

No: 1/89

Ref: EW/G88/11/01

Category: 1a

**Aircraft Type
and Registration:**

PBY/5A Catalina, N 212 DM

No & Type of Engines:

2 Pratt & Whitney 1830/92 Twin Wasp piston engines

Year of Manufacture:

1945

Date and Time (UTC):

2 November 1988 at 1630 hrs

Location:

North Weald Aerodrome near Harlow, Essex

Type of Flight:

Ferry flight

Persons on Board:

Crew - 4

Passengers - None

Injuries:

Crew - 4

Passengers - N/A

Nature of Damage:

Damage to several underside rivet heads, small crack in skin and split in right float

Commander's Licence

Airline Transport Pilot's Licence (FAA) Commercial Pilot's Licence (UK)

Commander's Age:

66 years

**Commander's Total
Flying Experience:**

10000 hours (of which approximately 100 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot and telephone enquiries.

The aircraft was being ferried from Exeter to North Weald where it was to be stored. After take-off from Exeter the landing gear failed to retract despite an indicated hydraulic pressure of 600 psi. The electric pump was selected and pressure increased to 900 psi whereupon the nose gear retracted. The main gear was retracted using the hand pump but the left wheel did not retract fully. On approach to North Weald the landing gear was selected down but the nose gear failed to unlock. It was released manually and was observed to be down.. Both main wheels extended and the hand pump was used to bring the hydraulic pressure to 900 psi. One of the engineers used a purpose made rod to establish that the main wheels were down. There were no cockpit indications that the landing gear was fully down and locked but the crew ascribed the absence of such lights to a faulty micro switch since the landing gear UNSAFE light was also out. Following a gentle touch down at North Weald the aircraft rolled for about 200 metres when the right wing slowly dropped. The crew were aware that the right landing gear had collapsed and left braking was applied to prevent a ground loop and to try and maintain the right wing off the ground for as long as possible. The aircraft slid gently, turning through about 90°, and came to rest on the grass to the right of the runway. Subsequent inspection showed that the right landing gear actuator had extended fully but the down locks had not engaged. The pin on the end of the

actuator had sheared off since the weight of the aircraft was partly borne by it and the gear had then collapsed.

No. 139	Actuator Type and Registration	No. & Type of Engines	Year of Manufacture	Date and Time (UTC)	Location	Type of Flight	Person on Board	Number of Passengers	Nature of Damage	Commander's License	Commander's Age	Commander's Total Flying Experience	Information Source
	1710A Caudron R.2000	11700 & 11700 (1710) from Waspijira engine	1943	1 November 1943	North West coast of British East Africa	Long flight	Chief Pilot	Chief Pilot	Damage to landing gear actuator and landing gear collapsed	Chief Pilot - 1710A	60 years	10000 hours of flying experience	At 1710A - British East Africa