

Cessna 210L, N249SP

AAIB Bulletin No: 12/2004	Ref: EW/G2004/08/03	Category: 1.3
Aircraft Type and Registration:	Cessna 210L, N249SP	
No & Type of Engines:	1 Continental IO-520 piston engine	
Year of Manufacture:	1975	
Date & Time (UTC):	6 August 2004 at 1256 hrs	
Location:	Belfast City Airport, Northern Ireland	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Propeller damage. Slight under belly damage	
Commander's Licence:	FAA Private Pilot's Licence	
Commander's Age:	41 years	
Commander's Flying Experience:	250 hours (of which 50 were on type)	
	Last 90 days - 90 hours	
	Last 28 days - 41 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The aircraft had departed from Paris Le Bourget Airport at 1,000 hrs for the flight to Belfast City Airport. The pilot flew an ILS approach to Runway 22 in light winds and with scattered cloud at 2,500 feet but did not lower the landing gear or check for a "down and locked" indication. On short finals the pilot flew slightly below the ILS glidelsope, which was set at 3 degrees. The aerodrome controller saw that the undercarriage was up and transmitted a warning to the aircraft "on very short final", but the pilot did not hear this transmission. The aircraft landed with the landing gear retracted, sustaining damage to the propeller and lower fuselage. The pilot and his passenger were uninjured and able to evacuate the aircraft through the cabin doors with the airport fire and rescue service in attendance.

The gear warning system was subsequently tested and found to be serviceable. The pilot commented that the gear warning horn on this aircraft type was not particularly loud and could easily be confused with the stall warning horn. The procedural approach to an unfamiliar airfield had increased the pilot's workload and may have contributed to his failure to lower the landing gear. The increased power requirement of the shallower final approach would probably have delayed the onset of the gear

warning to just before touchdown. The pilot could not recall any cockpit or other distractions during the latter stages of the approach which could account for him missing the transmission from ATC.

Description of landing gear indication and warning system

The landing gear indication system on aircraft of this build standard consists of a single green light to indicate that all landing gears are locked down and an amber light to indicate all gears fully up. These lights illuminate when the appropriate microswitches on all three legs are made; when the gear is in transit or at least one leg is not at a limit position, there is no indication light. There is also a warning horn which should sound if the landing gear is not fully locked down when the manifold pressure falls below a pre-determined level. When down, the main landing gear is visible from the cabin. The audio warning for both the gear and stall warning systems is routed through the overhead speaker rather than the pilot's headset.