ACCIDENT

Aircraft Type and Registration:	Pegasus XL-R, G-MTDI
No & Type of Engines:	1 Rotax 447 piston engine
Year of Manufacture:	1987
Date & Time (UTC):	12 November 2008 at 1500 hrs
Location:	Long Marston Airfield, Warwickshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Fibreglass pod cracked, monopole broken, damage to wing fabric and to front tyre
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	44 years
Commander's Flying Experience:	45 hours (of which 8 were on type) Last 90 days - 9 hours Last 28 days - 6 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The pilot applied the brake while taxiing, the front wheel locked up and the aircraft tipped forwards.

History of the flight

The pilot landed on Runway 22 which has an asphalt surface. After landing he continued to taxi ahead and then applied the brake. The front tyre deformed and contacted the brake bar causing the nosewheel to lock up. The aircraft tipped forwards causing damage to the pod and the wing structure. The pilot was not injured and was able to free himself from the aircraft.

This aircraft has a simple foot operated brake acting on the front wheel tyre. The mechanism consists of a spring return, foot-operated lever, which pivots on the left fork and applies frictional force via a metal tubular arch to the top of the front tyre. The brake is considered to be an aid to be used for taxiing and for engine run-ups. The operator's handbook contains operating limitations for use of the brake, two of which are:

> *'OPERATING LIMITATIONS: TAXIING*
>
> *(i) The foot brake should not be applied at speeds above 15 mph.*

(ii) To avoid the possibility of tipping the aircraft over, do not apply the foot brake when the aircraft is being turned during taxiing. The foot brake should only be applied whilst the aircraft is travelling in a straight line.'