

AIRCRAFT SERIOUS INCIDENT PRELIMINARY REPORT SI 02/25

Air Accident Investigation Bureau (AAIB) Ministry of Transport Malaysia

Fixed-Wing Aircraft Airbus A321-211, Registration PK-TLG, at Sultan Abdul Aziz Shah Airport, Subang, Selangor on 14 February 2025



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AIR ACCIDENT INVESTIGATION BUREAU (AAIB) MALAYSIA

PRELIMINARY REPORT NO: SI 02/25

OPERATOR : PT. TRANSNUSA AVIATION MANDIRI

AIRCRAFT TYPE : AIRBUS A321-211

NATIONALITY : INDONESIA

REGISTRATION : PK-TLG

PLACE OF OCCURRENCE : SULTAN ABDUL AZIZ SHAH AIRPORT,

SUBANG, SELANGOR

DATE AND TIME : 14 FEBRUARY 2025 AT 1944 LT (1144 UTC)

This preliminary report contains statement of facts which have been determined up to the time of issue only. It must be regarded as tentative, and is subject to alteration or correction if additional evidence becomes available.

This investigation is carried out to determine the circumstances and causes of the accident with a view to the preservation of life and the avoidance of accident or incident in the future. It is not the purpose of this investigation to apportion blame or liability (Annex 13 to the Chicago Convention and Civil Aviation Regulations 2016).

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

INTRODUCTION

The Air Accident Investigation Bureau (AAIB) is the authority responsible for investigating air accidents and incidents in Malaysia, operating under the Ministry of Transport. The AAIB's mission is to promote aviation safety through independent and objective investigations into air accidents and serious incidents.

All investigations by the AAIB are conducted in accordance with Annex 13 to the Convention on International Civil Aviation (ICAO Annex 13) and the Civil Aviation Regulations 2016. It is important to note that AAIB reports are not intended to apportion blame or determine liability, as neither the investigations nor the reporting processes are designed for those purposes. The sole objective of this investigation is the prevention of accidents and incidents.

In accordance with ICAO Annex 13 paragraph 4.1, notification of the serious incident was sent out on 28 March 2025 to the Civil Aviation Authority of Malaysia (CAAM), the National Transportation Safety Committee (NTSC), Indonesia as the State of Registration and the State of Operator, to the Bureau of Enquiry and Analysis for Civil Aviation Safety (French: Bureau d'enquêtes et d'analyses pour la sécurité de l'aviation civile, BEA) as the State of Design and Manufacture, and to the International Civil Aviation Organization (ICAO).

Unless otherwise indicated, recommendations in this report are addressed to the investigating or regulatory authorities of the State responsible for the matters concerning the recommendations. It is up to those authorities to decide what actions to take.

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GLOSSARY OF ABBREVIATIONS

Α

AAIB Air Accident Investigation Bureau

AAL Above Aerodrome Level

В

BEA Bureau of Enquiry and Analysis for Civil Aviation Safety

С

CAD Civil Aviation Directives
C of A Certificate of Airworthiness
C of R Certificate of Registration
CVR Cockpit Voice Recorder

F

FDR Flight Data Recorder

ft feet

fpm feet per minute

FWD forward

I

ICAO International Civil Aviation Organisation

ILS Instrument landing System

Κ

kg Kilogramme

Kts knots

L

LDA Landing Distance Available

LH Left-Hand LT Local Time

M

METAR Meteorological Aerodrome Report MOR Mandatory Occurrence Report

Ν

NTSC National Transportation Safety Committee of Indonesia

Ρ

PIC Pilot in Command POB persons on board

R

RA Radio Altimeter RH Right-Hand

S

SIC Second in Command

U

UTC Coordinated Universal Time

W

WIB Waktu Indonesia Barat

WIII Soekarno-Hatta International Airport, Jakarta WMSA Sultan Abdul Aziz Shah Airport, Subang

SYNOPSIS

On 14 February 2025, an Airbus A321-211 aircraft, registered PK-TLG and operated by PT. TransNusa Aviation Mandiri of Indonesia, experienced a severe hard landing upon touchdown at Sultan Abdul Aziz Shah Airport (WMSA). The aircraft was operating as flight 8B699 on a scheduled service from Soekarno-Hatta International Airport, Jakarta (WIII) to WMSA.

The flight departed WIII without any reported abnormalities and was the third sector of the day for the Pilot-in-Command (PIC). The journey was uneventful until the approach phase at WMSA, during which an Instrument Landing System (ILS) approach was conducted for Runway 15. Although no irregularities were reported during the approach, the aircraft experienced a hard landing upon touchdown on Runway 15.

This incident was not reported to the Civil Aviation Authority of Malaysia (CAAM) or Air Accident Investigation Bureau, Malaysia (AAIB) Malaysia through any means by the operator until it only being notified by National Transportation Safety Committee of Indonesia (NTSC) to the AAIB as notification of the incident through email on 27 March 2025.

1.0 FACTUAL INFORMATION

1.1 History of the Flight

On 14 February 2025, an Airbus A321-211 aircraft, registered PK-TLG and operated by PT. TransNusa Aviation Mandiri of Indonesia, experienced a severe hard landing during touchdown at Sultan Abdul Aziz Shah Airport (WMSA). The aircraft was operating as flight number 8B699 on a scheduled service from Soekarno-Hatta International Airport, Jakarta (WIII) to WMSA.

Flight 8B699 is typically scheduled to depart from WIII at 16:05 WIB and arrive at WMSA at 19:00 LT, with an estimated flight duration of approximately 1 hour and 55 minutes. The route covers a distance of approximately 635 nautical miles. While the flight generally operates according to schedule, minor delays have been recorded on occasion.

On the day of the incident, the flight departed WIII without any reported abnormalities. It was the third sector of the day for the Pilot-in-Command (PIC). The flight proceeded uneventfully until the approach phase at WMSA, where an Instrument Landing System (ILS) approach was conducted for Runway 15. No irregularities were reported during the approach. However, during the landing on Runway 15, the aircraft experienced a hard landing. Following the hard landing, the aircraft vacated the runway via intersection Echo and proceeded to park at Bay 5 at the Skypark Terminal.

The occurrence was not reported by the operator to the Civil Aviation Authority of Malaysia (CAAM) or the Air Accident Investigation Bureau (AAIB) Malaysia. The incident only came to the attention of the AAIB after a notification was received via email from the Indonesian National Transportation Safety Committee (NTSC) on 27 March 2025.

1.2 Injuries to Persons

Injuries	Crew	Passengers	Others	Total
Fatal	-	-	-	-
Serious	-			-
Minor/None	6	174	-	180
Total	6	174	-	180

Table 1: Injuries to Persons

1.3 Damage to Aircraft

Preliminary investigation indicates several significant damages have been observed on the aircraft after the incident. The Initial Damage Assessment is provided in Appendix A.

1.4 Other Damage

Nil

1.5 Personnel Information

1.5.1 Pilot A321-211

Status	Pilot in Command (PIC)
Nationality	Indonesian
Age	51 years old
Gender	Male
License Type	ATPL
License Validity	Valid until 31 Mei 2025
Aircraft Rating	Multi-Engine Land

Instructor Rating	Nil
Total Hours on Type	81.26 hrs
Total Flying Hours	8911 hrs
Rest Period Since Last Flight	00:41 hrs
Date of Medical Examination	31 October 2024

1.5.2 Pilot A321-211

Status	Second in Command (SIC)	
Nationality	Indonesian	
Age	29 years old	
Gender	Male	
License Type	ATPL	
License Validity	Valid until 28 February 2026	
Aircraft Rating	Multi-Engine Land	
Instructor Rating	Nil	
Total Hours on Type	Nil hrs	
Total Flying Hours	3225 hrs	
Rest Period Since Last Flight	00:41 hrs	
Date of Medical Examination	8 January 2025	

Both pilots were licensed, qualified, and approved to perform the flight in accordance with existing regulations. The Pilots were medically fit to operate the flight.

It was observed that both pilots flew two different types of aircraft (A320 and A321) on the same day and had a rest period of less than 1 hour before performing this flight.

1.6 Aircraft Information

Aircraft Type	Airbus A321-211
Manufacturer	France
Year of Manufacturer	2004
Owner	ZI JIANAN Aircraft Leasing (Shanghai)
Registration No.	PK-TLG
Aircraft Serial No.	MSN 2309
C of A Expiry Date	5 November 2025
C of R Expiry Date	23 September 2027

The aircraft was airworthy when dispatched for the flight. Additional information will be included in the Final Report.

1.7 Meteorological Information

The incident occurred during nightlight hours. Weather conditions at WMSA between 1900 and 2000 LT were fine, with visibility reported to be over 10 kilometres and winds from the northwest at 8 knots, varying between 260° and 340°. The following METARs were in effect:

METAR WMSA 141300Z 01003KT 300V100 9999 FEW017CB 29/24 Q1010 METAR WMSA 141200Z 30008KT 280V340 9999 FEW017CB 30/25 Q1009 METAR WMSA 141100Z 29008KT 260V330 9999 FEW017CB 30/25 Q1008

Detailed weather data is being collected, focusing on local meteorological conditions around WMSA airfield at the time of the incident, to assess whether any weather-related factors may have influenced Flight 8B 699.

1.8 Aids to Navigation

All navigation aids fitted on the aircraft and installed at WMSA were operational at the time of the occurrence.

1.9 Communications

All ATC communication frequencies were operating normally.

1.10 Aerodrome Information

Sultan Abdul Aziz Shah Airport, Subang (WMSA) Latitude 030752N Longitude 1013253E with an elevation of 89 feet and 3780 feet of runway length available for the landing (LDA). Runway 15 and 33 were used for the landing with no abnormality on the surface condition.



Figure 1: Sultan Abdul Aziz Shah Airport (WMSA)

1.11 Flight Recorders

The aircraft A321-211, Registration PK-TLG was equipped with a Flight Data Recorder (FDR) and a Cockpit Voice Recorder (CVR). The data from FDR and CVR will be downloaded for analysis.

1.12 Wreckage and Impact Information

The aircraft had several defects found after being inspected as stipulated in Appendix A. There are no FOD or damages on the runway and its facilities were reported following that heavy landing incident.

1.13 Medical and Pathological Information

As no medical examination was conducted for the pilots immediately after the incident, their health status could not be conclusively verified.

1.14 Fire

There was no indication of fire inflight or after landing.

1.15 Survival Aspects

Not applicable

1.16 Tests and Research

To be included in Final Report.

1.17 Organisational and Management Information

1.17.1 Aircraft Operator

PT TransNusa Aviation Mandiri, operating as TransNusa, is an Indonesian airline headquartered in Jakarta. Established on 4 August 2005, the airline initially focused on serving destinations in East Nusa Tenggara, utilizing aircraft chartered from Pelita Air and Trigana Air Service. In August 2011, TransNusa obtained its own Air Operator's Certificate (AOC) and commenced scheduled commercial operations as a regional carrier.

In August 2024, TransNusa became the first foreign airline to initiate scheduled international flights to WMSA. This milestone followed approval from the Malaysian Aviation Commission, positioning TransNusa among a select group of six airlines, including two foreign carriers, authorized to operate from Subang Airport. TransNusa's daily service commenced on 1 August 2024, with flight 8B699 departing WIII to WMSA and the return flight, 8B698, departing from WMSA to WIII.

Despite the introduction of the Subang's route, TransNusa continued to maintain its existing services, including three daily flights from Jakarta to KLIA and four weekly flights to Johor Bahru.

1.18 Additional Information

To be included in Final Report.

1.19 Useful or Effective Investigation Techniques

Shall be included in the Final Report.

2.0 ANALYSIS

Shall be included in the Final Report.

3.0 CONCLUSION

3.1 Findings

The preliminary findings of the investigation are as follows:

- 3.1.1 The pilot was properly licensed and qualified for the flight.
- 3.1.2 Both pilots were medically fit before flight.
- 3.1.3 Both pilots operated two different types of aircraft on that day of the incident.
- 3.1.4 The aircraft had valid airworthiness certification and registration.
- 3.1.5 PIC did not record the hard landing incident in the aircraft maintenance log.
- 3.1.6 Additional findings shall be included in the Final Report.

3.2 Causes/Contributing Factors

Shall be included in the Final Report.

4.0 IMMEDIATE SAFETY ACTIONS

- 4.1 The operator shall put in place clear procedures to ensure all incidents are reported on time to the appropriate air accident authority, especially to the State of Occurrence authority.
- 4.2 Other safety recommendations shall be included in the Final Report.

5.0 LIST OF APPENDICES

Α	Initial Damage Assessment	A-1 to A-7
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INVESTIGATOR IN-CHARGE

Air Accident Investigation Bureau Ministry of Transport Malaysia

APPENDIX A

INITIAL DAMAGE ASSESSMENT

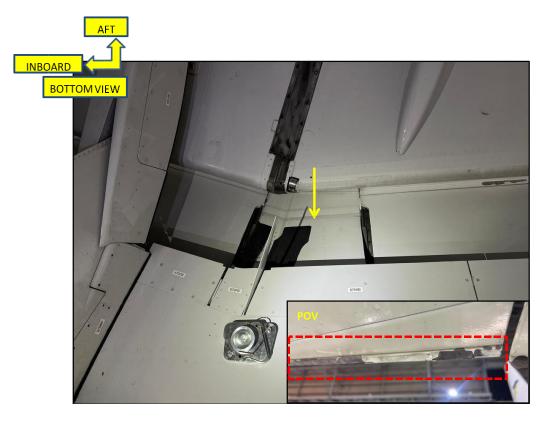


Figure 1: RH Strip Rubbing Trailing Edge Falsework between Spoiler 1 & 2

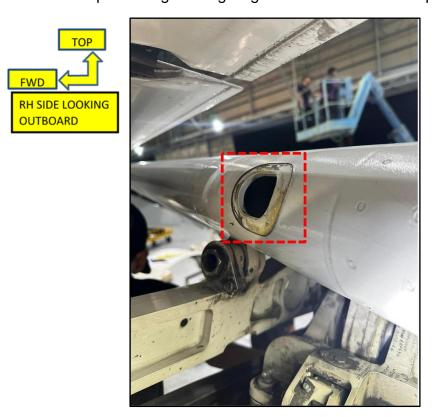


Figure 2: RH Flap Trap Fairing No. 3 Hoist Patch Missing

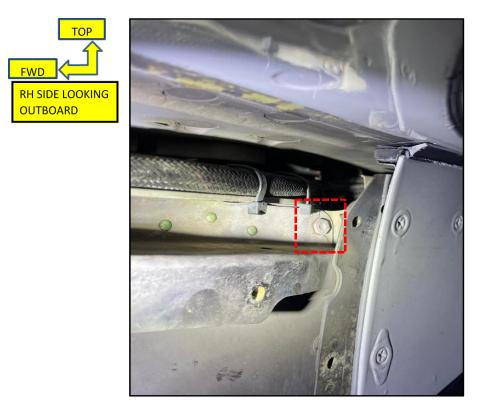


Figure 3: Crack found at Pylon Bracket inboard Engine No. 2

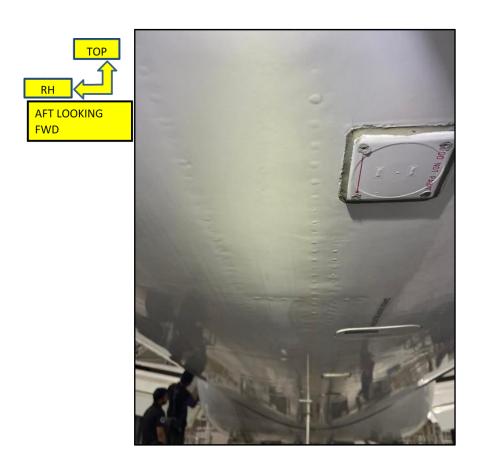


Figure 4: Suspected Skin Buckling at FR50-65

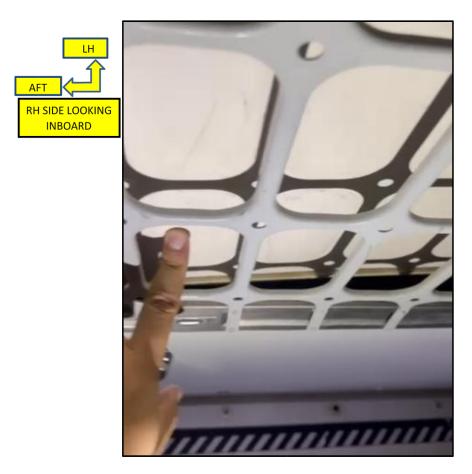


Figure 5: Aft Cargo Decompression Panel Unlatched

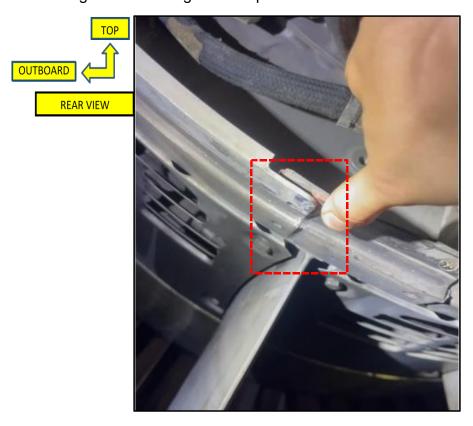


Figure 6: Engine No. 1 Flange Aft of VBV Rivet Pop-Out

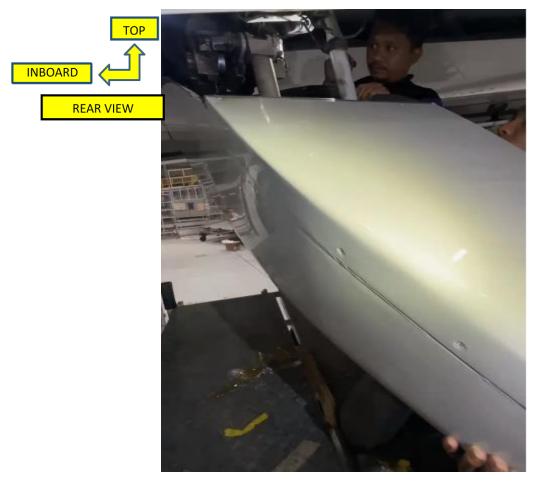


Figure 7: All Flap Fairing High Free-Play

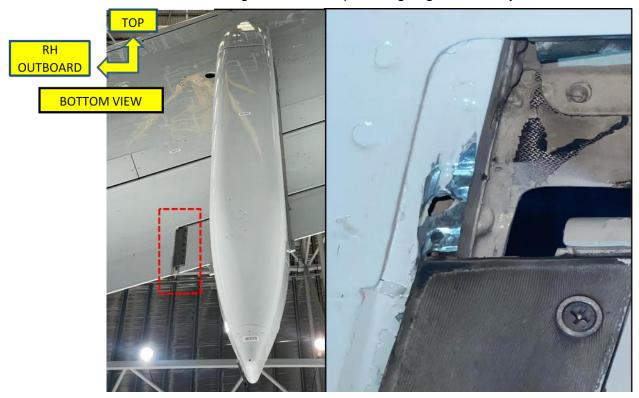


Figure 8: RH Outboard Flap Punctured

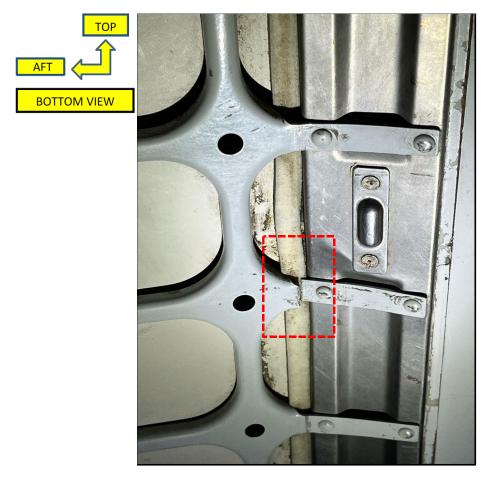


Figure 9: Forward Cargo Decompression Panel Broken



Figure 10: Gouge on LH Flap Rubber Strip

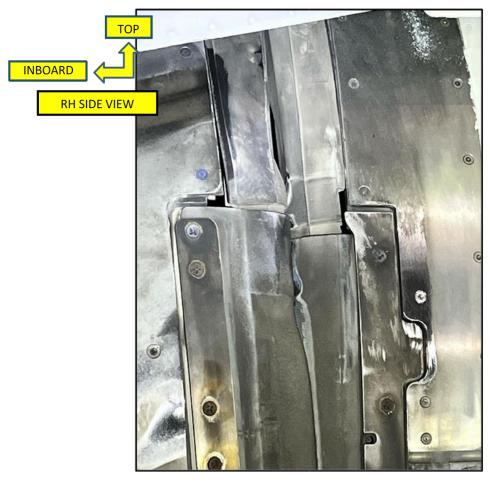


Figure 11: Sign on Seal Distortion on RH Flap



Figure 12: Loose Bearing on Engine No. 1 Pylon Inboard Panel

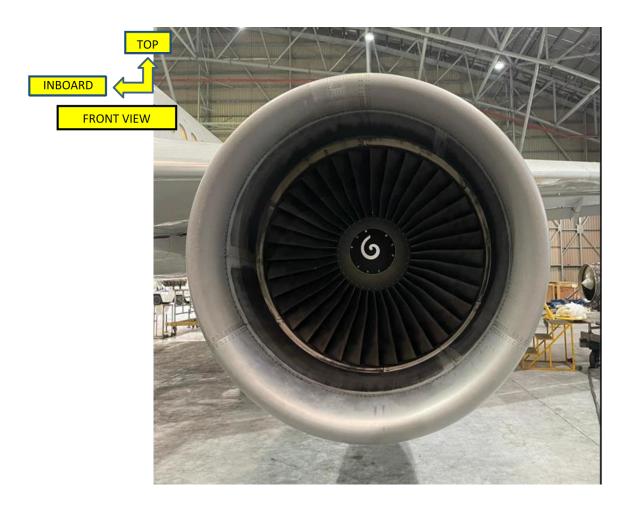


Figure 13: Engine No. 1 Ran Rotor Unsmooth Rotation