powerful valve transmitter was therefore erected at Poldhu in Cornwall in 1921, operating initially at 97 m, signals from which were received on board the yacht *Elettra*, which sailed into the Atlantic while measuring the signal strength as the distance increased. These tests were outstandingly successful.

Subsequently, wavelengths of 64, 32 and 16 m were tested and it was established that, by choosing the appropriate wavelength for the distance and time of day, it was possible to obtain signals of such quality as to permit high-speed recording to any part of the world for a sufficient number of hours each day to the satisfaction of the British Post Office.

Signals were subsequently reinforced by using huge arrays of directional aerials, both at the transmitters and receivers; this resulted in the beam system being adopted for the Imperial Communication.

Incidentally, it is relevant to point out that Gerald Garratt suggested at the Centenary colloquium that it was a harmonic from Poldhu that enabled Marconi to receive the first transatlantic signals in 1901, and its wavelength could well have been 200 m, as above—Yours faithfully,

E. A. PAYNE
Robins, Little Baddow
Chelmsford, Essex CM3 4SY
England
2nd June 1974

Social responsibility

Dear Sir—R. W. Minter (30th May 1974 *E&P*, p.422) states, among other things, that 'he who pays the piper calls the tune' and J. D. Wright asserts (13th June 1974 *E&P*, p.463): 'power comes out of the barrel of a gun'. The unfortunate thing about these sweeping generalisations is that they sound believable and are liable to put an end to logical argument.

continued on p.644