

AIRCRAFT ACCIDENT FINAL REPORT A 09/17

Air Accidents Investigation Bureau (AAIB) Ministry of Transport

Accident Involving a Quicksilver Aircraft GT500 Registration 9M-EAC at Sungai Rambai, Melaka, Malaysia on the 14 October 2017



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AIR ACCIDENTS INVESTIGATION BUREAU (AAIB) MALAYSIA

ACCIDENT REPORT NO.: A 09/17

OWNER / OPERATOR : PRIVATE

AIRCRAFT TYPE : QUICKSILVER AIRCRAFT GT500

NATIONALITY : MALAYSIA

REGISTRATION : 9M-EAC

PLACE OF OCCURRENCE: SUNGAI RAMBAI, MELAKA, MALAYSIA

(2° 07' 47.75" N, 102° 31' 48.10" E)

DATE AND TIME : 4 JUN 2017 AT 1130LT

This investigation is carried out to determine the circumstances and causes of the accident with the sole objective for the preservation of life and the avoidance of accidents in the future. It is not for the purpose of apportioning blame or liability (ICAO's Annex 13 to the Chicago Convention).

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

INTRODUCTION

The Air Accidents Investigation Bureau Malaysia

The Air Accidents 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 Accidents Investigation Bureau
CAAM Civil Aviation Authority of Malaysia

GH General Handling

ICAO International Civil Aviation Organisation

LT Local Time

PAX Passengers

PIC Pilot-in-Command
POB Persons on Board

PPL Private Pilot License

UTC Coordinated Universal Time

WMKM ICAO Code for Melaka International Airport

SYNOPSIS

On 14 October 2017, a microlight aircraft bearing the registration 9M-EAC was involved in an accident near Sungai Rambai, Melaka, Malaysia. The aircraft had 2 POB.

9M-EAC was on its way to do some circuits and landings when it encountered engine problems. The PIC decided to turn back to the runway but ended up crashing short into a river instead.

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

1.0 FACTUAL INFORMATION

1.1 History of the Flight

On Saturday, 14th October 2017, a Malaysian registered privately owned tandem two seat microlight bearing the registration 9M-EAC tookoff from the Sungai Rambai Aerodrome in Melaka. On board was the owner/pilot and a passenger. The microlight was an American built Quicksilver Aircraft GT500 powered by a Bombardier Rotax 582.

Shortly after take-off witnesses on ground heard the engine of the microlight start to run 'rough'. The microlight was seen to attempt a turn back to the runway but ultimately fell short of the threshold and crashed into a river.

A local villager was the first to arrive on scene and spotted the passenger seriously injured amongst some undergrowth beside the river moaning in pain. There was no sight of the pilot nor the microlight.

The Fire and Rescue Services which arrived a few minutes later however did manage to locate the microlight submerged in the river at a depth of approximately three meters. They subsequently recovered the body of the owner/pilot.

Two investigators from AAIB Malaysia were dispatched to the scene of the accident the very next day. The recovery of the crashed microlight was however only carried out on Monday, 30th October 2017.

1.2 Injuries to Persons

The pilot was recovered from the river deceased but his passenger survived with some injuries.

	9M-EAC		
Injuries	Crew	Pax	
Fatal	1	-	
Serious	-	-	
Minor / None	-	1	

1.3 **Damage to Aircraft**

The aircraft was submerged in about three meters of water and was only recovered 16 days after the accident.

For images of damage to the aircraft on-site please refer to **APPENDIX B**.

1.4 Other Damages

There were no other damages to property as a result of the accident.

1.5 **Personnel Information**

The pilot of the aircraft held a valid PPL and was properly qualified for the GH sortie. The pax onboard was an acquaintance of his.

1.6 Aircraft Information

The aircraft in question was privately owned and maintained by the pilot himself.

Aircraft Type	Quicksilver Aircraft GT500
Manufacturer	Quicksilver Aeronautics
Registration	9M-EAC

1.7 Meteorological Information

The weather on that fateful day was clear with some scattered clouds and light and variable wind conditions.

1.8 Aids to Navigation

Not applicable.

1.9 Communications

No RT calls were recorded.

1.10 Aerodrome Information

Sungai Rambai Aerodrome is a general aviation airstrip for light aircraft. It was once a back-up airfield to the Melaka International Airport (WMKM) in Batu Berendam.

1.11 Flight Recorders

The Quicksilver Aircraft GT500 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 secured and brought back to its late owner's hangar by road.

There were several reliable eyewitnesses on ground who saw the aircraft crash into the river after attempting to turn back to the runway.

1.13 Medical and Pathological Information

According to a pathologist the pilot was found to have drowned while the passenger suffered some cuts and bruises.

1.14 Fire

There was no post-impact fire.

1.15 Survival Aspects

The passenger managed to egress from the aircraft which was submerged before making it back to the riverbank unaided. According to him the pilot was knocked unconscious but he was unfortunately unable to save him.

1.16 Tests and Research

The fuel and oil samples were found to be contaminated with river water after being submerged for 16 days.

1.17 Organisational and Management Information

All organisational and management aspects of the owner/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 The most probable cause of the accident was due to loss of power from the engine. There were conflicting statements from witnesses as to whether the engine had totally ceased or was still partially running at the time of impact.
- 2.2 Fuel and oil samples taken after the recovery of the wreckage from the river were also deemed inconclusive due to the level of contamination after being submerged in the river for over two weeks.
- 2.3 On further inspection, damage to the control surfaces and linkages were deemed to have occurred post-impact.

3.0 CONCLUSION

This accident is classified as **UNK / SCF-PP** or **FUEL** related.

4.0 SAFETY RECOMMENDATIONS

CAAM airworthiness experts are to look into this accident.

INVESTIGATOR-IN-CHARGE
Air Accidents Investigation Bureau
Ministry of Transport
14 October 2018



AAIB Malaysia Accident/Serious Incident Notification Form

Ref No A 09/2017 MOT/BSKU(S)600

Ministry of Transport Malaysia

(Air Accident Investigation Bureau)

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Malaysia			-
A. Classification accident / Incident (Serious) / Incident (Minor)	ACCID	INCID (Serious)	INCID
B. Detail of Aircraft / Flight	Manufacturer Model Nationality Registration Flight Number Serial Number	: Quicksilver Aircraft: GT 500: Malaysia: 9M-EAC: Nil: GT500 0315	
C. Detail of Owner / Operator / Lessee (If applicable)	Owner Lessee (If Applicable) Operator	: Yen Yoon Fah: Nil: Yen Yoon Fah	
D. Date and Time (Local / UTC) of the event i.e. accident or serious incident	Date Time	: 14 October 2017 : 11:30 am (Local)	
E. Last point of departure and point of intended landing of the aircraft	Last point of departure Point of intended landing	: Sungai Rambai Aero	
F. Last known position	Latitude Longitude Descriptions Sungai Rambai Aerodrome, Melaka	: 2° 07' 47.75" N : 102° 31' 48.10" E	

			-	
G. No of crew and passengers aboard; killed or seriously injured.	Total occupants on board: Pilot: 1 Crew: 0 Passenger: 1			
	Conditions Pilot was fatally injured and succumbed at the scene. Passenger suffered serious injuries.			
H. Qualification of the pilot in command and nationality of the crew and passengers	Pilot in Command qualification: PPL (R) Pilot in Command nationality: Malaysia First Officer nationality: N/A Passengers nationality: Malaysia			
I. Description of the accident or serious incident and the extent of damage to the aircraft so far as is known:	From witness statements, after taking off on Runway 23, the engine started to run rough and the pilot attempted to do a 180. However the aircraft fell short of Threshold 05 and crashed into a river at speed. The aircraft is submerged in the river at a depth of approximately 3 meters.			
J. An indication to what extent the investigation will be conducted or is proposed to be delegated by the State of Occurrence	The Air Accident Investigation Bureau (Malaysia) has classified this as an Accident and has conducted an investigation in accordance with the provisions of Annex 13 to the Convention of International Civil Aviation.			
K. Presence and description of dangerous goods on board the aircraft	No Yes (Please	e describe)	Unknown	
L. Operation Type		eduled Scheduled	Passenger Cargo Others	
M. Level of damage to aircraft (If information is available)	<u>Destroyed</u> Substantial	Minor	None Unknown	

The State of Occurrence shall forward a notification of an accident or serious incident with a minimum of delay and by the most suitable and quickest means available to: a) the State of Registry b) the State of the Operator c) the State of Design d) the State of Manufacture and e) the International Civil Aviation Organisation, when the aircraft involved is of a maximum mass of over 2250 kg.

BSKU/Notification Form/Issue 1 Rev Initial