

**AAIB Bulletin No:** 9/95      **Ref:** EW/G95/06/05      **Category:** 1.3

**Aircraft Type and Registration:** Cessna 172N Skyhawk, G-BMVJ

**No & Type of Engines:** 1 Lycoming O-320-H2AD piston engine

**Year of Manufacture:** 1979

**Date & Time (UTC):** 10 June 1995 at 1750 hrs

**Location:** Near Slieau Lhean, approximately 13 nm north east of Ronaldsway Airport, Isle of Man

**Type of Flight:** Private

**Persons on Board:** Crew - 1                      Passengers - 3

**Injuries:** Crew - None                      Passengers - None

**Nature of Damage:** Nosewheel leg broken off, propeller bent, windscreen cracked and bulkhead bent

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 41 years

**Commander's Flying Experience:** 347 hours (of which 70 were on type)  
Last 90 days - 6 hours  
Last 28 days - 3 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot and enquiries by the AAIB

In preparation for his return flight to Teesside from Ronaldsway Airport, the pilot obtained weather information before completing his flight planning and other administrative requirements. The TAF for Teesside issued at 1500 hrs to cover the period 1600 to 2200 hrs forecast the following conditions: surface wind 350°/09 kt, visibility 4,000 metres in drizzle, broken cloud at 800 and 1,500 feet agl; temporarily the visibility would be greater than 10 km with no significant weather, scattered cloud at 1,500 feet agl and broken cloud at 3,000 feet agl. The actual conditions at Teesside at 1620 hrs indicated a light surface wind, visibility greater than 10 km, scattered cloud at 500 and 1,000 feet agl and broken cloud at 2,500 feet agl. The TAF and actual conditions at Newcastle were not significantly different from those at Teesside.

After completing his flight planning, the pilot booked out VFR to Teesside and then went to the Meteorological Office for an update on the weather. As he was planning on using Carlisle as an en route alternate airfield, and the latest TAF and actual for there were dated the previous day, he

asked the Meteorologist to telephone Carlisle to obtain the latest conditions. There was no reply but the pilot considered that the displayed satellite information indicated that Carlisle was suitable as an en route alternate airfield. The actual weather at Ronaldsway at 1650 hrs showed a surface wind of 320°/18 kt gusting to 28 kt, visibility of 20 km, scattered cloud at 600 and 1,200 feet agl and broken cloud at 20,000 feet.

The pilot reported that his start and taxi-out were normal and, after completing all his checks, he was cleared for departure on Runway 26; for takeoff the surface wind was passed as 340°/20 kt. Prior to departure, the total weight of G-BMVJ calculated by the pilot was 22 lb below the MTOW; this included a combined weight of 413 lb for the three male passengers. At 500 feet agl, the pilot started a climbing turn to the left with the intention of tracking up the coast; he levelled G-BMVJ at 1,000 feet agl on a northeasterly heading. Shortly afterwards, the pilot stated that he experienced a severe downdraught and heard a very loud bang. The uncommanded manoeuvre caused all four occupants to be lifted out of their seats and some struck their heads on the cabin ceiling. Fearing another downdraught, the pilot applied full power and commenced a climb into smoother air. Thereafter, as G-BMVJ approached "Laxey" visual reporting point, ATC transmitted that the aircraft was leaving the zone and passed the Holyhead pressure setting; the pilot acknowledged this message and informed the controller that G-BMVJ was VMC. At this stage the aircraft was flying between cloud layers with the upper scattered layer an estimated 200 feet above. Just then, as the aircraft was levelling off, the right wing suddenly dropped; the pilot closed the throttle and applied maximum left rudder. He recalls that he also applied back pressure on the elevator control and that the control yoke was difficult to move. However, the aircraft levelled and the pilot applied power and noted that the airspeed was 100 kt. Almost immediately, the left wing dropped and the pilot reacted by closing the throttle and applying right rudder. The aircraft descended into cloud but the pilot levelled out using the attitude indicator. He then applied power to climb out of the cloud and, at that point received a call from Ronaldsway ATC asking for a position report; he informed the controller that he was at 1,500 feet and in cloud. The controller informed the pilot that the Sector Safe Altitude (SSA) was 3,200 feet and that he should turn onto an easterly heading and try and maintain ground contact. Just prior to this transmission, the controller had noticed that the aircraft was just inland on a northerly heading and that the track appeared unsteady.

The pilot started to turn to the east but the wing dropped again and the pilot became disorientated. Shortly afterwards, G-BMVJ came out of cloud and, when he saw the ground about 50 feet below, the pilot's immediate reaction was to carry out a forced landing. He stated that the landing was light until the nosewheel struck the ground and collapsed; the aircraft skidded along on its nose before slewing to the left, causing the right wing to contact the ground before G-BMVJ came to rest. The passengers vacated the aircraft and the pilot informed ATC of their safe landing.