ACCIDENT

Aircraft Type and Registration:	Piper PA-28R-180 Cherokee Arrow, G-AWBA
No & Type of Engines:	1 Lycoming IO-360-B1E piston engine
Year of Manufacture:	1968 (Serial no: 28R-30528)
Date & Time (UTC):	2 January 2012 at 1420 hrs
Location:	Stapleford Airfield, Essex
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - 1 (Serious) Passengers - 1 (Minor)
Nature of Damage:	Starboard wing detached, landing gear damaged
Commander's Licence:	Private Pilot's Licence
Commander's Age:	66 years
Commander's Flying Experience:	202 hours (of which 50 were on type) Last 90 days - 2 hours Last 28 days - 1 hour
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft became very low on final approach and struck bushes some distance short of the runway threshold. The pilot believed that windshear may have been a factor in the accident.

History of the flight

The accident occurred as the aircraft was approaching to land at Stapleford following an uneventful general handling flight. On board were the pilot and his passenger, also a qualified private pilot. Runway 22L was in use, with a west-south-westerly surface wind of about 13 kt. The weather was fine, with good visibility and scattered clouds.

The aircraft joined the circuit and established on what

appeared to be a normal, stabilised approach at 87 mph IAS, with the landing gear and three stages of flap extended. The pilot recalled the wind starting to buffet the aircraft and his next recollection was of being at very low height with bushes immediately ahead. The aircraft struck the bushes and stopped abruptly, in a nose-down attitude, about 20 m before the start of the runway (the actual threshold was displaced by 177 m).

While the pilot secured the aircraft, his passenger kicked the cabin door open, as it was obstructed by the bushes. Both occupants vacated the aircraft, although the pilot needed to lower the flap lever as it impeded his exit in the raised (flap lowered) position. They alerted Stapleford radio room by mobile telephone and the airfield fire and rescue vehicle arrived on scene a few minutes later. An air ambulance, which was flying in the vicinity, also attended the scene. Both men were subsequently taken to hospital; the pilot was found to have a broken arm while his passenger had sustained cuts and bruises.

The pilot opined that the aircraft had been affected by windshear, possibly a result of the local airflow over and around the airfield buildings and nearby trees located to the west of the final approach to the runway threshold. The presence of such windshear was reportedly confirmed by the doctor on board the air ambulance, who was also believed to be a qualified private pilot.