## Piper PA-34-200T Seneca II, G-BFLH

AAIB Bulletin No: 10/2003	Ref: EW/G2003/06/21	Category: 1.3
Aircraft Type and Registration:	Piper PA-34-200T Seneca II, G- BFLH	
No & Type of Engines:	2 Continental LTSIO-360-E piston engines	
Year of Manufacture:	1977	
Date & Time (UTC):	25 June 2003 at 1645 hrs	
Location:	Wycombe Air Park, Buckinghamshire	
Type of Flight:	Public Transport	
Persons on Board:	Crew - 1	Passengers - 2
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Propellers damaged, engines shock loaded, flap and fuselage skins scratched	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	31 years	
Commander's Flying Experience:	5,950 hours (of which 2,090 were on type)	
	Last 90 days - 186 hours	
	Last 28 days - 52 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The flight was operated for the purpose of carrying two passengers from Wycombe Air Park, Buckinghamshire, to Blackpool Airport, Lancashire, and returning with them later the same day. The outbound flight was uneventful. On the return flight, shortly after departure from Blackpool, the pilot saw that the 'GEAR UNSAFE' red warning light was illuminated. He considered that the landing gear was in fact retracted because he could not hear the sounds associated with an extended gear and the aircraft handling felt normal. In the belief that the indication meant that the landing gear hydraulic pump may be running and might therefore burn out, he pulled two associated landing gear circuit breakers.

The aircraft arrived back at Wycombe after the airport had closed. The pilot had previously been informed by his company operations that permission to land out of operating hours had been obtained (although the airport operator did not agree that this was so). He positioned into the circuit for Runway 07 and, when established on base leg, selected the landing gear down. However, because the circuit breakers were still out the gear failed to extend, and the pilot did not notice this. He then became distracted by other traffic in the vicinity, on approach to a grass landing area to the south of the runway, and did not complete a final check of gear down before landing.

The propellers, flaps and underside of the fuselage contacted the runway and the aircraft came to a halt some 300 metres along the surface. The airfield had closed at 1630 hrs, 15 minutes before the landing, so there was no fire or rescue service available. Some other airfield personnel did see the accident and went to assist, but in the event no injuries were sustained and the three persons on board were able to evacuate the aircraft without external assistance.

The Pilot's Operating Handbook states that the landing gear unsafe light will illuminate when the landing gear is in transit. Should the light remain illuminated the recommended action is to recycle the landing gear. The pilot did not report that he carried out this action. Instead, he pulled the circuit breakers which disabled the landing gear hydraulic motor and the indicating lights and warning horn system. He did not appear to have considered taking any troubleshooting action to determine whether the landing gear would function correctly, being confident that the unsafe light was related to the gear retracted position alone. Had he considered that a further problem with the gear might occur it seems unlikely that he would have continued the flight to an airfield that was closed and therefore without any emergency services.

On 17 January 2002 this aircraft was involved in an earlier incident, but being flown by a different operator on an instructional flight, in which it landed with the landing gear retracted. (AAIB Bulletin July 2002.) The landing gear warning horn is designed to sound when either throttle is retarded aft of a position consistent with 14 inches manifold pressure with the landing gear retracted. On that occasion the horn had continued to sound at manifold pressures of greater than 14 inches (as a result of a misaligned micro switch) and the landing gear warning circuit breaker had been pulled to silence the horn. As a result of the incident the training organisation issued a notice to all instructors to the effect that the circuit breaker should not be pulled if the gear warning horn sounds with a manifold pressure of greater than 14 inches. Instead, the problem was to be reported so that the micro switch could be adjusted.

The landing gear indication system on the aircraft has not been tested since the incident although it is considered likely that there was an intermittent problem with the up position switch. The operator has now issued a 'Notice to Pilots' highlighting the importance of not disabling aircraft systems unnecessarily by pulling circuit breakers.