ACCIDENT

Aircraft Type and Registration:	Gulfstream AA-5A Cheetah, G-RATE
No & Type of Engines:	1 Lycoming O-320-E2G piston engine
Year of Manufacture:	1978
Date & Time (UTC):	17 May 2009 at 1345 hrs
Location:	Disused airfield at Oakley, Oxfordshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Damage to right wing and propeller
Commander's Licence:	Private Pilot's Licence
Commander's Age:	30 years
Commander's Flying Experience:	140 hours (of which 40 were on type) Last 90 days - 19 hours Last 28 days - 8 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

During a cross-country flight, the engine started to run roughly and would not produce full power. The pilot elected to land at a disused airfield but, after a normal touchdown, saw a fence across the runway which she was unable to avoid. The weather conditions were conducive to carburettor icing and the pilot assessed this as the most likely cause of the power reduction and rough running.

History of the flight

During a cross-country flight from Cranfield to Enstone, the pilot diverted 15° left of track to avoid a band of weather (rain) en-route, with the intention of regaining her original route by turning right through 30° after 10 minutes to intercept the original track. As she initiated this turn, the engine started to run roughly. After completing the emergency checklist, full power had not been restored and with the engine continuing to run roughly she elected to land on one of the disused runways at Oakley Airfield, which was below the aircraft at that stage.

During the landing roll, after a successful touchdown on the into-wind runway, the pilot noticed a line of steel-cable fencing, supported by posts, across the runway. She was able to turn the aircraft left, off the hard surface and onto the grass, using wheel brakes but was unable to prevent it subsequently striking the fence at a shallow angle, resulting in a puncture of the right wing fuel tank.

The pilot reported that the forecast and actual temperatures/dewpoints as +9ºC/+2ºC and +10°C/+2°C respectively, and assessed the cause of the power reduction and rough running as carburettor icing. Standard icing charts show that these conditions straddle the boundary between predicted 'serious icing at glide power' and 'serious icing at cruise power'.