

ACCIDENT

Aircraft Type and Registration:	Yak-52, G-YKCT	
No & Type of Engines:	1 Ivchenko Vedeneyev M-14P piston engine	
Year of Manufacture:	1990	
Date & Time (UTC):	24 April 2010 at 1420 hrs	
Location:	1 km west of Kilkerran Airstrip, Ayrshire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to propeller, right main landing gear leg and uplock mounts	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	40 years	
Commander's Flying Experience:	9,676 hours (of which 140 were on type) Last 90 days - 138 hours Last 28 days - 17 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB	

Synopsis

Whilst practising circuits at Kilkerran Airstrip, the aircraft experienced a reduction in engine power leading to a wheels-up forced landing in a field with minimal damage.

History of the flight

The aircraft had been airborne for some 40 minutes conducting a dual recurrent training sortie with two members of the ownership group. The briefed profile for the sortie comprised a normal takeoff and climb to 5,000 ft, stalls, spins, unusual attitude recovery and basic aerobatics. This was followed by a return to Kilkerran Airstrip where circuit work would be

practised. During the first planned go-around from a normal approach, full power was applied, the go-around attitude adopted and 100% was noted on the rpm gauge; however shortly afterwards, the pilots felt a vibration and sensed a loss of engine power, noting fluctuations on the engine rpm gauge. The nose was lowered and the landing gear and flaps raised to maintain airspeed. The engine continued to run but with significantly reduced power and fluctuating rpm.

With obstacles ahead and no noticeable rate of climb, the decision was made to execute a 'gear-up' flapless forced landing into a field to the right of the runway

extended centreline. The landing on very short grass resulted in minimal damage to the aircraft as, in its original role as a military/civilian aerobatic trainer, the YAK-52 was designed to perform such landings without major structural damage as the wheels protrude from the wings and the fuselage even when retracted.

Damage was limited to the propeller, a bent right MLG oleo strut and both MLG uplock brackets. The fuel tanks

were checked for the presence of water and none was found. The engine was removed from the aircraft and sent to a specialist on this type of powerplant for inspection and possible fault identification. No faults were found which could account for the power reduction.