

ACCIDENT

Aircraft Type and Registration:	Diamond Aircraft DA 40 D Diamond Star, G-OCCL	
No & Type of Engines:	1 Thielert TAE 125-02-99 piston engine	
Year of Manufacture:	2006 (Serial no: D4.237)	
Date & Time (UTC):	16 December 2012 at 0950 hrs	
Location:	Wolverhampton (Halfpenny Green) Airport	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Propeller destroyed, probable damage to clutch and gearbox. Damage to tail and tail rotor system of parked helicopter	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	59 years	
Commander's Flying Experience:	4,015 hours (of which 172 were on type) Last 90 days - 24 hours Last 28 days - 6 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft taxied to the airfield fuel bay with a flying instructor and his student on board. Forward visibility was reduced by moisture on the windscreen and the effects of a low sun. The flying instructor, who was taxiing the aircraft, did not see a light helicopter which was already parked at the fuel bay. The aircraft collided with the helicopter at low speed.

History of the flight

An R44 helicopter was parked at the airfield fuel bay for refuelling. The DA 40 Diamond Star (G-OCCL), with a flying instructor and his student on board, taxied to the fuel bay and collided with the helicopter.

The flying instructor had been tasked to oversee a solo consolidation exercise. The aircraft had been hangared overnight, but had been pulled outside before his arrival at the airfield at 0910 hrs. The air temperature was 2°C. After completing the daily inspection, the instructor briefed his student for the exercise and then the pair boarded the aircraft. With the engine running, air was directed to the windscreen but it was slow to demist, so the instructor cleared the inside of the screen with the back of his glove. He also reached through the DV (direct vision) window and cleared moisture from the outside of the screen immediately in front of him.

The student then commenced taxiing towards the fuel bay. The route involved a section of taxiway followed by right then left turns into the bay, to pass between a fuel bowser and a fire service vehicle. As the aircraft emerged from the shadow of a hangar, the student informed the instructor that he could not see to taxi (the taxi route was into sun, which was still low in the sky). The instructor could see ahead, so took control and continued taxiing. As the aircraft approached the fuel pumps, the sun was directly ahead and visibility was poor, particularly to the left. The instructor failed to see the helicopter parked at the fuel pumps and the aircraft taxied into its tail at low

speed. The instructor shut down the aircraft, made it safe and both occupants vacated. The helicopter, which was unoccupied, suffered damage to its tail and tail rotor system.

The instructor reported that the primary cause of the accident was his failure to clear the windscreen thoroughly. He considered that contributory causes were the low sun directly ahead and the distraction posed by the need to taxi carefully through the relatively narrow space between the fuel bowser and fire vehicle.