Glasair RG, G-TRUK

AAIB Bulletin No: 11/2004	Ref: EW/G2004/09/03	Category: 1.3
Aircraft Type and Registration:	Glasair RG, G-TRUK	
No & Type of Engines:	1 Lycoming O-320-D1A piston engine	
Year of Manufacture:	1989	
Date & Time (UTC):	1 September 2004 at 1102 hrs	
Location:	Bembridge Airfield, Isle of Wight	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to propeller, engine, lower engine cowling, exhaust tail pipe, nose gear doors, flaps, aerials and pitot head	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	73 years	
Commander's Flying Experience:	1,335 hours (of which 639 were on type)	
	Last 90 days - 12 hours	
	Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

This light aircraft, of relatively high performance, landed on Runway 12 with full flap selected but the landing gear retracted. It touched down gently and slid along the runway for about 300 metres before stopping. There was damage to the propeller, the engine, its cowling, the flaps, aerials and the underneath of the fuselage. The pilot was uninjured and there was no fire or fuel leak.

In a comprehensive and honest report the pilot stated that he had flown into Bembridge in this aircraft, which he had owned for 14 years, over a hundred times before. On this occasion the aircraft was inbound from Fairoaks and it was his normal practice to call the airfield on the radio, for joining instructions, as he crossed the mainland coast at Langstone Harbour. On the majority of such flights he had been informed that there was 'no known traffic' and had been able to join direct on to base leg. On only three occasions had the pilot had to join the circuit via the overhead to fit in with other aircraft. This time the pilot was advised that there was a Piper PA-28 joining the left base leg for Runway 12. He confirmed that he would join behind that aircraft and, in excellent visibility, completed his approach checks and looked for the PA-28.

The pilot regarded himself as pedantic when it came to correct checklist procedures and stated that on more than 95% of his flights he would start his downwind checks with the landing gear already

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extended. He reduced power but found himself much further away from the airfield than normal as the speed decreased below that at which he would normally have lowered the landing gear. He delayed this selection and enquired as to the position of the other aircraft. He was told that it was crossing the coast. He widened his approach on to base leg, reduced speed even more and concentrated on looking for the other aircraft. This distracted him from carrying out his 'ingrained downwind checks'. He requested the PA-28's position again and was advised that it was now turning on to final approach. The pilot immediately saw the other aircraft well ahead, selected two stages of flap and commenced a descent on left base leg. Having widened the approach G-TRUK was now on a shallower angle of descent than the pilot was used to and consequently required more power than normal. The pilot concluded that this masked the fact that there was less drag with the landing gear still retracted.

At this point the pilot became aware of an irritating tone in his noise-cancelling headset. Each year he had listened to the gear warning horn being tested in a hangar during the aircraft's annual inspection. This checked that the horn operated when the flaps were selected while the landing gear remained retracted. However, the pilot stated that he had never heard this 'strident electro-mechanical' sound when he had been airborne because he had never failed to lower the landing gear at the proper time. The tone distracted him from his normal checks as the aircraft turned on to final approach, and he continued to wonder what it was. He selected full flap and later considered that if the descent angle had been as steep as normal he would have noticed that there was less drag. Also, he thought that without the intrusion of the gear warning horn he would not have been distracted from his normal checks on final approach and would have made his customary call of "final with three greens" to the control tower.

The pilot concluded that the accident could have been avoided if he had maintained his normal speed profile during his approach and joined the circuit via the overhead.