

ACCIDENT

Aircraft Type and Registration:	Piper PA-32-300 Cherokee Six, G-BBSM	
No & Type of Engines:	1 Lycoming IO-540-K1A5 piston engine	
Year of Manufacture:	1973	
Date & Time (UTC):	1 September 2010 at 1727 hrs	
Location:	3 miles off Orfordness, Suffolk	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Aircraft lost at sea	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	49 years	
Commander's Flying Experience:	571 hours (of which 533 were on type) Last 90 days - 54 hours Last 28 days - 12 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft was ditched successfully in the sea after a burning smell and smoke became apparent in the cabin and the engine began to run roughly. The two occupants were able to vacate the aircraft and board their life raft before the aircraft sank.

History of the flight

The aircraft was flying from Donaueschingen-Villingen, Germany to Hardwick, England at a cruising level of FL060 in VMC. At the commencement of the sea crossing, the pilot briefed the passenger on the safety procedures to follow in the event of a ditching. Approximately 17 nm before reaching the English coast, they both smelt a burning smell and opened the cabin air vents and the direct vision window to clear the fumes

from the cabin. The smoke and burning smell persisted. The engine was by now running roughly and the EGT was high, prompting the pilot to reduce engine power. He declared a MAYDAY to London Information and prepared to ditch the aircraft, as the sea conditions were favourable and he considered that a glide to the coast was unlikely to be successful.

The pilot reminded the passenger of the ditching procedures, including the importance of not inflating the life raft prematurely and they wedged the cabin door slightly open. Because of concerns about a possible fire in the engine compartment, he shut the engine down by closing the throttle and selecting the mixture and fuel selector to OFF. As the aircraft descended, he became

aware that he might be able to reach land, but decided the best option was to continue with the ditching as planned, as the sea conditions were good and there were several boats in the area. He turned the aircraft into the wind and concentrated on the touchdown.

The aircraft touched down in a wings-level attitude. The pilot reported the impact was violent and the deceleration was rapid; “it felt like the undercarriage had tripped us forward”, he commented. The aircraft settled nose-down and water ingress into the cabin was faster than he expected. The occupants’ egress was slightly impeded by cables and headset leads, but once onto the wing they successfully deployed and inflated the life raft. The raft’s drogue became temporarily entangled but was freed before the aircraft sank.

Discussion

The aircraft was not recovered and therefore it was not possible to determine the cause of the burning smell and other reported symptoms.

The pilot, who had flown this route on several previous occasions, always ran through the emergency landing/

ditching procedures in his head before and during each flight. However despite this, he candidly made the following observations: in the stress of the event he did not find it easy to complete the memorised items and whilst concentrating on the arrival, he omitted to deploy the flaps and to select the master and ignition switches to OFF. He found the mnemonic ‘Aviate, Navigate, Communicate’ very helpful and considered that adhering to his original decision to ditch was the right thing to do, as the outcome may not have been so successful had he tried to stretch the glide to reach land, or attempted to restart the engine. The risk of fire was a significant factor in the pilot’s decision making.

The pilot commented that there is little to prepare a pilot for the reality of such situations and that regular flying, continual education, reviewing of accident reports and attendance of safety seminars all help a pilot to be better prepared.

The CAA Safety Sense Leaflet 21, ‘*Ditching*’, contains useful advice and guidance on the subject and is recommended reading for anyone contemplating an overwater flight.