Republic of the Philippines
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

AIRCRAFT ACCIDENT INVESTIGATION AND INQUIRY BOARD

FINAL REPORT

RP-C7202

AVION TRANSPORT REGIONAL ATR 72-212A

OPERATOR: AIRSWIFT TRANSPORT, INC.

TYPE OF OPERATION: COMMERCIAL AIR TRANSPORT

DATE OF OCCURRENCE: FEBRUARY 23, 2024

PLACE OF OCCURRENCE: LIO AIRPORT, EL NIDO, PALAWAN, PHILIPPINES

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(Avion Transport Regional ATR 72-212A Final Report)

FOREWORD

This report was produced by the Aircraft Accident Investigation and Inquiry Board (AAIIB), Civil Aviation Authority of the Philippines, MIA Road, Pasay City, Philippines.

The report is based upon the investigation carried out by the AAIIB in accordance with Annex 13 to the Convention on International Civil Aviation, Republic Act 9497 Section 42, and Philippine Civil Aviation Regulation Part 13.

Readers are advised that the AAIIB investigates for the sole purpose of enhancing aviation safety. Consequently, AAIIB reports are confined to matters of safety significance and may be misleading if used for any other purpose. It should be noted that the information in AAIIB reports and recommendations is provided to promote aviation safety, and in no case is it intended to imply blame or liability.

Furthermore, no part of the AAIIB report or reports relating to any accident or investigation shall be admitted as evidence or used in any suit or action for damages arising out of any matter mentioned in such report or reports.

FINAL REPORT

TITLE: A serious incident occurred on February 23, 2024, involving an ATR 72-212A aircraft with registry number RP-C7202, operated by AirSWIFT Transport Inc., which experienced a runway side excursion during landing at Lio Airport in El Nido, Palawan, Philippines.

Notification of Occurrence to National Authority

The serious incident was reported by the AirSWIFT Safety Manager to the OIC–CAAP AAIIB on February 23, 2024.

Identification of the Investigation Authority

The Aircraft Accident Investigation and Inquiry Board (AAIIB), the mandated accident investigation organization within the Civil Aviation Authority of the Philippines (CAAP) as the state of Occurrence/Registry/Operator conducted the investigation.

Organization of the Investigation

In accordance with the provisions of the Philippine Civil Aviation Regulation (PCAR) Part 13, an Investigator-In-Charge was appointed.

Authority Releasing the Report

The Final Investigation Report was released by the Aircraft Accident Investigation and Inquiry Board (AAIIB) and published on the CAAP website on **30 May 2025.**

Synopsis:

On or about 0658H of February 23, 2024, an ATR 72-212A aircraft, registered as RP-C7202, veered off the runway after landing on runway 15 at Lio Airport in El Nido, Palawan, Philippines. The aircraft was operated by AirSWIFT Transport, Inc., a local commercial airline based at Ayala Malls Manila Bay, Diosdado Macapagal Blvd. corner ASEANA Ave., Parañaque City, Philippines. The flight was a scheduled commercial route from Manila to El Nido, with two (2) flight deck crew, two (2) cabin crew, and sixty-six (66) passengers onboard. The crew and all passengers deplaned the aircraft without any reported injuries. The investigation identified the probable cause of the incident as the flight crew's failure to maintain directional control of the aircraft during landing.

LIST OF ACRONYMS AND ABBREVIATIONS

AAIIB	:	Aircraft Accident Investigation and Inquiry Board
AMT	:	Aircraft Maintenance Technician
ATO	:	Approved Training Organization
BIA	:	Bicol International Airport
CAAP	:	Civil Aviation Authority of the Philippines
CoA	:	Certificate of Airworthiness
CoR	:	Certificate of Registration
CPL	:	Commercial Pilot License
CRM	:	Crew Resource Management
DME	:	Distance Measuring Equipment
IAS	:	Indicated Airspeed
IATA	:	International Air Transport Association
ICAO	:	International Civil Aviation Organization
NM	:	Nautical Miles
OFSAM	:	Office of the Flight Surgeon and Aviation Medicine
PAPI	:	Precision Approach Path Indicator
PL	:	Power Lever
RFFS	:	Rescue and Firefighting Services
RPM	:	Revolution Per Minute
SIAS	:	Standard Indicated Airspeed
SOP	:	Standard Operating Procedure
VFR	:	Visual Flight Rules
Vrtg	:	Vertical Load Factor

1. FACTUAL INFORMATION

Aircraft Registration No.	:	RP-C7202
Aircraft Type/Model	:	Avion Transport Regional ATR 72-212A
Operator	:	AirSWIFT Transport, Inc.
Address of Operator	:	5001-5006 5th Floor, Ayala Malls Manila Bay, Diosdado Macapagal Blvd., corner ASEANA Ave., Parañaque City, Philippines
Place of Occurrence	:	Lio Airport, El Nido, Palawan, Philippines
Date/Time of Occurrence	:	February 23, 2024, at about 0658H/2258 UTC
Type of Operation	:	Scheduled Commercial
Phase of Flight	:	Landing
Type of Occurrence	:	Runway Side Excursion

1.1 History of the Flight

On or about 0658H of February 23, 2024, an ATR 72-212A type of aircraft with registration number RP-C7202 and flight number ATX-106 experienced a runway excursion incident after landing on runway 15 of Lio Airport in El Nido, Palawan, Philippines. The aircraft is owned and operated by AirSWIFT Transport, Inc. The aircraft had earlier departed at around 0531H from Manila for a scheduled commercial flight to El Nido, Palawan. On the aircraft were two (2) flight deck crew and two (2) cabin crew, along with sixty-six (66) passengers.

Based on DFDR data, the Training Captain (T/Capt.) was at the controls during landing. The aircraft touched down slightly left of the runway centerline within the touchdown zone. Following touchdown, recorded data show that initial braking was applied by the left-hand seat (CM1), with further inputs observed from the right-hand seat (CM2). Alternating rudder and brake pedal efforts were recorded from both pilots during the landing roll. Despite these inputs, the aircraft veered left of runway 15, resulting in a momentary runway excursion, with the left main landing gear exiting the paved surface.

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The crew subsequently maneuvered the aircraft back onto the runway and executed a 180^{o} turn to taxi toward the ramp.

The aforementioned occurrence was not immediately reported to the concerned units and offices, and the aircraft was flown for an additional two (2) sectors before it was grounded upon its second flight arrival at Lio Airport.

1.2 Injuries to Person (s)

Injuries	Crew	Passengers	Others	TOTAL
Fatal	0	0	0	0
Serious	0	0	0	0
Minor	0	0	0	0
None	4	66	0	70

1.3 Damage to Aircraft

The aircraft did not sustain any damage.

1.4 Other Damages

There was no reported other damage because of this incident.

1.5 Personnel Information

1.5.1 Pilot-In-Command (PIC)

Gender	:	Male
Date of Birth	:	March 31, 1990
Nationality	:	Filipino
License	:	103662 ATPL, valid until October 31, 2027
Type rating	:	Multi Engine Land – ATR 42-500/600, ATR 72-600
Medical Certificate	:	Class 1, valid until September 07, 2024
Date of last medical	:	February 28, 2024
Total flying time	:	6,854 + 35 Hours as of February 23, 2024
Total flying time on type	:	2,217 + 09 Hours as of February 23, 2024

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1.5.2 Training Captain (T/Capt.)

Gender	:	Male
Date of Birth	:	December 24, 1994
Nationality	:	Australian
License	:	014742 ATPL, valid until January 18, 2029
Type rating	:	Multi Engine Land – ATR 42/72-600
Medical Certificate	:	Class 1, valid until December 06, 2024
Date of last medical	:	October 25, 2023
Total flying time	:	3,104 + 12 Hours as of February 23, 2024
Total flying time on type	:	2,835 + 00 Hours as of February 23, 2024

1.6 Aircraft Information

The ATR 72-212A is a regional turboprop aircraft developed by the French-Italian aircraft manufacturer ATR (Aerei da Trasporto Regionale or Avions de transport régional). It is a stretched variant of the ATR 42 and designed for short to medium-haul flights.

It is widely used by regional airlines around the world due to its efficiency, reliability, and cost-effectiveness. It is suitable for short to medium-haul routes, often serving routes that are not economically viable for larger jets.

1.6.1 Aircraft Data

Registration Mark	:	RP-C7202
Manufacturer	:	Avions de transport régional (ATR)
Country of Manufacturer	:	France and Italy
Type/Model	:	ATR 72-212A
Operator	:	AirSWIFT Transport, Inc.
Serial No.	:	1492
Year of Manufacture	:	2018
Certificate of Airworthiness	:	Valid until June 29, 2024
Certificate of Registration	:	Valid until June 28, 2024
Category	:	Transport
Gross Weight	:	23,000 kgs.
Number of Flight Crew	:	2/2
Number of Passengers	:	72
Airframe total time	:	7,156 + 55 Hours since last C of A

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1.6.2 Engine Data

Manufacturer	:	Pratt and Whitney
Type	:	Turboprop
Model	:	PW127M
Engine Serial No.	:	ED1599 (ENG 1), ED1600 (ENG 2)
Engine Total Time	:	7,156 + 33 Hours since last C of A

1.6.3 Propeller Data

Manufacturer	:	Hamilton Sundstrand
Type	:	Constant Speed
Model	:	568F-1
Propeller Serial No.	:	FR2017120017 (ENG 1), FR2017120018 (ENG 2)
Propeller TBO	:	10,500 Hours
Propeller Total Time	:	7,156 + 33 Hours since last C of A

1.7 Meteorological Information

Visual Meteorological Conditions (VMC) prevailed at the time of the occurrence. The actual METAR provided by the Lio Airport Tower was as follows:

Wind Condition	Visibility	Temperature	Dewpoint	QNH
3 knots at 070°	Ok	26°C	23°C	1013hPa

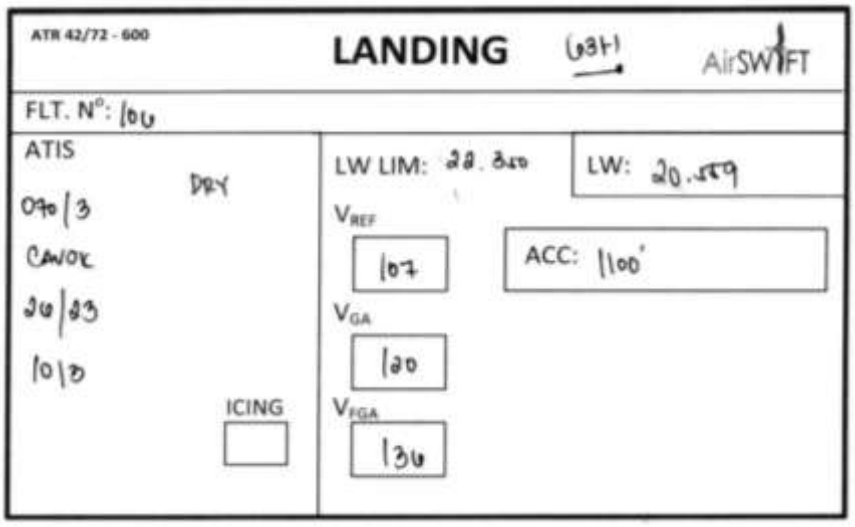

Figure 1 – AirSWIFT flight ATX-106 landing card last February 23, 2024.

At the time of the incident, the Lio Airport Tower utilized a VAISALA Automated Weather Observing System (AWOS) as its source of weather data. This equipment carried the latest certification issued by the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) under the Department of Science and Technology

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(DOST). It was calibrated on January 18–19, 2024, and, according to PAGASA's Instrument Calibration Laboratory, a calibration validity period of one (1) year is recommended for meteorological instruments.

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Philippine Atmospheric, Geophysical and Astronomical Services Administration
(PAGASA)

AO-01 Rev.0/02-16-2023

CERTIFICATE NO. 001
Series 2024

Type of Instrument : Automated Weather Observing System (AWOS)
Brand : VAISALA
Model / Serial number: HMP-155 / V3740809 (RH & T)
: PTB 330 / V3810771 (Pressure)
Owner : Swift Aerodrome Services, Inc.
Validation Site : El Nido Aerodrome
Validation Date : 18 January 2024

This is to certify that the above Instrument was compared and validated with the travelling standard of the PAGASA Instrument Calibration Laboratory (PICL) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) of the Department of Science and Technology (DOST) with the following results:

Validation Results for Pressure:

Range of Observation (hPa.)	Average Correction (hPa.)	Operationally Desirable Accuracy (hPa.)
1012.2 – 1008.9	+ 0.15	+/- 0.5

Validation Results for Temperature:

Range of Observation (°C)	Average Correction (°C)	Operationally Desirable Accuracy (°C)
31.0 - 28.2	- 0.1	+/-1.0

Validation Results for Humidity:

Range of Observation % RH	Average Correction % RH	Operationally Desirable Accuracy (% RH)
67.0 – 57.0	- 0.86	+/-3.0

Averaged Environmental Conditions:

T = 29.9 °C	RH = 62.2 %	P = 1010.6 hPa

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Philippine Atmospheric, Geophysical and Astronomical Services Administration
(PAGASA)

CERTIFICATE NO. 02
Series 2024

Type of Instrument : Automated Weather Observing System (AWOS)
Brand : VAISALA
Model / Serial number: Ultrasonic Wind sensor
: Serial number – V3730476
Owner : Swift Aerodrome Services, Inc.
Validation Site : El Nido Aerodrome
Validation Date : 19 January 2024

This is to certify that the above Instrument was compared and validated at **El Nido Aerodrome** of **Swift Aerodrome Services, Inc.** with the traveling standard of the PAGASA Instrument Calibration Laboratory (PICL) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) of the Department of Science and Technology (DOST) with the following results:

Validation Results for Wind:

Range of Observation (mps)	Average Correction (mps)	Operationally Desirable Accuracy (mps)
0.92 – 3.48	- 0.0	+/- 0.5

Standard Reference Used:

For Wind Sensor

Type	Serial Number	Calibration Date	Certificate Number	Issuing Lab/Traceability
Digital Anemometer (GILL)	1534027	04 April 2023	PICL2023-04B-001	PAGASA

Validated by:
WILFREDO H. TUAZON
Laboratory Manager, PICL
PICL/HTMIRDS/RDTD

Attested by:
MARCOS P. BACANI
Weather Observer III
METTSS/ETSD

Figure 2 – PAGASA issued certificates.

1.8 Aids to Navigation

The flight was carried out under Visual Flight Rules (VFR). Likewise, the airport is equipped with PAPI and runway edge lights.

1.9 Communications

The aircraft is equipped with a standard radio transceiver. Communications were carried out between the pilot, Lio Airport Tower, and other traffic.

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1.10 Aerodrome Information

Lio Airport (IATA: ENI, ICAO: RPEN), also known as El Nido Airport, is a small, private airport located in Brgy. Villa Libertad, El Nido, just a few kilometers from the town center. Serving as the primary gateway to this stunning tropical destination, the airport is nestled within the lush surroundings of the Lio Tourism Estate, a sustainable development by Ayala Land designed to preserve the area's natural beauty. The terminal features an open, minimalist design that incorporates local materials, blending seamlessly with its natural environment. In alignment with the eco-tourism principles of the Lio Estate and El Nido, the airport emphasizes sustainable practices to minimize its environmental impact while supporting the region's growing tourism industry.

The airport features a single runway, designated as 15/33, stretching approximately 1,000 meters in length. Owned and managed by Swift Aerodrome Services, Inc. (SASI), Lio Airport connects El Nido to major cities such as Manila, Cebu, and Clark through direct flights. Currently, only ATR 42 and ATR 72 series aircraft operate at the airport.

1.11 Flight Recorders

The aircraft is equipped with Digital Flight Data Recorder (DFDR) and Cockpit Voice Recorder (CVR) as required by the Philippine Civil Aviation Regulations (PCAR).

The recorded parameters and data were intact and allowed an accurate reconstruction of the incident dynamics. The data were analyzed and validated with the assistance of the Transport Safety Investigation Bureau (TSIB) of Singapore using the appropriate interpretation tools.

1.11.1 DFDR

Manufacturer	: L-3 Aviation Products
Model	: FA2100
Part No.	: 2100-4245-00
Serial No.	: 0001211917

The recording quality of the FDR data was of good quality. The FDR contained 228,233 seconds of synchronized subframe data that included recorded data of the incident flight. The FDR had 1,063 parameters in the data frame file. The document "DFDR recorded parameters decoding law" (Service Letter No. ATR72-31-6010 Rev. 12) provided by the operator was used to convert the FDR data to engineering units based on data frame version V4. Timings of all the downloaded data are based on UTC, with each subframe increasing by 1 second.

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On the flight data readout, the aircraft departed from Ninoy Aquino International Airport (NAIA) on runway 13 at 2149 UTC with a gross weight of 21.3 tons and headed toward El Nido Airport in the southwest direction.

During the approach phase, the crew executed a visual approach to runway 15 (QFU 147°), keeping the autopilot engaged until reaching 1,000 feet RA.

At 2,900 feet RA, the aircraft was aligned with RPEN runway 15, approximately 9 NM from the runway threshold, with a recorded left crosswind of 28 knots between 3,000 and 2,000 feet RA. As the aircraft descended, the flaps were set to 15° at 2,300 feet RA, and the landing gear was lowered at 2,198 feet RA at 22:51:09 UTC. The indicated airspeed (IAS) decreased from 170 to 120 knots between 2,300 and 2,100 feet RA, at which point the flaps were further extended to 30°. From 2,000 to 1,400 feet RA, the left crosswind gradually decreased to 15 knots, with a drift angle of approximately 10°. It then reached 20 knots at 1,200 feet RA before decreasing to 10 knots around 1,000 feet RA, where the drift angle was approximately 5°.

The autopilot was disconnected at 22:53:02 UTC (around 1,000 feet RA) during the aircraft's descent to El Nido, with recorded control inputs on CM1's control column (CM1 was the PF).

Further DFDR analysis provided the following data:

a. From 1,000 feet RA to 130 feet. RA,
- IAS was around 120 knots on average (SIAS = 107 knots)
- PLs were maintained around 50°, with torque around 20%
- Heading was varying between 143° and 151° (QFU at 147°)
- Left crosswind was around 10 knots which indicates a drift angle between 0° and 5°
- Roll angle varied between -5° and 5°
- Pitch angle was stabilized around -1°
- Vrtg varied between +0.7g and +1.2g

b. At 130 feet RA,
- PLs were pushed to 68° and retrieved to 60°
- IAS was at 113 knots
- Torque increased to 53%
- Pitch angle increased to +1.6°

c. At 85 feet RA,
- PL were pulled back around 50°
- Torque decreased back to 20%
- Pitch angle decreased to -2.5°

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d. At 75 feet RA,
- A succession of nose-up and nose-down efforts started to be applied on CM1
- Elevators deflection varied between 5^{o} and -5^{o}
- Pitch angle started to increase from -2.5^{o} with variations

e. At 45 feet RA,
- The yaw damper was disconnected
- The rudder trim increased from -1.6^{o} to +1.3^{o}

f. At 37 feet RA, the aircraft was above the runway threshold, and by 15 feet RA, the pitch angle reached +2.5°.

g. At 10 feet, a right rudder pedal input was recorded, causing the rudder to deflect and the heading to increase (nose turning to the right) from 147° to 154°, which was reached at touchdown.

Note: Handling quality computations confirmed that this heading change is due to RH rudder input and wind change. Wind direction changed from left crosswind to right crosswind just before touchdown. The magnitude of the wind speed remained of a similar nature.

h. At 2 feet RA,
- Elevators deflection reached an extremum of -9^{o} (nose up)
- A nose-up effort of 10 daN was recorded on CM1, while CM2 recorded a nose down input (opposite input)
- A left turn deflection of 7° was recorded on the ailerons, causing the roll angle to increase from wings level to -5° left.
- Pitch angle at +2.8^{o} started to decrease

i. One (1) second before touchdown, CM2 applied a nose-down effort of up to 8 daN, while CM1 continued applying a nose-up effort (opposite input). Likewise, PLs were moved to flight idle (35°).

DFDR review additionally shows that the aircraft was configured for landing with flaps at 30° and approached the runway with a track of 147°, drifting left of the centerline, while its heading was 154°, indicating the nose was slightly to the right. The aircraft touched down at 22:54:30 UTC at approximately 520 meters beyond the threshold, with a flat landing where all three (3) gears made contact simultaneously at a pitch angle of 0°. Upon touchdown, the aircraft experienced a maximum vertical acceleration of 1.2g and a lateral acceleration of -0.2g (toward the right) at an indicated airspeed of 114 knots. Also on touchdown, the CM1 (LH seat) applied a nose-down effort while the CM2 (RH seat) effort was released. Likewise, a 40 daN left rudder pedal input was recorded, deflecting the rudder up to 23° (85% of full deflection), followed by rapid alternating rudder inputs from left

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to right and back to the left. One second later, the power levers were set to ground idle (20°) and ground speed decreased from 112 knots with the heading reduced to 146° aligning more closely with the runway QFU of 147°. It was also noted that the reversers were engaged at more than idle thrust.

At 22:54:32 UTC, the CM1 (LH seat) applied brakes with an initial low pressure of 800 psi on the right brakes and 580 psi on the left brakes. Simultaneously, a 30 daN nose-right effort was recorded on the rudder pedal, causing the rudder to deflect up to 75% of full deflection. The aircraft experienced 0.3g of left acceleration while a 33 daN nose-down effort was applied on CM1, resulting in full nose-down elevator input, which was maintained until the runway excursion. The elevators deflected to 13°, and the aircraft underwent 0.3g of deceleration. At this point, the heading was 146° (QFU = 147°), power levers (PLs) were retarded to reverse at an indicated airspeed of 105 knots, and braking effort was applied on CM1 brake pedals.

At 22:54:34 UTC, a nose-left effort of 160 N was recorded on the rudder pedal, reaching full deflection over approximately 3 seconds while the aircraft experienced 0.4g of deceleration, 0.3g of right acceleration, and a heading of 151° (QFU = 147°).

At 22:54:36 UTC, the recorder captured efforts applied on both the CM1 and CM2 brake pedals. At this time, the aircraft was traveling at a ground speed of 87 knots, with a heading of 149° and a roll angle of +3°. The RH seat pilot applied the right brake first, followed by the left, while the LH seat pilot released the left brake but maintained pressure on the right. Despite increasing right brake pressure to a maximum of 3,000 psi, the aircraft continued veering left, with the left rudder pedal also being depressed. By the time it reached 800 meters beyond the runway threshold, it had already begun drifting left of the centerline.

At 22:54:37 UTC, PLs started to be pushed back and the aircraft experienced 0.3g of deceleration and 0.4g of left acceleration. Aircraft heading was 142° with a ground speed of 73 knots.

At 22:54:39 UTC, PLs started to be pushed back from REV and an effort on CM1 was released with the elevator deflection started to reduce. At this time, the aircraft heading was 137° and ground speed of 65 knots. A nose right effort of -700 N was also recorded on the rudder pedal with the rudder reaching its full nose right deflection and remains at that position. During this time, the GPS-recorded positions indicate that the aircraft's left-hand main landing gear was outside the paved runway surface, and the aircraft experienced a momentary runway excursion approximately 880 meters beyond the threshold.

At 22:54:40 UTC, CM1 released its nose down effort and CM2 started to apply one. The elevator deflection was recorded null. At this time, the aircraft had a heading of 138°, a ground speed of 56 knots, and an IAS of 45 knots.

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At 22:54:42 UTC, CM1 released the brake pedals, and efforts on the right rudder pedal were reduced. The aircraft's heading was recorded at 154°, with a ground speed of 38 knots, an IAS of 27 knots, and a PL angle of 15° (TQ = 12%).

At 22:54:44 UTC, the aircraft was back within the runway centerline at approximately 1,000 meters from the threshold of runway 15. Aircraft heading at this time was 169°, ground speed of 22 knots, and PL angle of 5° (TQ = 12%). A nose down effort on CM2 was noted to be released during this time.

At 22:54:49 UTC, the CM2 brake pedals were released, with the aircraft heading at 160° and a ground speed of 7 knots.

At 22:55:20 UTC, the aircraft was noted to be at approximately 1,080 meters from the runway threshold of runway 15 traveling at 9 knots and performing a 180° at the runway end before starting to taxi towards the airport ramp area.

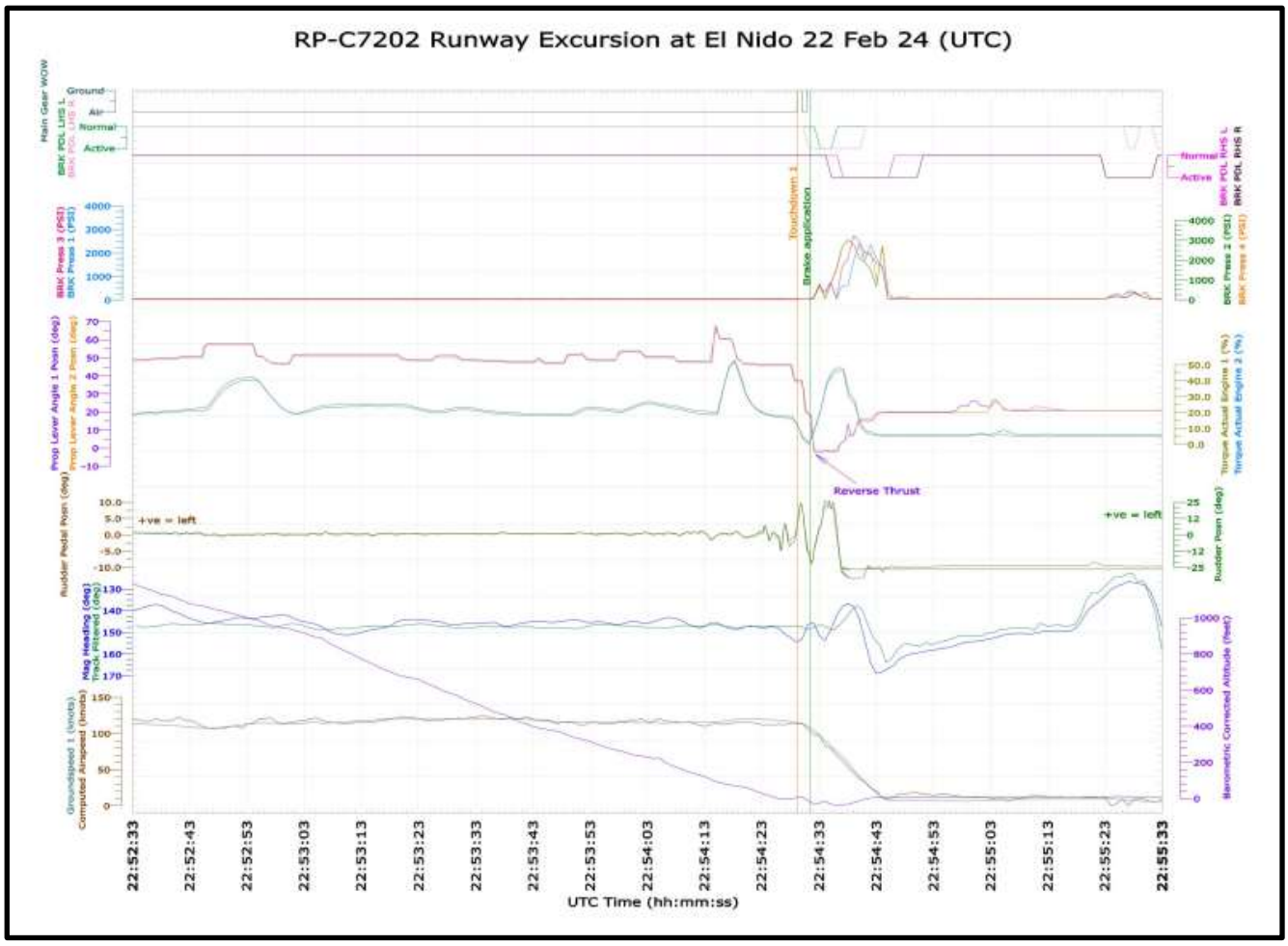

Figure 3 – DFDR readout of RP-C7202 runway excursion.

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1.11.2 CVR

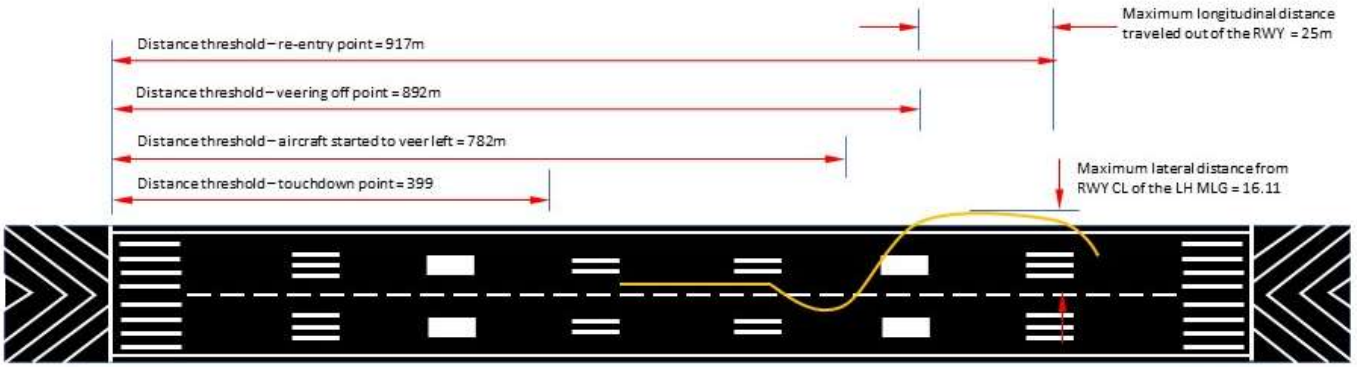
Manufacturer	: L-3 Aviation Products
Model	: FA2100
Part No.	: 2100-1225-22
Serial No.	: 001215491

The CVR was reviewed, and the audio recording of the event was overwritten since the aircraft flew another two (2) sectors before the flight recorders were removed for investigation. Despite this, the remaining audio file captured some significant conversations related to the incident. In the last part of the recording, there was a conversation between the flight crews confirming their awareness of the runway excursion. They discussed that their company's Operations Control Center (OCC), had advised them to call their Chief Pilot, and the T/Capt. mentioned to the PIC that this might be due to the incident during their first landing at Lio Airport that morning. These captured conversations, although incomplete, proved to be valuable in confirming the occurrence of this serious incident.

1.12 Wreckage and Impact Information

A post-incident runway inspection revealed evidence of hard braking by the right main landing gear. Similarly, tire marks indicated that the aircraft started to veer to the left side of the runway centerline, approximately 383 meters from its touchdown point. Additionally, traces showed that the aircraft's left main landing gear exited the paved portion of the runway approximately 493 meters from its touchdown point, at coordinates 11° 11' 56" N, 119° 25' 7.4" E. The left main landing gear spent approximately 25 meters in the grassy/unpaved area before returning to the concrete surface of the runway at coordinates 11° 11' 55" N, 119° 25' 7" E. Furthermore, the left main landing gear was out of the paved portion of the runway, approximately 16.11 meters from the runway centerline.

After the momentary runway excursion, the crew was able to taxi the aircraft to the ramp without any reported damage or issues with aircraft handling.



Note: Not drawn to scale

RP-C7202 – Lio Airport, El Nido, Palawan/23 Feb 2024

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Figure 4 – Tire marks indicating the aircraft LH main landing gears exited the runway and evidence of hard braking actions on the RH main landing gear.

Figure 5 – Off runway tire marks.

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Figure 6 – Tire marks of the aircraft re-entering the paved portion of the runway.

1.13 Medical and Pathological Information

The PIC/FI and T/Capt. underwent the mandatory Drug and Alcohol Testing upon arrival in Manila. The result was then later endorsed to CAAP OFSAM for the required post-accident medical examination. Both pilots were later issued with a medical clearance by the mentioned CAAP office.

1.14 Fire

No reports were received regarding any post-incident fires.

1.15 Survival Aspects

The incident was survivable as the aircraft did not sustain any damage during the brief runway excursion. The aircraft was able to taxi to the ramp for passenger deplaning and preparation for its turnaround flight.

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1.16 Test and Research

No additional tests were conducted on the aircraft, as there were no reported technical issues prior to or following the incident.

1.17 Organizational and Management Information

Founded in 2002 as Island Transvoyager (ITI), the company had three Dornier-228 aircraft. All of these were retired by early 2013 and were replaced by ATR 42-500 and later on, added ATR 72-212A to its fleet of aircraft. Ayala Land Inc. acquired ownership of ITI in 2012 and it was rebranded as AirSWIFT last October 2015. Currently, the airline has daily flights from El Nido to Manila and Cebu. It also operates Lio Airport, a private airport at El Nido, Palawan which serves as its hub. AirSWIFT is one of the two known charter airlines in the Philippines which own and operate a private airport.

2. ANALYSIS

2.1 Flight Crew

2.1.1 Training and Qualifications

A review was made of the available pilot's records and was able to establish the following:

a. The PIC/FI has been with AirSWIFT since 22 September 2014 and has been performing the duty of an ATR 42/72 Captain since 08 February 2019.

b. As for the T/Capt., he has been with the company as First Officer for the ATR 42/72 fleet since 27 January 2018. He has been upgraded as a T/Capt. last December 07, 2023.

c. The involved flight crews had just completed the following scheduled trainings:

Training	Date Completed	
	PIC/Flight Instructor	T/Captain
Line Check *	November 25, 2023	November 25, 2023
Recurrent Simulator Training *	September 18, 2023	October 03, 2023
Proficiency Check **	September 19, 2023	October 04, 2023
Crew Resource Management *	June 12, 2023	March 17, 2023
Safety Management System ***	February 14, 2024	April 06, 2023
ACOS/CBT (Aircraft System) *	May 19, 2023	June 06, 2023
Specialized Training (PBN) *	October 24, 2023	September 20, 2023

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Flight Planning and Performance *	October 12, 2023	September 18, 2023
Adverse Weather Operations *	September 04, 2023	November 21, 2023
Inflight Hazard Training (ACAS, EGPWS) *	November 07, 2023	October 13, 2023

Note:

* - Every 12 months
** - Every 6 months
*** - Every 2 years

d. The right-hand seat (RHS) Qualification Training for the PIC/FI was completed on September 18, 2023. His last time in the RHS as an FI before the incident was on January 26, 2024.

e. The T/Capt. last RHS flight was December 16, 2023. Further review of the training records of the involved T/Capt. disclosed that his simulator training from December 20, 2023, to January 19, 2024, with a total of nine (9) simulator sessions was under the following airports:

1. RPLL/NAIA
2. RPVM/Mactan-Cebu
3. RPVV/Busuanga
4. RPVI/Iloilo
5. RPVP/Puerto Princesa

The above list shows that RPEN/Lio Airport is not part of the T/Capt.'s simulator training.

f. According to interviews with both pilots, the flight was the T//Capt.'s first Supervised Line Flying (SLF) seated in the left-hand seat, and it was his first ever landing at Lio Airport as the Pilot Flying (PF) and the one seated in the left-hand seat.

2.1.2 Flight/Duty Schedule

The interview of both pilots did not disclose any issue on their physical capability to man their flight last February 23. 2024. The occurrence flight was their first flight for that day. Based on the scheduled and actual duty period of the FI, there was only a one-time duty exceedance of 00:38 last January 18, 2024. On the other hand, the T/Capt. did not incur any duty time exceedances.

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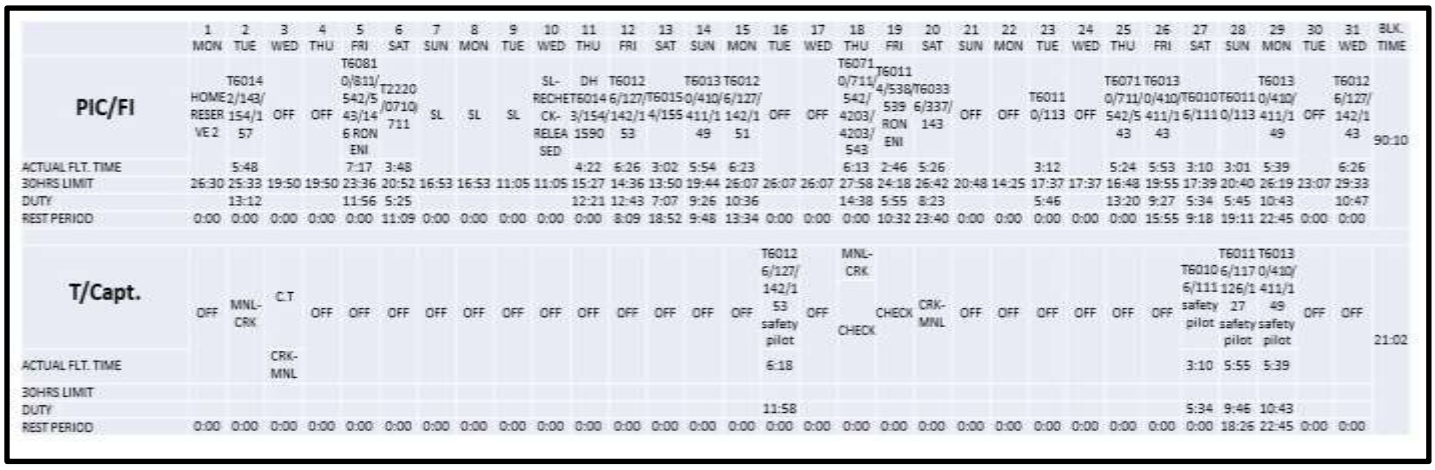
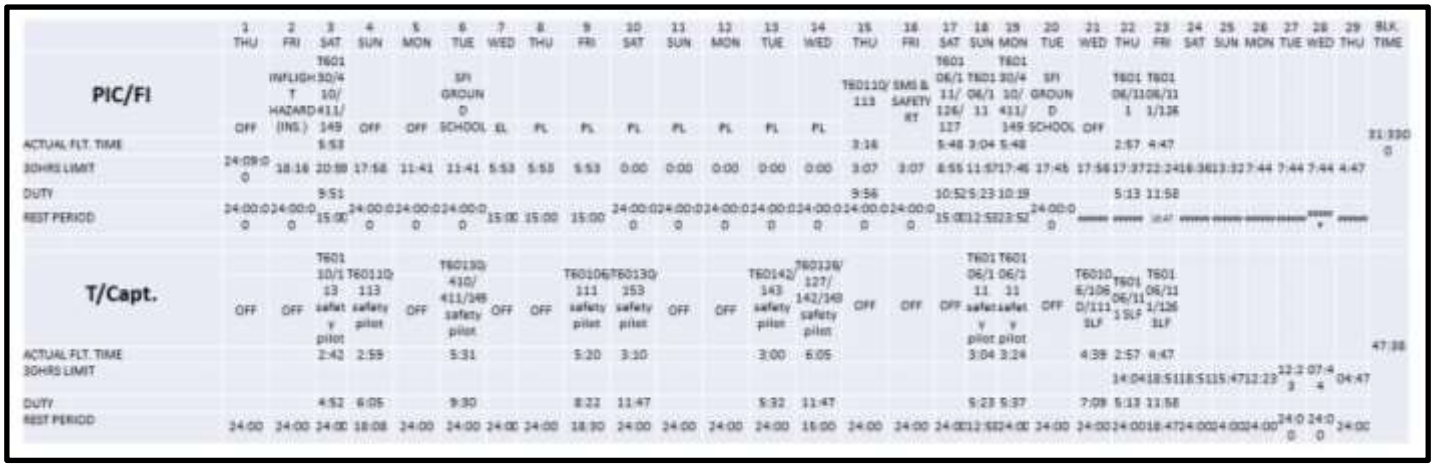


	1 MON	2 TUE	3 WED	4 THU	5 FRI	6 SAT	7 SUN	8 MON	9 TUE	10 WED	11 THU	12 FRI	13 SAT	14 SUN	15 MON	16 TUE	17 WED	18 THU	19 FRI	20 SAT	21 SUN	22 MON	23 TUE	24 WED	25 THU	26 FRI	27 SAT	28 SUN	29 MON	30 TUE	31 WED	BLK. TIME
PIC/FI	HOME RESERVE	T6014 2/143/154/157	OFF	OFF	T6081 0/811/542/543/146 RON ENI	T2220/0710/711	SL	SL	SL	SL-RECHECK-RELEASED	DH 3/154/1590	T6012 6/127/142/153	T6015 4/155	T6013 0/410/411/149	T6012 6/127/142/151	OFF	OFF	T6071 0/711/542/4203/4203/543	T6011 4/538/539 RON ENI	T6033 6/337/143	OFF	OFF	T6011 0/113	OFF	T6071 0/711/542/543	T6013 0/410/411/143	T6010 6/111	T6011 0/113	T6013 0/410/411/149	OFF	T6012 6/127/142/143	90:10
ACTUAL FLT. TIME		5:48			7:17	3:48					4:22	6:26	3:02	5:54	6:23			6:13	2:46	5:26			3:12		5:24	5:53	3:10	3:01	5:39		6:26	
30HRS LIMIT	26:30	25:33	19:50	19:50	23:36	20:52	16:53	16:53	11:05	11:05	15:27	14:36	13:50	19:44	26:07	26:07	26:07	27:58	24:18	26:42	20:48	14:25	17:37	17:37	16:48	19:55	17:39	20:40	26:19	23:07	29:33	
DUTY		13:12			11:56	5:25					12:21	12:43	7:07	9:26	10:36			14:38	5:55	8:23			5:46		13:20	9:27	5:34	5:45	10:43		10:47	
REST PERIOD	0:00	0:00	0:00	0:00	0:00	11:09	0:00	0:00	0:00	0:00	0:00	8:09	18:52	9:48	13:34	0:00	0:00	0:00	0:00	10:32	23:40	0:00	0:00	0:00	0:00	15:55	9:18	19:11	22:45	0:00	0:00	
T/Capt.	OFF	MNL-CRK	CT CRK-MNL	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	T6012 6/127/142/153 safety pilot	OFF	MNL-CRK CHECK	CHECK	CRK-MNL	OFF	OFF	OFF	OFF	OFF	OFF	T6010 6/111 safety pilot	T6011 6/117 126/127 safety pilot	T6013 0/410/411/149 safety pilot	OFF	OFF	21:02
ACTUAL FLT. TIME																6:18											3:10	5:55	5:39			
30HRS LIMIT																																
DUTY																11:58											5:34	9:46	10:43			
REST PERIOD	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	18:26	22:45	0:00	0:00	

Figure 7 – Flight crew schedule for January 2024.



	1 THU	2 FRI	3 SAT	4 SUN	5 MON	6 TUE	7 WED	8 THU	9 FRI	10 SAT	11 SUN	12 MON	13 TUE	14 WED	15 THU	16 FRI	17 SAT	18 SUN	19 MON	20 TUE	21 WED	22 THU	23 FRI	24 SAT	25 SUN	26 MON	27 TUE	28 WED	29 THU	BLK. TIME
PIC/FI	OFF	INFLIGHT HAZARD (INS.)	T601 30/410/411/149	OFF	OFF	SFI GROUND SCHOOL	EL	PL	PL	PL	PL	PL	PL	PL	T6011 0/113	SMS & SAFETY RT	T601 06/11/126/127	T601 06/11	T601 30/4 10/411/149	SFI GROUND SCHOOL	OFF	T601 06/11 1	T601 06/11 1/126							31:33 0
ACTUAL FLT. TIME			5:53												3:16		5:48	3:04	5:48			2:57	4:47							
30HRS LIMIT	24:09:00	18:16	20:38	17:58	11:41	11:41	5:53	5:53	5:53	0:00	0:00	0:00	0:00	0:00	3:07	3:07	8:55	11:57	17:46	17:45	17:58	17:37	22:24	16:36	13:32	7:44	7:44	7:44	4:47	
DUTY			9:51												9:56		10:52	5:23	10:19			5:13	11:58							
REST PERIOD	24:00:00	24:00:00	15:00	24:00:00	24:00:00	24:00:00	15:00	15:00	15:00	24:00:00	24:00:00	24:00:00	24:00:00	24:00:00	24:00:00	24:00:00	15:00	12:52	23:52	24:00:00			12:47							
T/Capt.	OFF	OFF	T601 10/113 safety pilot	T601 10/113 safety pilot	OFF	T601 30/410/411/149 safety pilot	OFF	OFF	T601 06/11/126/127 safety pilot	T601 30/413/153 safety pilot	OFF	OFF	T601 42/143 safety pilot	T601 38/127/142/149 safety pilot	OFF	OFF	OFF	T601 06/11 safety pilot	T601 06/11 safety pilot	OFF	T601 06/11/126 SLF	T601 06/11 1 SLF	T601 06/11 1/126 SLF							
ACTUAL FLT. TIME			2:42	2:59		5:31			5:20	3:10			3:00	6:05				3:04	3:24		4:39	2:57	4:47							47:38
30HRS LIMIT																								14:04	18:51	18:51	15:47	12:23	12:23	07:44	04:47	
DUTY			4:52	6:05		9:30			8:22	11:47			5:32	11:47				5:23	5:37		7:09	5:13	11:58							
REST PERIOD	24:00	24:00	24:00	18:08	24:00	24:00	24:00	24:00	18:30	24:00	24:00	24:00	24:00	18:00	24:00	24:00	24:00	12:52	24:00	24:00	24:00	24:00	18:47	24:00	24:00	24:00	24:00	24:00	24:00	24:00	

Figure 8 – Flight crew schedule for February 2024.

2.1.3 Crew Resource Management

During the interview, it was stated by both that they have a good working relationship and no issues had arisen that may have affected their functions during the flight. Last CRM Training of the Flight Instructor was last June 12, 2023, while the Training Captain was last March 17, 2023, which is still considered valid based on their published annual recency schedule.

2.2 Aircraft Status

2.2.1 Pre-Flight Inspection

Based on the crew interview, the PIC/FI conducted the preflight inspection together with the T/Capt. There were no findings during the inspection. In addition, there were also no remarks of discrepancy from maintenance before it departed from Manila.

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2.2.2 Maintenance Records

A review of the aircraft records shows that there were no open maintenance items/actions that may have restricted the operation of the aircraft.

AirSWIFT **C7202 MEL HISTORY (23 JAN - 22 FEB 2024)**

DATE (LOCAL TIME)	A/C REGISTRATION	ATA CHAPTER	FLIGHT NUMBER	MEL ITEM	CATEGORY	MEL REFERENCE	CORRECTIVE ACTION	DUE DATE	MEL EXTENSION (Y / N)	NEW DUE DATE	RECTIFICATION DATE
3-Feb-24	C7202	52	ADX 126	CARGO DOOR MOTOR ACTUATOR INOP	C	MEL 52-31-01A	PERFORMED REPLACEMENT OF CARGO DOOR ACTUATOR. SATISFACTORY. MEL CLEARED.	13-Feb-24	N	N/A	7-Feb-24
13-Feb-24	C7202	61	ADX 337	PSC 2 SEL CH	A	MEL 61-21-02	PERFORMED REPLACEMENT OF RH ENGINE PROPELLER VALVE MODULE. SATISFACTORY. MEL CLEARED.	15-Feb-24	N	N/A	14-Feb-24
14-Feb-24	C7202	31	ADX 618	NO INDICATION OF LANDING ELEV ON AUTO PRESS PANEL	C	MEL 31-31-04-01	PERFORMED OPERATIONAL TEST OF DIGITAL CONTROLLER. SATISFACTORY. MEL CLEARED.	24-Feb-24	N	N/A	18-Feb-24
16-Feb-24	C7202	34	ADX 127	EFWS – TERRAIN FAULT	A	MEL 34-44-01-01	PERFORMED REPLACEMENT OF TCAS COMPUTER. SATISFACTORY. MEL CLEARED.	19-Feb-24	N	N/A	19-Feb-24

Figure 9 – RP-C7202 MEL record.

2.2.3 Post incident maintenance actions/inspections

After the incident, the following inspections were conducted:

a. Unscheduled Inspection of the Aircraft after Runway Excursion (ATR-A-05-51-15-00001-282A-A) was performed last 23 February 2024;

b. Preliminary Inspection List for MSN 1492 after Runway Excursion (ES-00233867_01_A) was performed last 22 March 2024.

The above inspection did not result in any findings on the aircraft.

2.3 Flight Operations February 23, 2024

2.3.1 Approach

The METAR given by the Tower indicated a wind speed of 3 knots at 070°, however, the actual wind condition as stated by the Flight Instructor during the short final was 9-12 knots which required the flight crew to perform crabbing action due to crosswind conditions. DFDR recorded data later indicated that wind conditions below 1,000 feet is at 10 knots from 090°, resulting in a left crosswind of approximately 5 to 10 knots. With this information, it can be noted that, despite the proper certification of weather equipment at Lio Airport Control Tower, inconsistencies exist between the wind data recorded by the aircraft and that captured by the Tower equipment. The data's margin of difference is not reasonably close, which may impact operational decisions during flight operations.

On the DFDR, all landing gears were lowered at 22:51:09 UTC which was when the aircraft was at around 2,198 feet altitude. At 22:53:02 UTC (around 950 feet), the autopilot was disengaged and the aircraft was configured for landing with flaps at

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30°. The approach track was approximately 147° (aircraft drifting to the left of runway center line) with a heading of 155° (aircraft nose pointing to the right of runway center line). The latter confirmed that the aircraft was in a crabbing position during its final approach.

2.3.2 Before Touchdown, Touchdown to Landing Roll

Personnel interview, site inspection, and DFDR readout revealed the following information:

a. The aircraft landed within the touchdown zone, as stated by both the flight crew and the on-duty ATC, as well as confirmed also by the DFDR data.

b. At 45 feet RA, DFDR analysis revealed that the trim movement before the disconnection of the yaw damper suggests a disconnection of the yaw damper using the feet. On ATR 600 models, the disconnection should be done using a push button when the runway visual references are obtained**.** Any efforts on the rudder pedals with the yaw damper ON will generate a reaction of the automatic rudder trim. Further, this action can destabilize the aircraft and affect directional control during landing, thus increasing the risk of runway excursions or unstable touchdown.

Regarding the disengagement of the yaw damper via rudder pedal input, the absence of CVR data (audio recording of the event was overwritten) together with the lack of crew confirmation, makes it impossible to verify whether a callout was made or if the action was intentional or an omission of SOP by the flight crew.

Below is the ATR-published procedure related to the above subject:

NOR.21.1 Landing

MOVED 15 SEP 2023
ALL

PF	PM
At DH or MDA +100 ft	► HUNDRED ABOVE .... ANNOUNCE
At DH or MDA ▪ **If visual references acquired** ► VISUAL REF.....ANNOUNCE ► APPROACH..... .....CONTINUE ▪ **If visual references not acquired** ► GO-AROUND.... .... ORDER & INITIATE *"Announce , Go-around, set power, flaps one notch".* ► AP .....DISCONNECT & ANNOUNCE ► CAVALRY CHARGE.....CANCEL *Press twice AP disconnection pb to cancel* ► YD DISENGAGEMENT..... ..... ORDER	► MINIMUM .....ANNOUNCE ► YD .... DISENGAGE & ANNOUNCE ► AFCS YD ALARM.....CLEAR ► YAW TRIM..... ..... CHECK
At 50 ft AAL	► 50 FT AAL .....ANNOUNCE *If no automatic call-out*

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2 Autopilot Engagement

30 APR 2020

When the AP is engaged, the pitch, roll, and yaw actuators are connected to the flight controls, the pitch AUTO trim and yaw AUTO trim function are activated.

- Engagement with no vertical upper mode selected: The AP flies current pitch attitude. This is the basic vertical mode (PITCH HOLD, displayed in green). Pitch wheel and TCS can be used to modify the pitch attitude.
- Engagement with no lateral upper mode selected: Depending of the conditions at engagement, the AP levels wings and then maintains wing level (WING LVL, displayed in green), or maintains the current heading (HDG HOLD, displayed in green), or maintains the current bank angle (ROLL HOLD, displayed in green).
  These are the basic lateral mode. TCS pb may be used (Refer to Control Wheel).
- Engagement with a lateral or vertical armed upper mode selected: the AP flies basic mode until the armed mode becomes active
- Engagement with a lateral and/or vertical active upper mode selected: the AP maneuvers to fly to zero the FD command bars
- If AP is engaged while the vertical FD orders are not followed, the reversion is done in pitch hold mode (AP basic mode).

3 Autopilot Disengagement

11 OCT 2017

AP can be disengaged manually or automatically.

Manual disengagement is achieved by action on one of the following devices:

- Quick disconnect pb on control wheel
- Action on pitch trim (normal or STBY)
- AP pb on FGCP
- YD pb on FGCP
- GA pb on PL
- Force of pilot on the pedals over 300 N (66 lb)
- Force of pilot on the control column (pitch axis) over 100 N (22 lb)

c. At 10 feet RA, a right rudder input and a shift from left to right crosswind increased the aircraft's heading from 147° to 154° at touchdown.

d. The analyzed DFDR data likewise shows alternating inputs on the rudder and brake pedals after touchdown. In the interview, neither flight crew mentioned that proper handover of controls or callouts were made during the landing roll and while correcting the aircraft's directional control. Furthermore, the PIC, who was the FI at the time, did not fully take over the controls when the T/Capt. encountered difficulty managing the aircraft, resulting in a lack of decisive intervention.

e. Based on the report and the interviews with both flight crews, they stated that they were aware of landing on the left side of the runway and using hard braking to control the speed and direction of the aircraft. However, both allegedly claimed that they were unaware of having encountered a runway excursion despite the significant deviation of the aircraft from the runway centerline. Both flight crews affirmed that they had not exited the runway.

f. The DFDR data confirmed that the aircraft experienced a momentary runway excursion during landing based on the recorded track and heading of the subject flight. The GPS-recorded positions indicate that the aircraft's left-hand main

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landing gear was outside the paved runway surface approximately 880 meters beyond the threshold.

Based on the on-site investigation, only the left-hand (LH) main landing gear tire marks were visible on the grass outside the runway, indicating that the aircraft's runway excursion was less than 2 meters, based on the lateral distance between the main landing gear and the nose landing gear.

g. The said runway excursion was witnessed by the security personnel manning the gate located at the end of the runway. This was immediately reported to his immediate supervisor for further handling.

Figure 10 – Braking actions by the flight crew during the landing roll.

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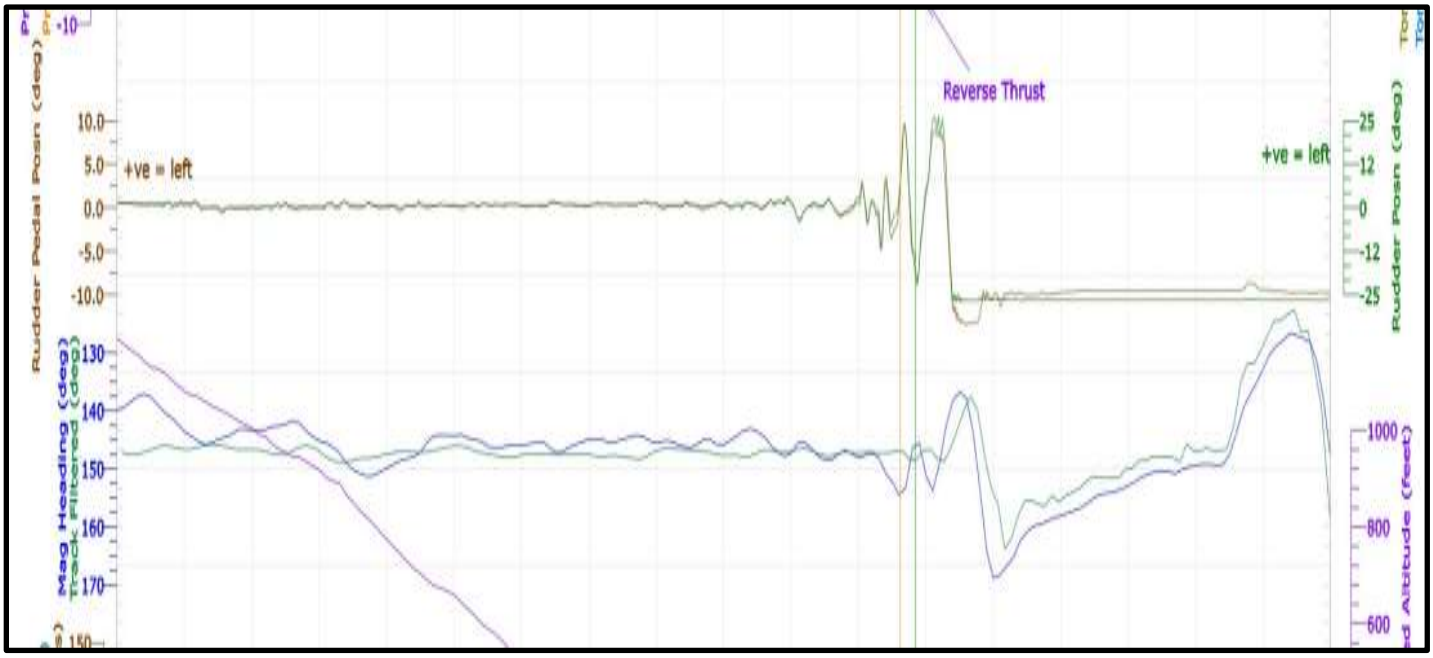

Figure 11 – The aircraft heading and rudder pedal inputs based on DFDR.

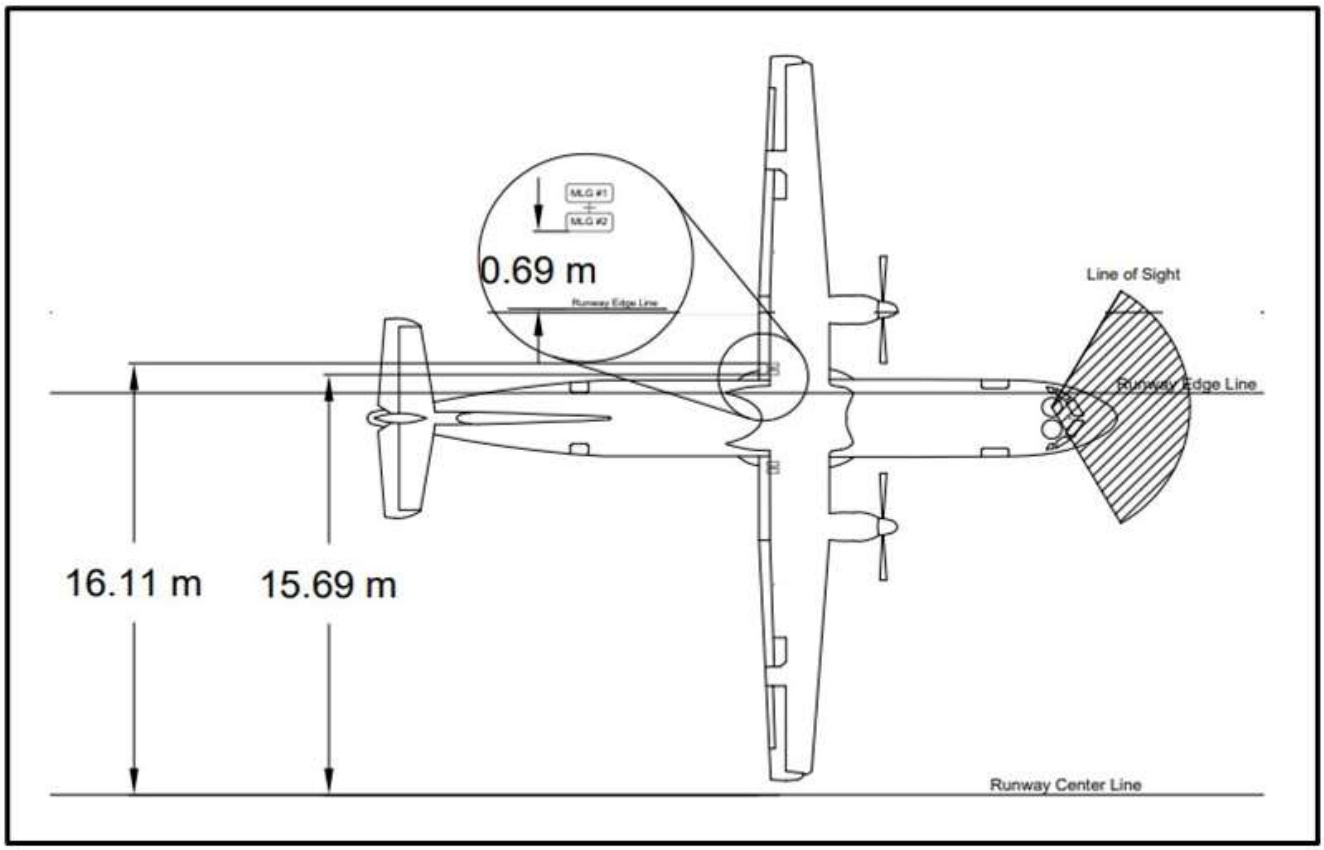

Figure 12 – Plotted tire track indicating the aircraft position from the runway centerline.

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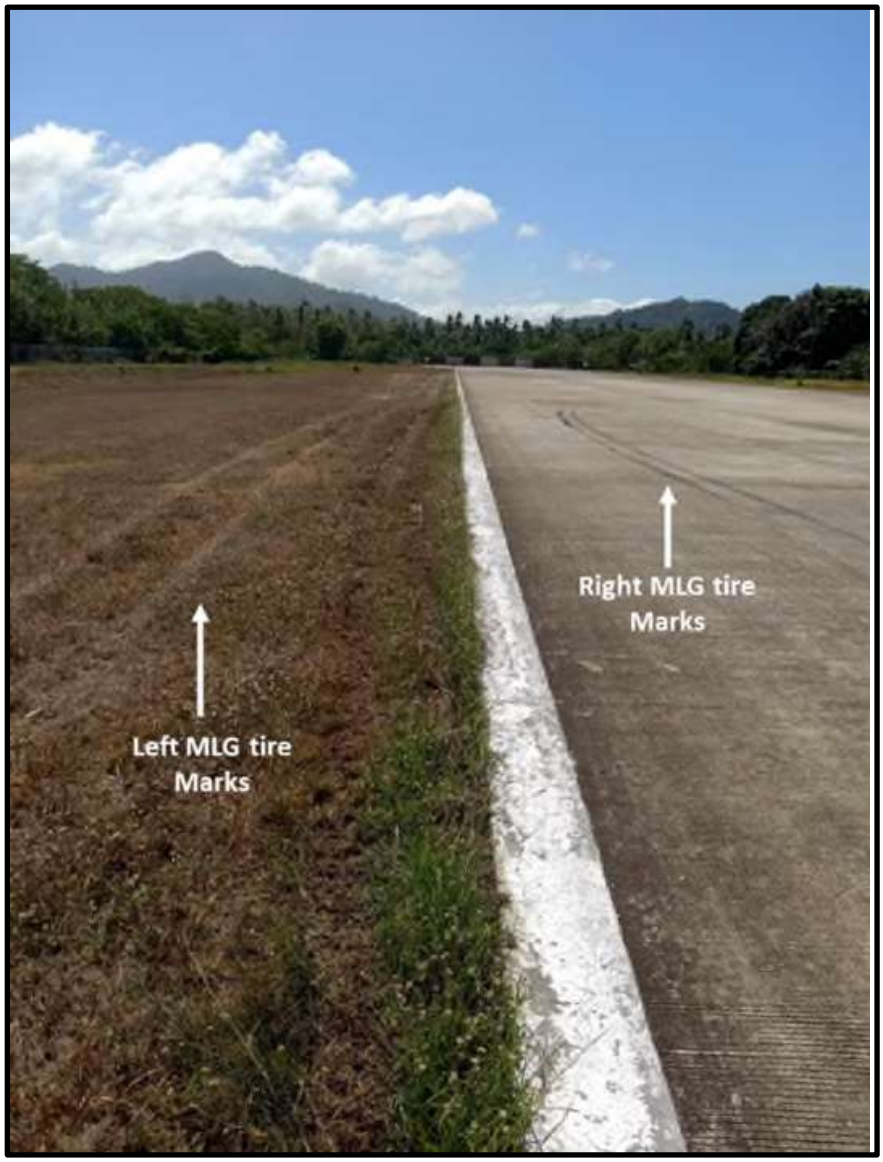

Figure 13 – Aircraft tire marks on the incident site.

2.3.3 Aircraft Parking at the Ramp

The aircraft taxied towards the ramp for ground servicing and passenger deplaning. Upon passenger disembarkation, the PIC/FI stated that he delegated the walkaround inspection to the T/Capt. because he was busy with all the paperwork and preparation for their next flight. With this statement, it is noteworthy that his decision not to personally and visually check the aircraft upon parking despite the circumstances encountered during the landing roll raises questions about his accountability as the person in command of the aircraft. Additionally, information gathered from ground personnel revealed that both pilots disembarked after parking, but they could not recall if the PIC/FI also conducted the walkaround inspection. The terminal's CCTV did not capture this, making further confirmation impossible.

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In the interview with the T/Capt., he said that he conducted the walkaround inspection after parking and gave more attention in checking the wheels and brakes due to the excessive braking during the landing. He stated that he observed nothing unusual on the wheels and brakes of both main landing gears. However, the photos taken after the aircraft completed two (2) additional flights revealed significant mud dirt on the left-hand main landing gear (MLG) tires, specifically tires no. 1 and 2. In contrast, the right-hand main landing gear tires, no. 3 and 4, showed no similar accumulation of mud or dirt. This observation suggests that the left-hand side of the aircraft had experienced conditions conducive to picking up such debris or dirt, potentially corroborating accounts of a runway excursion or off-pavement event like the report made by the security personnel that he observed a cloud of dust when he saw the aircraft veer to the left side of the runway.

Figure 14 – LH MLG tires after flight ATX-126, which was the 3rd flight following the incident.

Figure 15 – RH MLG tires after flight ATX-126, which was the 3rd flight following the incident.

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As for the maintenance personnel assigned at Lio Airport, they did not check the aircraft upon its arrival since there was no advice from the flight crew regarding any issues with the aircraft. They added that, according to their existing procedure, it is the responsibility of the flight crew to conduct the walkaround inspection, and they will only assist if there are any findings on the aircraft. They also stated that there was no report from anyone at Lio Airport indicating that the aircraft encountered a runway excursion during landing, and that they stayed inside their office in the terminal the entire time the aircraft was on the ramp. However, reports from ground personnel indicated that one of the maintenance personnel assisted one of the flight crew members during refueling, but they could not confirm if the said mechanic conducted any further inspection on the aircraft.

The aircraft continued its scheduled turnaround flight to Manila because neither the flight crew nor the maintenance personnel had noticed or reported anything unusual about the aircraft, nor had they escalated the security personnel's report.

2.3.4 Flight Back to Manila

The aircraft arrived in Manila without any untoward incidents. Upon parking, a Base Transit Check was conducted on the aircraft by assigned Manila station maintenance personnel. Part of this check was to inspect the landing gear's condition. According to the mechanics on duty, they found everything to be normal and assumed that the dirt on the tires was just typical runway dust, even if this physical condition was not present on the other landing gear tires (tires no. 3 and 4). When asked what their basis was for assuming that there was nothing unusual on the tires given that they were aware that this aircraft had just come and landed on airports with a paved runway (concrete and asphalt pavement), both mechanics could not fully justify their assumption on the subject aircraft tires. Moreover, it was mentioned by the concerned maintenance personnel that they did not receive any report from the flight crew regarding the event encountered during their landing at Lio Airport.

Figure 16 – MLG tires that encountered a runway excursion

Figure 17 – MLG tires that did not encounter a runway excursion

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After completing the required ground servicing and passenger embarkation in Manila, the aircraft proceeded with its second flight to Lio Airport.

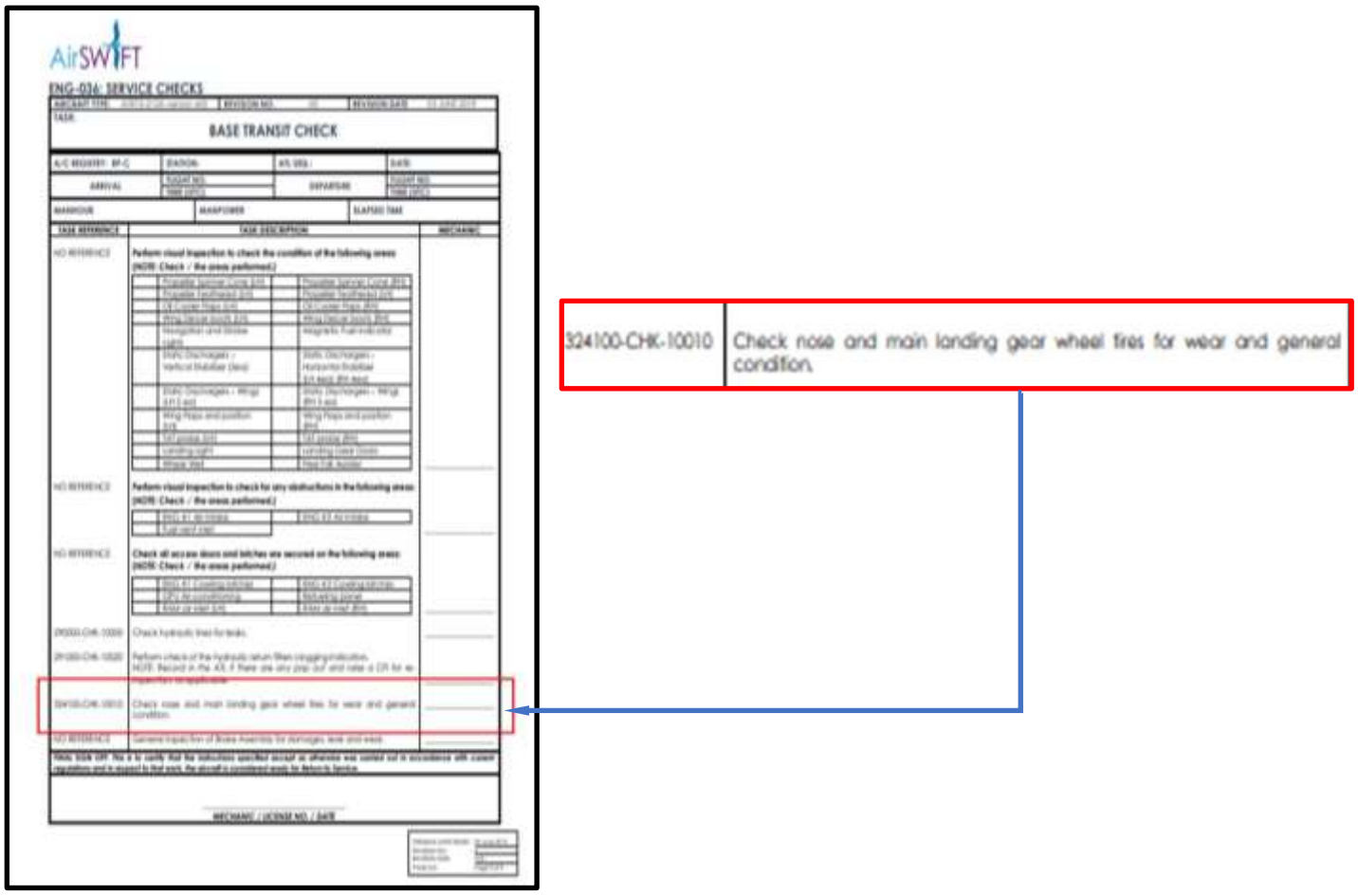

Figure 18 – Base Transit Checklist indicating the check required for the aircraft landing gear tires.

2.4 Reporting of Occurrences

After the incident that morning on February 23, 2024, there was no immediate report of the occurrence to the headquarters of AirSWIFT. This was only brought to the attention of the airline's Safety Department through an anonymous report.

Based on both crews' statements, they are not aware that they had a runway excursion, and a post-flight inspection revealed nothing unusual with the aircraft. With this, the crew stated that there was nothing to report.

As for the aerodrome operator, it was known that the first person aware of the incident was the security personnel stationed at the end of the runway. As stated by the security personnel, he immediately relayed the occurrence to his immediate supervisor at around 0658H after he observed the aircraft veering to the left and exiting the paved portion of the runway.

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On the part of the concerned Security Supervisor, he stated during the interview that upon receipt of the information about the occurrence, he also relayed this immediately to the on-duty Detachment Commander in the airport since the former was still not at the airport when he received the call from the security personnel stationed at the runway's end. As further stated by the Security Supervisor, it was part of their protocol to verify the information first before reporting it to the Lio Airport Manager. However, there was no documented procedure to support the statement. Further, the Security Supervisor did not initiate any confirmation from other units such as the Lio Airport Tower or ground operations personnel, since, as stated, he wanted to personally check the runway by himself before escalating the security personnel's report. Due to numerous aircraft movements at that time, he could only access the incident site at around 0805H, by which time the involved aircraft had already departed for its turnaround flight at about 0758H. As a result, the aircraft proceeded with its scheduled flight without undergoing any maintenance checks.

The Security Supervisor further stated that he informed the Airport Manager about the occurrence only at around 0810H. He was also able to provide pictures of the incident site to the Airport Manager at 0820H, and it was only at 0900H that the Airport Manager proceeded to check the incident site. After inspecting the site, the Airport Manager then called the AirSWIFT OCC.

Regarding the actions of the airline's OCC, the submitted report indicates that the OCC Manager received a call from the Lio Airport Manager regarding the incident at 0916H. Upon receipt of the report, she opted first to send an SMS at around 0921H to the fleet Chief Pilot to confirm the occurrence rather than initiating the protocols under the company's Crisis Management Manual (CMM) since she already had the information from the Airport Manager. The Chief Pilot replied at around 1011H, by which time the aircraft was already on its second flight to Lio Airport.

On the other hand, an interview with the on-duty Aerodrome Reporting Officer (Lio Airport Tower personnel) revealed that the crew had not reported a runway excursion. Additionally, she was waiting for the next aircraft to land at that time, so her focus was on her next incoming traffic. Likewise, it would have been difficult to determine if a momentary runway excursion had occurred from her location.

Based on the gathered data, we can identify several shortcomings in the airline's reporting system and the aerodrome operator, leading to numerous missed chances to guarantee the aircraft's airworthiness following the incident and prior to its subsequent flights.

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3. CONCLUSIONS

3.1 Findings

3.1.1 The involved pilots hold valid pilot licenses and medical certificates issued by the CAAP.

3.1.2 The pilots hold the appropriate ratings to perform their functions for this specific type of aircraft.

3.1.3 The aircraft has valid Certificates of Airworthiness and Registration.

3.1.4 The aircraft was released for flight without any recorded maintenance issues. Likewise, documentation of the aircraft maintenance is available and in proper order.

3.1.5 Flight operations at Lio Airport were not part of the simulator training for the involved pilot.

3.1.6 Crosswind landing procedure and technique were not properly executed. The lateral deviation from the runway centerline was primarily caused by overcorrection and pilot-induced oscillation, contributing to the aircraft's directional instability.

3.1.7 The yaw damper was disengaged at approximately 45 feet RA via rudder pedal input, rather than the standard push-button method. Without confirmation from the CVR or crew, it remains unclear whether this action was intentional or an omission of SOP. Disengaging the yaw damper in this manner at low altitude may result in mistrim and affect directional control during landing.

3.1.8 There was no proper handover and takeover of controls during the landing roll, as DFDR data shows both pilots simultaneously attempting to correct the aircraft's directional control but in different directions.

3.1.9 Despite the proper certification of weather equipment in the Airport Control Tower, inconsistencies exist between the wind data recorded by the aircraft and that captured by the Tower equipment. The data’s margin of difference is not reasonably close, which may impact operational decisions during flight operations.

3.1.10 The flight crew and maintenance personnel failed to diligently assess the actual condition of the left main landing gear tires during their walkaround inspection. This indicates that the inspection was not conducted thoroughly, missing critical signs that could have highlighted the aircraft's condition after landing.

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3.1.11 The Flight Instructor, as the Pilot-In-Command, failed to take full responsibility for ensuring the airworthiness of the aircraft by delegating the walkaround inspection to the Training Captain despite the occurrence during landing.

3.1.12 The flight crew failed to report the occurrence despite the fact that the captured CVR recording indicates their awareness of the occurrence.

3.1.13 There were lapses in the proper handling and escalation of the report received from the person who witnessed the occurrence, as both the aerodrome operator and the airline's Operation Control Center failed to follow the documented protocol.

3.2 Probable Cause

3.2.1 Primary Cause Factors

a. The flight crew failed to maintain directional control of the aircraft after touchdown.

3.2.2 Contributory Cause Factor

a. The pilot still lacks training and experience as the Pilot Flying on airports classified by the operator as high risk/Captain's runway airport such as Lio Airport.

b. Late yaw damper disengagement at low altitude likely resulted in aircraft mistrim, which may have contributed to directional control difficulties during landing.

c. Proper handover and takeover of controls during the landing roll were not performed by both pilots.

d. Inconsistency between the wind information received by the flight crew and the actual wind data may have impacted operational actions during the landing.

4. SAFETY RECOMMENDATIONS

4.1 In light of the internal actions already taken by the involved airline as outlined under 5.1 – Safety Actions, no further recommendations will be issued to the CAAP-FSIS as a result of this investigation. However, the AAIIB provides the following recommendation to the CAAP-AANSOO in view of the investigation conducted:

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a. For Lio Airport operator, Swift Aerodrome Services Inc. (SASI), to review their handling and protocols in handling safety reports and ensure that all procedures are documented.

b. For SASI to re-evaluate the accuracy and reliability of weather information provided to flight crew.

5. SAFETY ACTIONS

5.1 Following this occurrence, AirSWIFT initiated the following safety corrective actions:

a. Emphasize to instructors the importance of conducting a detailed briefing to the trainees the actions to be taken and anticipated threats in critical phases of flight (i.e. Takeoff and Landings). Instructors should follow the following levels of correction - deviation call outs, instructive call outs, control correction, controls take over. Instructors hand should be ready at the controls in case corrective action or takeover of controls is necessary. Call outs should be clearly verbalized. Delegation of PF and PNF duties should be clearly identified and transfer of controls should be verbalized and responded to.

b. Review of the policy on allowing Training Captains to make their first landing at ENI. For the first flight, Instructor on the Right Seat is to demonstrate the landing at ENI and the Training Captain is to be PM. For the second leg, the Training Captain is to perform PF duties landing at a bigger runway. Based on his performance on landing, the instructor will assess the readiness of the trainee to land at ENI. Review the requirements and policy for currency of instructor Pilots to make takeoffs and landings on the right seat. Instructors should maintain currency on the right seat.

c. Revision of Flight Operations Bulletin FOD-013 where more specific duties/items to be included (i.e. Walk-around Inspection, Crosswind Landing Technique, Centerline during takeoff and landing). The keeping of training records is revised - trainees are to keep all the FOD-013 and FOD-014 forms in one folder, to be presented to their instructors prior to every flight for their review. This will ensure proper endorsement of trainee, so that instructors can address areas of improvement based on the grades of the previous flights. Scanned copies of the forms shall also be submitted to Training Department by the trainee after every flight for record keeping.

d. Walk around inspections should be done by the instructor with the trainee until the trainee is deemed competent and confident enough to perform the task on his own. This shall be reflected on the FOD-013 by his instructor. In case of any significant event, it is the responsibility of the instructor to perform the walk around before the next flight.

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e. It was discussed during Flight Operations Standardization Meeting that all Instructors must conduct debriefings after every lesson particularly if there's an event or unusual situation that needs to be discussed.

f. The policy for delegation of takeoff and landing for Training Captains will be revised. Training Captains will be given takeoffs and landings in Captain's runways only after having satisfactory demonstrated landings in a non-Captain's runway. All records shall be documented in the Training Captain's record.

g. The recurrent training syllabus will be reevaluated and revised to include a series of crosswind landings using El Nido Airport.

h. The policy on Aircraft's Inspection will be revised. During training flights, all walkaround checks shall be supervised by the Flight Instructor.

i. The Chief Pilot-ATR reiterated the Duties and Responsibilities of the PIC.

j. The training department will require simulator instructors to utilize ENI as the training airport in the simulator.

k. Flight Instructors will be required to maintain Right Hand Seat Landing proficiency in El Nido.

l. A memo was created to highlight the importance of Line Maintenance operations in preventing similar occurrences. This emphasizes the need for increased diligence in adhering to all Line and Base check procedures. Any irregularities discovered during aircraft walk-around inspections must be promptly addressed and discussed with the flight crew to ensure comprehensive oversight.

m. A bulletin was created to emphasize that the Operations Control Center (OCC) is the core source of operational information for the entire company. Therefore, it is crucial that all valid information comes from the OCC. The bulletin also highlights the operational communications guide and the crisis management process flow.

(Reference: AirSWIFT's Safety Manager letter (SFT.202409.008) to the AAIIB dated September 23, 2024).

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