haps the area which could be examined is the traditional trade structure, which in some respects ill-fits the needs of modern aeroplanes. Inertial guidance is all very well for some purposes but should not be adopted as a system for navigating the industry on its future path. In this respect the writers of the original letter have many allies.

K. G. WILKINSON, Fellow

Chief Engineer, and C. VAN DER MEULEN

Engineering Training Manager, British European Airways 26th September 1966

HAVE read with interest Mr. Frv's letter in the September issue, and I am very glad to see you publishing various views on this terribly vital subject.

I hope that much more thought will be given before the Board is set up, because the fundamental purpose of the letter by Mr. Rainbow and me was to draw attention to the need so to balance the constitution of the Board that it would have the flexibility to arrive at the right decisions.

Mr. Fry's letter is of value, but on two points we disagree:

(1) We are not certain that the extension of special training colleges in association with a flying school and an avionics school is entirely the best solution. Much of the equipment available at these schools is already obsolete, and we feel that a scheme using the actual facilities of an operating company can be of far more value.

(2) While we agree that the SLAET does have a qualification system, in our opinion it does not fill the bill in establishing an agreed and approved standard.

There is, however, perhaps a case for taking all the existing standards and examining them carefully to see whether some aspects can be found, which will embrace or extend the SLAET qualification system.

26th September 1966 G. D. PEACOCK

## A Question of Accurate History

READ the contribution from Lt.-Col. L. F. R. Fell in the June 1966 issue of the JOURNAL with interest and I found that the penultimate paragraph requires amplification to make it a basis for accurate history.

First, I think it is quite incorrect to write that Richard Fairey persuaded Sir Hugh Trenchard to introduce from the USA the Curtiss D12 engine. Fairey introduced this engine into Britain and had the Fairey Fox designed for it. It was the then outstanding performance of the Fox twoseat day bomber (faster than any contemporary RAF fighter) which caused Trenchard to order 28 to equip one squadron (No. 12) with reserves. I was then sole test pilot to the Fairey Aviation Co Ltd, and I first flew the Fox on 3rd January 1925. Trenchard, accompanied by his staff (Sir Geoffrey Salmond, AMSR; AVM T. I. Webb-Bowen; and others) saw my demonstration of the Fox at Northolt on 28th July 1925 and immediately he placed an order verbally with Fairey for "one squadron of these aircraft".

I believe Col. Fell's wording is merely accidental in tending to give the impression it does; but it was the fact of Trenchard's ordering of the Fox aircraft which introduced the Curtiss D12 into the RAF; the engine, as such, was not introduced by Trenchard; had it been so, it does not follow that the Fox would have been ordered, for other firms would have been invited also to tender to meet a specification for an aircraft powered by the D12. But there was no other such aircraft in Britain, because the Fox was a private venture conceived by Fairey after he had secured the British rights for the Curtiss engine.

Secondly, can Col. Fell give us the dates when he asked Napier and Rolls-Royce to build engines to compete with the Curtiss D12? Was it before or after the appearance of the Fox that this was done? It is quite impossible to reconstruct the history of this affair correctly unless these dates are known. The RR F prototype engine referred to by Col. Fell was first flown, by me, in a Fox aircraft on 29th August 1927, 25 months after Trenchard ordered the Curtiss-Fox and 32 months after the Fox first flew with the Curtiss motor. Therefore, I have little doubt that the moves to produce a rival British engine referred to by Col. Fell were made after Fairey brought the Curtiss engine to Britain, and perhaps after the Fox flew; I think the latter. Will Col. Fell kindly supply the dates?

5th July 1966.

NORMAN MACMILLAN. Associate Fellow.

DO NOT think there is any difference of opinion between Wing Cdr. Macmillan and me about the facts which led up to the purchase of a squadron of Fairey Fox aircraft fitted with Curtiss D12 engines. This was a decision made by Sir Hugh Trenchard himself after the occasion mentioned as having taken place on 28th July 1925.

With regard to the second paragraph the Fox was built around the D12 and there was then no British engine that could take its place. We ought to have had a low drag liquid-cooled engine but none was available. At the Air Ministry we were well aware of the requirements and fully understood the pioneer efforts which Fairey was making to meet them. It was well before July 1925 that we tried, but without success, to persuade Napiers to produce a twelvecylinder Vee Lion.

It was, however, after the demonstration in July 1925 and Sir Hugh Trenchard's subsequent decision to purchase a squadron of D12 Fox aircraft, that I approached Royce with my request that Rolls-Royce should build an engine. as a private venture, which would rival the D12. This must have been so because the D12 engines from the USA had already begun to be available in England, as the property of the Air Ministry, and therefore I was able to send a D12 to Derby for examination by Rolls-Royce engineers for them to see the kind of engine the Air Ministry required before the design of the Rolls-Royce engine was begun. (This is referred to on p 159 of the Centenary JOURNAL.)

There is no doubt in my mind that it was the advent of the Curtiss D12 into Britain which provided the incentive to produce the Rolls-Royce Kestrel. 4th July 1966.

RUDSTON FELL, Fellow.

"HE Curtiss engine sent to Rolls-Royce by Colonel Fell must have been supplied to the Air Ministry by the Fairey Aviation Co Ltd, who held sole UK rights for them.

The approach to Rolls-Royce was made not less than 18 months after C. R. Fairey brought his first Curtiss engine to England. It was made not less than 7 months after the Fox first flew, because that was the lapse of time before Sir Hugh Trenchard saw it and ordered it. It is therefore unlikely that Napiers was approached until well into 1925.

It appears that no one at the Air Ministry and certainly no one in industry made a move towards low frontal area liquid-cooled engines until after confrontation by the Curtiss D12 in Fairey's hands and fitted in the Fairey Fox private venture day bomber. C. R. Fairey had intended to manufacture the Curtiss D12 engines, but he received no support for this from the Air Ministry and could only import American-made engines.

When the Rolls-Royce Kestrel engine reached initial production,  $4\frac{1}{2}$  years after Fairey brought his first Curtiss D12 to England, Fairey's hope of entering aero engine manufacture having first been quashed by lack of support, his imports of US-made Curtiss engines had also ceased. 23rd July 1966. NORMAN MACMILLAN.