

Piper J4A, G-AFZA

AAIB Bulletin No: 6/2002	Ref: EW/G2002/04/13	Category: 1.3
Aircraft Type and Registration:	Piper J4A, G-AFZA	
No & Type of Engines:	1 Continental Motors Corp A65-8 piston engine	
Year of Manufacture:	1939	
Date & Time (UTC):	21 April 2002 at 1541 hrs	
Location:	Barra Airport, Scotland	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to propeller and fuselage	
Commander's Licence:	Private Pilots Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	319 hours (of which 43 were on type)	
	Last 90 days - 12 hours	
	Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The pilot flew to Barra, Outer Hebrides with a group of vintage light aircraft and stayed two nights. On the planned morning of departure, high winds and low cloud prevented the aircraft from leaving, but the weather forecast predicted a lull in the conditions between frontal systems. By 1500 hrs the wind had dropped to 190/23 kt and the en-route weather had improved. Conscious that the airfield closed at 1600 hrs, the group decided to depart.

The pilot of the accident aircraft was aware that the high winds could present problems during taxi, and he decided that if he had any difficulty accomplishing the 180° turn required to taxi from his parking position he would stop, tie the aircraft down and stay a further night.

As the aircraft started to taxi at 1530 hrs, ATC gave the wind as 200/20 kt. The 180° turn was accomplished easily and the pilot started a long, crosswind taxi to Runway 25 over the sand parallel to Runway 33. Conditions were not easy, but the pilot was satisfied that he could taxi safely. At

1535 hrs ATC reported an increase in the wind to 25 kt and shortly thereafter transmitted a further increase to 32 kt. Other aircraft in the group started to have problems with the strength of the wind, and the accident aircraft began to rock badly. The pilot started having difficulty holding the stick in position, and he therefore brought the aircraft to a halt, set the throttle to idle and applied the brakes with the aircraft heading approximately 330°. He considered turning the aircraft into wind, but with the wind already at 32 kt he was concerned about how the aircraft would react as he turned it through 90° to the wind.

The wind continued to increase over the next five minutes to a maximum of 46 kt at which point the pilot needed both hands to hold the stick fully forward. Suddenly the aircraft moved slightly left, the left wing lifted and the aircraft flipped on to its back causing damage to the windscreen, propeller and fuselage. The pilot, who was held inverted in his seat, released his four-point harness and dropped on to the cockpit roof framework injuring his leg. He vacated the aircraft through the cockpit door without further difficulty.

In his report the pilot stated that he thought the accident might have been prevented if he had stopped and turned the aircraft into wind as soon as the wind increased to 25 kt.