

INCIDENT

Aircraft Type and Registration:	Cessna 208 Caravan I (floatplane), G-MDJE
No & Type of Engines:	1 Pratt & Whitney Canada PT6A-114A turboprop engine
Year of Manufacture:	2001
Date & Time (UTC):	24 May 2008 at 1930 hrs
Location:	Overhead Partick, Glasgow
Type of Flight:	Commercial Air Transport (Non-Revenue)
Persons on Board:	Crew - 2 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Water rudder detached in flight
Commander's Licence:	Commercial Pilot's Licence
Commander's Age:	34 years
Commander's Flying Experience:	4,615 hours (of which 6.5 were on type) Last 90 days - 32 hours Last 28 days - 6.5 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

Whilst flying over Glasgow at 1,200 ft, the left float water rudder fell from the aircraft due to a failure of its attachment post. The damage to the attachment post was consistent with the rudder having struck a submerged object.

History of the flight

The aircraft had taken off from the river Clyde on a positioning flight to Loch Lomond. Shortly after reaching its cruising altitude of 1,200 ft, a vibration was felt through the aircraft which lasted for approximately 10 seconds. The pilot carried out a visual inspection of the airframe from the cockpit and saw that the left float water rudder was missing. The aircraft diverted to Glasgow Airport where an uneventful landing was made.

The water rudder was later recovered from a garden; no one on the ground was injured.

Examination of the aircraft revealed that the water rudder attachment post at the rear of the left float had been distorted, and a weld on the rudder pivot tube had failed, allowing the separation of the rudder. The damage was consistent with the water rudder having struck a submerged object. The aircraft had operated for 85 hours since its last scheduled water rudder inspection (required at 100 hour intervals). To prevent corrosion, a liberal coating of grease is applied to the rudder mechanism during the inspection, and this is likely to have obscured the presence of the damage during any subsequent pre-flight inspection.