No. 22

Fleming Airways System Transport, DC-3C, PI-C626, crashed after taking-off from Bacolod Airport, Bacolod City, The Philippines, on March 1958. Report released by the Department of Public Works and Communications, Republic of The Philippines.

Circumstances

PI-C626 departed Manila on a non-scheduled flight to Cebu and return with intermediate stops at Marindugue, Iloilo and Bacolod. The flight as far as Bacolod was uneventful. However, shortly after taking-off from Bacolod at 1210 hours, and on reaching the height of 5 to 8 ft from the ground, the aircraft banked to the left. The pilot tried to correct the attitude of the aircraft but was unsuccessful. He, therefore, decided to crashland the aircraft. There were no fatalities, but the pilot and some passengers suffered minor injuries. Fire broke out on impact which destroyed the main front section of the aircraft.

Investigation and Evidence

The weather at the time of the accident (1213 hours) was gusty and bumpy with a north-northwest wind of about 25 to 30 mph, visibility unlimited, and ceiling estimated at 3 000 ft.

The captain held a valid Airline Transport Pilot's Licence and had completed approximately 5 000 flying hours.

The captain stated that he had very good control of the aircraft on take-off; the aircraft was airborne with an airspeed of 85 mph, and there was no stalling, but a sudden loss of power from the left engine caused the aircraft to bank and swerve to the left. On take-off the manifold pressure was between 45 and 46 inches of mercury, however, it dropped, according to the captain's statement to 36 inches of mercury. With an airspeed of 85 mph, the captain decided not to continue the take-off on a single engine.

The co-pilot noticed that there was some pre-stall buffeting before the crashlanding. He also stated that the captain never reduced power except when the aircraft was about to hit the ground.

Results of the strip inspection of the major component parts of the left engine showed nothing to indicate that a material failure had occurred. The pilot's statement that there was loss of power on the left engine was not altogether substantiated by the results of the tear-down inspection and was not accepted by the Investigation Board.

The facts established that the aircraft was airborne, tail low, at an airspeed of 85 mph indicated airspeed.
Considering the estimated load of the aircraft (26 376 lbs), the pilot should have waited until the airspeed indicated 90 mph, a safe V₂ speed for the type aircraft before lifting the same.

Probable Cause

The captain prematurely "lifted" the aircraft before attaining the V_2 speed. A contributing factor could have been the presence of the 25 to 30 mph crosswind.

Recommendation

Non-scheduled operators utilizing equipment weighing more than 12 500 lbs should establish a more comprehensive and detailed pilots' training program. Such requirement should be a prerequisite before allowing the operator to start his operations.

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