



AIRCRAFT ACCIDENT FINAL REPORT
A 08/16
Air Accidents Investigation Bureau (AAIB)
Ministry of Transport

Accident Involving a Piper PA-28-161
Registration 9M-SKE
at Malacca International Airport (WMKM), Melaka, Malaysia
on the 14 July 2016



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

ACCIDENT REPORT NO. : A 08/16

OWNER / OPERATOR : MALAYSIAN FLYING ACADEMY SDN BHD
AIRCRAFT TYPE : PIPER PA-28-161
NATIONALITY : MALAYSIA
REGISTRATION : 9M-SKE
**PLACE OF OCCURRENCE: MALACCA INTERNATIONAL AIRPORT,
MELAKA, MALAYSIA**
DATE AND TIME : 14 JULY 2016 AT 1545LT

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
AFRS	Airport Fire and Rescue Service
ATO	Aviation Training Organisation
CAAM	Civil Aviation Authority of Malaysia
CAVOK	Cloud and Visibility OK
ICAO	International Civil Aviation Organisation
LT	Local Time
MFA	Malaysian Flying Academy
PAX	Passengers
POB	Persons on Board
RT	Radio Telephony
SPL	Student Pilot License
UTC	Coordinated Universal Time
WMKM	ICAO Code for Malacca international Airport, Melaka

SYNOPSIS

On 14 July 2016, a Piper PA-28-161 bearing the registration 9M-SKE was involved in an accident at Malacca International Airport, Melaka, Malaysia. The aircraft had 1 POB.

9M-SKE was carrying out a student pilot's solo for circuits and landings. Unfortunately during the second circuit the aircraft bounced three times before experiencing a hard landing.

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

1.0 FACTUAL INFORMATION

1.1 History of the Flight

On Thursday, 14 July 2016, 9M-SKE was taken up by a student pilot for a solo circuit and landing sortie. The student pilot was the sole person onboard at the time.

The first circuit was uneventful and the student pilot then proceeded for a second one. Once the student pilot was established on finals she requested and was granted clearance to land. She recalled that her airspeed was 70kts and that on passing Threshold 22 had reduced her power. Once she felt the aircraft begin to 'sink' she applied back pressure on the controls to initiate a flare.

The main landing gears contacted the runway but unfortunately the aircraft bounced. She intended to go around but just as she was about to apply full power the aircraft bounced for the second time. She applied full power this time but because she was fearful that the aircraft would pitch up and that the tail would strike the ground she immediately retarded the power to idle causing the aircraft to come down hard on its nosewheel bouncing again for the third time before coming to a rest in a nose-down attitude on the runway at the 500ft marker.

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The tower called her asking if she was alright. She answered yes before shutting down the aircraft and vacating it to await the AFRS. She then contacted her instructor using her mobile phone informing him about what had just happened.

1.2 Injuries to Persons

The student pilot was not injured in the accident.

	9M-SKE	
<i>Injuries</i>	Crew	Pax
Fatal	-	-
Serious	-	-
Minor / None	1	-

1.3 Damage to Aircraft

An assessment of damage to the aircraft revealed that the nose-wheel gear assembly had been substantially damaged along with damages to the propeller.

For images of damage to the aircraft on-site and after being recovered to its hangar, please refer to **APPENDIX A**.

1.4 Other Damages

No other damages were observed other than scuff marks on the runway.

1.5 Personnel Information

The student pilot held a valid SPL and was properly qualified for her solo circuit and landing sortie. She had logged 23 hours of flying experience up until the accident.

Nationality	Malaysia
Age	19
Gender	Female
License Type	SPL No 12613
License Validity	31 March 2017
Medical Certificate Validity	31 March 2017
Flying Hours	Total: 23 Hrs Type: 23 Hrs

1.6 Aircraft Information

The aircraft in question is operated by the Malaysian Flying Academy (MFA), a professional flight training centre based in Malacca International Airport. MFA is a pioneer among the Aviation Training Organisations (ATO) in Malaysia, approved and accredited by CAAM and recognized by ICAO.

Aircraft	Piper PA-28-161
Manufacturer	Piper Aircraft
Registration	9M-SKE
Serial No.	28-8316085
Owner	MFA Sdn Bhd
Fuel used	AvGas

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1.7 **Meteorological Information**

The weather on the day of the accident was described as CAVOK. Wind was at 220° / 6kts.

1.8 **Aids to Navigation**

Not applicable.

1.9 **Communications**

The tower inquired about the condition of the student pilot over the RT while alerting both the AFRS and MFA's flight operations over their respective direct lines.

1.10 **Aerodrome Information**

Not applicable.

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 the operator's hangar. Scuff marks on the runway was consistent with a hard landing and nosewheel collapse.

1.13 Medical and Pathological Information

As was stated earlier the student pilot was not injured.

1.14 Fire

There was no post-impact fire.

1.15 Survival Aspects

The student pilot egressed from the aircraft via the cabin door unhampered and unaided.

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 According to the student pilot she was satisfied with her approach. However the first bounced landing caught her by surprise that she was not able to apply full power to go around before the second bounced landing occurred. The student pilot in this case most likely had contributed to the accident by applying insufficient flare during the initial touch-down.

2.2 Additionally she admitted that although she applied full power after the second bounce, she immediately retarded the power to idle out of fear the aircraft might pitch up and for the tail to strike the runway.

2.3 Unfortunately for her the retardation of power made the aircraft pitch down instead making the aircraft land nose-wheel first leading to the third bounce before the aircraft settled nose-down on the runway due to the fact that its nose-wheel had collapsed.

2.4 A look at the training material available to the student and also the methods of instruction by her instructor himself did not reveal anything out of the ordinary.

3.0 CONCLUSION

This accident is classified as an **Abnormal Runway Contact (ARC)**.

4.0 SAFETY RECOMMENDATIONS

The operator is to ensure that the correct techniques for good landings including the proper corrective actions to overcome bad ones are continuously impressed upon their instructors and students to overcome this training hazard.

INVESTIGATOR-IN-CHARGE

Air Accidents Investigation Bureau

Ministry of Transport

14 July 2017

DAMAGE ASSESSMENT (IMAGES ON-SITE)

9M-SKE



9M-SKE (Cont...)



9M-SKE (Cont...)

