

No: 9/91 **Ref: EW/G91/07/13** **Category: 1c**

Aircraft Type and Registration: Piper PA-22-160 Tripacar, G-APWR
No & Type of Engines: 1 Lycoming O-320-B2B piston engine
Year of Manufacture: 1959
Date & Time (UTC): 7 July 1991 at about 0840 hrs
Location: In the sea off the Isle of Wight
Type of Flight: Private
Persons on Board: Crew - 1 Passengers - 1
Injuries: Crew - Serious Passengers - Serious
Nature of Damage: Aircraft destroyed - ditched and sank
Commander's Licence: Private Pilot's Licence
Commander's Age: 36 years
Commander's Flying Experience: 281 hours (of which 36 were on type)
Information Source: Aircraft Accident Report Form submitted by the pilot and telephone inquiries by AAIB

The aircraft was on a banner towing flight from Goodwood aerodrome with a planned route along the south coast abeam Southsea and Portsmouth, round the Isle of Wight and back to Goodwood. The weather was fine with no cloud, good visibility and a light easterly wind. The surface temperature was 16°C.

The pilot reports that he took off from Goodwood at 0725 hrs and flew a low level circuit of the aerodrome to return and pick up the banner. The aircraft was then climbed to 600 feet agl and headed towards Portsmouth. After a run at 300 feet and 65 mph along the coast between Southsea and Portsmouth, the aircraft was climbed back to 600 feet and headed towards Ryde. Approaching Ryde, the pilot commenced an anti-clockwise circuit of the Isle of Wight again at 300 feet and 65 mph. Once south of the island and as the aircraft was approaching Ventnor the pilot reports that he turned further south to avoid possible turbulence that he had encountered in that area on a previous flight.

He next noticed that the aircraft was descending and that he had to apply full left aileron and selected full power. Unfortunately full power could not be obtained - only 2300 rpm was available instead of the normal 2700 rpm - and he therefore released the banner. However the aircraft continued

descending in a nose up attitude until it contacted the water, climbed briefly then stalled back into the sea. The pilot managed to release himself as the aircraft sank, then he realised that there was no sign of his passenger. He dived down and managed to open the right hand door, release the passenger and help him to the surface. The crew of a trawler, which was close to the ditching position, had witnessed the incident and came to the rescue of the aircraft occupants and took them on board. The emergency services were alerted and the pilot and passenger were subsequently transferred to hospital in a Search and Rescue helicopter.

Having ditched, the aircraft occupants were in the sea for about 10 minutes before their rescue by the trawler. They had not been wearing life jackets nor were any carried in the aircraft. The sea temperature at the time is recorded as being between plus 12°C to 15°C.

The aircraft held a valid Certificate of Airworthiness in the Transport Category (Passenger) and had approval for towing banners. The approval included the limitation that towing speed with flaps retracted shall not be lower than 66 mph IAS and shall not exceed 80 mph IAS. The aircraft's stalling speed with flaps retracted is 53 mph. The wreckage was not recovered from the sea bed, and the pilot could not recall any abnormal indications that would explain the drop in engine power. There were reports that during recent flights the engine had a tendency to run at higher than normal temperature.