
INCIDENT

Aircraft Type and Registration:	DR 107 One Design, G-IIID	
No & Type of Engines:	1 Lycoming O-360-A4N piston engine	
Year of Manufacture:	2005	
Date & Time (UTC):	21 April 2006 at 1700 hrs	
Location:	Tatenhill, Staffordshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to undercarriage, main gear bent, tailwheel detached, fuselage tubing damage near gear attach point	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	39 years	
Commander's Flying Experience:	5,700 hours (of which 11 were on type) Last 90 days - 147 hours Last 28 days - 31 hours	
Information Source:	Aircraft Accident Report Form, and follow up correspondence and photographs submitted by the pilot	

Synopsis

The aircraft was damaged in a ground loop as directional control was lost after the pin securing the tailwheel to its cantilever spring detached. This then allowed the tailwheel to detach from the aircraft.

History of the flight

Whilst backtracking to clear the runway for an approaching aircraft, the tailwheel detached from its supporting spring, making a loud scraping sound and rendering it impossible for the pilot to steer the aircraft normally. After running straight initially, the aircraft veered towards the left side of the runway; possibly, the

pilot suggests, as a result of uneven braking. The pilot was aware of raised lighting units at the runway edge and was also concerned that the aircraft might nose over if it ran off the paved runway and onto the adjoining soft ground. His attempts to keep the aircraft on the runway, however, provoked a ground loop to the right. As the aircraft swung through 90°, it started to 'hop' on its left wheel and tilted sufficiently to bring the left wing tip into light contact with the ground. It finally came to rest after having yawed through 180° from its original direction of travel.

The pilot reported that when he examined the aircraft, he found that the pin or bolt (he was unsure which) securing the tailwheel assembly to its cantilever spring, was missing. He tried to locate the missing item but was unsuccessful, and consequently the reason for its loss

could not be established. A post-incident photograph provided by the pilot, showing the tailwheel in situ held by a temporary pin, showed no deformation of relevant areas around the hole for the missing pin.