

1934: year of the legendary Comet racing 'planes

They set out to forge the air link between Britain and Australia—and built one of the world's most beautiful aeroplanes in only nine months. R. W. Cantello recalls the Comet racers from the viewpoint of a De Havilland worker.

With the possibility of supersonic airliners flying from London to Australia in twelve hours in the foreseeable future it is interesting to recall how 40 years ago a prominent Australian businessman did his best to speed up communication on that route. Sir MacPherson Robertson, a wealthy Australian, decided in 1933 to offer a first prize of £10,000 for an air race from Britain to Australia open to all comers.

Postal communications were slow and it was 1934 before the Royal Aero Club finalised their plans to supervise the race and announced terms and conditions of entry. Manufacturing companies, particularly in America and the UK, immediately showed interest. As the race was scheduled for October, time was short. But the very

progressive De Havilland Company decided in January to make an attempt to win.

This meant designing, building and selling a special racing aircraft. It was costly to build fewer than three machines. The estimated cost of three racers would be £50,000 and it was extremely unlikely that these aircraft would fetch a price in excess of £6,000 each. There would be a subsidy from the company of some £32,000—a waste of money if failure followed.

However, De Havilland decided to proceed with the programme and advertisements appeared in the press offering to build the aircraft.

The aircraft industry in the early 1930s was having great difficulty even in meeting its weekly wage bills: often it was at the very

last moment on Friday afternoon that the wages could be paid. I was a rather hard-up young man so for me Friday was always a worry day. In fact, owing to subsequent financial disputes this was to be the last of the sponsored flights by the De Havilland Company in racing events. Although the De Havilland factory had been working short time for several years they were now emerging as a successful company and were in production with three large passenger aircraft types.

It was now January 1934 and the race was due to start early in October but the Company decided to go ahead with the project. The aircraft would be known as the Comet (not to be confused with the 1952 Comet airliner) and would be a low-winged plywood monoplane, twin-engined and carrying two pilots.

The engines would be 200 hp Gipsy VI engines which were being developed from the earlier Gipsy Major engine. The revolutionary retractable undercarriage would be wound up by hand in the cockpit.

The propellers would be metal, but they presented a supply problem. Someone was sent hurriedly to Canada to see the Hamilton Airscrew Company but although this was the beginning of a long association between Hamilton and De Havilland, no suitable propeller was available at that time. The Ratier Company of France was working on a suitable metal propeller with variable pitch and this was acceptable for the performance of the engine.

The propeller was built in coarse pitch but had to be in fine pitch for take-off. To enable this to be done a rubber cylinder was built into the hub but it needed a bicycle pump to bring it into fine pitch on the ground. Once the aircraft was in the air it was possible to release the air pressure but the propeller would then remain in coarse pitch until the end of the flight. I was involved in building this aircraft at De Havilland's aerodrome at Stag Lane and I

■ Comet racer prototype at Hatfield for flight trials in 1934. The hand-wound undercarriage is clearly seen. The propellers shown here may be a pair of Hamiltons fitted prior to deliveries from the Ratier factory.

