

Denney Kitfox MK2, G-KAWA

AAIB Bulletin No:	Ref: EW/G2002/06/35	Category: 1.3
Aircraft Type and Registration:	Denney Kitfox MK2, G-KAWA	
No & Type of Engines:	1 Rotax 582 piston engine	
Year of Manufacture:	1994	
Date & Time (UTC):	30 June 2002 at 1418 hrs	
Location:	Long Marston Airfield near Stratford-on-Avon	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Propeller broken, vertical stabiliser and engine mount distorted, wing struts buckled	
Commander's Licence:	Private Pilots Licence (Microlight Aeroplanes)	
Commander's Age:	59 years	
Commander's Flying Experience:	633 hours (of which 38 were on type) Last 90 days - 14 hours Last 28 days - 9 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by AAIB	

The Kitfox Mk2 is a lightweight high-wing aircraft (MTOW less than 500 kg) with a tailwheel configuration and a narrow-track main landing gear.

The aircraft was on a pleasure flight returning to Long Marston Airfield where the surface wind was from 230° to 250° at 12 kt gusting to 18 kt (as observed from the crew room around the time of the accident). From overhead the airfield the pilot observed the windsock varying in direction with a mean of approximately 240°. Asphalt Runway 22 was not available because it was being used for drag racing so the pilot elected to land on grass Runway 20. The crosswind component for this runway was 8 kt with gusts to 12 kt (assuming a wind direction of 240°). An 18 kt gust from 250° would have produced a 14 kt crosswind from the right.

The pilot reported a bumpy and turbulent descent into the circuit. The approach speed used was 55 mph and the flaperons (full span drooping ailerons) were set to 0°. Whilst crossing the runway threshold, a gust of wind lifted the aircraft approximately 15 feet. The pilot added power and stabilised the aircraft at a height of about 20 feet before reducing power and executing a reportedly normal touchdown. During the ground roll on dry grass the right wing rose. The pilot applied full right stick, momentarily causing the right wing to lower but then it lifted again. The left wing tip touched the ground and the aircraft ground looped to the left. It came to almost a complete stop before the nose dipped causing the propeller to strike the ground. The aircraft continued to pitch nose down and it came to rest in an inverted attitude on the edge of the runway. The pilot switched off the fuel, battery master switches and magnetos before releasing himself from his four-point harness and exiting the aircraft.

The 'How to Fly a Kitfox' book produced by SkyStar Aircraft Corp, the manufacturers of Kitfox kits states: '*the Kitfox's powerful controls tolerate crosswinds of up to 15 kt, given appropriate pilot skill and currency.*' The conditions on the day of the accident may have been producing crosswind gusts of up to 14 kt.

The pilot stated that the gusty crosswind from 40° to the right of the landing direction exceeded his abilities. He believed that the Kitfox was not easy to land even in good conditions.