AAIB Bulletin No: 3/95 Ref: EW/G94/12/07 Category: 1.3

Aircraft Type and Registration: Piper PA-28-161 Cherokee Warrior II, G-LACA

No & Type of Engines: 1 Lycoming O-320-D3G piston engine

Year of Manufacture: 1978

Date & Time (UTC): 18 December 1994 at 1525 hrs

Location: Manchester (Barton) Airfield

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 3

Injuries: Crew - None Passengers - None

Nature of Damage: Extensive

Commander's Licence: Private Pilot's Licence

Commander's Age: 47 years

Commander's Flying Experience: 187 hours (of which 90 were on type)

Last 90 days - 4 hours Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was attempting to land after a local flight of some 1 hour 10 minutes duration. The wind was almost calm, and the grass Runway 06 was in use, with a wet/soft surface condition. The landing distance available was 410 metres, after a displaced threshold was taken into account. The pilot reported that touchdown was some 16 yards past the threshold, although other witnesses commented that it may have been further along the runway. The pilot reported that he applied the brakes moderately, but that the speed was too high and that stopping before the end could not be certain. He therefore ceased braking and applied full power in order to go-around. The engine responded normally, but the full flap selection was maintained. In an attempt to clear the boundary hedge, the aircraft was rotated at around 52 kt as it passed the 24 threshold. The aircraft became airborne and was flown level in order to increase speed. However, the landing gear and stabilator contacted the top of the hedge and the aircraft decelerated. It then contacted the surface of soft ground some 30 yards past the hedge. The left main and nose landing gears collapsed, and there was damage to the right main gear. Damage was also sustained by the wings, flaps, fuselage, propeller and engine. However, there was no fire and the occupants vacated the aircraft by the normal means.

The pilot estimated that, at the time of the accident, the weight of the aircraft was 118 lb below the maximum allowable for the type. CAA General Aviation Safety Sense leaflet number 7A deals with the topic of Aeroplane Performance, and includes the necessary factors to be applied to the Flight Manual/Pilot's Handbook figures for calculating takeoff and landing performance in varying conditions.