

**Aviation Safety Investigation Report
198803474**

**Piper PA28-180
Piper PA28-180**

7 August 1988

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 198803474 **Occurrence Type:** Accident
Location: South Passage Bar, Moreton Bay QLD
Date: 7 August 1988 **Time:** 924
Highest Injury Level: Fatal
Injuries:

	Fatal	Serious	Minor	None
Crew	2	0	0	0
Ground	0	0	0	-
Passenger	2	0	1	0
Total	4	0	2	0

Aircraft Details: Piper PA28-180	Piper PA28-180
Registration: VH-WAS	VH-DMB
Serial Number: 28-7505009	28-7405012
Operation Type: Private	Private
Damage Level: Substantial	Destroyed
Departure Point: Coolangatta QLD	Surfers Gardens QLD
Departure Time: 0857	0
Destination: Coolangatta QLD	Surfers Gardens QLD

Approved for Release: 29th June 1989

Circumstances:

Both aircraft were conducting scenic flights over North Stradbroke and Moreton Islands. Neither the pilot of VH-WAS nor the pilots in VH-DMB submitted a flight plan (nor was it a requirement) and were operating NOSAR, NO DETAILS outside controlled airspace on a "see and be seen" basis. No routine radio transmissions were heard from either aircraft when they were in the South Passage Bar area. VH-DMB had flown over Moreton Island and was turning left at an angle of bank of 25 degrees when it collided with VH-WAS at 1500 feet above mean sea level over the South Passage Bar. The pilot of VH-WAS stated that his aircraft was turning through east, in a shallow right turn when he felt and heard an impact. It was immediately obvious to him that a wingtip section from the left wing was missing, but he was unaware of what his aircraft had struck. An uncontrolled, left, descending turn ensued and the aircraft descended about 1200 feet before the pilot managed to level the wings after reducing the engine power to idle. He transmitted a brief MAYDAY call during the recovery. The pilot successfully ditched the aircraft some 4 kilometres east of Reeder's Point, Moreton Island. After the aircraft came to rest, it floated for about a minute before sinking in 7-8 metres of water. The pilot and his passenger escaped from the wreckage and each clung to a separated aircraft wheel. They then began to swim for the shore on the incoming tide. VH-DMB plummeted out of control and impacted in a near vertical dive on a shallow sand bank some 800 metres from the shore of North Stradbroke Island. Inspection of the wreckage found that the left wingtip of VH-WAS had struck the cockpit area of VH-DMB. It is probable that this impact disabled both the front seat occupants of VH-DMB. The left mainwheel of VH-WAS had severed a 1.2 metre section of the left wing of VH-DMB. The investigation determined that both aircraft were in a position to have been visible from the cockpit of the other aircraft for at least 10 seconds before impact. Several factors affect a pilot's ability to observe other aircraft. In this case it is likely that the relative position of each aircraft to the other meant that they were in a constant position in the other pilot's field of view. The pilot of VH-WAS was also looking in the direction of the sun and VH-DMB was coloured such that it

would not have contrasted with the backdrop of a high overcast. Although the pilots in VH-DMB were looking down-sun it is possible that the small frontal cross-section presented by VH-WAS would have been lost against the background of the island and the horizon. Because of the nature of the sight-seeing flights being undertaken by both aircraft it is also possible that all pilots may have been partially distracted from their lookouts by passengers. As a result of a previous accident involving a mid-air collision, the Bureau of Air Safety Investigation has undertaken to conduct an evaluation and prepare a report on the practicality of the "see and be seen" principle.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. Neither aircrew saw the other aircraft in time to avoid a collision.
2. The sun glare caused a reduced forward visibility (for pilot of VH-WAS).
3. The pilots of both aircraft may have been distracted by their passengers and sight-seeing.

Reccomendations:

1. That the CAA consider altering the FIA boundaries to locate the islands within the one VHF radio frequency area.
2. That the area be declared a mandatory broadcast zone.
3. That the CAA specify and promulgate the required direction of flight around the islands.