



AIRCRAFT ACCIDENT

FINAL REPORT

SI 07/22

Air Accident Investigation Bureau (AAIB)

Ministry of Transport Malaysia

**Serious Incident Involving Fixed Wing Aircraft Textron Aviation
172S, Registration 9M-HOT at Sultan Azlan Shah Airport, Ipoh.
Perak on the 25 October 2022**



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FINAL REPORT SI 07/22

AIR ACCIDENT INVESTIGATION BUREAU (AAIB) MALAYSIA

REPORT NO: SI 07/22

OPERATOR : LAYANG LAYANG FLYING ACADEMY
AIRCRAFT TYPE : TEXTRON AVIATION 172S
NATIONALITY : MALAYSIA
REGISTRATION : 9M-HOT
PLACE OF OCCURRENCE : SULTAN AZLAN SHAH AIRPORT, IPOH (WMKI)
DATE AND TIME : 25 OCTOBER 2022 AT 1230 LT

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

INTRODUCTION

The Air Accident Investigation Bureau of Malaysia

The Air Accident Investigation Bureau (AAIB) is the air accidents and serious incidents investigation authority in Malaysia and is responsible 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.

AAIB also conducts investigations into incidents when the occurrence shows evidence to have safety issues concerned.

AAIB conducts all accident and serious incident investigations in accordance with Annex 13 to the Chicago Convention and 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 process has been undertaken for that purpose.

In accordance with ICAO Annex 13 paragraph 4.1, notification of the accident was sent on 30 October 2022 to the National Transportation Safety Board of the United States of America as State of Design and as State of Manufacturer. A copy of the Preliminary Report was subsequently submitted to the above organization, the Civil Aviation Authority of Malaysia (CAAM), and the Aircraft Operator on 2 December 2022.

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 taken.

TABLE OF CONTENTS

CHAPTER		TITLE	PAGE NO
		TITLE PAGE	i
		INTRODUCTION	iii
		TABLE OF CONTENTS	iv
		APPENDICES	vi
		GLOSSARY OF ABBREVIATIONS	vii
		SYNOPSIS	1
1.0		FACTUAL INFORMATION	2
	1.1	History of the Flight	2
	1.2	Injuries to Persons	3
	1.3	Damage to Aircraft	3
	1.4	Other Damage	6
	1.5	Personnel Information	6
	1.6	Aircraft Information	6
	1.7	Meteorological Information	7
	1.8	Aids to Navigation	7
	1.9	Communications	7
	1.10	Aerodrome Information	7
	1.11	Flight Recorders	7
	1.12	Wreckage and Impact Information	8
	1.13	Medical and Pathological Information	8
	1.14	Fire	8
	1.15	Survival Aspects	8
	1.16	Tests and Research	9
	1.17	Organizational and Management Information	9
	1.18	Additional Information	9
	1.19	Useful or Effective Investigation Techniques	10
2.0		ANALYSIS	10
	2.1	On-site Investigation	10
	2.2	On-site Investigation Analysis	11
	2.3	Solo Flights Requirements	14
3.0		CONCLUSIONS	15
	3.1	Findings	16
	3.2	Causes/Contributing Factors	16

FINAL REPORT SI 07/22

4.0		SAFETY RECOMMENDATIONS	17
5.0		COMMENTS TO THE REPORT AS REQUIRED BY ICAO ANNEX 13 PARAGRAPH 6.3	18

FINAL REPORT SI 07/22

APPENDICES

A	Base Maintenance Release (BMR)	A-1
B	Meteorological Information	B-1
C	Seat belt restraint system hardware inspection	C-1 to C-3
D	TP Flight Logger	D-1 to D-2

GLOSSARY OF ABBREVIATIONS

A

A	Accident
AAIB	Air Accident Investigation Bureau
ac	aircraft
AFRS	Airport Fire and Rescue Services
AGL	Above Ground Level
ATC	Air Traffic Controller
ATCO	Air Traffic Controller Officer
ATO	Approved Training Organisation
ATPL	Air Transport Pilot Licence

B

BMR	Base Maintenance Release
-----	--------------------------

C

CAAM	Civil Aviation Authority Malaysia
CAD	Civil Aviation Directive
CB	Cumulonimbus Clouds
CCT	Circuits
CFI	Chief Flight Instructor
CI/HOT	Chief Instructor/Head of Training
CP	Cadet Pilot
CPL	Commercial Pilot's Licence
CVR	Cockpit Voice Recorder

F

FDR	Flight Data Recorder
FEW	few
FI	Flight Instructor
ft	feet

G

GH General Handling

H

hrs hours

I

ICAO International Civil Aviation Organisation

ie id est or 'that is'

IF Instrument Flying

IR Instrument Rating

K

KLIA Kuala Lumpur International Airport

L

LH Left Hand

LT Local Time

LYG Layang

M

m meters

MASB Malaysia Airports Sendirian Berhad

MOR Mandatory Occurrence Report

P

PAPI Precision Approach Path Indicator

R

RH Right Hand

RPM Revolution per Minute

FINAL REPORT SI 07/22

S

SOP	Standard Operating Procedures
SPL	Student Pilot Licence

T

TO	Take-Off
TP	Trainee Pilot
TPM	Training Procedures Manual

U

UTC	Coordinated Universal Time
-----	----------------------------

V

VFR	Visual Flight Rule
-----	--------------------

X

XC	Cross Country
----	---------------

W

WMKI	Ipoh (Sultan Azlan Shah Airport)
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SYNOPSIS

A Textron Aviation 172S aircraft with callsign LYG 1339 was on a planned navigation solo training flight (XC06). The aircraft departed Sultan Azlan Shah Airport (WMKI) at 1009 hours for route 7B as per the flight planned route.

Start-up, Taxi, Take Off and Navigation Exercise was uneventful. However, during the final landing, the Trainee Pilot (TP) encountered three bounced landings which resulted in a heavy landing. The aircraft taxied back to the bay without any further incident. The Pilot exited safely without any injuries. The aircraft sustained some physical damage to its rudder, fuselage, and propeller. The Trainee Pilot was brought to the clinic for a post-accident medical check-up.

,
A Mandatory Occurrence Report (MOR) was submitted by the Aircraft Operator to the Civil Aviation Authority of Malaysia (CAAM) and Air Accident Investigation Bureau, Malaysia (AAIB) as notification of the serious incident.

1.0 FACTUAL INFORMATION

1.1 History of the Flight

Trainee Pilot (TP) with call sign LYG 1339 was planned for Navigation Solo flight, a program in the flight training syllabus as Navigation Solo 06 (XC 06).

Pre-flight checks, start and taxi were normal. The ac took off at 1009 hrs from WMKI Runway 04 on planned route 7B ie Ipoh - Lasah - Kampung Ayer Panas - Baling - Tasik Muda - Jeniang - Kampung Karangan - Kuala Kurau - Redang Panjang - Kuala Sepetang - Beruas - Parit - Batu Gajah - Ipoh. The TP encountered bad weather (CB cloud and rain) while enroute from Baling to Beruas and requested to descend from 5000 ft to 2000 ft. At Parit, the TP regained visual and could see Batu Gajah. Ipoh Tower instructed the TP to track for the final on straight in approach but the TP requested to track the dead side and was approved by Ipoh Tower. After holding at the dead side due to one departure, the TP then cleared to descend 1000 ft LH downwind and was asked to report final. Once on final, Ipoh Tower cleared the ac to land runway 04.

Rolling out for the approach to land, the TP realized the approach was quite high judging from the PAPI lights which indicate 4 white. The TP made approach path corrections on the final to 2 Reds and 2 White on the PAPI lights. The ac continue on a normal approach with the aiming point at the 1000 ft marker on the normal final speed of 70 knots. The TP flared at the normal flaring attitude and pulled power to idle and waited for the aircraft to sink. The ac landed hard on the runway centreline and subsequently bounced hard thrice on the right of the runway centreline before landing finally.

During the ac bounce, the TP realized the seat belt came loose from the pilot seat belt buckle, resulting in the TP being thrown off from the pilot seat. The TP managed to control the ac back to the runway centerline and continue

FINAL REPORT SI 07/22

to vacate the runway via Taxiway Charlie to Bay 1. Runway inspection was carried out at 1235 hrs and the runway resumed normal operations at 1241 hrs. The Trainee Pilot was sent to Path Lab Ipoh for a post-accident medical check-up.

The aircraft suffered damage to the Propeller, Nose landing gear, Below Fuselage, Floorboard (center pedestal), and Tail section. It was impounded for AAIB investigation.

1.2 Injuries to Persons

Injuries	Crew	Passengers	Others	Total
Fatal	Nil	Nil	Nil	Nil
Serious	Nil	Nil	Nil	Nil
Minor/None	1	Nil	Nil	1

Figure 1: Injuries to persons

1.3 Damage to Aircraft

Post-accident inspection revealed the following damage to the aircraft:

- a. Propeller.



Figure 2: All Propeller blades bent inwards at the blade tips.

b. Nose landing gear.



Figure 3: Nose landing gear. Damaged on riveted joints.

c. Below fuselage.



Figure 4: Below fuselage. Found deep scratches.

d. Floorboard (Center Pedestal).

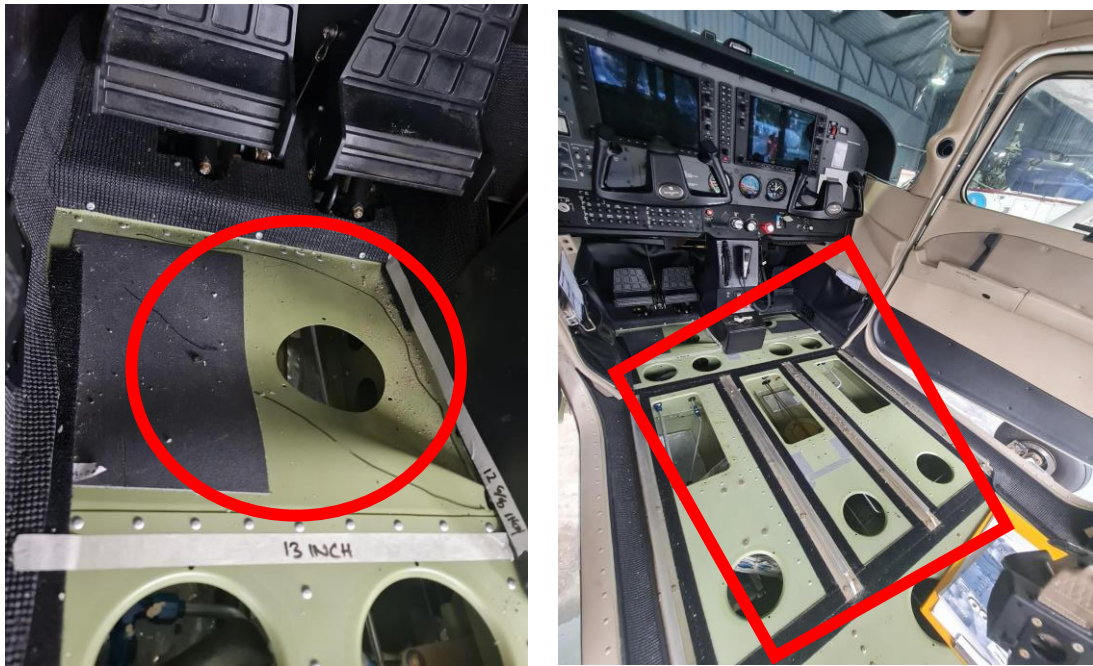


Figure 5: Forward Left and Right Floorboard Assembly found wrinkled and buckled.

e. Tail section.



Figure 6: Rudder Lower tip found scratches

1.4 Other Damage

No reported damages to aerodrome facilities or other properties.

1.5 Personnel Information

1.5.1 Pilot in Command

Nationality		Malaysian
Age		21
Gender		Female
License Type		SPL
License Expiry		31 January 2023
Medical Expiry		31 January 2023
Aircraft Rating		N/A
Instructor Rating		N/A
Flying Hours	Total Hours	96
	Total on Type	21

Figure 7: Personnel Information – Pilot in Command

1.6 Aircraft Information

The aircraft flown on that day was in airworthy condition. The last scheduled maintenance ie 50 hours /operation 1 at 1231:46 hrs were carried out on 19 Oct 2022 (**Appendix A**). The aircraft had flown 11:30 hrs after the scheduled maintenance with no defect recorded till the accident date (25 Oct 2022).

Aircraft Type	Textron Aviation 172S
Manufacturer	Textron Aviation Inc.
Year of Manufacture	2020
Owner	Layang Layang Flying Academy
Registration No.	9M-HOT
Aircraft Serial No.	172S - 12489
Certificate of Airworthiness Issue / Expiry date	9 Sept 2022 / 08 Sept 2023
Certificate of Registration Issue / Expiry date	21 Oct 2020 / 20 Oct 2023
Total Flight Hours	1243:16

Figure 8: Aircraft Data

1.7 Meteorological Information

The incident happened at noon. Actual weather was fine, visibility was reported at more than 10 km, and the wind was 040° at 03 knots. **(Appendix B)**

1.8 Aids to Navigation

All navigation aids were operating normally.

1.9 Communications

All ATC communications frequencies were operating normally.

1.10 Aerodrome Information

Airfield	Sultan Azlan Shah Airport (WMKI)
Runway	04/22
Length	2000 m
Width	45 m
ICAO Designator	WMKI
IATA Designator	IPH
Elevation	131 ft / 40 m

Figure 9: Sultan Azlan Shah Airport (WMKI) Aerodrome Information

1.11 Flight Recorders

The aircraft was not equipped with Flight Data Recorder (FDR) or Cockpit Voice Recorder (CVR). It is equipped with Garmin G1000. The Garmin G1000 is an electronic flight instrument system (EFIS) typically composed of two display units, one serving as a primary flight display, and one as a multi-function display.

1.12 Wreckage and Impact Information

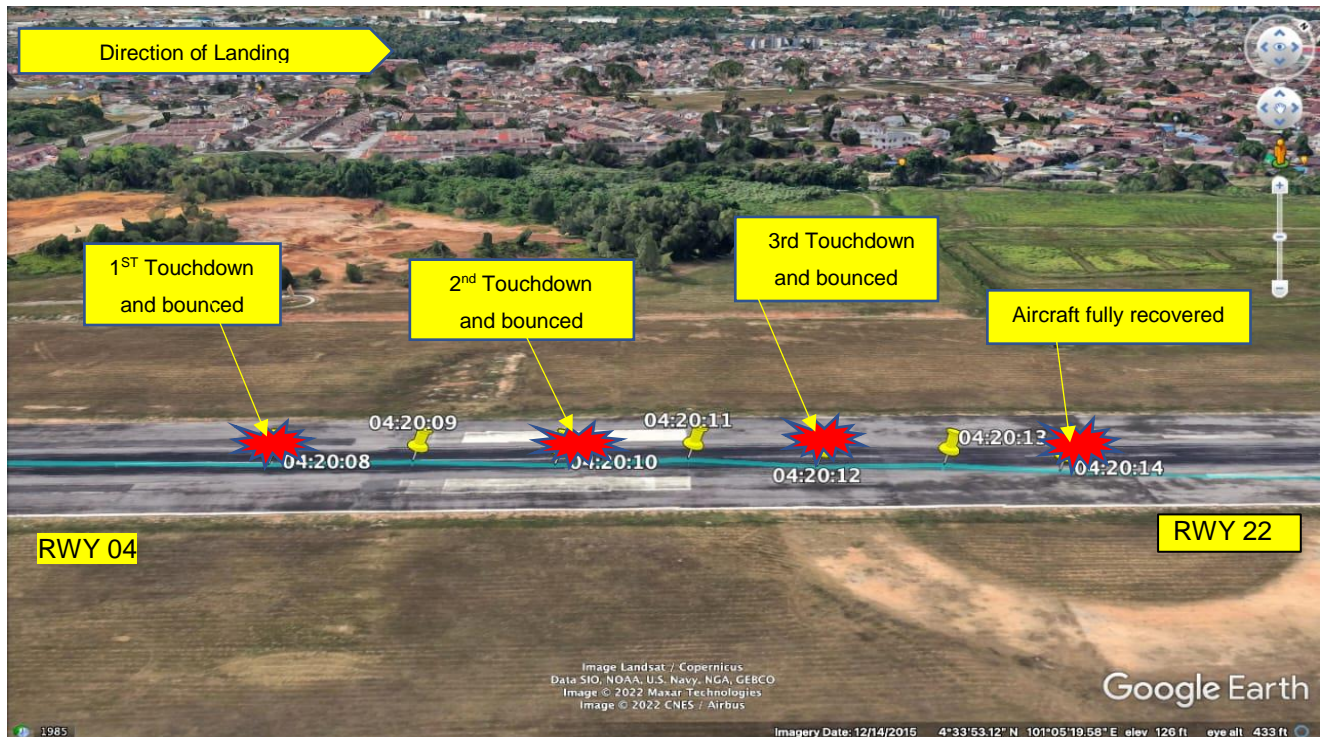


Figure 10: Landing path
(Diagram not to scale)

1.13 Medical and Pathological Information

The Trainee Pilot underwent a urine drug test and the results were negative for substance abuse.

1.14 Fire

There was no pre or post-impact fire.

1.15 Survival Aspects

There were no injuries to the TP.

1.16 Tests and Research

The TP reported the seat belt came off and was thrown off position during the hard landing. The pilot and co-pilot seat belt restraint system hardware inspection were done by LLFA Engineering and found satisfactory and airworthy condition **(Appendix C)**. The seat belt came off from the buckle was most probably due to TP not fully securing it during strapping before the flight.

1.17 Organizational and Management Information

The Aircraft Operator is an Approved Training Organisation (ATO) by the Civil Aviation Authority of Malaysia (CAAM) for pilot training since the year 2019 and is situated at Sultan Azlan Shah Airport, Ipoh. Perak. It operates 3 types of aircraft ie 3 x single-engine Textron Aviation C172, 2 x single-engine Piper 28 and 1 x twin-engine Piper 34. The main flying course conducted by the Aircraft Operator is the Integrated Course of Commercial Pilot Licence (CPL) / Instrument Rating CPL/IR (A).

The Aerodrome Operator for Sultan Azlan Shah Airport (WMKI) is Malaysia Airports Sdn Bhd (MASB). MASB is licensed by the Ministry of Transport Malaysia to operate, manage, and maintain all airports in Malaysia except Kuala Lumpur International Airport (KLIA).

1.18 Additional Information

1.18.1 Interview and Statements

AAIB investigation team conducted separate interview sessions with TP, CFI, Duty ATCO and Maintenance Organisation Technical Controller. The interview sessions were all recorded under the express knowledge of all the parties. All of the above personnel had also submitted a written statement to be included in this report.

1.19. Useful or Effective Investigation Techniques

The aircraft was not installed with an FDR or a CVR. It is equipped with Garmin G1000. Data from Garmin G1000 was used in the analysis of the said incident.

2.0 Analysis

2.1 On-site Investigation.

The AAIB Investigation team conducted the investigation on the runway and found 3 scratched markings on the runway. The scratched marking were from the impact of the rudder lower tip (figure 11) and the propeller (figure 12) during the hard landing and was confirmed by the TP during the interview.



Figure 11: Scratched marking from the rudder lower tip on the runway during the hard landing.



Figure 12: Scratched marking from the propeller on the runway during the hard landing.

2.2 On-Site Investigation Analysis

Figure 13 shows the profile of the ac on the final approach to land. The ac approach height was not stable (high) and not as per the 3° glide path. It shows the ac speed of 70-80 KIAS (Figure 14) on the final approach does not follow the C172 SOP Performance Landing Procedure (Figure 15) which states that the final approach technique is achieved not below 65 knots aiming to achieve a touchdown speed of 50 knots. Due to high-speed descent after making adjustments to the pitch from a high approach, the TP was unable to control the ac to land smoothly. TP's flaring of the ac at 29 ft which the flaring height between 10-15 ft. Due to the high sink rate and the TP applying too much back pressure while flaring the ac, it resulted a hard bounced landing and the ac ballooned on the runway. The TP should initiate a go-around as per LLFA Student Study Guide paragraph 13.3.5 when the approach was seem to be an unstabilized approach (Figure 16).

The first touchdown which was landing hard resulted the rudder's lower tip striking the runway (figure 11). On the second hard bounce landing, the ac ballooned toward the right of the runway centreline and resulted the propeller hitting the runway (figure 12). On the third bounce, the TP managed to control the ac by bringing it back to the runway centreline and land.

FINAL REPORT SI 07/22

The hard landing caused some damage to the ac such as the propeller, tail section, nose wheel, floorboard and below the fuselage.

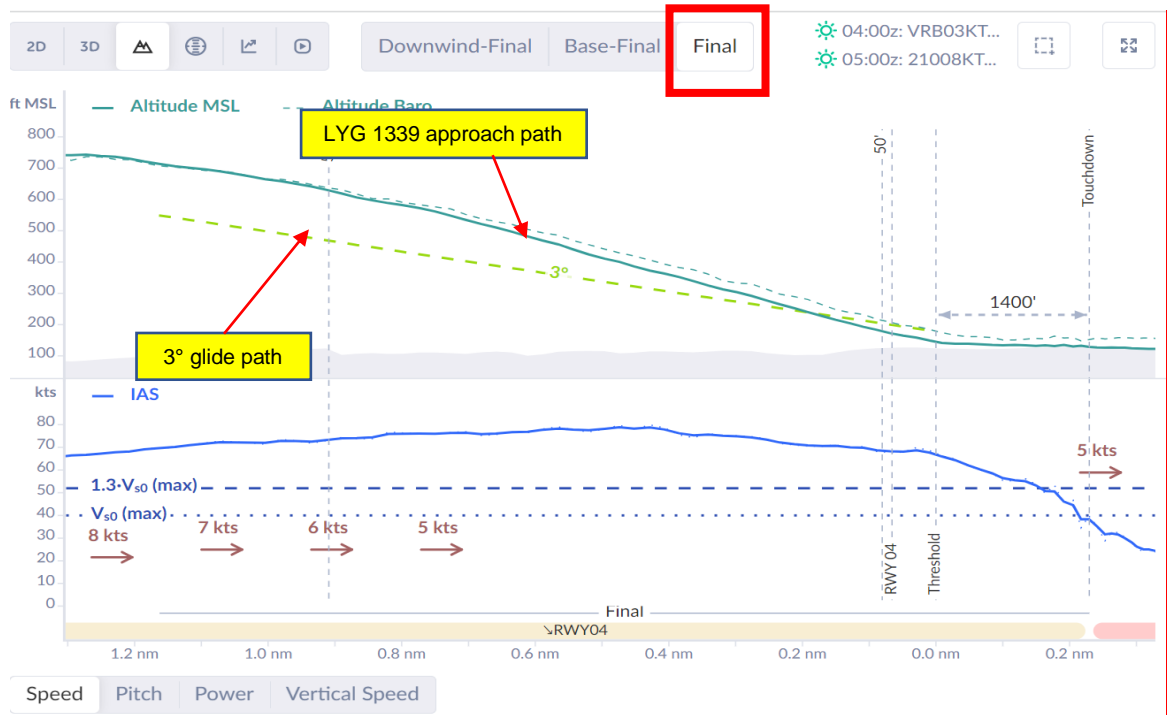


Figure 13: Data extracted from Garmin G 1000 shows the flight path of the aircraft during the final approach to land.

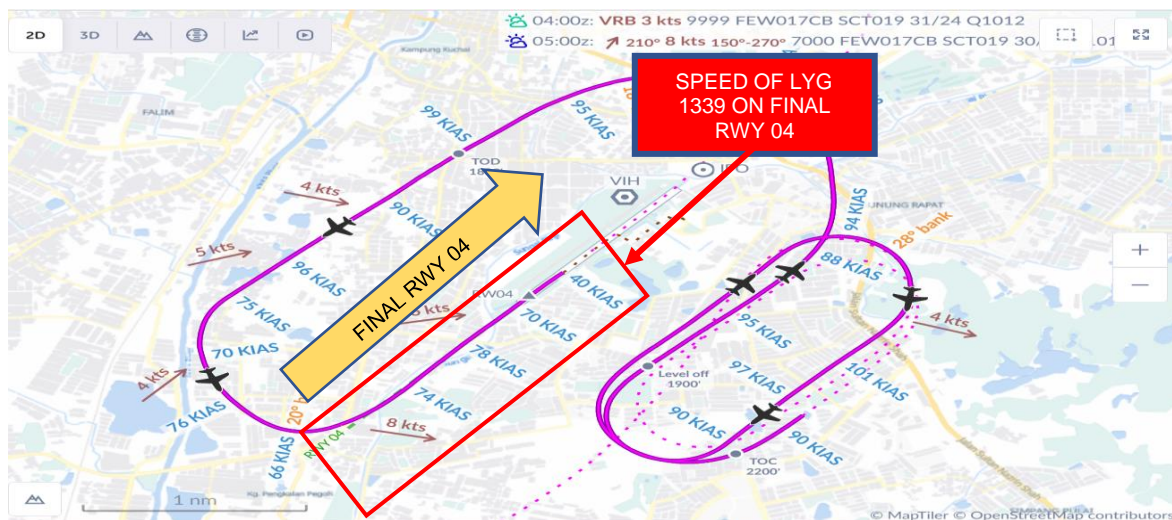


Figure 14: Data from Garmin G1000 shows the speed of the aircraft on the final to land

PERFORMANCE LANDING

7. The circuit pattern is flown as the normal circuit or the low-level circuit. The Final Approach technique is to achieve not below 65 knots at 200' AGL and aiming to achieve a touchdown speed of 50 knots. To achieve the shortest possible landing run, aim to, and flare so as to touch down on the 500' markers. Immediately after touchdown on the main wheels, check Throttle closed, lower the Nose Wheel onto Runway, select Flap 0° and apply optimum braking with the Control Column fully until the aircraft comes to a stop.

Figure 15: C172 SOP on Performance Landing

13.3.5 The Go Around From Final

You might have to go around for any of these reasons:

- You have made a bad approach.
- You are told to do so by ATC.
- The approach is baulked.

To go around:

1. Level the wings.
2. Set MAX power and select a shallow climbing attitude.
3. When the aircraft is climbing safely, ensure flap at 10°. Raise the flap once you are above 70 KIAS/200 feet AGL
4. Lookout above and behind and turn gently onto the dead side.
5. Carry out the after-takeoff checks. 6. Level off at 1000 ft and fly another circuit.

Figure 16: LLFA Student Study Guide – The Go Around from Final

2.3 Solo Flight Requirements

TP's started flying with Piper 28 ac and clocked 45 hrs before proceeding to simulator training. After completing the simulator training for 30 hrs, TP continue flying with C172 ac and clocked 18 hrs prior to the incident.

(APPENDIX D)

TP's last training flight prior to the incident was on 18 October 2022 where TP was flying with FI on a navigation exercise (XC 09). TP was programmed for solo navigation exercise on 25 October 22 which was Seven (7) days lapsed as in the LLFA Training and Procedure Manual (figure 17). The flight was the TP's first solo navigation flight on C172.

LLFA TPM on Solo Flying Requirements (figure 17) stated TP's with hours more than 40 shall not fly solo if they have not flown an Academy aircraft within the previous 7 days. The 40 hrs stated in the TPM are not clear and should be specific as 40 hrs on the type and not interpreted as 40 hrs all types. The TP only clocked 18 hrs on C172 prior to the incident.

TP's lack of experience on C172 **(18 hrs)** and long lay-off flying **(7 days)** are also contributing factors to the hard landing.

1.4.1.6. Solo Flying Requirements.

A. Pilots shall have demonstrated their competence to an Academy instructor and shall have signed as having read this TPM prior to flying solo in any Academy aircraft.

B. Trainee Pilots (TP)

(1) TP with less than 2 hours solo flying shall fly with an FI prior to each solo flight.

(2) TP with hours less than 40 shall not fly solo if they have not flown an Academy aircraft within the previous 2 days.

(3) TP with hours more than 40 shall not fly solo if they have not flown an Academy aircraft within the previous 7 days.

(4) TP with hours less than 40 shall not fly more than 3 hours solo between dual instructional flights.

(5) All solo flying by a TP shall be arranged to terminate 30 minutes prior to sunset.

Figure 17: LLFA Training and Procedures Manual - Solo Flying Requirements

3.0 Conclusion

The incident of the hard landing shows an unsafe act by the TP during the final approach to land. The TP was on an unstable approach (high and flying too fast) during the touchdown. The TP should execute a go-around when the approach to land was not stable.

LLFA TPM on Solo Flying Requirements not clearly stated ie TP's with more than 40 hrs shall not fly solo if they have not flown the Academy ac within the previous 7 days. The 40 hrs have to be specific as 40 hrs on the

type and not interpreted as 40 hrs all types. The TP should go for a check flight before allowing the TP to fly solo after 7 days of no flying.

3.1 Findings

3.1.1 The TP was properly licensed to fly the navigation training flight.

3.1.2 The aircraft was properly maintained and airworthy for the flight.

3.1.3 The incident happened at noon. The weather was fine.

3.1.4 The TP reported no abnormalities on the aircraft during the navigation training flight.

3.1.5 The TP admitted coming to land with a high approach which the PAPI indicates four whites.

3.1.6 TP does not follow the LLFA Student Study Guide a go-around procedure when made a bad approach.

3.1.7 The ac suffered 3 bounces on landing.

3.1.8 The aircraft suffered damage to the propeller, nose landing gear, below fuselage, floorboard (center pedestal), and tail section.

3.1.9 The TP's last flight was on 18 October 22 which was 7 days prior to the incident.

3.2 Causes/Contributing Factors

3.2.1 The cause of the incident was TP's **Judgement and Decision-Making Error** by continuing the approach for landing. TP's should

make a go-around as stipulated in the LLFA Student Study Guide –
The Go Around From Final when the approach to land was unstable.

3.2.2 No checked flight were done to TP before allowing the TP to fly solo after 7 days of no flying.

4.0 Safety Recommendations

4.1 The Aircraft Operator is to carry out the following safety recommendations:

4.1.1 To publish instructions or circulars to all Trainee Pilots to execute a go-around procedure on the final if the approach is bad or not stable.

4.1.2 To include the requirement in the Layang Layang Flying Academy Training and Procedures Manual for Flight Instructor to conduct a check ride on the Trainee Pilot who has not flown for 7 days before being allowed to fly solo.

4.1.3 To review the Layang Layang Flying Academy Training and Procedures Manual - Part 1 - General in paragraph 1.4.1.6 - Solo Flying Requirements, subparagraph B (3) "Trainee Pilot with hours more than 40 shall not fly solo if they have not flown an Academy aircraft within the previous 7 days" to be specific as 40 hrs on type and not interpreted as 40 hrs all type.

5.0 COMMENTS TO DRAFT FINAL REPORT AS REQUIRED BY ICAO ANNEX 13 PARAGRAPH 6.3

In accordance with ICAO Annex 13, paragraph 6.3, the Draft Final Report was sent to State of Registry (CAAM), State of Manufacturer (National Transportation Safety Board of United States (NTSB), State of Manufacturer's Technical Adviser (Textron Aviation) and the Aircraft Operator (Layang Layang Flying Academy) inviting their significant and substantiated comments on the report. The following are the status of the comments received: -

Organisations	Status of Significant and Substantiated Comments
Civil Aviation Authority of Malaysia (CAAM)	Report received and no comments.
National Transportation Safety Board (NTSB)	Report accepted and no comments.
Textron Aviation	Report accepted and no comments.
Layang Layang Flying Academy	Report accepted and no comments.

Figure 18: Status of Significant and substantiated comments.

Investigator in-charge
AAIB
Ministry of Transport
Malaysia

FINAL REPORT SI 07/22

APPENDICES

A	Base Maintenance Release (BMR)	A-1
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C	Seat belt restraint system hardware inspection	C-1 to C-3
D	TP Flight Logger	D-1 to D-2

BASE MAINTENANCE RELEASE (BMR)

SER NO. : LL/BMR/529

Layang Layang Aerospace Sdn Bhd
(243883-V)

**BASE MAINTENANCE RELEASE
(BMR)**

Aircraft Type : CESSNA 172S Registration Mark : 9M-HOT
AMP Ref. : LLA/CAMO/AMP/C172S ISSUE 3 REV 1 Job No. : LL/CAMO/HOT/080

SCHEDULED MAINTENANCE INSPECTION : OPERATION 1, 50H ENG, ENGINE OIL & FILTER CHANGE
was completed

ON : 19/10/2022 AT : IPH AIRFRAME HOURS : 1231:46

Category	Signature	AML/Auth/Co. App No.
C		


The work recorded above has been carried out in accordance with the requirements of the CAR 2016 for the time being in force and in that respect the Aircraft/Equipment is considered fit for release to service.

The Next SCHEDULED MAINTENANCE INSPECTION due
at 1281:46 AF Hrs / or Date : whichever 18/02/2023
occurs first.

Form No. LLA/CAMO/002-00

METEOROLOGICAL INFORMATION

CAAM/MET/01

 CIVIL AVIATION AUTHORITY OF MALAYSIA
METEOROLOGICAL INFORMATION RECORD FORM

METAR/SPECI * WMKI (TIME) 0400 UTC

(WIND) 040/03 knots Gusting..... knots

(DIRECTION VARIATION) V

(VISIBILITY) 40
(minimum) (maximum)

(WEATHER) H2

(CLOUD) F017 CB S-W

SKY OBSCURED 8019 feet

CB DIRECTION

(TEMP/DEW POINT) 31/24 (HUMIDITY)

QNH 1012 Hpa 29. Inches

QFE RWY () RWY ()


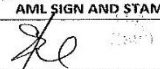
(TREND)

NOTE: 1. * delete as appropriate
2. Information above dotted lines may or
3. may not be reported by MET.
Words in brackets SHOULD NOT be
transmitted.

FINAL REPORT SI 07/22

		LAYANG-LAYANG AEROSPACE SDN. BHD. CAMO APPROVAL NO.: CAMO/2017/010		ADDITIONAL WORKSHEETS Form No.: LLA/CAMO/005-04	
AIRCRAFT TYPE	C172S	JOB NO.		LL/CAMO/HOT/084	
AIRCRAFT REGISTRATION	9M-HOT	TOTAL AIRFRAME HOURS		1243.16	
AIRCRAFT S/N	172S12489	DATE	01.11.2022	PAGE NO.	1 of 1

DESCRIPTION OF WORK	
<p>1. AAIB STATEMENT FORM INSTRUCTION</p> <p>TO CARRY OUT PILOT & CO-PILOT SEAT BELT RESTRAINT SYSTEM HARDWARE INSPECTION TO ENSURE SECURITY OF INSTALLATION AND OPERATION DUE TO THE STUDENT PILOT REPORT OF PILOT'S SEAT BELT UNBUCKLED DURING HARD LANDING INCIDENT.</p> <p>REFERENCE: MODEL 172 (SERIES 1996 AND ON) MAINTENANCE MANUAL CHAPTER 5-10-01 ITEM 251101 PAGE 3 & CHAPTER 25-10-00 PAGE 206-207 REV. 24 DATED 01/07/2021</p>	

ACTION TAKEN	
<p>PILOT AND CO-PILOT SEAT BELT RESTRAINT SYSTEM INSPECTED AS PER MODEL 172 (SERIES 1996 AND ON) MAINTENANCE MANUAL CHAPTER 5-10-01 ITEM 251101 PAGE 3 AND CHAPTER 25-10-00 PAGE 206 AND 207 REV 24 DATED 01/07/2021. FOUND SATISFACTORY.</p>	
TECH SIGN	DATE
	01.11.2022
AML SIGN AND STAMP	DATE
	01.11.2022
<p>The work recorded above has been carried out in accordance with the requirements of the CAR 2016 for the time being in force and in that respect the Aircraft/Equipment is considered fit for release to service.</p>	

DESCRIPTION	PART NO	SERIAL NO. ON	SERIAL NO. OFF	QUANTITY	BATCH NO.

FINAL REPORT SI 07/22



Layang Layang Aerospace Sdn. Bhd.

MAN-HOUR AND FOD CLEARANCE DECLARATION FORM			
REGISTRATION	9M-HOT	SERIAL NUMBER	172S12489
JOB NUMBER : LL/CAMO/HOT/084			

CERTIFICATION				
NO	TECHNICIAN NAME	TECHNICIAN SIGN	AML ENGINEER NAME	AML ENGINEER SIGN
1	ERNEST		A.J. SARDIQU	
2	FARHODIN			
3				
4				
5				
6				
7				
8				
9				
10				

*Fill in after completion of maintenance.

NO	DESCRIPTIONS	MAN HOURS				
		TECH		LAE		TOTAL
		MAN	HOURS	MAN	HOURS	
1	PILOT & CO-PILOT SEAT BELT RESTRAINT SYSTEM HARDWARE INSPECTION	2	1	1	1	2
2						
3						
4						
5						
6						
7						
8						
9						
10						
TOTAL MAN HOURS INVOLVED		1		1		2

DECLARATION OF TOOLS AND FOD CLEARANCE (AFTER COMPLETION OF MAINTENANCE)

SATISFACTORY	UNSATISFACTORY	REMARKS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	nil

Engineer In-Charge

Name : A.J. SARDIQU
Date : 01.11.2022

Form No: LLA/CAMO/016-00

FINAL REPORT SI 07/22

APPENDIX D

TP FLIGHT LOGGER

FlightLogger - 2022-10-28
Program Report

Layang Layang Flying Academy
CPL/IR(A) with Frozen ATPL

L1339 - PUTERI MAISARAH

Layang Layang Flying Academy
CPL/IR(A) with Frozen ATPL - A

L1339 - PUTERI MAISARAH
A1461, JALAN PELINDUNG 2, OFF JALAN TENGGU MUHAMAD
KUANTAN 25050

CPL/IR(A) with Frozen ATPL

Date	VFR					IFR		Sim	Aircraft	Instructor	Lesson
	Single			Multi		Single					
	Dual	Solo	SPIC	Dual	Solo	Dual					
27/01/2022				1:30					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 01 (EOC 1&2)
04/02/2022				1:30					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 02 (S&L 1&2)
07/02/2022				1:00					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 03 (C&D)
10/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 04 (DESC 2)
14/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 05 (MT)
22/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 06 (STALL 1)
23/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 07 (STALL 2)
24/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 08 (CCT 1)
28/02/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 09 (CCT 2)
02/03/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 10 (CCT 3)
05/03/2022				0:10					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 11 (CCT 4)
09/03/2022				1:00					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 12 (CCT 5)
15/03/2022				1:20					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 13 (CCT 6)
16/03/2022				1:30					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 14 (CCT 7)
17/03/2022				1:00					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 15 (CCT 8)
17/03/2022					0:30				9M-BFF(OLD)	SOLO	IDENT 16 (FS)
21/03/2022				0:30					9M-BFF(OLD)	LYG18-Capt Shaifu	IDENT 17 (CCT 9)
21/03/2022					0:30				9M-BFF(OLD)	SOLO	IDENT 18 (CCT 10)
04/04/2022	1:00 / 1:00								9M-BFF	LYG17-Capt Erwan	IDENT 19 (GH 01)
07/04/2022	1:00								9M-ANA	LYG18-Capt Shaifu	IDENT 21 (GH 03)
07/04/2022		1:00							9M-ANA	SOLO	IDENT 20 (GH 02)
26/04/2022								1:00	9M-ANA	LYG18-Capt Shaifu	IDENT 23 (IF 01)
26/04/2022		1:00							9M-ANA	SOLO	IDENT 22 (GH 04)
28/04/2022								1:00	9M-BFF	LYG17-Capt Erwan	IDENT 24 (IF 02)
09/05/2022	1:00								9M-BFF	LYG18-Capt Shaifu	IDENT 25 (GH 05)
10/05/2022								1:00	9M-ANA	LYG17-Capt Erwan	IDENT 26 (IF 03)
17/05/2022								1:00	9M-BFF	LYG17-Capt Erwan	IDENT 27 (IF 04)
19/05/2022	3:00								9M-BFF	LYG17-Capt Erwan	IDENT 28 (XC 01)
24/05/2022	2:00								9M-BFF	LYG17-Capt Erwan	IDENT 29 (XC 02)
25/05/2022		1:30							9M-ANA	SOLO	IDENT 30 (XC 03)
31/05/2022		3:30							9M-ANA	SOLO	IDENT 31 (XC 04)
02/06/2022	1:00								9M-BFF	LYG17-Capt Erwan	IDENT 32 (GH 06)
08/06/2022	1:10								9M-BFF	LYG18-Capt Shaifu	IDENT 34 (GH 08)
08/06/2022		1:00							9M-BFF	SOLO	IDENT 33 (GH 07)
29/06/2022	1:30								9M-BFF	LYG18-Capt Shaifu	IDENT 35 (GH 09)

2/144

FINAL REPORT SI 07/22

LightLogger - 2022-10-28 Program Report		Layang Layang Flying Academy CPL(R/A) with Frozen ATPL		L1339 - PUTERI MAISARAH		
29/06/2022		1:00		9M-BFF	SOLO	IDENT 36 (GH 10)
30/06/2022	1:30			9M-BFF	LYG18-Capt Shailu	IDENT 37 (GH 11)
06/07/2022			1:30	9M-BFF	Capt Shahroul	IDENT 38 (PT 1 - GH)
13/07/2022	1:30			9M-WEE	LYG18-Capt Shailu	IDENT 59 (GH 12)
14/07/2022				TRC4000G (IPH)/SE	Capt Asri	IDENT 39 (SIM 01)
18/07/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 40 (SIM 02)
20/07/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 41 (SIM 03)
25/07/2022			1:00	TRC4000G (IPH)/SE	Capt Rossly	IDENT 42 (SIM 04)
26/07/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 43 (SIM 05)
28/07/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 44 (SIM 06)
01/08/2022			1:00	TRC4000G (IPH)/SE	Capt Rossly	IDENT 45 (SIM 07)
03/08/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 46 (SIM 08)
05/08/2022			1:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 47 (SIM 09)
09/08/2022	1:30			9M-WEE	LYG17-Capt Erwan	IDENT 104 (GH 13)
10/08/2022	1:30			9M-WEE	LYG18-Capt Shailu	IDENT 105 (GH 14)
11/08/2022		0:30		9M-WEE	SOLO	Extra lesson
16/08/2022				TRC4000G (IPH)/SE	Capt Asri	IDENT 48 (SIM 10)
22/08/2022			1:00	9M-WEE	LYG18-Capt Shailu	IDENT 74 (IF 05)
25/08/2022				TRC4000G (IPH)/SE	Capt Asri	IDENT 49 (SIM 11)
30/08/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 50 (SIM 12)
06/09/2022		2:30		9M-ZAB	LYG17-Capt Erwan	IDENT 60 (XC 05)
08/09/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 51 (SIM 13)
15/09/2022			2:00	TRC4000G (IPH)/SE	Capt Rossly	IDENT 52 (SIM 14)
21/09/2022			1:00	9M-HOT	LYG18-Capt Shailu	IDENT 75 (IF 06)
22/09/2022			1:00	9M-HOT	LYG10-Capt Diana	IDENT 76 (IF 07)
23/09/2022			1:00	9M-WEE	LYG10-Capt Diana	IDENT 77 (IF 08)
29/09/2022			1:00	9M-WEE	LYG18-Capt Shailu	IDENT 78 (IF 09)
04/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 53 (SIM 15)
05/10/2022			1:00	9M-HOT	LYG10-Capt Diana	IDENT 79 (IF 10)
06/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 54 (SIM 16)
06/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 55 (SIM 17)
12/10/2022			1:00	9M-HOT	LYG10-Capt Diana	IDENT 80 (IF 11)
13/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 56 (SIM 18)
13/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 57 (SIM 19)
17/10/2022			2:00	TRC4000G (IPH)/SE	Capt Asri	IDENT 58 (SIM 20)
18/10/2022		3:30		9M-HOT	LYG10-Capt Diana	IDENT 64 (XC 09)
25/10/2022		3:00		9M-HOT	SOLO	IDENT 61 (XC 06)
Total (96:10)	24:40 / 1:00	12:30	7:30	9:30	1:00	11:00