



AIRCRAFT ACCIDENT FINAL REPORT
A 14/15P
Air Accident Investigation Bureau (AAIB)
Ministry of Transport

Piper PA-32-300, Registration 9M-AVN
at Pangkor Airport (WMPA), Perak, Malaysia
on 15 November 2015



Air Accident Investigation Bureau
Ministry of Transport
No. 26, Jalan Tun Hussein, Precinct 4
Federal Government Administrative Centre
62100 PUTRAJAYA
Phone: +603-8892 1072
Fax: +603-8888 0163
E-mail: AAIB@mot.gov.my
Website: <http://www.mot.gov.my/en>

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FINAL REPORT A 14/15P

**AIR ACCIDENT INVESTIGATION BUREAU (AAIB)
MALAYSIA**

REPORT NO.: A 14/15P

OWNER : EVER SUCCESS AUTO LTD
OPERATOR : EXCEL BOND LEISURE AIR SDN BHD
AIRCRAFT TYPE : PIPER PA-32-300
NATIONALITY OF AIRCRAFT : MALAYSIA
REGISTRATION : 9M-AVN
PLACE OF OCCURRENCE : PANGKOR AIRPORT, PERAK, MALAYSIA
(4° 14' 54.32'' N 100° 33' 22.69'' E)
DATE AND TIME : 15 NOVEMBER 2015 AT 1320LT

The sole objective of the investigation is the prevention of accidents and incidents. In accordance with Annex 13 to the Convention on International Civil Aviation, it is not the purpose of this investigation to apportion blame or liability.

All-time in this report is Local Time (LT) unless stated otherwise. LT is UTC +8 hours.

INTRODUCTION

The Air Accident Investigation Bureau Malaysia

The Air Accident Investigation Bureau (AAIB) is the air accident and serious incident investigation authority in Malaysia and is accountable to the Minister of Transport. Its mission is to promote aviation safety through the conduct of independent and objective investigations into air accidents and serious incidents.

The AAIB conducts the investigations in accordance with ICAO's Annex 13 to the Chicago Convention, the Civil Aviation Act of Malaysia 1969 and the Civil Aviation Regulations of Malaysia 2016.

It is inappropriate that AAIB reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting processes has been undertaken for that purpose.

In accordance with ICAO's Annex 13 paragraph 4.1, a notification of the accident was sent out to the Civil Aviation Authority Malaysia (CAAM) as the State of Occurrence, Registration & Operator and also to the National Transportation Safety Board (NTSB), United States as the State of Design and Manufacturer.

Unless otherwise indicated, recommendations in this report are addressed to the investigating or regulatory authorities of the State having responsibility for the matters with which the recommendations are concerned. It is for those authorities to decide what action is to be taken.

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ABBREVIATIONS

AAIB	Air Accident Investigation Bureau
CAAM	Civil Aviation Authority of Malaysia
ICAO	International Civil Aviation Organisation
LT	Local Time
PAX	Passengers
PIC	Pilot-in-Command
POB	Persons on Board
PPL	Private Pilot License
RMN	Royal Malaysian Navy
RT	Radio Telephony
STOL	Short Take-Off and Landing
UTC	Coordinated Universal Time
WMKJ	ICAO Code for Senai International Airport, Johor Bahru
WMLH	ICAO Code for Lumut Heliport, RMN
WMPA	ICAO Code for Pangkor Airport
WMSA	ICAO Code for Sultan Abdul Aziz Shah Airport, Subang

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SYNOPSIS

On 15 November 2015, a Piper PA-32-300 bearing the registration 9M-AVN was involved in an accident near Pangkor Airport, Perak, Malaysia. The aircraft had 4 POB.

9M-AVN was attempting to take-off when its tail clipped the airport perimeter fence and subsequently crashed into the shallow waters of the sea at the end of the runway. All four occupants however managed to egress from the aircraft with only minor injuries.

The AAIB Chief Inspector was notified immediately of the accident and an investigation team was then dispatched.

1.0 FACTUAL INFORMATION

1.1 History of the flight

On Sunday, 15 November 2015, a Malaysian registered Piper PA32-300 attempted to take-off from Pangkor Airport. On board were a pilot, his co-pilot and two passengers.

The aircraft with the same crew and passengers had arrived a day earlier from Sultan Abdul Aziz Shah Airport, Subang (WMSA) for a nightstop on Pangkor Island. 9M-AVN was parked overnight at the dispersal area of the airport during which it was covered with a tarpaulin.

On the fateful day of the accident, the crew and passengers arrived early at the airport aiming for a 1330LT take-off back to WMSA. After preparing and checking the aircraft, the PIC taxied 9M-AVN to the holding point for an engine run-up before entering the runway to line-up at Threshold 04 for the take-off.

As Pangkor Airport was a STOL airport, the PIC carried out the STOL protocol for taking-off. All checks were carried out without any abnormalities observed, i.e. all parameters were in the 'green'. A standing-take-off was then carried out with the PIC initiating to rotate the aircraft once it had achieved its rotate velocity of 70kts approximately 600 meters down the runway which was 800 meters long.

The PIC stated that the aircraft began to climb slightly but then descended back onto the runway. As he was now committed to the takeoff the PIC continued with full power and just as he reached the end of the runway he pulled back on the controls to get the aircraft airborne.

As the end of the runway is elevated approximately 15 feet above the perimeter fencing and a road, the aircraft did get airborne but its tail clipped the top of the fence before its nose dived into the shallow waters of the sea and flipped over. A video clip of the accident can be accessed through the link below:

<https://www.facebook.com/701244341/videos/10153474053704342/>

Nearby villagers who witnessed the accident rushed to the crash site and managed to help the passengers and crew egress from the aircraft safely albeit with minor injuries.

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1.2 Injuries to persons

The PIC split his lower lip while his co-pilot has minor cuts and bruises to his left hand and right leg. Both passengers seated at the back strained both their shoulders and backs.

<i>Injuries</i>	9M-AVN	
	Crew	Pax
Fatal	-	-
Serious	-	-
Minor / None	2	2

1.3 Damage to aircraft

The aircraft came to a rest inverted in about two meters of water at the surfs edge. Its propellers were bent and the left wingtip was heavily damaged. Debris from the tail section was also found scattered on the roadside and beach due to it striking the airport perimeter fencing. The cabin however was basically intact which is why the passengers were able to egress from the aircraft via its doors.

It must be noted that additional damage to the nose-wheel assembly, engine cowlings and tail section of the aircraft were due to the recovery efforts and not from the accident itself.

1.4 Other damages

The perimeter fencing of the airport was slightly damaged.

1.5 Personnel information

The PIC of the aircraft held a valid PPL as did his co-pilot. Total flight experience of the PIC was 368 hours with some 300 hours on type. The other two pax onboard were acquaintances of both the pilots.

1.6 Aircraft information

The aircraft in question was kept and maintained at a flying club in Senai International Airport (WMKJ), Johor.

Aircraft Type	Piper PA-32-300
Manufacturer	Piper Aircraft
Registration	9M-AVN

1.7 Meteorological information

The weather at the time of the accident was overcast with a cloud base at approximately 1,000ft. A rain shower had just passed and the wind was light and variable.

1.8 Aids to navigation

Not applicable.

1.9 Communications

No distress call was relayed over the RT by either pilot.

1.10 Aerodrome information

Pangkor Airport is an unmanned STOL airport on Pangkor Island, Perak. It has only one approach (Runway 22) and one departure (Runway 04) due to hilly terrain. ATC services are provided by Lumut Tower situated at the Royal Malaysian Naval Base in Lumut (WMLH) approximately 4nm East-South-East of Pangkor Airport.

1.11 Flight recorders

The Piper PA-32-300 is not equipped with flight recorders (FDR and/or CVR) nor is it mandated by law to do so.

1.12 Wreckage and impact information

The wreckage was inverted in about two meters of water. Recovery of the aircraft was carried by local authorities employing a back-hoe to pull it out of the water by attaching a rope to the nose landing gear. During the recovery process, the nose-wheel assembly as well as the engine cowlings were damaged.

The rope was then fastened to the tail section of the aircraft to pull it further up the beach. This unfortunately resulted in further damage to the tail section. Additionally, the local authorities in their attempt to lighten the aircraft before transporting it by lorry back to the airport for storage also drained all the fuel and fluids from the aircraft.

Note: AAIB investigators had not yet arrived on-site when these efforts were made to salvage the aircraft.

Nonetheless, from a video obtained of the crash, it can be seen that the aircraft's tail had clipped the airport perimeter fence before it impacted into the water's edge nose first and flipped over.

1.13 Medical and pathological information

As stated earlier there were only minor injuries to the occupants of the aircraft.

1.14 Fire

There was no post-impact fire.

1.15 Survival aspects

All occupants of the aircraft managed to egress through the cabin doors unhampered as the cabin of the aircraft had remained intact.

1.16 Tests and research

No tests were able to be carried out on the engine as it had ingested seawater. There were also no fluid samples to be tested as they had been drained earlier during the recovery process.

1.17 Organisational and management information

All organisational and management aspects of the operator were found to be in order throughout the investigation.

1.18 Additional information

Nil.

1.19 Useful or effective investigation techniques

Nil.

2.0 ANALYSIS

2.1 From the interview with the PIC, the aircraft did not indicate any problems before the incident. The initial flight from Subang to Pangkor Airport had been uneventful and the checks carried out before the fateful take-off were all satisfactory. Although it did rain overnight in Pangkor Airport the aircraft was properly secured and covered with a tarpaulin. During pre-flight the next day the PIC did not notice anything out of the ordinary.

2.2 As far as weight and balance of the aircraft was concerned the same passengers along with their luggage boarded the aircraft. No extra baggage was loaded.

2.3 The fuel state before take-off from Subang the day before was 84 US Gallons and it was 64 US Gallons on landing at Pangkor Airport for a 48 min flight. This corresponds with the stated fuel consumption of the aircraft of approximately 18-20 US Gallons / hour.

2.4 As tests were not able to be carried out on the engine and fuel/fluid samples, the contributing factors towards this accident remain unknown.

3.0 CONCLUSION

This accident is classified as **Unknown / System Component Failure – Power Plant (UNK / SCF–PP)**.

4.0 SAFETY RECOMMENDATIONS

CAAM airworthiness experts are to help look into this accident.

INVESTIGATOR-IN-CHARGE

Air Accident Investigation Bureau

Ministry of Transport