

Extra 300, G-XCCC

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Aircraft Type and Registration:	Extra 300, G-XCCC	
No & Type of Engines:	1 Lycoming AEIO-540-L1B5 piston engine	
Year of Manufacture:	2001	
Date & Time (UTC):	21 September 2001 at 1411 hrs	
Location:	Rochester Aerodrome	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - 0	Passengers 1 minor
Nature of Damage:	Damage to the landing gear, wings, engine attachments and propeller	
Commander's Licence:	Private Pilots Licence	
Commander's Age:	49 years	
Commander's Flying Experience:	414 hours (of which 165 were on type)	
	Last 90 days - 54 hours	
	Last 28 days - 18 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further telephone enquiries	

The aircraft had recently arrived in the United Kingdom after its manufacture in Germany and was being ferried from Meppershall to Rochester with the new owner as the passenger and a more experienced pilot, who owns a similar Extra, acting as commander. The passenger flew in the front cockpit, the pilot/commander in the rear.

Before the ferry flight the owner and the pilot examined the fuel contents. According to a calibrated fuel stick carried by the pilot, the two wing tanks contained a total of some 40-50 litres and the centre ('Acro-/Fuselage') tank was nearly empty. They arranged to fill the centre tank for the flight. In the Extra 300 the fuel is carried in two linked wing tanks and a centre fuselage tank which feeds into the small 'Acro' tank. The fuel selector has three positions: Wing, Centre and Off and is

mounted close to the pilot's right thigh. The pilot of G-XCCC commented that, in this position, it is difficult to see the valve and the selection is largely done 'by feel'.

The aircraft left Meppershall at 1345 hrs and arrived, without incident, in the overhead at Rochester at 1410 hrs. The pilot and owner had agreed on an 'overhead join' at Rochester for a planned left-hand circuit onto Runway 34, with landing traffic already in the circuit. There was also a radio call from a light aircraft intending to depart from this runway and the pilot of G-XCCC noted the AFIS message from Rochester Information for this aircraft to line up.

On final approach the pilot considered it unlikely that the departing aircraft would get airborne in time for him to make a safe landing so, at about 200 feet, he initiated a dead-side go-around to the right. As he did so, he moved the throttle forward and there was a brief increase in power before there was an abrupt and almost total loss of power. The pilot made a MAYDAY call and exercised the throttle (the propeller was still windmilling) but did not change fuel tank selection as he believed he was operating from the centre tank, which was nearly full, and he knew that the wing tanks would be close to empty. There was no recovery of power and the pilot made a descending left turn towards the airfield as the only potential safe landing site. The aircraft cleared the boundary fence but made a heavy landing close to Runway 34, damaging the landing gear, wings, engine attachments and propeller. There was no fire and the pilot and passenger made a prompt and safe exit. The passenger suffered some injury to his lower back as a result of the accident.

Following the accident, the aircraft was disassembled at Rochester by a light aircraft repair organisation. When the wings were removed, it was noted that there was no evidence of leakage from the wing tanks and the total amount of fuel recovered from the wings was about two litres. Inspection of the aircraft showed that the centre tank was nearly full. As part of the repair process, the engine was inspected and subsequently run: there was no problem apparent with the engine and it was reinstalled in the same aircraft.

The pilot stated that he had taken off from Meppershall with the wing tanks selected and had stayed on these tanks until reaching the overhead at Rochester. He believed that, at this point, he changed the fuel selection to the centre tank although he did not switch on the electric boost pump as he would not routinely do so for his own Extra aircraft. The throttle had then been retarded to idle until he initiated the go-around. The pilot was less sure about his actions following the power loss, due to the pressure of the situation.

There is, therefore, no mechanical explanation for the engine's power loss during the go-around manoeuvre at Rochester Aerodrome. The behaviour of the engine at the go-around was consistent with a lack of sufficient fuel delivery to the engine at that stage. One possibility would be that, having drawn fuel from the wing tanks for the take-off and transit portions of the flight, there had not been a change of selection to the centre tank for the landing or, if this change was made, it was incomplete.

The aircraft manufacturer states in the Pilot's Operating Handbook/Flight Manual that the centre tank should be used for take-offs and landings and that the operation of the electric boost pump is required for these phases of flight.