## **ACCIDENT**

Aircraft Type and Registration: Piper PA-28-181 Cherokee Archer II, G-BSIM

**No & Type of Engines:** 1 Lycoming O-360-A4M piston engine

**Year of Manufacture:** 1986 (Serial no: 28-8690017)

**Date & Time (UTC):** 20 August 2019 at 1355 hrs

**Location:** Branscombe Airfield, Devon

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 3

**Injuries:** Crew - None Passengers - None

Nature of Damage: Substantial

Commander's Licence: Private Pilot's Licence

Commander's Age: 30 years

**Commander's Flying Experience:** 136 hours (of which 60 were on type)

Last 90 days - 7 hours Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot

The pilot had lined up on Runway 28 at Branscombe Airfield for a return flight to his home base at RAF Henlow. The reported wind was from 180° at 9 kt, although a windsock, visible in a moving image recording of the takeoff, indicated that it was gusting considerably higher than this. The maximum demonstrated cross wind for the aircraft is 17 kt.

As the takeoff commenced the pilot's directional control of the aircraft was not steady, and the nose of the aircraft lifted at low speed. The aircraft then became briefly airborne and 'weathercocked' in to the wind and towards the airfield boundary hedge. The pitch angle continued to increase, and the aircraft sank back on to its main wheels and its tail contacted the ground, Figure 1.



Figure 1
G-BSIM 'weathercocked' and at a high pitch angle, during the takeoff

The aircraft then became airborne again in a nose-high, low speed condition. The pilot attempted to turn towards the runway and the aircraft 'mushed' on to the boundary hedge. There were no injuries, but the aircraft was substantially damaged, Figure 2.

## **AAIB** comment

Proper technique and practice are vital to achieve a safe cross wind takeoff, especially when the wind speed is close to the demonstrated maximum.



Figure 2
The aircraft's position after impact with the hedge