

No. 36

Aero/Nord Sweden AB, Airspeed A.S. 65 Consul SE-BTU crashed shortly after take-off from Sundsvall-Härnösands Aerodrome on 24 November 1954. Swedish Accident Investigation Report released 20 December 1954.

Circumstances

The aircraft had completed the outward journey on a newspaper delivery flight from Stockholm-Bromma to Sundsvall-Härnösands on 24 November 1954. At 14.47 hours local time a few minutes after take-off from the latter airport for the return trip, it crashed in woods east of the Indalsälvens river, 1750 metres from the Sundsvall-Härnösands control tower. The pilot was killed and the other crew member suffered serious injuries.

Investigation and Evidence

The aircraft had filed a flight plan with Bromma ATC for a VFR flight from Bromma to Sundsvall and return, with an ETD of 10.15 (GMT). The actual time of departure from Bromma was 10.41 (GMT). While no significant comments concerning the condition of the aircraft on the day of the accident were found in the relevant records of Bromma airport, investigation revealed that the engines had not been operating properly during the month of November and that the ground mechanic responsible for inspection of the plane as well as the crew mechanics who inspected it on the night before the flight did not possess the required certificates. The flight from Bromma to Sundsvall seems to have been quite normal. En-route newspapers were dropped on Mohed airfield since conditions there made it impossible to land. Current weather conditions in the area were generally poor with light snowfall. The 14.55 (local time) weather report for Sundsvall gave ground wind 70°, 6 knots, visibility 7 km, ceiling 450-480 m, 8/8 stratocumulus. The aircraft landed normally at Sundsvall at 14.24 local time, although it appeared to some witnesses that contact was made rather far down the runway. The aircraft unloaded and refuelled rapidly for immediate take-off. During refuelling, the driver of the fuel tanker noticed ice on the leading edge of the wing, which did not appear to be removed. Immediately after refuelling the crew boarded the aircraft, started the engines and taxied out for take-off from runway 34. It does not appear that the engines were tested prior to take-off. Radio liaison with ATC personnel was made at 14.40. Following instructions and latest weather information, take-off clearance was given at 14.42. The ground run appeared unusually long, and the aircraft did not become airborne until it reached the end of the runway. After leaving the ground, it began a gradual climb, the landing gear was retracted and the aircraft turned left continuing to climb. Shortly thereafter the landing gear and wing flaps were lowered as the aircraft turned back towards the airport. Losing altitude, it flew in an easterly direction over the boundary of the airport at a height of 20-30 m and continued at approximately the same altitude over the intersection of runway 16-34 and 08-26.

It was noticed both earlier and when the aircraft came over the aerodrome that its port engine had an unusual note and was coughing. Continuing to fly at this low altitude but in a somewhat more nose-up attitude than is normal, the aircraft crossed the eastern branch of the Indalsälvens. At this point the nose of the aircraft appeared to rise even further as the aircraft commenced a right turn. As this happened the aircraft went into a stall on the left wing, turned on its back, lost altitude and collided with trees in the woods beside the riverbank.

The aircraft was completely destroyed on impact but did not catch fire. Examination of the wreckage indicated that the right engine was operating at full power at the time of the crash, while the left engine may have stopped just before the stall. The landing gear was found extended and locked and the wing flaps were down. A tear-down inspection of the left engine revealed a broken intake valve.

Probable Cause

The accident was caused by an excessive climbing angle and stall with accompanying loss of altitude. The excessive climbing angle and the stall were caused partly by the fact that flight could not be maintained owing to the engine failure and partly by the fact that the aircraft's flying qualities had deteriorated as a result of snow and ice on the aircraft.