

No. 29

I. A. S. London Ltd., Rapide (DH. 89A) G-ALBB Aircraft,
crashed at London Airport on 1 August 1952

Circumstances

The aircraft was approaching to land at London Airport on runway 23L after a five-minute local pleasure flight. It was coming in after a Stratocruiser and had reached a point between the beginning of the runway approach lighting and the Bath Road when it encountered turbulent air at a height of 300 feet. The pilot lost control and the aircraft crashed just inside the aerodrome and 475 yards from the threshold of the runway. On impact with the ground the nose of the aircraft disintegrated and the pilot was thrown out and severely injured. Five of the eight passengers received injuries of a lesser degree.

Investigation and Evidence

By arrangement with the airport authorities these pleasure flights are dovetailed into the routing traffic and generally the second half of the runway in use is used for take-off and the first half for landing.

After a normal take-off the pilot proceeded to carry out a right-hand circuit. During this, Control informed him by R/T that he was No. 2 in the traffic pattern, No. 1 being a Stratocruiser which was on a long final approach to runway 23L. In reply, the pilot asked if he could land after the Stratocruiser and was told to make a longdown-wind leg and take up a position behind the Stratocruiser. After the Stratocruiser had landed and had reached the intersection of runways 23L and 15L (i. e. 1 000 yards from the threshold of 23L), Control gave the pilot of the Rapide permission to land at his own discretion and this was acknowledged. The pilot states that after making a longdown-wind leg he proceeded towards runway 23L keeping well to its right in order to be clear of the Stratocruiser's slipstream. On receipt of permission to land he noted that the Stratocruiser was near the end of the runway, so reduced power and turned to the left to line up for landing. He also states that at this time he was at a height of about 300 feet and was approaching at 100 mph at half throttle, slowly losing height. Almost immediately after starting a turn severe turbulence was encountered and the pilot lost control.

In a rapid movement the aircraft was lifted to the right on an even keel and violently rocked several times. Eye witnesses state that the aircraft started to assume abnormal attitudes when it was between the beginning of the runway approach lighting and the Bath Road. The pilot immediately increased engine power to regain control but the aircraft was now violently thrown to the left, still on an even keel. It then started to lose height rapidly in a left wing low attitude. As it was now near the ground the pilot throttled back and tried to level out. The aircraft started to respond but before recovery was complete it passed over the Bath Road, almost hitting a street lighting standard, and then struck a wire fence bordering the aerodrome and crashed. Inspection at the scene of the accident showed that the aircraft had struck a six-foot high wire fence on the aerodrome boundary with the port wing and had then bounced on its nose and come to rest on the perimeter track 475 yards from the threshold of runway 23L. The port wing assembly, the undercarriage and the fuselage were extensively damaged. The front portion of the fuselage had disintegrated and all but the three rear seats had torn adrift from their anchorages. The attachment fittings of the pilot's safety belt had been torn out but the bolt was intact and fastened.

A detailed examination of the airframe and engines did not reveal any pre-crash defect.

In view of the circumstances surrounding this accident inquiries were made to ascertain if any similar occurrences have taken place. The information obtained shows that there are numerous cases on record where light aircraft have been put out of control after encountering turbulence created by the propeller wash of large aircraft either during a take-off or during a landing approach. In some instances small aircraft have encountered turbulence of such a nature as to cause a flight hazard at distances exceeding one mile from the other aircraft. It appears that in conditions of little or no wind the turbulence is likely to persist near the ground for an appreciable time.

Probable Cause

The accident was due to the pilot losing control of the aircraft after encountering turbulent air which had been caused by the Stratocruiser.