

# FLIGHT

and

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## Dilemmas are in Fashion

LAST week we reviewed proposals contained in Lord Weeks' Air League address. We entitled the review "The Industry's Dilemma". This week we print select passages from a paper by Dr.-Ing. Lachmann, director, scientific research, Handley Page, Ltd., which he calls "The Designer's Dilemma"; and we report also an interview with Hawker Siddeley chiefs which might have been aptly titled "A Manufacturer's Dilemma." So if we add our own dilemma we shall find ourselves in good company.

Clearly, the path out of the maze must begin with the turning that the British aircraft industry is taking sheerly by instinct. Already firms are in process of reorientating and adapting themselves to a new outlook of rationalism. The lengths to which the process of reorientation has already been carried beyond the aeronautical field was shown last week when the Hawker Siddeley chiefs reported that, whereas two years ago aviation accounted for 80 per cent of their group's activities, the figure today was only 30 per cent. But we must stick to our aeronautical last; and we note that Dr. Lachmann states categorically that the Government will in future demand co-operation of two or more firms in tendering for a contract. He foresees that the pooling of technical resources, design capacity and production facilities will speed delivery; and in this connection he pays *Flight* the compliment of quoting a question recently posed in this column, when he asks (concerning the time cycle of the modern bomber), "Has there ever been in history such a lengthy period for forging and tempering a new weapon?"

But that question is not merely rhetorical: it has little significance whatever beyond the academic, for not one supersonic bomber will now be succeeding the V-class. As Dr. Lachmann puts it, the "comfortable period" is ending—the period when military aviation could continue as a pacemaker for civil aviation, with the supersonic airliner following in the wake of the supersonic bomber, and with the commercial application generally subsidized by military development.

The designer's major dilemma, as Dr. Lachmann sees it, is how to adjust his creative ability within a rapidly changing universe wherein the demand for conventional military aviation is contracting, but which "indicates expansion in civil aviation."

This fashionable word "dilemma" is defined as "a choice between two alternatives, both equally unfavourable"; but Dr. Lachmann chooses to apply the term in a wider sense—to a position leaving a choice between two or more solutions without implying that all are necessarily unwelcome or unsatisfactory. We ourselves have always suspected a dilemma of being a chimerical beast that lurks in dictionaries, and on being driven into the open turns out to be nothing more than our old friend the challenge. And no self-respecting designing or planning office should ever be without one of these improving creatures.

## The Naval Pattern

Another recent lecturer whose remarks invite comment is Rear Admiral D. R. F. Cambell, Flag Officer Flying Training. In a lecture at Brough (where the N.A.39 is coming along nicely under its British and American sponsorship) he puts forward the view that manned aircraft will remain in the Navy, but that development will be diverted from the aircraft itself to its equipment. For strike and air defence he visualizes the development of a long-endurance aircraft of moderate speed and ceiling, launching high-performance missiles. Guided weapons would be a most effective substitute for the close-range gun-defence system. But Admiral Cambell doubts whether it will be practical or economical to develop a long-range weapon to supersede the fighter unless some other customer (the R.A.F. or U.S. Navy?) can share the burden of development.

We are left with the reflection that the aircraft suggested by Admiral Cambell might be the N.A.39 itself—and that the missile might be the ultimate development of the SR.177 mixed-unit fighter, already earmarked for the Navy.