AAIB Bulletin No: 11/94 Ref: EW/G94/09/09 Category: 1.3

Aircraft Type and Registration: Turbulent D31A, G-BJIB

No & Type of Engines: 1 Volkswagen 1600 piston engine

Year of Manufacture: 1990

Date & Time (UTC): 22 September 1994 at 1126 hrs

Location: 1 mile east of Eglinton Airfield, Londonderry

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Damaged beyond economic repair

Commander's Licence: Private Pilot's Licence with IMC Rating

Commander's Age: 43 years

Commander's Flying Experience: 136 hours (of which 8 were on type)

Last 90 days - 11 hours Last 28 days - 9 hours

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

weather aftercast by the Meteorological Office

The aircraft departed from Runway 26 at Eglinton Airfield and climbed to 1,000 feet before establishing in the cruise at an indicated air speed of 55 to 60 kt on an easterly heading. The pilot noted that the engine was running at 2,700 RPM, the oil pressure and temperature were within the limits stated in the Pilot's Notes and that the cylinder head temperature was 160°C; carburettor heat was applied with no abnormal indications. About 3 nm to the east of the airfield, the pilot decided to return to the airfield to make a full stop landing followed by a departure and advised ATC accordingly. However, whilst flying over the Foyle estuary he noticed that the engine oil temperature had increased to its upper limit and that the oil pressure had fallen to its lower limit. In accordance with advice from the previous owner of the aircraft, the pilot decreased the engine RPM to 2,500 in order to assist engine cooling. However, the engine oil temperature and pressure remained outside their maximum and minimum limits respectively. The engine then began to lose power and the aircraft started to descend; ATC were advised of the situation. The pilot initiated a turn towards the shore line, but after some 30 seconds the engine failed completely. At this stage the engine oil temperature was indicating in excess of 120°C, the gauge's maximum limit, and the oil pressure was almost on the gauge's

minimum indication. The pilot carried out a forced landing onto the mud flats of the estuary, but the aircraft then pitched downwards and 'flipped over' onto its back. The pilot, who escaped with only minor injury, could not remember any part of the forced landing although he did remember having to wade some 550 metres through 2 feet deep mud before reaching dry ground.

Thus far no examination of the engine has been carried out but when any related details become available these will be reported in a future AAIB Bulletin addendum.