# Piper PA-32-300, G-MCAR

## AAIB Bulletin No: 1/2001

## Ref: EW/G2000/08/39 - Category: 1.3

| | |
|---|---|
| **Aircraft Type and Registration:** | Piper PA-32-300, G-MCAR |
| **No & Type of Engines:** | 1 Lycoming IO-540-K1A5 piston engine |
| **Year of Manufacture:** | 1970 |
| **Date & Time (UTC):** | 4 August 2000 at 0930 hrs |
| **Location:** | RAF Henlow, Bedfordshire |
| **Type of Flight:** | Private |
| **Persons on Board:** | Crew - 1 - Passengers - None |
| **Injuries:** | Crew - None - Passengers - N/A |
| **Nature of Damage:** | Starboard undercarriage torn off, wing spar damaged. Engine shock loaded and propeller damaged. Fuel drain broken off which allowed fuel spillage |
| **Commander's Licence:** | Private Pilot's Licence |
| **Commander's Age:** | 40 years |
| **Commander's Flying Experience:** | 198 hours (of which 4 were on type)<br>Last 90 days - 6 hours<br>Last 28 days - 3 hours |
| **Information Source:** | Aircraft Accident Report Form submitted by the pilot and other enquiries made by AAIB |

The pilot had planned to fly from RAF Henlow to the Channel Isles and intended to refuel prior to completing his final preparations. He taxied the aircraft to the refuelling area where a Cessna was already in the process of refuelling from the bowser. The aircraft was shutdown and then pushed back about 40 feet from the refuelling area in order to allow the Cessna plenty of room to taxi away after its refuelling.

When the refuelling area was clear, the pilot of G-MCAR attempted to start the engine but without success. He then attempted a hot start. This requires the throttle to be set 1/4 inch open, the fuel pump to be selected 'ON' and the mixture control to be at Idle Cut Off. The engine started on the second attempt and the aircraft immediately started to move rapidly forwards. The pilot attempted to apply the toe brakes but with no apparent effect. The right hand undercarriage struck the concrete bund (a low walled area designed to contain any fuel spillage) surrounding the refuelling

area and broke off. The aircraft came to rest with fuel leaking from a broken fuel drain. This fuel then floated on the water that had gathered within the bund during recent rain thus producing a potential fire hazard. The airfield fire services arrived promptly and covered the area with a foam blanket.

The pilot stated that he had ommitted to re-apply the parking brake after pushing the aircraft back to allow the Cessna aircraft to move. He also recalled that the engine started abruptly and ran up to a surprisingly high power setting. Photographs taken after the event show that there were skid marks on the damp earth during the final 15 feet or so prior to the impact with the bund but no skid marks prior to that.

It is therefore probable that the pilot attempted the hot start with the parking brake not applied and with the throttle set to a higher power setting than intended. As the engine started, the aircraft immediately accelerated and, with subsequent sustained application of the toe brakes, this caused the aircraft to skid into the concrete bund.