AAIB Bulletin No: 6/2005 Ref: EW/G2005/04/05 Category: 1.3

Aircraft Type and Registration: Piper PA-18-150 Super Cub, G-BGWH

No & Type of Engines: 1 Lycoming O-320-A2B piston engine

Year of Manufacture: 1961

Date & Time (UTC): 14 April 2005 at 1454 hrs

Location: Nayland Airfield, Essex (takeoff)

Clacton Airfield, Essex (landing)

Type of Flight: Training

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Severe damage to main landing gear and propeller.

Further damage to the engine, wing strut and fuselage

Commander's Licence: Air Transport Pilot's Licence

Commander's Age: 66 years

Commander's Flying Experience: 8,500 hours (of which 200 were on type)

Last 90 days - 22 hours Last 28 days - 10 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

and subsequent telephone enquiries

The instructor was conducting a student's refresher course for farm strip flying from their base at Clacton. As the weather was below minima for solo flying they planned to land away at Nayland, the remaining strip to be used on the course. The weather was good with a surface wind from 230° at 03 kt. Runway 13 was in use at Nayland and its grass surface, which undulates, was damp.

Before departure from Nayland, the instructor and student walked across to Runway 13 to inspect the take-off track. After completing the engine checks and selecting 25° flap the student lined up and confirmed the runway direction.

Just before lift off, as the aircraft came over the brow of the first undulation, the aircraft drifted to the left. The left main landing gear ran diagonally off the runway onto the sloping shoulder of the runway. The instructor took control but was unable to regain the clear area on the runway. The

aircraft hit a small earth mound that was covered by a bush on the down slope beside and below the runway shoulder causing damage to the right main landing gear.

Once airborne, the instructor assessed the damage to the aircraft visually from the rear cockpit. The engine and propeller appeared undamaged, as did the tailplane, the supporting struts and the left main landing gear. However, the right main landing gear could not be seen from the rear cockpit. The instructor decided to return to Clacton Airfield for a landing on its grass runway.

On return to Clacton the instructor informed them of the damage and asked for an inspection of his undercarriage as he did a low fly by. From this it appeared that the right main landing gear had been bent underneath the aircraft although the left main landing gear appeared to be undamaged. The crew of an air ambulance that was in the area at the time inspected G-BGWH while formatting on it. They confirmed the damage to the right main landing gear, but were unable to give any firm information on the serviceability of the left main landing gear.

The instructor was then asked by Clacton radio if he would like the local emergency services to be placed on standby at the airfield, which he agreed to; arrangements were made for them to attend. The pilot flew a few circuits to practice the approach to landing while he waited for the emergency services to assemble. When he was ready to land the airfields local fire appliance was positioned at the threshold of Runway 18 in a position to follow him during the landing roll.

The instructor attempted to land on the left main landing gear while trying to keep the right wing up with aileron. On touchdown however, the left main landing gear collapsed as soon as the weight of the aircraft came on to it. The aircraft then slid to a halt on its belly.

As the aircraft came to rest the airfield's fire appliance deployed to the scene and the local emergency services also arrived shortly afterwards. Both occupants exited the aircraft unassisted having sustained no injuries.

The aircraft was secured and moved into the hanger where the damage was assessed by the resident maintenance organisation. Subsequently damage was found to the main landing gear, engine, propeller, one wing strut and distortion to parts of the fuselage.