

ACCIDENT

Aircraft Type and Registration:	Alpi Aviation Pioneer 300, G-VIXX	
No & Type of Engines:	1 Rotax 912 ULS piston engine	
Year of Manufacture:	2010	
Date & Time (UTC):	25 November 2011 at 1145 hrs	
Location:	Gloucestershire Airport	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - 1 (Minor)	Passengers - N/A
Nature of Damage:	Substantial	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	78 years	
Commander's Flying Experience:	6,000 hours (of which 3 were on type) Last 90 days - 15 hours Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft was positioned on the apron with the parking brake set and after completing the pre-flight checks, the pilot started the engine. When the engine fired, it immediately accelerated to a high power setting. The aircraft surged forward across a taxiway and verge before striking a large shipping container, causing substantial damage to the aircraft. The pilot suffered minor injuries but was able to leave the aircraft unaided.

Discussion

The aircraft was fitted with a Rotax 912 ULS engine which is a common choice for this class of aircraft. The throttle butterfly valves on each of the two carburettors are spring biased to the fully open, FULL

POWER, position as the throttle cable used to control them is typically of a 'pull only' design. The throttle control fitted to this aircraft was a plunger type with a separate friction nut to allow pilot adjustment of throttle friction during flight. If the friction nut was loosened sufficiently the throttle butterfly would move to the FULL POWER position under the action of the bias spring and therefore this type of throttle control may not be best suited to this type of engine. Some other aircraft designs that are fitted with this type of engine utilise a throttle control system that prevents rapid uncommanded throttle movement by incorporating, for example, a balance spring or a fixed friction device.

The pilot reported that in the future he intends to face the aircraft towards a clear area and confirm the throttle is in the idle position immediately prior to starting the engine.

Safety Action

The LAA are reviewing the design requirements for throttle control mechanisms on aircraft, for which they are responsible, that are fitted with this type of engine.