ACCIDENT

Aircraft Type and Registration:	Europa XS, G-CHOX	
No & Type of Engines:	1 Rotax 912 ULS piston engine	
Year of Manufacture:	2007	
Date & Time (UTC):	10 August 2008 at 1500 hrs	
Location:	Near Sherburn-in-Elmet, North Yorkshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nosewheel damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	50 years	
Commander's Flying Experience:	176 hours (of which 5 were on type) Last 90 days - 2 hours Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilo	

Aircraft Accident Report Form submitted by the pilot and subsequent telephone enquiries by the AAIB

Synopsis

The pilot made a successful forced landing in a field following an engine failure due to oil starvation caused by the engine oil filter working loose. The reason why the filter worked loose could not be determined.

History of the flight

During the climb after takeoff from Sherburn-in-Elmet, when approaching 2,000 ft, the passenger commented that he could smell burning. This was followed almost immediately by smoke in the cockpit. The electrics were checked, but did not appear to be the cause. Oil could then be seen on the windscreen. The pilot turned back towards the airfield and transmitted an emergency call, just before, the engine stopped. He turned the aircraft into wind and selected a suitable field for a forced landing. A glide approach was made, followed by a successful landing in a field of unharvested wheat.

Inspection of the engine revealed that the oil filter had worked loose, allowing oil to escape under pressure. When strip examined, the engine was found to have suffered seizure of a connecting rod big end. This had caused extensive secondary internal damage, rendering the engine beyond economic repair. It was deduced that the seizure was the result of oil starvation.

Discussion

The oil filter is screwed on and does not have any

locking device. Detailed fitting instructions are provided in the engine maintenance manual. The UK distributor of the engine is aware of only one other case of an oil filter working loose on this engine type. On that engine there was evidence that the threads had been damaged when installing the filter.