Republic of the Philippines
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

AIRCRAFT ACCIDENT INVESTIGATION AND INQUIRY BOARD

FINAL REPORT

RP-C2211
TEXTRON AVIATION/C172M

OPERATOR: TOPFLITE ACADEMY OF AVIATION INC.

TYPE OF OPERATION: FLIGHT TRAINING

DATE OF OCCURRENCE: JULY 11, 2025

PLACE OF OCCURRENCE: PUROK 4, LIPAY-DINGIN-PANIBUATAN, IBA, ZAMBALES, PHILIPPINES

TABLE OF CONTENTS

(Textron Aviation/C172M, RP-C2211 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: Accident involving a C172M type of aircraft with Registry Number RP-C2211 owned and operated by Topflite Academy of Aviation Inc. (TAAI) that crash landed at a vacant area in Purok 4, Lipay-Dingin-Panibuatan, Iba, Zambales, Philippines after colliding with a tree shortly after take-off at Runway 14 of Iba Community Airport, Philippines on July 11, 2025/0858H local time.

Notification of Occurrence to National Authority

The notification of accident to AAIIB CAAP was relayed by the Operator of the aircraft to the OIC, AAIIB through the Operation Center-CAAP at 0930H (LOCAL) on July 11, 2025.

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 provisions of Philippine Civil Aviation Regulation (PCAR) Part 13, an Investigator-In-Charge and Deputy Investigator-In Charge were appointed.

Authority Releasing the Report

The Final investigation report was released by Aircraft Accident Investigation and Inquiry Board (AAIIB) and published on the CAAP website on **24 October 2025.**

Synopsis:

On July 11, 2025 at about 0858H, a C172M type of aircraft with Registry Number RP-C2211 operated by Topflite Academy of Aviation Inc., crash landed at a vacant lot in Iba, Zambales shortly after take-off at Runway 14, Iba Community Airport, Iba Zambales. The two (2) pilots and two (2) observers sustain minor injuries while the aircraft sustained substantial damage as result of the accident. A training flight plan was filed and Visual Meteorological Condition (VMC) prevailed at the time of occurrence. The aircraft colliding with a tree upon takeoff was the cause of the accident.

LIST OF ACRONYMS AND ABBREVIATIONS

AAIIB	:	Aircraft Accident Investigation and Inquiry Board
AMO	:	Approved Maintenance Organization
AMOC	:	Approved Maintenance Organization Certificate
ASPH	:	Asphalt
ATOC	:	Aircraft Training Organization Certificate
AVSEGROUP	:	Aviation Security Group
CAAP	:	Civil Aviation Authority of the Philippines
CPL	:	Commercial Pilot License
CPT	:	Commercial Pilot Trainee
ELT	:	Emergency Locator Transmitter
FI	:	Flight Instructor
LCD	:	Licensing and Certification Division
OFSAM	:	Office of the Flight Surgeon and Aviation Medicine
PAGASA	:	Philippine Atmospheric Geophysical and Astronomical Services Administration
PCAR	:	Philippine Civil Aviation Regulation
PF	:	Pilot Flying
PIC	:	Pilot-In-Command
PNP	:	Philippine National Police
RPUG	:	ICAO 4 Letter Code for Subic Bay Int'l Airport, Philippines
RPUG	:	ICAO 4 Letter Code for Lingayen Community Airport, Philippines
RPUI	:	ICAO 4 Letter Code for Iba Community Airport, Philippines
RWY	:	Runway
TAAI	:	Topflite Academy of Aviation Incorporated
TSN	:	Time Since New
UTC	:	Universal time coordinated
VFR	:	Visual Flight Rules
VHF	:	Very high frequency
VMC	:	Visual Meteorological Condition

1. FACTUAL INFORMATION

Aircraft Registration No.	:	RP-C2211
Aircraft Manufacturer/Model	:	Textron Aviation/C172M
Operator	:	Topflite Academy of Aviation Inc.
Address of Operator	:	Salem Complex, Domestic Airport, Pasay City, Philippines
Place of Occurrence	:	Purok 4, Lipay-Dingin-Panibuatan, Iba, Zambales, Philippines
Date/Time of Occurrence	:	July 11, 2025/0858H/0058UTC
Type of Operation	:	Flight Training
Phase of Flight	:	Take-Off
Type of Occurrence	:	Aircraft collision with tree

1.1 History of Flight

On 11 July 2025 at about 0858H, RP-C2211, a Textron Aviation/Cessna 172M type of aircraft operated by Topflite Aviation of Academy Inc. (TAAI) crash landed at a vacant area in Iba, Zambales after colliding with a tree shortly after takeoff at Runway 14 of Iba Community Airport, Iba, Zambales, Philippines.

On the day of the occurrence, RP-C2211 departed Subic Bay International Airport (RPLB) at 0757H for a CPL cross-country training lesson bound for Lingayen (RPUG) with two commercial pilot trainees (2) and an observer on board. However, due to inclement weather en-route to RPUG, decided to proceed to Iba Community Airport (RPUI) to continue the flight training and made a full stop landing at about 0838H. During the interview with the Flight Instructor, he revealed that upon landing at RPUI, a change of pilot was initiated to fly the aircraft back to RPLB with the FI still at the right seat. The flight was to perform one (1) touch-and-go maneuver then fly back to RPLB. Upon landing, the aircraft touched down beyond the third portion of the runway and subsequently took-off again one hundred fifty (150) meters before the

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end of the runway. The aircraft failed to attain the adequate takeoff speed and the FI took control of the aircraft as it approaches stall speed. Despite the intervention, the aircraft collided with a tree and eventually crashed on a vacant lot area approximately 771 meters from IBA airport heading 317.6 degrees. The aircraft final position was at coordinates 15.19, 09.4N 119.58.28.5E.

All four (4) occupants egresss the aircraft thus sustaining minor injuries and were immediately brought to President Ramon Magsaysay Memorial Hospital, Iba, Zambales for immediate treatment by responding Airport personnel. The event was ably responded by the IBA PNP AVSEGROUP, Iba Bureau of Fire Protection and other people from the area. No post fire was reported. On site investigation showed that the aircraft sustained substantial damage on its structures and other components.

Figure 1 - RP-C2211 on its final position at the accident site.

1.2 Injuries to Person (s)

Injuries	Crew	Passengers	Others
Fatal	0	0	0
Serious	0	0	0
Minor	2	2	0
Missing	0	0	0
None	0	0	0
Total	2	2	0

1.3 Damage to Aircraft

The aircraft sustained substantial damage.

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1.4 Other Damage

The aircraft collided with other vegetation on the crash site.

1.5 Personnel Information

1.5.1 Flight Instructor (FI)

Gender	:	Male
Date of Birth	:	13 February 1995
Nationality	:	Filipino
License	:	143585 CPL/FI
Date Issued	:	28 September 2024
Type rating	:	Airplane: Single Engine Land-Instrument C152, C172.
Medical Certificate Validity	:	Class I, 17 December 2025
Time on C172	:	875+06 Hours
Grand Total time	:	400+30 Hours

1.5.2 Commercial Pilot Trainee (CPT)

Gender	:	Male
Date of Birth	:	26 April 2002
Nationality	:	Filipino
License	:	152660-CPL
Valid up to	:	24 March 2025
Type rating	:	Airplane: Single Engine Land: C172
Medical Certificate Validity	:	Class I, 17 October 2025
Time on C172	:	168+ 00 Hours
Grand Total time	:	168+ 00 Hours

1.6 Aircraft Information

1.6.1 Aircraft Data

Registration Mark	:	RP-C2211
Manufacturer	:	Textron Aviation Inc.
Country Of Manufacturer	:	United States of America
Type/Model	:	Cessna 172M
Operator	:	Topflite Academy of Aviation Inc.
Serial No.	:	17265494
Date of Manufacture	:	1976
Certificate of Airworthiness Valid up to	:	06 December 2025

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Certificate of Registration Valid up to	:	09 October 2025
Number of Crew	:	2
Number of Passenger Seat	:	2
Time Since New (TSN)	:	14,898+10 Hours

1.6.2 Engine Data

Manufacturer	:	Lycoming
Type	:	Piston
Model	:	O-320-E2D
Serial No.	:	L3446-27A
Time Since New	:	1,882+30 Hours as of 11 July 2025
Time Since overhauled	:	1,157+34 Hours

1.6.3 Propeller Data

Manufacturer	:	McCauley
Type/Model	:	Fixed Pitch 2 Blade/ IC160DTM7553
Serial No.	:	AJG4402
Time Since New	:	1,511 +00 Hours

1.7 Meteorological Information

Visual Meteorological Conditions prevailed at the time of the occurrence.

1.8 Aids to Navigation

The flight was carried out under Visual Flight Rules (VFR). In using VFR, the pilot must be able to operate the aircraft with visual ground references and visually avoid obstructions and other aircraft.

1.9 Communication

The aircraft was equipped with operational Very High Frequency (VHF) transceiver used for communicating with aerodrome personnel and other aircraft in the area. The communication frequency is 121.9 Unicom.

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1.10 Aerodrome Information

The Iba Community Airport (RPUI) is operated by the Civil Aviation Authority of the Philippines, and is listed in the CAAP approved aerodrome facility data as well the Philippine Aeronautical Information Publication (AIP as of December 2024).

1.10.1 General Information

Aerodrome	:	Iba Community Airport (RPUI)
ARP Coordinates and site at AD	:	151953.8213N 1195805.1856E
Elevation	:	3.3 AMSL
Aerodrome Operator	:	Civil Aviation Authority of the Philippines
Address, Telephone. Telefax	:	Iba, Zambales 2201PHONE: (047) 811-1738 / 3156
Type of Traffic permitted (IFR/VFR)	:	VFR
Runway Direction	:	14/32
Runway Length	:	900 M
Runway Width	:	30 M
Surface	:	PCN 10 F/B/Y/U/Concrete + ASPH

1.11 Flight Recorders

The aircraft was not equipped with any flight recorders and existing CAAP regulation does not require it.

1.12 Wreckage and Impact Information

The crash site was located approximately 771.6 meters from Iba Community Airport. During takeoff from Runway 14, the aircraft was unable to attain adequate takeoff speed, subsequently striking a tree before crash-landing on a vacant lot.

The aircraft sustained substantial structural damage, including damage to major components, as a result of the impact sequence. Three (3) trees and ground vegetation at the occurrence site encountered the aircraft. Notably, the trees helped cushion and dissipate the impact forces, thereby reducing the severity of the crash. No post-impact fire occurred.

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Figure 2 - RP-C2211 impact and flight path as per google earth.

1.13 Medical and Pathological Information

The Flight Instructor together with the crew reported at Lab Diagnostic Center, Unit 4, 2/F RM CenterPoint Bldg. Cor. Magsaysay Avenue, East Tapinac, Olongapo City, Zambales on July 11, 2025 for drug Testing. The drug test results indicated negative findings.

On May 23, 2025, the two (2) pilots reported to OFSAM for a post-medical examination. The OFSAM reported that no further medical examination is required and are medically fit.

1.14 Fire

No evidence of post fire was noted during on-site investigation.

1.15 Search and Survival Aspects

The accident was survivable as the occupants were able to egress from the aircraft without delay. Both pilots and passengers evacuated promptly and were transported to a nearby hospital for treatment of minor injuries. The aircraft's Emergency Locator Transmitter (ELT) activated and was received by the CAAP emergency ground station facility.

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The site of occurrence, located on a vacant lot near a residential area close to the airport, enabled a timely response by duty personnel who assisted the occupants and secured the aircraft.

1.16 Test and Research

The engine was removed from the aircraft and brought to the operator's hangar at RPLB last July 16, 2025. A teardown inspection by the operator's AMO and witnessed by AAIIB investigators was conducted on the engine. It was determined that the engine was in good condition and was functioning normally throughout the flight.

1.17 Organization and Management Information

1.17.1 Operator

The Topflite Academy of Aviation Incorporated (TAAI) has an Aircraft Training Certificate Organization Certificate (ATOC) #2021-005 valid until January 20, 2027 authorized to perform Flight and Ground Training Operations that provides Private Pilot License Course, Commercial Pilot License Course, Flight instructor Course, Refresher Course for single engine land/sea, Flight Instructor for Upset Prevention and Recovery Training Course and Airline Transport Pilot Theory Course. TAAI Base of Operations is at Bicol International Airport with Satellite Base of Operations located at Boton Apron, Building 8128A Subic Bay International Airport, Subic Bay Freeport Zone, Zambales. The aircraft RP-C2211, is listed on their ATOC Operations specification.

1.17.2 Maintenance

The Topflite Academy of Aviation Inc. a holder of an Approved Maintenance Organization Certificate (AMOC) #AMO-215-24 empowered to operate as an Approved Maintenance Organization in compliance with the requirements of the Civil Aviation Regulation (PCAR) Part 6 with official address at Bay D North, General Aviation Area, Domestic Airport, Andrew Ave., Pasay City and Subic Bay International Airport, Subic Bay Freeport Zone, Zambales. Philippines with limited capability to perform Line Maintenance, Base Maintenance, Preventive Maintenance and Minor Repair as listed in the CAAP Approve Topflite Academy of Aviation MOPM Scope of Work and Capability as revised valid up to June 30, 2029.The maintenance function of RP-C2211 is being undertaken TAAI Repair Station.

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2. ANALYSIS

2.1 General

Pre-flight inspections conducted at RPLB did not reveal any aircraft discrepancies, as confirmed by both pilots. During the interview, the Flight Instructor (FI) stated that following a full-stop landing at RPUI, a pilot change was carried out for the return flight to RPLB. The newly designated Pilot Flying (PF) was undertaking his first flight at Iba Community Airport and was scheduled to perform a single touch-and-go maneuver before continuing with a cross-country flight back to RPLB. The pilot exchange was arranged to allow the other Commercial Pilot Trainee (CPT) to resume the training lesson, as the originally designated training aerodrome (RPUG) was unavailable due to adverse weather.

2.2 Human Factors

2.2.1 Flight Crew

The Flight Instructor (FI) and the Commercial Pilot Trainee (CPT) both held valid licenses issued by the Civil Aviation Authority of the Philippines (CAAP) Licensing and Certification Division (LCD), authorizing them to operate the aircraft type involved. The Pilot Flying (PF) taxied the aircraft to the end of Runway 14 and performed a standard take-off procedure. After becoming airborne, the PF perceived the climb to be less responsive, which he attributed to the presence of a strong crosswind from the right. Witnesses on board confirmed that the windsock was fully extended and aligned perpendicular to the runway, indicating prevailing crosswind conditions.

During the subsequent approach, the flaps were set to 30 degrees. The aircraft did not touch down within the normal landing zone but instead landed beyond the latter third of the runway, after which a go-around was attempted. During the maneuver, the PF did not retract the flaps to the recommended minimum setting, citing high workload. The aircraft became airborne but failed to achieve sufficient acceleration and climb rate, prompting the FI to assume control. Despite the intervention, the aircraft was unable to clear surrounding obstacles and collided with trees.

2.2.2 Flap Lever Configuration

Cessna 172 models are fitted with varying flap actuation systems. The Cessna 172M, as in this case, utilizes a flap lever knob (Figure 3) that requires the pilot to depress and hold the switch for a prescribed duration: approximately three seconds for 10°, five seconds for 20°, and eight seconds for 30°. Verification of flap position is typically made through external visual reference from the side window. Retraction is performed by incremental adjustments using the same knob.

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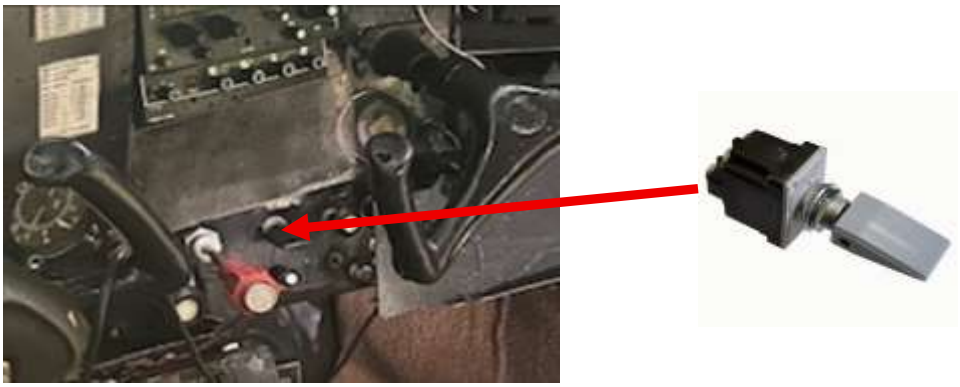

Figure 3 - RP-C2211, Flap lever, Knob, PN: S177-3.

By contrast, other C172 variants employ a flap detent lever (Figure 4), which allows the pilot to directly select flap settings (10°, 20°, or 30°). The detent type is more intuitive and reduces workload, as the lever locks into place at the selected setting and the flaps automatically move to the commanded position.

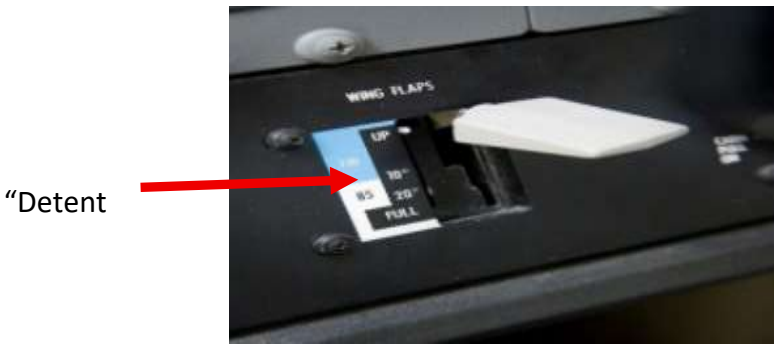

Figure 4 - Flap lever, Detent, PN: 0560028-6.

The PF admitted unfamiliarity with the knob-type system and reported difficulty achieving precise flap adjustments. His prior training had primarily been on detent-type systems. This unfamiliarity likely contributed to delayed flap retraction during the go-around, further degrading aircraft performance.

2.2.3 Flight Instructor's Intervention

During the final approach, the aircraft landed beyond the normal touchdown zone, in the latter third of the runway, and continued rolling before a takeoff was initiated. The Flight Instructor (FI) took control only after the aircraft failed to achieve adequate acceleration and climb performance, at which point recovery options were already limited.

An earlier intervention such as directing or executing a full-stop landing when the extended landing roll became evident may have reduced the risk of the accident. Flight instructional best practices emphasize the importance of the FI maintaining

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heightened situational awareness and readiness to assume control whenever student pilots encounter non-standard or unstable conditions.

2.2.4 Continuation Bias/"press-on-itis" factor

The sequence of events began during the first takeoff phase at RPUI, shortly after the aircraft landed following a diversion to avoid unfavorable weather at Lingayen Community Airport. Although all occupants were safe on the ground, the prevailing conditions required careful reassessment before resuming the flight.

Following the pilot change, the new Pilot Flying (PF) was tasked to conduct a single touch-and-go maneuver before proceeding with the cross-country flight back to RPLB, as deteriorating weather conditions were noted in the area. During the initial takeoff, the PF encountered strong crosswind conditions while establishing the climb. On final approach, aerodrome personnel observed that the aircraft appeared to be flying at a higher-than-normal approach speed and entered unfavorable wind conditions. The approach was not stabilized, yet the PF elected to continue the landing.

The PF's actions and delayed corrective responses suggest that workload and task saturation may have limited his ability to recognize key cues during the approach and landing. The aircraft touched down at an excessive speed, beyond the normal touchdown zone, which reduced the available runway for rollout or for a safe subsequent takeoff attempt.

Continuation bias—defined as the unconscious cognitive tendency to persist with the original plan despite changing conditions—can impair situational awareness (SA) by reducing the pilot's capacity to detect or act upon critical cues. In this case, the prevailing strong crosswind, which became a tailwind component after the left turn in the circuit, introduced additional hazards that further complicated the maneuver.

These factors collectively contributed to an unstable approach, a long landing, and an immediate attempt to take off under crosswind conditions. This sequence reflected a deviation from recommended aircraft operating procedures for crosswind landings and takeoffs, as outlined in the Cessna Pilot Operating Handbook (see Figure 5).

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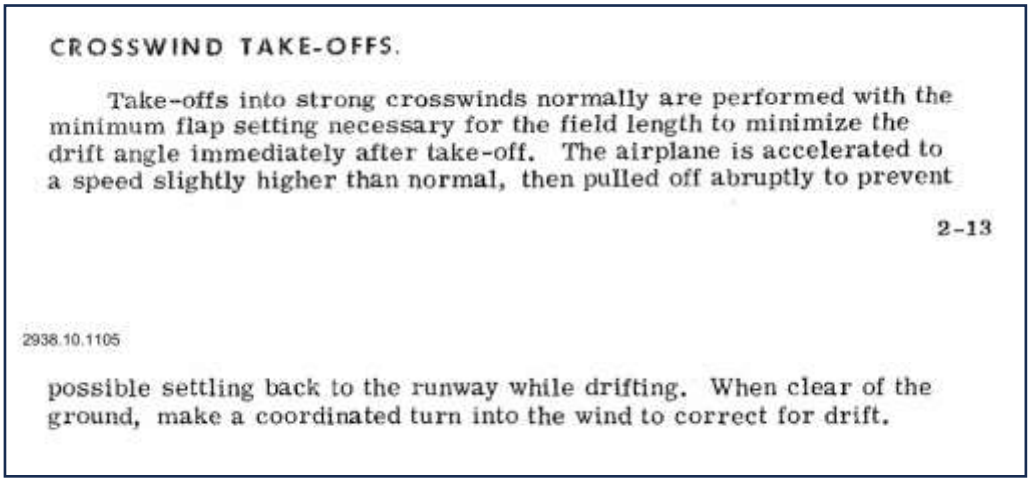

CROSSWIND TAKE-OFFS.

Take-offs into strong crosswinds normally are performed with the minimum flap setting necessary for the field length to minimize the drift angle immediately after take-off. The airplane is accelerated to a speed slightly higher than normal, then pulled off abruptly to prevent

2-13

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possible settling back to the runway while drifting. When clear of the ground, make a coordinated turn into the wind to correct for drift.

Figure 5- Cessna 172, crosswind take-off procedure

"The maximum crosswind that the Cessna 172 can take-off is 15 knots = 28km/h. To be precise – The Maximum "DEMONSTRATED" crosswind that the 172 can take-off, or land, is 15 knots."

2.3 Operational Factor

2.3.1 The Flight Arrangement

The filed flight plan was for a cross-country round-robin flight involving two Commercial Pilot License (CPL) trainees and one observer, with the route RPLB–RPUG–RPLB and RPUI designated as the alternate aerodrome. En route to RPUG, weather conditions were found to be unsuitable, prompting the diversion to RPUI, where a full-stop landing was carried out. Following this, a pilot change was made, assigning the new Pilot Flying (PF) to continue the cross-country training, with the Flight Instructor (FI) remaining in the right seat. The PF was tasked to perform one touch-and-go maneuver before proceeding back to RPLB.

Cross-country lessons generally focus on conducting takeoffs and landings at different aerodromes without additional maneuvering. During the interview, the PF stated that this was his first flight at RPUI and that he was unfamiliar with its aerodrome environment and operating conditions. He further reported that it was his first experience flying this aircraft variant, which featured a different flap-switch configuration. These factors contributed to an unstable approach, resulting in a landing beyond the third portion of the runway and a subsequent takeoff initiated approximately 150 meters before the runway end.

The FI did not conduct a familiarization or demonstration flight at RPUI for the new PF before allowing him to operate in the local traffic pattern. This omission increased the risks associated with flying into an unfamiliar aerodrome environment under prevailing weather conditions. Additionally, the maneuver performed by the PF

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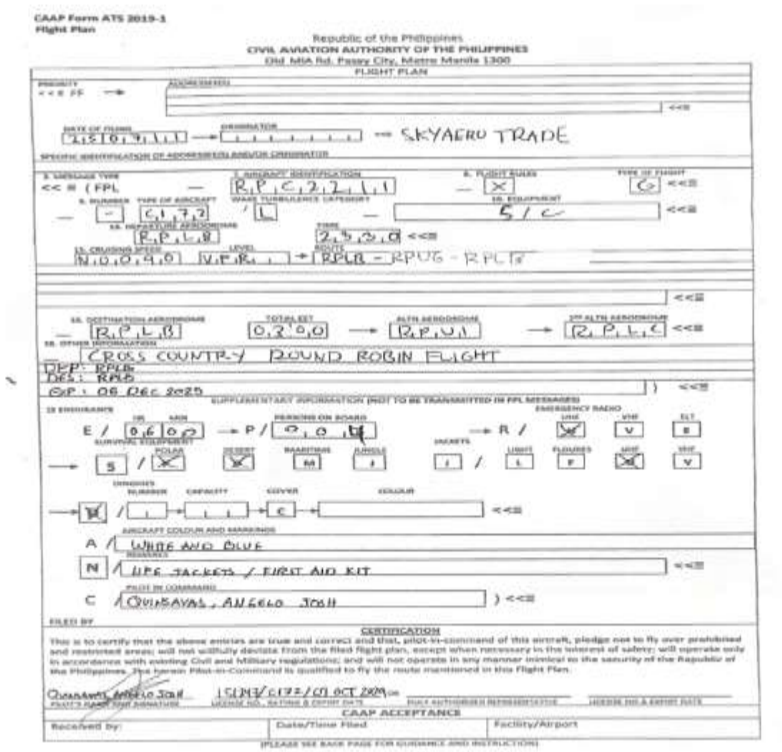
deviated from the intended training plan, which was originally limited to cross-country operations without added exercises.

Prior to departure from RPLB, an operational briefing had been conducted for the training flight. The FI confirmed that the purpose of the flight was a cross-country round-robin exercise for CPL training and flight time accumulation, as reflected in the filed flight plan (Figure 6). However, no additional flight briefing or specific instructions were provided to the new PF at RPUI before the continuation of training, which increased exposure to operational risks.


CAAP Form ATS 2019-1
Flight Plan

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Old MIA Rd. Pasay City, Metro Manila 1300
FLIGHT PLAN

<< ≡ FF →

→ SKYAERO TRADE

<< ≡ (FPL — RPC2211 — X G <<≡
— C172 / L — S/C <<≡
RPLB 2330 <<≡
N0090 VFR → RPLB - RPUG - RPLB

— RPLB 0200 → RPUI → RPLC <<≡
— CROSS COUNTRY ROUND ROBIN FLIGHT
DEP: RPLB
DES: RPLB
EXP: 06 DEC 2025) <<≡

SUPPLEMENTARY INFORMATION (NOT TO BE TRANSMITTED IN FPL MESSAGES)

E / 0600 → P / 004 → R / U V E
→ S / P D M J → J / L F U V

A / WHITE AND BLUE
N / LIFE JACKETS / FIRST AID KIT <<≡
C / QUIÑSAYAS, ANGELO JOSH) <<≡

CERTIFICATION

CAAP ACCEPTANCE

Received by: | Date/Time Filed | Facility/Airport

Figure 6 - The flight plan.

2.3.2 Unstabilized Approach

The inland traffic pattern for Iba Community Airport was assessed by both the Flight Instructor (FI) and the Pilot Flying (PF) as feasible despite the prevailing strong crosswind, which was evident from the fully extended windsock on Runway 14. The operator had established procedures for RPUI traffic patterns, aligned with CAAP methods (see Figure 7).

According to the PF, the flaps were set to full extension during the approach, as he intended to counteract the strong crosswind. He reported attempting to maintain an approach speed of approximately 65 knots, but the aircraft remained above the normal glide path. To compensate for the crosswind while maintaining runway

alignment, he applied a cross-control technique, combining rudder input with opposite aileron, until crossing the runway threshold.

As the aircraft was aligned with the centerline, touchdown occurred well beyond the third portion of the runway. Airport personnel who observed the approach noted that the aircraft appeared unlikely to land within the remaining distance. Nevertheless, the aircraft eventually lifted off approximately 150 meters before the runway end. Witnesses described the initial climb as gradual, with a noticeably low rate of ascent.

Recognizing the abnormal situation, the FI took over control. Despite this intervention, the aircraft collided with a tree, which caused it to descend to the ground. The FI immediately carried out engine shutdown procedures, and all occupants were able to safely egress the aircraft.

The continuation of the approach despite being unstabilized under strong crosswind conditions reduced safety margins and was a significant factor in the outcome of the flight.

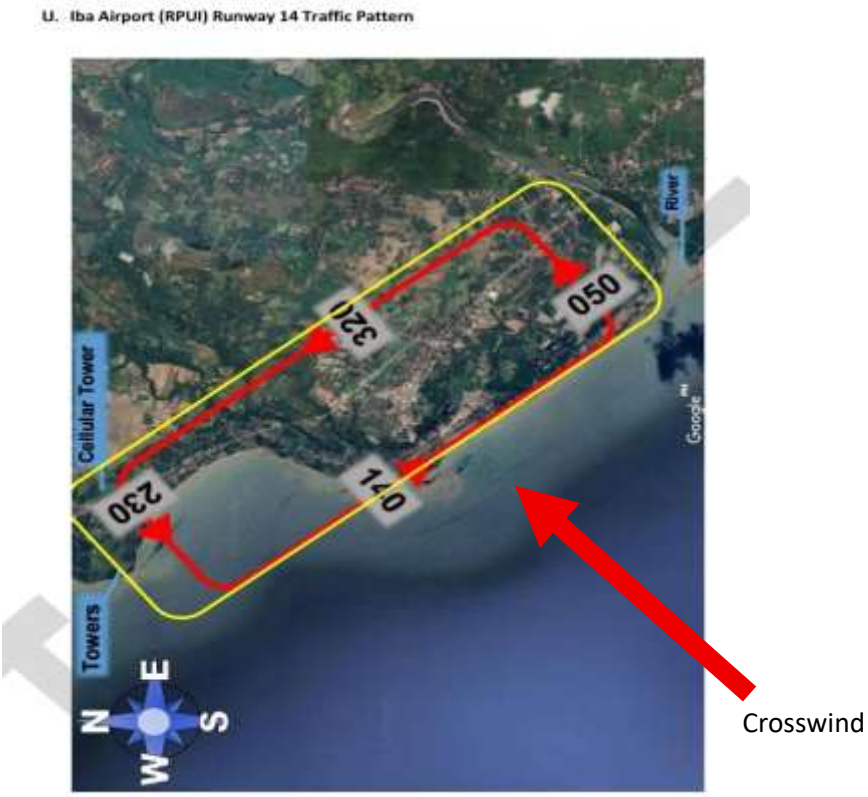

Figure 7 - Runway 14 company flight path.

2.3.3 Windsock/Windcone

Windsock/Windcone is an essential aviation tool that helps pilots make safe decisions. This cone-shaped fabric tube may seem simple, but it delivers vital information about wind conditions that every aviator must learn. Compared to

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commercial airports that have tower services, many small airports/airstrips are uncontrolled. It is the pilot's responsibility to evaluate wind conditions before selecting a runway for take-off or landing.

Guidelines to follow to read a windsock:

1. Wind Direction: The open end of the windsock points in the direction the wind is coming from.

2. Wind Speed: The position and shape of the windsock indicate wind speed. A fully extended windsock indicates strong winds, while a drooping or limp windsock indicates light winds.

3. Gustiness: If the windsock is flapping vigorously, it suggests gusty winds. A steady position indicates more consistent wind speed.

4. Height and Visibility: Windsocks are typically placed at aerodromes and other locations to provide pilots with quick visual cues about the wind condition.

By understanding these aspects, a person can effectively interpret the information provided by a windsock.

Figure 8 - Windcone, wind indication.

Some windsocks have color stripes or segmentations to help with this estimation. The more inflated the windsock, the faster the wind is blowing. Being able to judge wind strength visually adds another layer of situational awareness when making flight decisions. In consideration, the crew should have thought twice in continuing the flight training having to witness the wind indication as a cue in which persistent judgement took place over safety and break down in situational awareness ensued.

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2.4 Organizational Factor

2.4.1 Carriage of Passengers

According to the Company's Procedures Manual (page A-21), issued May 2023 and revised January 2025, Topflite Academy of Aviation Inc. (TAAI) is not authorized to operate as a commercial air transport operator and prohibits the carriage of passengers, cargo, or mail for remuneration or other valuable consideration.

Paragraph 1.10.1 of the manual permits the carriage of observers during dual training flights for training purposes, provided prior permission is obtained from the Pilot-in-Command (PIC). Authorized observers include TAAI students under training or a second Flight Instructor (FI) for standardization purposes. With the approval of the PIC, Head of Training, or Chief Flight Instructor, other persons may also be permitted to observe dual training flights.

While the presence of observers during training flights may be covered under company policy and documentation approved by the Authority, it nonetheless introduces additional risk exposure to non-essential occupants in the aircraft. In this case, the filed flight plan did not specify the purpose of the additional passenger(s), and no written documentation was available to confirm that observers were formally authorized to join the training flight.

The appropriateness of carrying observers may depend on the type of training lesson being conducted. Certain lessons of higher complexity—such as maneuver-based or emergency procedure training—may not be suitable for flights with observers on board. In this occurrence, the lesson was defined as a cross-country round-robin flight, with no mention of touch-and-go maneuvers. This highlights the importance of ensuring that Flight Instructors adhere to the specific training objectives as scheduled and documented.

2.4.2 Oversight on Flight Training

The investigation established that the operator maintains a fleet primarily composed of Textron Aviation Inc. C172 aircraft, with RP-C2211 designated as one of the main training platforms. The Operator's Procedures Manual also prescribes the standard flight pattern for Runway 14 at Iba Community Airport (see Figure 9).

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C152 / C172 SEL IBA, ZAMBALES AIRPORT / RPUI RWY 14		
LEG	PROCEDURE	LANDMARKS
Upwind	• Positive Climb: Tap Brakes; Call Tower "C/S, Airborne Runway 32" • 300ft AGL: Flaps Up, Mixture Rich, Throttle Full Open, Engine Gauges on Green, Climb Speed 80kts • Approaching Abeam Landmark/400ft AGL: Clearing Turns • Abeam Landmark/500ft AGL : Turn Crosswind HDG 050	River
Crosswind	• At Traffic Pattern Altitude: Level off, Gain Airspeed 90kts, Reduce Power to Cruise Setting (2100-2300 RPM) • Approaching Abeam Landmark or 45° of the threshold: Clear Area "Left, Front, Right Clear" • Abeam Landmark: Turn Downwind HDG 320	Cellular Tower
Downwind	• On HDG 320: Check Airspeed and Altitude • Abeam Landing Spot: Speed Check 90kts, Flaps 1, Maintain Altitude, Trim • Reduce Speed to 80kts (1900-2100 RPM), Flaps 2, Maintain Altitude, Trim • Reduce Speed to 70kts (1600-1700 RPM) • Abeam Landmark or 45° From Landing Spot, Turn Base HDG 230 • "Turn, Throttle Reduced (1500 RPM), Trim, Talk"	Towers
Base	• Descend at 200-300 ft/min, but not below 500ft AGL • Approximately 20° from Landing Spot, Turn Final HDG 140	NIL
Final	• Maintain Runway Centerline, Airspeed 70kts (Flaps 2) or 65kts (Flaps 3), Trim • Callouts: Airspeed and Maintaining Runway Centerline • Break the glide, Level off, Hold Attitude, Chop Power, Sinking Feeling, Flare and Hold Attitude, Touchdown, Maintain Runway Centerline, Flaps Up, Trim Set to Neutral	NIL

NOTE: Traffic Pattern Altitude – 700ft AGL IAW
AIP Philippines: RPUI AD 11-2
09 SEP 2021

Figure 9 - Typical flight pattern at RPUI RWY14.

The operator, in coordination with its Flight Instructors, should strengthen flight-training protocols by establishing clearer weather operating minima and reinforcing adherence to defined training standards. Particular emphasis should be placed on scenarios similar to this occurrence to ensure that operational risks are mitigated and the likelihood of recurrence is reduced.

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2.5 Environmental Factor

2.5.1 Weather Consideration

Weather data from the Subic Bay International Airport ground station indicated surface winds from 240° at 10 knots, visibility of 9 kilometers, intermittent rain, scattered clouds at 1,800 feet AMSL, and overcast conditions at 7,000 feet. The temperature and dew point were recorded at 29°C and 26°C, respectively.

Further, information obtained from the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) Subic Radar Facility showed the presence of two (2) weather formations southwest of Iba Community Airport on the day of the occurrence (Figure 10).

The available weather information prior to departure suggested the likelihood of encountering adverse environmental conditions along the intended route of flight. A more conservative decision by the FI, such as rescheduling or cancelling the training exercise, would have mitigated exposure to these risks.

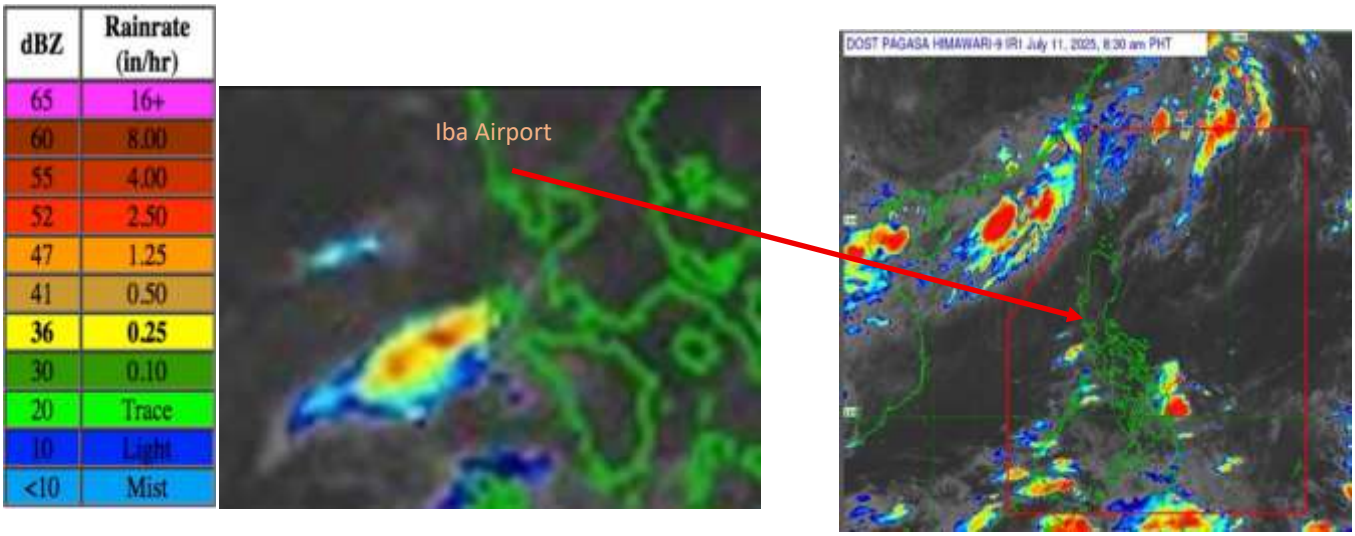

Figure 10- PAGASA RADAR weather image.

3. CONCLUSIONS

3.1 Findings

a. Both Pilots were trained and qualified with the Textron Aviation Inc., Cessna C-172M aircraft.

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b. Both Pilots have a valid license and medical certificate issued by the Licensing and Certification Division (LCD) and Office of Flight Surgeon and Aviation Medicine (OFSAM), CAAP respectively.

c. The aircraft has a current Certificate of Airworthiness and Registration.

d. A pilot change was conducted at RPUI, designating a PF who was flying at RPUI for the first time and operating an aircraft variant with an unfamiliar flap-switch configuration.

e. The filed flight plan was a cross-country round-robin (RPLB–RPUG–RPLB) with RPUI as the alternate. The diversion to RPUI was made due to adverse weather at RPUG.

f. The FI assumed control only after the aircraft failed to achieve adequate acceleration and climb, by which time recovery options were limited.

g. The aircraft collided with trees beyond the departure end of the runway, causing substantial damage.

h. Visual meteorological condition prevailed at the time of the occurrence.

i. The aircraft was properly released for flight on the day of the occurrence.

j. There were no records of engine discrepancy noted on the engine logbook and during the teardown inspection.

3.2 Probable Cause

3.2.1 Primary Cause Factor

a. The accident was caused by the continuation of an unstabilized approach and long landing under strong crosswind conditions at an unfamiliar aerodrome, followed by an attempted takeoff with insufficient runway remaining and delayed instructor intervention, leading to collision with terrain obstacles.

3.2.2 Contributory Factors

a. The PF's lack of familiarity with RPUI and the aircraft's flap-switch configuration, leading to poor approach and landing management.

b. Delayed FI intervention, reducing the opportunity to recover from the unsafe flight condition.

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c. The FI's decision to continue the training flight despite strong crosswinds and deteriorating weather conditions.

d. Insufficient specificity in the company's policy regarding the carriage of passengers during training flights.

e. Inadequate briefing and orientation provided to the new PF on Iba Community Airport operations and environment.

4. SAFETY RECOMMENDATION

4.1 The safety deficiencies identified in this report have been addressed through the corrective measures implemented by **Topflite Academy of Aviation Inc. (TAAI)**. Accordingly, no additional safety recommendations are proposed.

5. SAFETY ACTIONS

5.1 As a result of the occurrence, Topflite Academy of Aviation Inc. (TAAI) initiated the following corrective actions to mitigate the possibility of recurrence (see Appendix A1–A3):

5.1.1 Issued a reminder on the policy regarding the carriage of observers during training flights, incorporating the requirement for an observer waiver form and approval by the appropriate authority.

5.1.2 Amended the Training Manual to restrict touch-and-go operations during cross-country flights, particularly at aerodromes with shorter runways or when adverse conditions are present.

5.1.3 Reinforced the requirement for thorough weather assessment and consideration as a key factor in the approval and conduct of training flights.

-----END-----

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Email Address: info@topfliteacademy.com

DATE : July 13, 2025

TO : All Flight Instructors

FROM: Capt. Vladimir Evangelista
Head of Training

SUBJECT: Observers Policy Reminder – Maximum of Two (2) Observers per Flight & Pre-flight OBS and WAIVER Form Requirement

Dear Flight Instructors,

This memo serves as a reminder regarding the proper implementation of our Observer Policy during flight training operations.

Observer Policy Guidelines:

1. Maximum of Two Observers in flight
   - A maximum of two student observers may be allowed only if endorsed by the Chief Flight Instructor or Head of Training, and must be accompanied by a duly approved OBS and WAIVER Form.
2. Observer and WAIVER Form Requirement
   - The OBS and WAIVER Forms must be completed and approved prior to the flight. Approval must be secured from all three listed below:
     - Accountable Manager
     - Chief Flight Instructor
     - Head of Training
3. Submission of OBS and WAIVER Form
   - The approved OBS and WAIVER Form shall be submitted to the Operations Staff prior to the flight, and the Chief Mechanic shall be informed accordingly.

This policy is designed to ensure proper oversight, support safety protocols, and maintain the integrity of all training flights. Non-compliance may result in disciplinary action or restriction of instructional privileges.

For any clarifications, please contact the Flight Operations Office or the Chief Flight Instructor directly.

Thank you for your continued professionalism and strict adherence to this policy.

Topflite Academy

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MINUTES OF THE MEETING
Flight Operations Department
13 July 2025

Attendees:

1. Capt. Vladimir Evangelista	2. Capt. Zyrille Mirandilla
3. Capt. Louice De Leon	4. Capt. Justine Sasan
5. Capt. Vince Danao	6. Capt. Leah Ruby Pecson
7. Capt. Patrick Esteves	8. Capt. Felix Hocson
9. Capt. Johanes Ivan Co	10. Capt. David Ryan Robin
11. Capt. Mathew Gabriel Medina	12. Capt. Albert Delfin Reyes
13. Capt. Vernelle Obilio	14. Capt. Lance Guevarra
15. Capt. James Peter Dayot	16. Capt. Stephanie Anne De Torres

Topic	Action Required	Responsible	Target Completion	Status
1. **Aerodromes for Training**	There will be changes in procedure in some aerodromes, for Bicol Base, RPVJ(Masbate) and RPUN(Naga) – Stop and Go only, no Touch and Go. RPUD(Daet) and RPVY(Catbalogan) – low pass only, no landing. For Subic Base, RPUI(Iba) and RPUG(Lingayen) – Stop and Go only, no Touch and Go. These changes will be added on our Training and Procedure Manual.	All Flight Instructors	Immediately	On going
2. **Documentation**	- Fix all flight documents for better monitoring, this includes Maintenance Log, Pre-flight log and General Declaration, for General Declaration specify who's the Flight Instructor, Student and passenger. - addition of Weight and Balance computation for all types of flight should be included and will be further discussed.	All Flight Instructors and Students	Immediately	On going
3. **Carrying Observer/s**	Carrying of observer/s are still allowed but with the approval with the Head of Training (HOT) and Chief Flight Instructor (CFI) regardless of the number of observer/s. They should also secure an Observer and Waiver form prior to each flight.	All Flight Instructors and Students	Immediately	On going
4. **Fis Company Standardization**	-Instructor who had any issues in flight/grounds should be internally discussed by the post holders before they can start flying again. -All training procedures should be the same for every instructor. Specifically Go around procedures. -CFI reminded the importance of positive transfer of controls and when is right time to take the control of the aircraft.	All Flight Instructors	Immediately	On going

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Email: info@topflteacademy.com

DATE : 14 JULY 2024

TO : CAPT. VLADIMIR EVANGELISTA
Head of Training

SUBJECT : RECOMMENDED AMENDMENTS TO TRAINING MANUAL
RE: TOUCH AND GO OPERATIONS

Dear Capt. Vlad:

Please refer to the recommended amendment to the Training Manual regarding touch-and-go operations during cross-country flights:

1. OVERVIEW

This Memorandum establishes the guidelines for the proper conduct of touch-and-go landings to ensure safety during training operations, particularly in airports with shorter runways or adverse operating conditions.

2. OPERATIONS AT RUNWAYS LESS THAN 1200 METERS (~3900 FT.)

2.1. For all cross-country flights, landings at airports with runway lengths of less than 1,200 meters (~3,900 feet) shall only be conducted as either as stop-and-go landings or full stop landings.
2.2. Touch-and-go operations are strictly prohibited at these airports, regardless of aircraft type or prevailing conditions.

3. TOUCH-AND-GO OPERATIONS AT OTHER AIRPORTS

3.1. At airports where touch-and-go operations are permitted, the decision to conduct such exercises shall rest on a comprehensive pre-landing assessment, taking into account factors such as:

3.1.1. Wind direction and speed;
3.1.2. Visibility and weather conditions;
3.1.3. Runway surface conditions (e.g., contamination, slope, braking action);
3.1.4. Aircraft performance (including weight, density altitude, and engine performance), and
3.1.5. Presence of other air traffic or obstacles.

3.2. Instructors and student pilots must exercise sound aeronautical decision making to determine whether a touch-and-go maneuver is appropriate or whether a stop-and-go or full-stop landing should be conducted instead.

4. GO-AROUND BIAS AND CONSERVATIVE DECISION MAKING

4.1. When external conditions are not ideal but touch-and-go operations remain technically practicable, a go-around bias must be maintained. This means that:

4.1.1. If a safe touchdown cannot be assured, a go-around shall be executed without hesitation.

4.1.2. If a touchdown is made under marginal conditions, a full-stop landing should be favored to ensure safety and control.

4.2. The safety of the aircraft and its occupants shall always take precedence over training objectives.

5. IMPLEMENTATION

5.1. All Instructors are responsible for ensuring adherence to this policy during training flights. Violations of this policy may result in disciplinary action, and repeated or willful non-compliance may lead to suspension or termination of flying privileges.
5.2. This policy shall be reviewed annually or as necessary based on operational experience or regulatory updates.

Topflite Academy

MINUTES OF THE MEETING
Flight Operations Department
16 July 2025

Attendees:

1. Capt. Vladimir Evangelista	2. Capt. Zyrille Mirandilla
3. Capt. Louice De Leon	4. Capt. James Peter Dayot
5. Capt. Vince Danao	6. Capt. Leah Ruby Pecson
7. Capt. Patrick Esteves	8. Capt. Felix Hocson
9. Capt. Johanes Ivan Co	10. Capt. David Ryan Robin
11. Capt. Stephanie Anne De Torres	12. Capt. Albert Delfin Reyes
13. Capt. Vernelie Obilio	14. Capt. Lance Guevarra

Topic	Action Required	Responsible	Target Completion	Status
1. Cross Country Aerodrome Procedures	- For airports with runway that are less than 1200 meters (3900 ft), landings should either be a stop and go or a full stop landing only. - If there is only 2 or less traffic exists on the pattern of uncontrolled airport, landing should not be attempted. Traffic includes aircraft about to depart and any inbound aircrafts. In such cases proceed only over head at a minimum of 2500 ft then proceed back to home base. - Remind students to monitor traffic 10 NM inbound to destination airport. - The only time to go below 2500 ft is during emergency and only with FI controls.	All Flight Instructors and Students	Immediately	On going
2. Go Around	- For any unsafe approach, including touchdown beyond the first 1/3 of the runway, a go around should be commenced. - Any touch and go landing that was unable to continue for another takeoff should be halted without hesitation and line up again for another takeoff.	All Flight Instructors and Students	Immediately	On going
3. Carrying Occupants on Flight	- The number of occupants allowed on flight might be just 3 in total, with just 1 observer. Although the maximum is 2 observers, flights with 2 observers would need approval. - If student would sit to observe on flight, the student would need to provide reasoning and the lesson he needs to observe. - OBS form is different from waiver form.	All Flight Instructors	Immediately	On going
	- Must accomplish weight and balance computations.			
4. Preflight Breifing	- Preflight briefing sheet should now be accomplished before flight to have a more structured preparation and discussion. - This document should also include any hazard and risk assessment for the flight. - This sheet should be included on the email sent to the tower along with the flight plan and other documents. - Flight instructors need to sign this document. - This document should be introduced on simulator training and discussed on ground school.	All Flight Instructors, Ground, and Simulator instructors	Immediately	On going
5. Operations Updates	- Flight operations are still on hold. Simulator and ground school are to continue operations. - Continuation of operations would be disclosed by July 17, 2025. - BT flight are still on hold as well.	All Flight Instructors	Immediately	On going
6. Organization Chart	- To accomplish Organization Chart for everyone to know their duties and responsibilities.	CFI, HOT	Immediately	On going
7. Flight Instructor Duties	- As flight instructor, you have the highest licenses on flight and the highest responsibility as well. Be careful with your decisions.	All Flight Instructors	Immediately	On going
FOR INFORMATION ONLY				

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