No: 1/85 Ref: EW/G84/08/17

Aircraft type and registration: Sikorsky S61N G-BCEA (heavy helicopter — public transport)

Year of Manufacture: 1974

Date and time (GMT): 17 August 1984 at 1735 hrs

Location: "Mobil Searcher", 50 miles NNE of Unst

Type of flight: Commercial — winching

Persons on board: Crew -3 Passengers - Nil

Injuries: Crew — Nil Passengers — Nil

Nature of damage: Damage to underneath of fuselage

Commander's Licence: Airline Transport Pilot's Licence (Helicopters)

Commander's Age: 40 years

Commander's total flying

experience: 5253 hrs (of which 2642 were on type)

Information Source: Written report submitted by the operator.

The aircraft flew from Sumburgh to the 'Mobil Searcher'. Because the helideck of the vessel had not been certified for S61N landings it was intended to lower one passenger plus baggage and equipment onto the deck using the aircraft's winch. In accordance with normal company winching procedures the undercarriage was not lowered.

The passenger had been winched onto the deck and the second lowering operation was in progress, with baggage on the winch, when a large plastic bag which had come from the vessel was seen to pass downwards through the main rotor and be torn into several pieces. This was followed by a rumble and a loss of torque on No 2 engine. The co-pilot selected maximum on the speed select levers (SSL) but the aircraft was unable to maintain height and the commander cushioned it onto the deck on its keel. The co-pilot then retarded and advanced the No 2 SSL following which the No 2 engine responded normally. The aircraft was lifted into the hover with both engines operating satisfactorily, the undercarriage was lowered, and it was landed normally on the deck. After the engines and rotors were shut down, pieces of black polythene were recovered from the intake of No 2 engine.

The aircraft weight at the time of the accident was approximately 17,200 lb which was well in excess of the maximum permitted weight for single engined hovering under the conditions pertaining.