AAIB Bulletin: 4/2017	G-ODGC	EW/G2016/10/07
ACCIDENT		
Aircraft Type and Registration:	Eurofox 912(LS), G-ODGC	
No & Type of Engines:	1 Rotax 912 ULS piston engine	
Year of Manufacture:	2014 (Serial no: LAA 376-15274)	
Date & Time (UTC):	15 October 2016 at 1100 hrs	
Location:	Eyres Field, Wareham, Dorset	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Right main landing gear failure	
Commander's Licence:	Light Aircraft Pilot Licence	
Commander's Age:	62 years	
Commander's Flying Experience:	694 hours (of which 557 were on type) Last 90 days - 7 hours Last 28 days - 5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

## Synopsis

Whilst carrying out glider-towing flights the forward attachment bolt of the right landing gear failed, which allowed the landing gear to hang from the aircraft. The mounting bolt had failed due to the presence of a fatigue crack. The manufacturer has since introduced a mandatory life to the landing gear mounting bolts.

## History of the flight

The aircraft was carrying out glider towing on a grass field. Shortly after takeoff, on the aircraft's fifth flight of the day, the glider released the towing cable. The pilot continued to climb into the airfield circuit with the intention of landing. He was then informed by airfield personnel that the right landing gear leg was hanging below the fuselage. After discussion with the CFI over the radio the pilot flew the aircraft for approximately one hour to reduce the fuel load and to carry out a number of practice approaches. During the final approach to land the pilot shut the engine down at 100 ft agl and switched off the fuel supply and electrics. The aircraft touched down on the left mainwheel and the pilot held the right wing up until aileron effectiveness was lost as the aircraft slowed. When the right wing touched the ground the aircraft rotated though approximately 100° before coming to rest. The pilot was uninjured.

## Investigation

Examination of the aircraft identified that the forward bolt holding the right landing gear leg to the fuselage had failed. The remains of the bolt were removed from the aircraft and images of

the fracture surfaces were sent to the LAA for examination. The images showed that the bolt had failed due to crack progression in fatigue. The presence of corrosion across a significant portion of the fracture surface indicated that the crack had been present for some time.

## Safety action taken

As a result of the incident and discussions with the LAA, on 1 November 2016 the aircraft manufacturer issued Mandatory Service Bulletin, EuroFOX SB 03/2016 LAA (v2). This required the replacement of the landing gear mounting bolts within 20 flying hours of the release date of the Bulletin and introduced a 500 flying-hour mandatory life on the bolts. On 4 November 2016 the LAA published Airworthiness Alert LAA/AWA/16/07 which detailed the failure and alerted operators of the aircraft to the requirements of the Mandatory Service Bulletin. The incident was also publicised in the LAA's November 2016 Safety Sense article.

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