Aerotechnik EV-97 Eurostar, G-SDFM

AAIB Bulletin No: 7/2003	Ref: EW/G2003/04/11	Category: 1.3
Aircraft Type and Registration:	Aerotechnik EV-97 Eurostar, G-SDFM	
No & Type of Engines:	1 Rotax 912-UL piston engine	
Year of Manufacture:	2002	
Date & Time (UTC):	7 April 2003 at 1130 hrs	
Location:	Private landing strip, Pointon, Lincolnshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Landing gear, propeller damage and wing spar	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	56 years	
Commander's Flying Experience:	312 hours (of which 13 were on type)	
	Last 90 days - 20 hours	
	Last 28 days - 20 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The pilot was carrying out a short field landing at his private airstrip, having already completed some general handling in the local area. The grass runway is approximately 300 metres in length, is orientated east-west and has a dyke running across its western end adjacent to the Runway 09 threshold. The top of the dyke bank next to the threshold is about one foot higher than the level of the runway surface, is covered with grass and blends in with the runway when seen from above. The pilot remarked that, although the runway is sufficiently long for the aircraft type it would be more challenging in still wind conditions. Hence his desire to practice his short field landing technique.

On this occasion the pilot observed that the wind was from the east south east and he estimated it to be gusting up to 13 kt. It was dry with scattered cloud at about 4,000 feet. After completing some stalling and general handling exercises in the local area, the pilot carried out a standard approach to Runway 09 using full flap. The aircraft landed close to the normal touch down point, about 50 metres in from the threshold, and the pilot decided to convert the landing to a touch and go. He then made two further circuits and approaches with the intention of landing closer to the threshold. Both of these ended in the aircraft going around because it would have landed either too long or undershot. The pilot considered that his next approach would result in a good landing close to the threshold. However, the main wheels struck the top of the dyke bank next to the threshold and the aircraft pitched rapidly onto its nose wheel. The nose wheel collapsed and the propeller shattered after striking the ground. Once the aircraft had come to a stop, the pilot shut it down and exited normally,

the canopy having sprung open during the landing. He was uninjured and there was no fire. Subsequent examination revealed that the aircraft had also suffered a crack in the centre section of its wing spar. The pilot was not aware of any turbulence or windshear during the approach and landing.

Guidance on the dimensions of private airstrips is given in CAP 428, *Safety Standards at Unlicensed Aerodromes*. This publication is referred to in the CAA's General Aviation Safety Sense Leaflet Number 12C entitled *Strip Sense*. For runways less than 800 metres in length, it is recommended that there is an area stretching at least 30 metres beyond each end of the runway which will support the weight of an aircraft in the event of it overrunning during a landing. This also caters for an aircraft undershooting. Had this particular aircraft landed any shorter and come to an abrupt stop in the dyke, the consequences would probably have been much more severe.