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Aviation Safety Investigation Report 199000592

Piper PA28 R

29 June 1990

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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: 199000592 Occurrence Type: Accident

Location: SW Vernon Island NT (40 Km NNE Darwin) **Date:** 29 June 1990 **Time:** 1323

Highest Injury Level: Serious

Injuries:

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

Aircraft Details: Piper PA28 R Registration: VH-SWB Serial Number: 28R-7635097 Operation Type: Private

Damage Level: Destroyed

Departure Point: Cape Gambier NT

Departure Time: 1310

Destination: Darwin NT

Approved for Release: 29th August 1990

Circumstances:

The accident flight was intended to recover the aircraft which had been force landed that morning, due to a massive oil loss accompanied by a propeller overspeed. After takeoff, the pilot left the landing gear down and climbed the aircraft over land to 1500 feet as he checked the engine instruments. He reported an initial increase in cylinder head temperataure but this was attributed to the landing gear-down climb by the engineer who was following in a helicopter. A short time later, the pilot reported rough running and then the engine vibrated and seized. An attempt was made to reach a clear area on an island, but despite retracting the landing gear, the pilot was forced to land the aircraft in a mangrove-covered tidal plain. The pilot levelled the aircraft over the tree-tops and stalled before cutting through the trees. A heavy ground contact was felt and the aircraft came to rest in about 13 metres. The pilot egressed unaided after closing down the aircraft. The engine was recovered for inspection. Massive internal damage from a progressive failure of components, due lack of lubrication, is considered to have been the most probable cause of the engine failure. This is traceable to the previous occurrence that day when a massive oil loss and overspeed occurred. Inadequate inspection of the aircraft following the previous unserviceability including a failure to comply with the manufacturer's recommendations, allowed the aircraft to depart on the recovery flight in an unairworthy condition.

Significant Factors:

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

- 1. Inadequate inspection of the aircraft following a previous major oil loss and propeller overspeed.
- 2. Forced landing over unsuitable terrain following engine seizure. This accident was not the subject of an on-scene investigation.