No: 11/88

Ref: EW/G88/08/12

Category: 2b

Aircraft Type

and Registration:

Westland S55 Mk 10, G-BKHC

No & Type of Engines:

1 Rolls Royce Gnome 10101 turboshaft engine

Year of Manufacture:

1961

Date and Time (UTC):

22 August 1988 at 1200 hrs

Location:

Windmill Cottage, Hadleigh, Suffolk

Type of Flight:

Short Ferry Flight

Persons on Board:

Crew - 1

Passengers - None

Injuries:

Crew - 1

Passengers - N/A

Nature of Damage:

Rotor destroyed, forward right landing gear failed. Right side of

fuselage damaged

Commander's Licence:

Commercial Pilot's Licence (Helicopters) with Full Instructors Rating

Commander's Age:

41 years

Commander's Total

Flying Experience:

610 hours (of which 60 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot and telephone

enquiries

The aircraft was being ferried from a private airfield to the pilot's house, a distance of about 5 nm. During the pre-flight cockpit checks, the pilot observed an indication of just over 350 lbs of fuel available; 150 lbs was the minimum which the pilot considered safe during flight. The fuel burn rate for this type of aircraft is about 450 lbs/hour and the pilot estimated that about 150 lbs would be required for the flight, including the manoeuvring before landing.

On reaching the destination, the pilot circled and then pulled the aircraft into a hover at about 25 feet agl. A stationary turn was then initiated, in order to make a rearwards approach to avoid a high hedge which was situated on sloping ground. During the turn the engine cut out, and the pilot was unable to cushion sufficiently the subsequent descent to the ground. The aircraft struck the sloping ground on its front right landing gear, which failed, allowing the aircraft to roll over onto its right side. The pilot evacuated the aircraft though the co-pilot's (left) door, but had sustained back injuries which required hospital treatment.

The pilot believes that the initial fuel indication may have been over-reading as a result of the aircraft having been parked on sloping ground and, with a lower than expected fuel level, that the fuel surged away from the engine feed in the turn, and starved the engine.