

## AIRCRAFT ACCIDENT FINAL REPORT

## A 03/17

# Air Accidents Investigation Bureau (AAIB)

# **Ministry of Transport**

Accident Involving a Piper PA-28-161 Registration 9M-DRC at Pulai Jaya, Johor, Malaysia on the 4 June 2017



Air Accidents 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: <u>http://www.mot.gov.my/en</u> Issued on 4 June 2018

### AIR ACCIDENTS INVESTIGATION BUREAU (AAIB) MALAYSIA

#### ACCIDENT REPORT NO. : A 03/17

OWNER / OPERATOR	:	PRIVATE
AIRCRAFT TYPE	:	PIPER PA-28-161
NATIONALITY	:	MALAYSIA
REGISTRATION	:	9M-DRC
PLACE OF OCCURRENC	E:	PULAI JAYA, JOHOR, MALAYSIA
		(1° 34' 37.48" N 103° 36' 12.69" E)
DATE AND TIME	:	4 JUN 2017 AT 1015LT

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.

### TABLE OF CONTENTS

CHAPTER	PARA	TITLE	PAGE
		TITLE PAGE	i
			iii
		TABLE OF CONTENTS	
		APPENDICES	iv
		ABBREVIATIONS	V
		ABBREVIATIONS	vi
		SYNOPSIS	1
1.0		FACTUAL INFORMATION	
-	1.1	History of the Flight	1
	1.2	Injuries to Persons	
	1.3	Damage to Aircraft	2
	1.4	Other Damages	
	1.5	Personal Information	
	1.6	Aircraft Information	
	1.7	Meteorological Information	3
	1.8	Aids to Navigation	1
	1.9	Communications	
	1.10	Aerodrome Information	
	1.11	Flight Recorders	
	1.12	Wreckage and Impact Information	4
	1.13	Medical and Pathological Information	
	1.14	Fire	
	1.15	Survival Aspects	
	1.16	Tests and Research	
	1.17	Organisational and Management Information	5
	1.18	Additional Information	
	1.19	Useful or Effective Investigation Techniques	
2.0		ANALYSIS	5
3.0		CONCLUSIONS	6
4.0		SAFETY RECOMMENDATIONS	6

#### APPENDICES

APPENDIX	TITLE	PAGE
Α	DAMAGE ASSESSMENT (IMAGES ON-SITE)	A-1 to 2

#### ABBREVIATIONS

AAIB	Air Accidents Investigation Bureau
CAAM	Civil Aviation Authority of Malaysia
PPL	Private Pilot License
GH	General Handling
ICAO	International Civil Aviation Organisation
LT	Local Time
PAX	Passengers
PIC	Pilot-in-Command
РОВ	Persons on Board
RT	Radio Telephony
UTC	Coordinated Universal Time
WBKJ	ICAO Code for Senai International Airport

#### SYNOPSIS

On 4 June 2017, a Piper PA-28-161 bearing the registration 9M-DRC was involved in an accident near Pulai Jaya, Johor, Malaysia. The aircraft had 3 POB.

9M-DRC was on its way to a training area to carry out some GH exercises when it encountered engine problems. Unable to make it back to the airport the PIC decided to carry out an emergency landing on a highway flyover. He managed to land the aircraft albeit damaging it in the process. All three occupants however managed to walk away uninjured.

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 Sunday, 4 June 2017, a Malaysian registered privately owned Piper PA-28-161 parked at a flying club based at Senai International Airport, Johor took-off for a training area west of Gunung Pulai. On board were a pilot and two passengers.

Six minutes into the flight the pilot noticed that the engine of the aircraft was beginning to lose power. He immediately turned back and transmitted a MAYDAY call citing his intention to carry out an immediate landing at any open space since he had adjudged that he would not be able to make it back to Senai.

The pilot ultimately did manage to land the aircraft safely on an unopened newly built highway flyover albeit damaging the aircraft in the process. His left wingtip hit a lamp post just as he was about to touch down causing the aircraft to spin twice before coming to a rest at the edge of the flyover. No one was injured and they managed to egress without difficulty before calling for assistance using their handphones.

1

#### 1.2 Injuries to Persons

All three occupants onboard the aircraft did not experience any injuries.

	9M-DRC	
Injuries	Crew	Pax
Fatal	-	-
Serious	-	-
Minor / None	1	2

#### 1.3 Damage to Aircraft

The aircraft came to a rest at the edge of the flyover. Its left wingtip was heavily damaged due to it striking a lamp post just as the aircraft was about to land. All three landing gears collapsed most probably due to the impact. The cabin however was intact which perhaps is why the passengers were free from injury.

It was interesting to note that the propellers were bent backwards indicating that the aircraft impacted power-off. Overall damage to the aircraft was quite considerable and it was subsequently deemed a total write-off.

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

#### 1.4 **Other Damages**

Other than scuff marks on the asphalt of the flyover, a temporary barbed wire fence placed across it was destroyed by the aircraft.

#### 1.5 **Personnel Information**

The pilot of the aircraft held a valid PPL and was properly qualified for the GH sortie. The other two pax onboard were acquaintances of his.

#### 1.6 Aircraft Information

The aircraft in question was privately owned by the pilot and was parked at a flying club in Senai.

Aircraft Type	Piper PA-28-161
Manufacturer	Piper Aircraft
Registration	9M-DRC

#### 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**

A MAYDAY call was relayed over the RT to the control tower by the pilot.

#### 1.10 Aerodrome Information

Senai International Airport (WMKJ) is an international airport in the town of Senai, Johor, Malaysia, serving Johor Bahru and the southernmost region of Peninsular Malaysia. The airport is located approximately 32km north-west of the Johor Bahru city centre.

The aircraft training area west of Gunung Pulai is approximately 12nm west of the airport while the crash site was 5nm west of the nearest threshold of Runway 34.

#### 1.11 Flight Recorders

The Piper PA-28-161 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 flying club's hangar by road. There were no reliable eyewitnesses on ground who saw the emergency landing.

#### 1.13 Medical and Pathological Information

As stated earlier there were no 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 from the aircraft unhampered and unaided as the cabin of the aircraft had remained intact.

#### 1.16 **Tests and Research**

Not applicable.

#### 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 The direct cause of the emergency landing which led to the accident was a gradual loss of engine power. However, the reasons behind the failure could not be positively established.

5

2.2 The engine itself was inspected but there were no signs of any blockages and/or leakages in the fuel system or air intakes. Neither did both the fuel and oil samples indicate any signs of contamination.

#### 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 4 June 2018

**APPENDIX A** 

### DAMAGE ASSESSMENT (IMAGES ON-SITE)

9M-DRC



# 9M-DRC (Cont...)

