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Department of Transport

AIB Bulletin

11/85

No: 11/85 Ref: EW/G85/05/10

Aircraft type

and registration: Piper PA 28—140 Cherokee G-ATPN (light single engined fixed

wing aircraft)

Year of Manufacture: 1966

Date and time (GMT): 11 May 1985 at 1625 hrs

Location: 1 mile north of Birkdale Sands Airfield, Southport, Lancs

Type of flight: Public Transport (pleasure)

Persons on board: Crew -1 Passengers -3

Injuries: Crew — None Passengers — none

Nature of damage: Nose landing gear, engine and propeller damaged and wings bent

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 63 years

Commander's total

flying experience: 19,360 hours (hours on type unknown)

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

inspection of the aircraft.

The pilot was conducting pleasure flights from Birkdale Sands Airfield. This airfield, which was

This Bulletin contains facts relating to the accidents which have been determined up to the time of issue. This information is published to inform the public and the aviation industry of the general circumstances of the accidents at the preliminary/stage and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

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licenced by the CAA for 3 summer months of the year, comprises a 906 m \times 197 m roped-off area of the sands just south-west of Southport Pier. The airfield is on the seaward side of the coast road and can at times be covered by the sea at high tide.

The wind was estimated at 360°M 10 to 12 kt and the take off direction was 030°M, parallel to the longest sides of this rectangular area. In this direction the pier lay across the extended take-off line approximately 600 m from the upwind boundary.

The pilot estimated take-off weight at 40 kg below the maximum allowable. He reported that take-off was normal, but that at a height of around 100 ft the aircraft ceased climbing and rpm was seen to have decreased to 2100. Because it was considered that the aircraft would probably fail to clear the pier, it was turned 30° left. The pilot reported that a further loss of power made it impossible to maintain height, and a forced landing was made near the seaward end of the pier. The touchdown area was soft and the nosewheel sank in, causing the nose undercarriage to fail rearwards, allowing the propeller to contact the ground. All four occupants were uninjured and evacuated the aircraft via the single exit door provided.

Limited examination of the aircraft and engine after removal from the site did not reveal evidence to suggest why a loss of power should have occurred.

It was noted that the accident occurred close to the time of high water, and, although the predicted high tide height of 7.4 m was below the level of the airfield, some local opinion suggested that the airfield sand could become damp and somewhat softer when tide height exceeded approximately 7 m. The aircraft was not fitted with wide profile tyres. In addition, a low wing type of aircraft such as this reportedly experiences appreciably more sand contamination of wing surface than the high wing types that have more commonly operated at this airfield.