

No. 38

Fairways (Jersey) Ltd., Avro 19, G-AHIG, ditched in the Solent River, England,
on 6 August 1955. Ministry of Transport and Civil Aviation (UK),
Civil Accident Report No. C. 637.

Circumstances

The accident occurred during a passenger carrying flight from Jersey Airport to Blackbushe. The flight was uneventful until the aircraft was approaching the south coast of the Isle of Wight when the starboard engine began to surge and lose power. The pilot decided to divert to Eastleigh but when over the Solent the port engine also lost power, compelling him to ditch the aircraft. Of the 11 occupants on board the aircraft only 2 passengers were injured.

Investigation and Evidence

On the day of the accident the pilot had completed two return flights between Jersey and Blackbushe arriving back in Jersey at 1808 hours Greenwich Mean Time. After an interval of about 33 minutes, during which time he completed arrival and departure formalities, he took off for Blackbushe. Shortly before 1925 hours when at 2 300 feet and about three miles south of St. Catherine's Point, Isle of Wight, the pilot reported to London Air Traffic Control that the starboard engine was running very roughly and, a minute later that the propeller constant-speed unit had failed and the engine was losing power. An attempt was made to clear the surging by operating the starboard throttle and pitch levers through their full range but without effect. The pilot stated that as height was being lost he opened up the port engine to climbing power and then to full power but that descent continued. No feathering action was taken. He had no recollection of checking the fuel pressure warning lights or the contents of the port tanks but said that he checked the contents of the starboard main tank and that the gauge indicated 15 - 20 gallons.

At 1930 hours the pilot reported his position as over the Isle of Wight at 1 000 feet, at 1932 hours as approaching Southampton Water at 800 feet and at 1935 hours as four miles east of Calshot. Almost immediately afterwards the port engine also lost power and a MAYDAY call was transmitted; this was acknowledged by Eastleigh. The aircraft was successfully ditched at 1936 hours. There was no fire.

No warning of the emergency had been given to the passengers but they had themselves concluded that all was not well. One man who did not know how to fasten his safety belt correctly sustained fractured ribs and the passenger in the cockpit received a cut on the face.

When the aircraft came to rest it remained afloat and most of the occupants got out onto the port wing and top of the fuselage where life jackets were put on. One passenger, who had been sitting in the cockpit, did not know where his life jacket was stowed and another passenger had been unable to find his, so the pilot re-entered the aircraft and found life jackets for both of them.

Inspection of the aircraft revealed that it was only slightly damaged during the ditching. There was no evidence of any pre-crash damage or mechanical failure. The fuel tanks were empty except for the starboard inner which contained about five gallons of a mixture of petrol and sea water. The fuel tank cocks were selected "ON" and the crossfeed cock was in the "OFF" position. The fuel filters were clean and free from water; each contained a small quantity of fuel. The fuel system was pressure-tested and no leaks were found. The fuel delivery and vent lines were free and unobstructed. It was not possible to check the fuel pressure warning lights or the fuel tank contents gauge owing to the effects of immersion in the sea.

The carburettors, complete with the boost and mixture control units, were removed and tested at the makers. The tests showed that they were serviceable and that the fuel flows were within the maker's prescribed limits.

Although the pilot stated that before taking off he twice read the fuel contents gauge and was satisfied from the readings that the aircraft had been refuelled, investigation at Jersey Airport revealed that the aircraft had not been refuelled, that the tanks had not been inspected for the amount of fuel they contained and that the aircraft left Jersey with only such petrol as remained in the tanks after the flight from Blackbushe.

Observations

It is considered that the arrangements made by the operator for the refuelling of their aircraft at Jersey were not sufficiently definite and that this led to a breakdown in the procedure.

In addition, the pilot relied on his reading of the fuel contents gauge as a means of satisfying himself that the aircraft had been refuelled and this clearly gave rise to error.

When the starboard engine lost power the pilot did not carry out a thorough cockpit check to establish the cause of the failure and

erroneously concluded that because the engine was surging the propeller constant-speed unit was defective. Had he established that the fuel was almost exhausted he might well have been able to land on an aerodrome in the Isle of Wight.

The Company's operations manual makes it clear that in order to maintain height on one engine the propeller of the failed engine must be feathered.

Probable Cause

The accident was due to lack of fuel resulting in loss of power from both engines and a forced alighting in the sea.
