AAIB Bulletin No: 6/95

Ref: EW/G95/03/08

Category: 1.1 and 1.3

Aircraft Type and Registration:

i) Shorts SD3-30 Variant 100, G-BIOE

ii) Cessna 152, G-BNUL

No & Type of Engines:

i) 2 Pratt & Whitney PT6A-45R turboprop engines

ii) 1 Lycoming O-235-L2C piston engine

Year of Manufacture:

i) 1981

ii) 1980

Date & Time (UTC):

15 March 1995 at 1109 hrs

Location:

Exeter Airport, Devon

Type of Flight:

i) None

ii) Private

Persons on Board:

Nature of Damage:

i) Crew - None

Passengers - None

ii) Crew - 1

Passengers - 1

Injuries:

i) Crew - N/A

Passengers - N/A
Passengers - None

ii) Crew - None

i) Slight skin damage to upper nose section

ii) Substantial damage to left wingtip and skin on left

outer wing

Commander's Licence:

i) N/A

ii) Basic Commercial Pilot's Licence

Commander's Age:

i) N/A

ii) 36 years

Commander's Flying Experience: i) N/A

100

Last 90 days - N/A

Last 28 days - N/A

ii) 418 hours (of which 340 were on type)

Last 90 days - 61 hours Last 28 days - 23 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot, operations manager and further enquiries by the AAIB

The Shorts 3-30 ('OE') had arrived at Exeter Airport at 0130 hrs on the morning of the accident and had been parked into wind in 'D' parking area on a heading of 180°. Chocks had been placed by the airport staff at the rear of the nosewheel and to the rear of left mainwheel. No chocks were placed in front of the aircraft wheels.

At approximately 1108 hrs, the Cessna 152 ('UL') self-manoeuvred to park adjacent to the right side of 'OE'. The instructor and student pilot of 'UL' had been engaged in a circuit training detail but had cut short their exercise because of the imminent arrival of a rain and hail shower. The instructor and student remained in the aircraft to shelter from the inclement weather. The actual conditions at 1100

hrs were recorded as being surface wind 300°/11 kt (Varying 250° to 350°), good visibility, showers in the vicinity, scattered towering cumulus at 2,000 feet, broken cloud at 3,500 feet with a temperature of +6°C. The forecast weather valid from 1000 to 1900 hrs predicted temporary conditions of surface wind 300°/15 gusting to 25 kt, visibility 8 km in rain showers, broken cloud at 1,500 feet with a 30% probability of temporary conditions deteriorating to 4 km visibility, with hail showers and broken cumulonimbus at 1,200 feet.

At 1109 hrs, as a weather squall crossed the airfield, a gust of wind caused 'OE' to weathercock to the right onto a heading of 230°. The nose section contacted to left wing of 'UL' raising the wingtip and left main landing gear from the ground. The Instructor and student vacated the aircraft and chocked 'OE' to prevent it from further movement. It was reported that, although the parking brake of the Shorts 3-30 was applied, the wheels were seen to rotate and not skid as the aircraft moved under the influence of the gust.

The Shorts 3-30 Company Operations Manager reported that the aircraft should have been parked with chocks placed in front and behind all wheels as this aircraft type is particularly prone to movement in wind gusts.

A company Engineering Instruction titled 'PROCEDURES FOR HIGH WIND SPEED OPERATIONS', dated January 1995, detailed the procedures to be adopted in respect of parked aircraft. These procedures, which include details regarding the placement of chocks, however, were only to be adopted in the event of a gale warning.

As a result of the accident the company issued a 'NOTICE TO PILOTS' explaining to crews the parking precautions to be taken before leaving an aircraft. The Airport Manager has also revised aircraft parking arrangements on parking area 'D' at Exeter Airport.

