

ACCIDENT

Aircraft Type and Registration:	Piper PA-28-180 Cherokee, G-ATTX	
No & Type of Engines:	1 Lycoming O-360-A3A piston engine	
Year of Manufacture:	1966	
Date & Time (UTC):	9 October 2008 at 1130 hrs	
Location:	Earls Colne Airfield, Essex	
Type of Flight:	Private	
Persons on Board:	Crew – 1	Passengers - 1
Injuries:	Crew – None	Passengers - None
Nature of Damage:	Damage to the nose landing gear and propeller, and possible engine shock loading	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	63 years	
Commander's Flying Experience:	329 hours (of which 32 were on type) Last 90 days - 2 hours Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The pilot started the engine and the aircraft immediately began to move forward and accelerate. It continued for a short distance before the nose of the aircraft struck the airfield mower, which was attached to a tractor and parked next to the main hangar. The aircraft parking brake had not been selected ON and the pilot was unable to apply the hand brake in time to prevent the collision.

History of the flight

The pilot had been a member of the flying group which owned G-ATTX since November 2007. Prior to that, he was a member of a flying club which operated Cessna 150s, on which he had accrued most of his flying

experience, and Cessna 172s. The procedure adopted by that club when parking these aircraft was to chock the aircraft wheels and leave the parking brake OFF. This was partly due to the reliability of the parking brake but also ensured a physical means of preventing the aircraft from moving.

The pilot had flown 25 hours in G-ATTX and felt he had no particular problem with the single brake lever, which was used both for braking when taxiing and as a parking brake. However, he had noticed that his hand did not fall naturally onto the lever and that he had to look or feel for it. By contrast, all the previous aircraft he had flown had been fitted with toe brakes located on the rudder pedals.

On the day of the accident, the pilot was preparing for a flight to Popham Airfield with one passenger. He moved the aircraft over to the fuel pumps, by hand, and parked it facing the fuel pumps, with the nosewheel chocked and the parking brake released. After refuelling the aircraft, he pushed it back some 30 metres to a parking space almost opposite the fuel pumps. The pilot entered the aircraft, followed by his passenger, and commenced the pre-engine start checks using his printed checklist. He read the second item, 'Brakes – ON', but apparently did not carry out the action. He continued with the checklist and, once completed, started the engine.

As the engine started, the aircraft began to move forward and gather speed. The pilot could not recall if he closed the throttle but he did remember immediately trying to stop the aircraft by pressing the rudder pedals. When this had no effect, he grabbed the flap lever and then, realising his mistake, reached forward for the brake lever. Before he could locate it, the aircraft collided

with the airfield mower, which was attached to a tractor parked next to the main hangar.

The pilot selected the electrical master switch and fuel selector to OFF and he and his passenger, who were uninjured, vacated the aircraft through the normal exit. The airfield Rescue and Fire Fighting Service attended immediately but there was no fire.

In an honest report, the pilot concluded that the main cause of the accident was that he did not apply the parking brake when he read out the relevant item in the checklist. Secondly, even after accumulating 25 flying hours in the aircraft, his instinct in this emergency was to return to his previous training and experience and attempt to use toe brakes to stop the aircraft. He also considered that operating in a confined space, with limited time to find the hand brake lever and recover the situation, contributed to the outcome.