

SERIOUS INCIDENT

Aircraft Type and Registration:	Percival P66 Pembroke C Mk1, G-BNPH	
No & Type of Engines:	2 Alvis Leonides 127 piston engines	
Year of Manufacture:	1955 (Serial no: PAC/66/027)	
Date & Time (UTC):	7 July 2014 at 1030 hrs	
Location:	MOD St Athan, Glamorgan	
Type of Flight:	Private	
Persons on Board:	Crew - 2	Passengers - 2
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None reported	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	56 years	
Commander's Flying Experience:	409 hours (of which 24 were on type) Last 90 days - 11 hours Last 28 days - 6 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

After a normal landing, the aircraft drifted towards the left side of the runway. In an attempt to arrest this drift, the pilot used asymmetric braking which caused the aircraft to yaw rapidly right and depart the paved runway surface. The brakes on this aircraft are sensitive when used asymmetrically and the pilot inadvertently applied more braking force than he intended.

History of the flight

The aircraft was on a private flight from RAF Waddington to MOD St Athan and the pilot was making an approach to Runway 26. The pilot reported no significant crosswind. On short final, the pilot experienced some turbulence and windshear but he was able to continue the approach and landed normally slightly left of the runway centreline.

Immediately after touchdown the aircraft started to drift towards the left edge of the runway. The pilot applied full right rudder and then gentle braking, at which the aircraft yawed rapidly right through about 70°. The pilot observed that the area ahead of the aircraft was clear of obstructions so allowed the aircraft to run off the paved surface and onto the grass before gently turning it left to bring it to a halt approximately parallel with the runway. There were no injuries and no damage to the aircraft or any other structure.

The brake system on this aircraft is a pneumatic system operating on the two main wheels. The pilot controls the overall braking effort with a lever on the main control yoke. Brake

pressure is fed differentially to the mainwheels in proportion to the amount of rudder pedal deflection so that with full rudder applied the majority of the braking effort is applied to the mainwheel on the corresponding side. The pilot explained that, under these circumstances, the brakes are very sensitive.

The pilot assessed that the initial drift to the left was the result of an unexpected change in wind direction just after landing that caused the aircraft to weathercock. Despite his intention to apply gentle braking, the sensitivity of the braking system with full rudder pedal deflection caused him to apply greater asymmetric braking effort than he intended, and this caused the aircraft to yaw rapidly to the right.