No: 9/91 **Ref: EW/G91/06/03** **Category: 1c**

Aircraft Type and Registration:	Piper PA-28-151 Cherokee Warrior, G-BCTA
No & Type of Engines:	1 Lycoming O-320-E3D piston engine
Year of Manufacture:	1974
Date & Time (UTC):	5 June 1991 at 1427 hrs
Location:	Kent International Airport, Manston, Kent
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 3
Injuries:	Crew - None Passengers - None
Nature of Damage:	Severe damage to the left wing
Commander's Licence:	Private Pilot's Licence with IMC and Night ratings
Commander's Age:	56 years
Commander's Flying Experience:	154 hours (of which 85 were on type)
Information Source:	Aircraft Accident Report Form submitted by the pilot

It was the pilot's intention to fly a club aircraft with three passengers to Calais from Manston. The wind was reported as 120°/11 kt, although this was a transitory wind state due to the effect of sea breezes. At Manston, as well as the 2752 metre paved runway 11, there is a 792 metre grass runway 24 with a slight uphill gradient and light aircraft are allowed to use either, provided that doing so does not conflict with other traffic in the circuit.

Prior to the flight, one of the club instructors had reminded the pilot of the club's preference for taking off on the main runway (11/29) and landing on the grass runway (24), however, when ATC gave taxi clearance to the aircraft, they informed him that runway 24 was in use. During the time that the aircraft was taxiing out to the runway holding point and carrying out the engine checks, several other light aircraft were taking off and landing on runway 11 and making the normal radio calls with ATC concerning the existing wind direction and strength. Nevertheless, the pilot decided to accept a downwind take-off on runway 24.

The pilot reports that at a point halfway down the runway the aircraft had achieved an indicated airspeed only 45 kt, so he checked that the magneto switches and the carburettor heat selector were correctly positioned. By then, the airspeed had risen to slightly over 50 kt but, as the end of the

runway was very close, he rotated the aircraft in order to prevent the propeller striking the rising ground in the overrun area. The aircraft then sank to the ground and the pilot closed the throttle, selected full flap and applied the brakes, but he was unable to prevent the aircraft crossing a taxiway and striking a marker board on the far side of the main runway.

Calculations show that the Take Off Run Required by the aircraft under these conditions was greater than the Take Off Run Available on runway 24.