ACCIDENT

Aircraft Type and Registration:	Mainair Blade, G-CCXR
No & Type of Engines:	1 Rotax 582-2V piston engine
Year of Manufacture:	2004 (Serial no: 1367-0604-7-W1162)
Date & Time (UTC):	9 March 2017 at 1730 hrs
Location:	Near Pembroke Dock, Pembrokeshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Destroyed due immersion in salt water
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	51 years
Commander's Flying Experience:	369 hours (of which 138 were on type) Last 90 days - 6 hours Last 28 days - 1 hour
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

During an evening flight, the pilot's forward vison was restricted when he flew towards the low sun. He reduced power unintentionally and descended below 500 ft amsl before taking avoiding action when he unexpectedly saw a power line in front of him. He believes the evasive manoeuvre caused the wing to stall and the aircraft then fell out of control into the river below. The pilot remained conscious and extricated himself from the aircraft before swimming ashore.

History of the flight

The pilot took off from Haverfordwest Airfield approximately one hour before sunset for a local flight to the south, in good visibility and with a light westerly wind. Flying in a southerly direction and aiming to fly at 60 mph and at 500 ft amsl, he followed the River Cleddau until he was approximately 8 nm from the airfield, before turning to follow the river in a westerly direction. As he turned towards the low sun his forward visibility became limited, so he tried to shield his eyes by placing his left hand against his helmet visor. At the same time he believes he relaxed his pressure on the foot throttle, which he had been using in preference to the hand throttle, causing engine power to reduce and the aircraft to descend unintentionally.

Suddenly the pilot saw that he was heading towards a set of power lines and supporting steel pylons, and he took evasive action by pushing the control bar forwards and left to

initiate a climbing right turn. He believes he may also have reduced power further and that the combined effect of this low level manoeuvre was for the speed to reduce quickly and the wing to stall. His next recollection was that he was deluged with water when the aircraft hit the river.

As the aircraft settled on its right side, the pilot had to bend his head left to keep it above the water. He was wearing a lap strap which he was unable to undo with his gloved hand so he had to use his teeth to take one glove off before he could operate the harness release. After approximately 10 minutes the aircraft began to sink and the pilot swam to the shore and was later treated for the effects of hypothermia.

Discussion

The power lines cross the river approximately two nautical miles northeast of Pembroke Dock. The height of the pylon on the south side of the river is reported to be 170 ft agl, giving it an elevation of 285 ft amsl, and the wires are suspended 147 ft above the river at their lowest point. These power lines are shown on the CAA's 1:250,000 Topographical Air Chart, but not on the ICAO 1:500,000 Aeronautical Chart, as this does not generally include obstructions with a height of less than 300 ft agl.

The pilot's ability to see the wires appears to have been impaired by the glare from the low sun, with the aircraft flying at low altitude towards an unexpected obstruction. The pilot noted that that in future he will aim to use the hand throttle to control the aircraft when airborne.