Cessna F177RG, G-BAIS

AAIB Bulletin No: 12/99 Ref: EW/G99/10/14 Category: 1.3

Aircraft Type and Registration:	Cessna F177RG, G-BAIS
No & Type of Engines:	1 Lycoming IO-360-A1B6D piston engine
Year of Manufacture:	1973
Date & Time (UTC):	17 October 1999 at 0810 hrs
Location:	Gunton Park, Norfolk
Type of Flight:	Private
Persons on Board:	Crew - 2 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Damage to left wing, fuselage, gear and propeller; engine shock loaded
Commander's Licence:	Private Pilot's Licence
Commander's Age:	45 years
Commander's Flying Experience:	620 hours (of which 63 were on type)
	Last 90 days - 16 hours
	Last 28 days - 5 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The pilot was familiar with the airstrip but, as this would be his first take off in the aircraft type from this location, he was very conscientious in his preparation. The weather was good with a light surface wind. Prior to departure, he consulted two other pilots with experience of the aircraft and the airstrip. Additionally, he reviewed the advice given in General Aviation Safety Sense (GASIL) Leaflets 7B and 12B dealing with Aeroplane Performance and Strip Sense respectively. His conclusions, based on his aircraft take-off weight, and with appropriate safety factors included, were that he would be airborne within approximately 5/8 of the runway length. The strip, orientated north/south, was 800 metres long with short wet grass; the surface was undulating and there was a two metre high fence just to the north of the airstrip.

For the northerly take off, the pilot used the flight manual maximum take-off performance guidelines. G-BAIS was airborne just over halfway down the strip but shortly after lift-off, the pilot heard the stall warning horn activate. He reacted by lowering the nose of the aircraft; the horn stopped but G-BAIS touched down again. The pilot was then aware of some reduction in airspeed

but considered that there was insufficient room to stop and so continued his take off. The aircraft became airborne before the end of the strip but struck the top of the fence; the pilot was aware of the collision, closed the throttle and landed in the next field. During the subsequent retardation, the left wing struck a substantial tree protector.

After the accident, the pilot confirmed that his performance calculations were correct but considered that he overreacted to the sound of the stall warning. In the past, this warning had been considered too quiet by the operating pilots and had recently been modified to route through the aircraft loudspeaker system; the loud noise of the warning may have initiated the overreaction.