

ACCIDENT

Aircraft Type and Registration:	Quik GT450, G-DTAR	
No & Type of Engines:	1 Rotax 912S piston engine	
Year of Manufacture:	2008 (Serial no: 8416)	
Date & Time (UTC):	15 September 2018 at 1625 hrs	
Location:	Perth Airfield, Perth	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to landing gear and minor distortion of underside	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	62 years	
Commander's Flying Experience:	1,268 hours (of which 872 were on type) Last 90 days - 80 hours Last 28 days - 28 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The instructor was conducting training, flying circuits using Runway 27 at Perth Airport. During a downwind leg, a helicopter departed the airport from a pad south of the runway. The wind was estimated to be from 240° at less than 5 kt. The instructor discussed the wake turbulence risk but assessed that it would have dissipated before they reached the runway. When they encountered turbulence a few feet above the runway, the instructor applied full power, but the aircraft made heavy contact with the runway before continuing the go-around. In the circuit, he released the throttle which had become stuck at cruise power, before carrying out a successful glide landing.

CAA Safety Sense leaflet 15c "*Wake Vortex*" and NATS Aeronautical Information Circular P 001/2015, "*Wake turbulence*" provide pertinent information. Helicopters generate vortices radially in the hover. In forward flight, helicopters generate trailing vortices either side of the disk, much like wingtip vortices of a heavier aircraft. These descend and if they reach the ground will split and move sideways at approximately 5 kt in still air. When generated close to the ground, vortices can persist for about 80 seconds. In this case, the prevailing light winds would have been favourable for sustaining a vortex and drifting it towards the runway.