

**No:** 6/90                      **Ref:** EW/G90/03/20                      **Category:** 1c

**Aircraft Type and Registration:** Piper PA-38-112, G-BPMS

**No & Type of Engines:** 1 Lycoming O-235-L2C piston engine

**Year of Manufacture:** 1981

**Date and Time (UTC):** 28 March 1990 at 1809 hrs

**Location:** Glasgow Airport

**Type of Flight:** Private (training)

**Persons on Board:** Crew - 1                      Passengers - None

**Injuries:** Crew - 1 (minor)                      Passengers - N/A

**Nature of Damage:** Aircraft damaged beyond economic repair

**Commander's Licence:** Student Pilot

**Commander's Age:** 34 years

**Commander's Total Flying Experience:** 24 hours (all of which were on type)

**Information Source:** Aircraft Accident Report Form submitted by the pilot, ATC Recorded Speech Transcripts and a Preliminary Occurrence Report from the Strathclyde Police.

Runway 23 was in use at Glasgow Airport, the weather was fine and the surface wind was 240°/7 kt. At about 1804 hrs G-BPMS was cleared for an immediate take-off and, shortly afterwards, the pilot requested a right turn out for a 1500 foot glide circuit. This was approved by ATC and, just before 1807, G-BPMS called downwind and was told to report final runway 23. The controller advised the pilot that the circuit should not be "too tight" as there was a BAe146 about to depart. The acknowledgement of this advice was the last recorded transmission from the aircraft. The BAe146 called "rolling" shortly after 1808 hrs and at 1809 hrs and 41 seconds the tower controller informed the AFS watchroom that there had been an aircraft accident on runway 23 at the intersection.

Eye witnesses saw the Tomahawk approach close behind the departing BAe146. At about 20 to 30 feet agl the right wing dropped and the aircraft assumed a bank attitude estimated to be 90°. The wingtip hit the runway 6 metres south of the centreline and about 100 metres west of the intersection. The aircraft turned upside down and travelled a further 150 metres along the runway before coming to rest on the centreline. Appliances from the AFS were promptly on the scene and the pilot, who was wearing full upper torso restraint, was rescued from the crushed cockpit.

The pilot reported that he had carried out a dual check which involved 2 glide approach and landings and a flapless approach and landing. The instructor left the aircraft and, having completed the usual checks, the pilot carried out a normal take-off from runway 23. He turned right and climbed to 1500 feet in order to carry out a glide approach. The normal radio calls were made and, he began his glide approach abeam the runway threshold, having noticed that the BAe146 he had been warned about had started its take-off run. This was his first solo attempt at a glide approach and he considered that, in his determination to reach the runway, the base and final turns were tighter than might have been ideal. Once established on final approach, he realised that he was high and selected full flap in an attempt to bring the planned touchdown point nearer to the runway threshold. At this stage he noted that he was closer to the departing aircraft than he would have wished and, being aware of the hazard of flying into wingtip vortices, considered a go-around. However, as his touchdown point now appeared to be significantly before the point of rotation of the BAe146, he decided to continue with the proviso that he would make a normal landing rather than a touch-and-go. No final radio call was made because it was assumed that the clearance to commence the glide approach was a clearance to complete it. At about 15 to 20 feet agl the speed was about 65 to 70 kt and, as the nose was raised to the straight-and-level attitude to reduce speed for touchdown, the right wing suddenly dropped and the aircraft assumed a 90° right bank attitude. The pilot could recall no further details of the accident. He was subsequently detained in hospital for two nights as he had been concussed for a short period and had suffered minor injuries to the head and body.