AAIB Bulletin No: 8/94 Ref: EW/A91/12/1 Category: 1.2

Aircraft Type and Registration: Piper PA-23-250 Aztec E, G-OESX

No & Type of Engines: 2 Lycoming IO-540-C4B5 piston engines

Year of Manufacture: 1973

Date & Time (UTC): 21 November 1991, timing uncertain

**Location:** In the sea off Porto Levante, Gulf of Venice

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Fatal Passengers - N/A

Nature of Damage: Aircraft destroyed

Commander's Licence: No current UK licence

Commander's Age: 54 years

Commander's Flying Experience: N/K

Information Source: Investigation by the Italian authorities, assisted by AAIB

Wreckage from the aircraft was recovered by a fishing boat from Chioggia on 27 December 1991, some 12.8 miles south east of the harbour. The pilot was identified with the aid of documentation recovered, and an investigation was initiated by the Italian authorities. It also transpired that the main door from the aircraft had previously been recovered on 18 December by another fishing boat. Subsequent sea searches by the Italian Navy took some 24 days and recovered more than 90% of the wreckage.

The pilot had carried out his flying training with the Royal Air Force, and had been qualified on fast jet types. He left the RAF in 1963. He held a UK Private Pilot's Licence which lapsed in 1973. He also held an FAA Commercial Pilot's Licence (USA), valid for single and multi-engined landplanes, and was type-rated on the North American B-25. His latest recorded medical examination for this licence was a 'Class One', which was carried out in May 1980.

The aircraft was based at Shoreham Airport, and had been hired by the pilot from its owner. Both men boarded the aircraft for a flight to France. It was flight planned IFR from Southampton to Nice, departing at 0751 hrs on 21 November 1991. It diverted en route, and landed at Cannes Airport at 1131 hrs. There, the owner left the aircraft and returned on a scheduled flight to the UK.

The pilot refuelled the aircraft to full tanks, and departed Cannes at 1318 hrs on a VFR flight with the declared destination of La Ferte Alais, near Paris; no flight plan was filed. The final radio communication with the aircraft occurred at 1320 hrs, and the aircraft was not positively located again until the recovery of the wreckage.

The aircraft's transponder was found to have been switched off at the time of the accident but from deductions about the aircraft's speed and probable flight routing, estimates were made about the possible time of entry into Italian airspace. The recordings of primary radar stations were replayed, and an unidentified aircraft was located on the recording at 1424:38 hrs, some 34 miles north of Pisa, routing towards Chioggia. It followed a fairly tortuous route across the Appennine Range, and finally disappeared from radar at 1507:55 hrs in the vicinity of Loreo, some 16.5 nm south west of Chioggia.

An unidentified target then reappeared heading east at 1737:46 hrs, some 12.9 nm west of Chioggia VOR. The ground speed of the target was increasing as though the aircraft was accelerating after takeoff. The investigation concluded that the aircraft must have landed at some location, possibly the small grass airstrip at Ca Negra, near Chioggia. The final radar return in this sequence occurred at 1739:12 hrs, at a distance of some 19 nm west of the determined impact location, giving an estimated time for the accident of 1748 hrs.

The VOR receivers in the aircraft were recovered and found tuned to frequencies close to those of Chioggia and Pula VOR stations. The investigation concluded that the aircraft was probably bound for a destination in Istria, Yugoslavia, the most likely being Pula.

Examination of the wreckage concluded that the aircraft impacted the water intact, at a fairly steep angle of descent, under power, but with the right main landing gear extended. The right engine and right side instrument panel were not recovered.

The weather conditions were such that at the estimated time of the accident the surface wind was 030°/10 kt, visibility greater than 10 km, moderate rain, with 7/8 stratocumulus cloudbase 3,000 feet; the temperature was 10°C, QNH 1009 mb. The aircraft's altimeters were found to be set to 1011 mb and 1009 mb. It was dark at the estimated time of the accident.

It was the view of the Italian investigation that the accident was caused by a combination of factors, these being the failure of the right main landing gear to retract, the weather conditions and the darkness. The possibilities of collision or explosion were categorically excluded. Some form of incapacitation of the pilot could not, however, be ruled out.