No: 6/84

De Havilland DH104 Dove 8A G-LIDD (light twin-engined fixed-wing

Ref: EW/G84/04/09

aircraft

Year of manufacture:

Aircraft type and registration:

1961

Date and time (GMT):

28 April 1984 at 1100 hrs

Location:

Staverton, Gloucestershire

Type of flight:

Air test (C of A)

Persons on board:

Crew - 2

Passengers - Nil

Injuries:

Crew - Nil

Passengers — N/A

Nature of damage:

Substantial to nose gear assembly, propellers and lower aerial

Commander's Licence:

Airline Transport Pilot's Licence

Commander's Age:

43 years

Commander's total flying

experience:

3700 hours pilot in command (including 50 on type)

During the course of a Certificate of Airworthiness (C of A) test flight in G-LIDD in March 1984, it was found necessary to shut down the right engine due to backfiring. When the gear was selected down prior to landing, there were no gear green lights, but the mechanical indicators showed that the gear was down, and the aircraft landed safely.

The following month, and after an engine change, the aircraft was again undertaking a C of A test flight en-route from Staverton to Coventry. Approximately 7 to 10 minutes into the flight, low oil pressure and high oil temperature on the left engine was observed, and the propeller was feathered and engine shut down. The aircraft returned to Staverton, and the gear was selected down at approximately 800 feet agl. There were no green gear locked lights, but the main gear mechanical indicators showed that the main gear legs were apparently locked. The nose gear 'mushroom' mechanical indicator appeared to be in the down (unsafe) position.

The first action of the emergency gear selection checklist is to select the gear up. Rather than risk unlocking the main gear and leaving it in an undeterminate configuration, and because of doubts about the subsequent asymmetric climb out performance, the approach was continued and a landing made on the main wheels. After touchdown the right propeller was feathered. During the roll out the nosewheel collapsed, and substantial damage occurred to the nose gear assembly, right propeller, and underside skin in the area of the nose.

The emergency services arrived promptly, and there was no fire. The occupants were uninjured and evacuated the aircraft successfully.