

Republic of the Philippines DEPARTMENT OF TRANSPORTATION

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

MIA Road, Pasay City 1300

AIRCRAFT ACCIDENT INVESTIGATION AND INQUIRY BOARD

FINAL REPORT

RP-C1174 TEXTRON AVIATION INC. CESSNA U206F

OPERATOR: OUR BUILDERS WAREHOUSE, INC.

TYPE OF OPERATION: GENERAL AVIATION

DATE OF OCCURRENCE: JANUARY 24, 2023

PLACE OF OCCURRENCE: BARANGAY DITARUM, DIVILACAN, ISABELA, PHILIPPINES

TABLE OF CONTENTS

(Cessna U206F, RP-C1174 Final Report)

Descrip	otion	2	Page
Title Pa	nge		
Table o	f Contents		i
Forewo	rd		ii
Synops	is		iii
List of A	Acronyms and Abbreviation		iv
1	Factual Information		1
1.1	History of Flight		1
1.2	Injuries to Person		2
1.3	3 Damage to Aircraft		2
1.4	Personnel Information		2
	1.4.1 Pilot-In-Command		2
1.5	Aircraft Information		2
	1.5.1 Aircraft Data		2
	1.5.2 Engine Data		3
	1.5.3 Propeller Data		3
1.6	Meteorological Information		3
1.7	Aids to Navigation		3
1.8	Communications		3
1.9	Flight Recorders		3
1.10	Wreckage and Impact Information		4
1.11	Medical & Pathological Information		6
1.12	Fire		6
1.13	Search and Survival Aspect		6
1.14	Organization and Management Information		7
2	Analysis		7
2.1	Pilot		7
	2.1.1 Trainings and Qualifications		7
	2.1.2 Duty Time and Rest Periods		9
2.2	Aircraft Status		10
	2.2.1 Pre-Flight Inspection		10
	2.2.2 Maintenance Records		10
	2.2.3 Test and Research		11
2.3	Operations		12
2.4	Weather and Flight Route		18
2.5	Accident Site Investigation		20
2.6	Maconacon Airport		21
3	Conclusions		22
3.1	Findings		22
3.2	Probable Cause		23
4.0	Safety Recommendations		24
5.0	Safety Actions		24
	Signatories		25

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 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.



Republic of the Philippines DEPARTMENT OF TRANSPORTATION CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

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www.caap.gov.ph

FINAL REPORT

TITLE: An accident involving a Textron Aviation, Inc. C-U206 type of aircraft with Registry Number RP-C1174 had a Controlled Flight Into Terrain (CFIT) accident at the mountainous area of Barangay Ditarum, Divilacan, Isabela, Philippines on January 24, 2023, at around 1455H.

Notification of Occurrence to National Authority

The accident was relayed to the CAAP AAIIB by the CAAP Operations Center on January 24, 2023.

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 Philippine Civil Aviation Regulation (PCAR) Part 13, an Investigator-In-Charge was 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 **10 November 2023.**

Synopsis:

On January 24, 2023, a Cessna U206F type of aircraft with Registry Number RP-C1174, owned by Our Builders Warehouse, Inc., departed Cauayan Airport (RPUY) for Maconacon, Isabela, Philippines. On board the aircraft were one (1) pilot and five (5) passengers. It was expected to arrive at Maconacon at 1445H that day but at around 1455H, the said aircraft was reported to be missing. The aircraft wreckage was found after forty-four (44) days of search and rescue in the mountainous area of Barangay Ditarum, Divilacan, Isabela, Philippines. The pilot and all five (5) passengers were found fatally injured and the aircraft was completely destroyed. The investigation determined that the probable cause of the accident was the pilot's failure to clear off the terrain during the cruise-descent phase of the flight due to reduced visibility as a result of inclement weather conditions.

LIST OF ACRONYMS AND ABBREVIATIONS

AAIIB : Aircraft Accident Investigation and Inquiry Board AANSOO : Aerodrome and ANS Safety Oversight Office

AMO : Approved Maintenance Organization

AOC : Air Operator Certificate
APG : Associase Pilot Garudo
ATC : Air Traffic Control

ATII : Aviation Technology Innovators, Inc. ATO : Approved Training Organization

ATS : Air Traffic Service

BNC : Bayonet Neill-Concelman

CAAP : Civil Aviation Authority of the Philippines

CFIT : Controlled Flight Into Terrain
 COA : Certificate of Airworthiness
 COR : Certificate of Registration
 CPL : Commercial Pilot License

ELT : Emergency Locator TransmitterEQC : Equipment Qualification CourseFSIS : Flight Standards Inspectorate Service

FSS : Flight Service Station

GPS : Global Positioning System LGU : Local Government Unit

MDRRMO : Municipal Disaster Risk Reduction Management

Office

PAGASA : Philippine Atmospheric, Geophysical and

Astronomical Services Administration

PARCC : Philippine Aeronautical Rescue Coordinating

Center

PAF : Philippine Air Force

PDRRMO : Provincial Disaster Risk Reduction Management

Office

PCAR : Philippine Civil Aviation Regulation

PIC : Pilot-In-Command

PNP : Philippine National Police

PTO : Permit to Operate
VFR : Visual Flight Rules
VHF : Very High Frequency

SOP : Standard Operating Procedures



Republic of the Philippines CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

1. FACTUAL INFORMATION

Aircraft Registration No. : RP-C1174

Aircraft Type/Model : Textron Aviation Inc., Cessna U206F

Operator : Our Builders Warehouse, Inc.

Address of Operator : Sta. Agueda, Purok Sal-Ing, Pamplona, Negros

Oriental, Philippines

Place of Occurrence : Barangay Ditarum, Divilacan, Isabela,

Philippines

Date/Time of Occurrence : January 24, 2023/On or about 1455H

Type of Operation : General Aviation

Phase of Flight : Descent

Type of Occurrence : Aircraft collision - high terrain

1.1 History of Flight

On or about January 24, 2023, a Cessna U206F type of aircraft with Registry Number RP-C1174 departed Cauayan Airport (RPUY) for Maconacon, Isabela, Philippines. Onboard the aircraft were one (1) pilot and five (5) passengers. It was expected to arrive at Maconacon at 1445H that day. At around 1455H, the said aircraft was reported to be missing. Search and rescue activities were then initiated by the Philippine Aeronautical Rescue Coordinating Center (PARCC) in coordination with the Philippine Air Force (PAF) and the Isabela Provincial Disaster Risk Reduction and Management Office (PDRRMO). After forty-four (44) days of search, the crash site was discovered on March 9, 2023, at Barangay Ditarum, Divilacan, Isabela, Philippines. The pilot and all the passengers were fatally injured. The aircraft was destroyed upon impact with a forested area along the slope of a mountain. The remains of the passengers were then recovered and transported by air to Cauayan, Isabela, Philippines.

1.2 Injuries to Person (s)

Injuries	Crew	Passengers	Others	TOTAL
Fatal	1	5	0	6
Serious	0	0	0	0
Minor	0	0	0	0
None	0	0	0	0

1.3 Damage to Aircraft

The aircraft was completely destroyed upon impact.

1.4 Personnel Information

1.4.1 Pilot-In-Command (PIC)

Gender : Male

Date of Birth : May 16, 1977
Nationality : Filipino
License : CPL 143164
Valid up to : March 31, 2027

Medical Certificate : Class 1 valid until March 07, 2023

Date of last medical : November 02, 2022

Total Flying Time : 197 + 30 Hours as of April 20, 2022 Total Flying Time on Type : 12 + 30 Hours as of May 10, 2022

1.5 Aircraft Information

The Textron Aviation Inc. Cessna U206F is a six (6) seater, high wing, single engine, general aviation aircraft with fixed landing gear, used in commercial air service as well as for personal use. The "U" designation indicated "utility" and this model was equipped with a pilot side door and large clamshell rear door serving the back two rows of seats, allowing easy loading of oversized cargo.

1.5.1 Aircraft Data

Registration Mark : RP-C1174

Manufacturer : Textron Aviation Inc.
Type/Model : Cessna U206F
Serial Number : D20601905

Date of Manufactured : 1973

Aircraft Total Time : 12,034 + 04 Hours as of May 30, 2022

Certificate of Airworthiness : Valid until July 07, 2023

Certificate of Registration : Valid until November 16, 2023

Gross Weight : 1,636 Kilograms (Kgs.)

1.5.2 Engine Data

The Continental IO-520-F is a six-cylinder, horizontally opposed aircraft engine produced by Teledyne Continental Motors. First run in 1963 as a development of the IO-346, it has been produced in versions incorporating fuel injection, turbo-charging, and gearing

Manufacturer : Continental
Type/Model : IO-520F
Engine Serial Number : 570618
Time Between Overhaul : 1,800 Hours

Time Since Overhaul : 653 + 18 as of May 30, 2022

Time Since New : 5,714 + 52 Hours as of May 30, 2022

1.5.3 Propeller Data

Manufacturer : McCauley Type/Model : D2A34C58-NO

Propeller Serial Number : 742077 Time Between Overhaul : 1,500 Hours

Time Since Overhaul : 486 + 56 Hours as of May 30, 2022 Time Since New : 6,880 + 10 Hours as of May 30, 2022

1.6 Meteorological Information

Visual Meteorological Conditions (VMC) prevailed at the time of the incident:

Date/Time	Wind	Wind	Visibility	Sky	Temperature	Dew	ONH
Date/Time	Direction	Speed		Condition	Temperature	Point	QIVII
24 Jan 2023/0600Z	360	09	10 km	SCT 040	28°C	22°C	1014
24 Jan 2023/0700Z	360	11	10 km	SCT 040	28°C	21°C	1014

Note: Weather information was taken from the files of CAAP Cauayan airport ATC Tower.

1.7 Aids to Navigation

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

1.8 Communications

The aircraft is equipped with a standard radio transceiver to facilitate the communications between the pilot, air traffic controller and other traffic within the area.

1.9 Flight Recorders

The aircraft is not equipped with flight recorders and existing Philippine Civil Aviation Regulation does not require such for this type of aircraft.

1.10 Wreckage and Impact Information

The crash site is situated roughly 18 kilometers from Maconacon airport and about 60 kilometers from Cauayan airport.

The aircraft wreckage was discovered scattered across the slope of the mountain at coordinates 17° 13′ 24.96″ N, 122° 13′ 41.64″ E. Moreover, most of the aircraft parts lie at an elevation of approximately 1,870 feet with a general heading of 31° NE.

Further inspection of the crash site revealed the following:

- 1. Only the empennage section of the aircraft remained relatively intact and was found lodged in between trees in a down-sloping position.
- 2. The engine was located in the lower part of the mountain, some distance away from the main fuselage.
- 3. Observed crumpled and detached sections of the wings and horizontal stabilizers;
- 4. A broken section of the propeller tip was found at the site.
- 5. Passenger seats were discovered among the wreckage located below the hill and farther away from the main fuselage.
- 6. The nose landing gear was noted to be detached from the aircraft.



Figure 1 - RP-C1174 at the accident site.



Figure 2 – Aircraft engine located some distance away from the fuselage.



Figure 3 – Aircraft parts scattered within the crash site



Figure 4 – Branches of tress hit by the aircraft during its descent.

1.11 Medical and Pathological Information

The remains of the pilot were subjected to a post-mortem examination by the Philippine National Police (PNP) Regional Crime Laboratory Office 2. Based on the PNP report, a gaping fracture on the pilot's head, particularly over the left eye socket extending to the frontal bone and left parietal bone, was noted. The right hand is also noted to be already detached from the body. In addition, the Toxicology Report on the subject yielded a "negative" result to the tests for the presence of ethyl glucuronide, a metabolite of ethyl alcohol.

1.12 Fire

There was no evidence of post-crash fire at the accident site.

1.13 Survival Aspects

In consideration of the severity of the crash, the possibility of the occupants surviving is highly unlikely. If, by some rare chance, any of the occupants managed to survive the impact, they would likely sustain major injuries.

Moreover, the crash site was situated in an extremely remote area deep within the Sierra Madre Mountain range. The challenging terrain and unpredictable weather conditions in the area posed significant obstacles for local emergency responders to immediately rescue the aircraft occupants. With this, it took the aerial and ground search operations a grueling forty-four (44) days to locate the site.

Furthermore, it was discovered that the aircraft's Emergency Locator Transmitter (ELT), which is intended to transmit distress signals to aid the search and rescue after the crash, was still in place. However, it was observed that the Bayonet Neill-Concelman (BNC) connector used for the ELT was loose. Given the forceful impact experienced by the aircraft upon colliding with

the dense foliage of the mountain, it is plausible that this impact caused the connector to become loose, consequently hindering the proper functioning of the ELT equipment. As a result, the distress signal that could have facilitated the easier location of the aircraft was not effectively transmitted.

1.14 Organizational and Management Information

Based on the aircraft Certificate of Registration (CoR) of RP-C1174, the registered owner was Our Builder's Warehouse Inc. However, a copy of the Deed of Absolute Sale was obtained, indicating that the aircraft was sold to HML Technologies and Services, Inc. on April 4, 2022. On HML's "Amended Articles of Incorporation", the company is engaged in various types of businesses related to the sale and distribution of firearms, ammunition accessories, defense equipment, general construction, repair, and maintenance of communication networks related to security and commercial aviation. It has a principal office located at Unit 3-C, Place One Building, 205 Katipunan Avenue, Quezon City, Philippines.

2.0 ANALYSIS

2.1 Pilot

2.1.1 Trainings and Qualifications

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

- 1. The pilot is a holder of a valid CAAP-issued license and medical certificate.
- 2. He has a rating to operate a Cessna 150 and Cessna 206 type of aircraft.
- 3. The pilot was not instrument rated and only authorized to fly under VFR conditions.
- 4. His Cessna 206 aircraft rating was obtained last May 26, 2022, after successfully passing his proficiency flight test conducted by a CAAP-designated check pilot.
- 5. Prior to his Proficiency Flight Test, he was able to submit the following documents to support his application for an additional rating:
- 6. Certificate of Flying Time issued on May 10, 2022;
- Certification-Equipment Qualification Ground Course on Cessna 206 on March 14– 18, 2022

On his "Certificate of Flying Time", it was issued by Aviation Technology Innovators, Inc. (ATII), wherein he was certified to have accumulated a total of 12+30 hours of flying time on a Cessna 206 type of aircraft from April 4, 2022, to May 8, 2022. However, further investigation indicates that there were no other supporting documents confirming the pilot's employment with the mentioned organization during that specific period. As a result, questions have been raised regarding the legitimacy of the certificate and its accuracy in reflecting the pilot's association with ATII during the stated timeframe. Likewise, the stated aircraft in the certificate, which is RP-C1174, is also not in any way connected with ATII based on available CAAP files.

As for his Equipment Qualification Ground Course, this was also conducted by ATII, and based on the CAAP records, the said organization was not an Approved Training

Organization (ATO) Certificate holder but rather an Approved Maintenance Organization (AMO) with CAAP certificate no. 172-19 valid until September 30, 2026.

Due to the uncertainties arising from the files extracted from CAAP records, the AAIIB took the initiative to invite the President of ATII for clarification on the matter. During the interview, she categorically stated that the certificates mentioned had not been issued by their organization. This assertion was corroborated by ATII's Quality Manager and Finance Consultant, who emphasized that all certificates released by their company bear an official dry seal and a control number. In contrast, a review of the records compiled by the AAIIB revealed a lack of both the dry seal and control number on the pertinent document. Furthermore, upon examining documents sampled from ATII's files, inconsistencies emerged in the documents submitted to CAAP, particularly in regard to the purported signature of the ATII President.

With the above results of the interview and validation of records, a conclusion can be drawn that falsified documents were indeed submitted to CAAP in connection with the pilot's application for an additional rating on the Cessna 206.

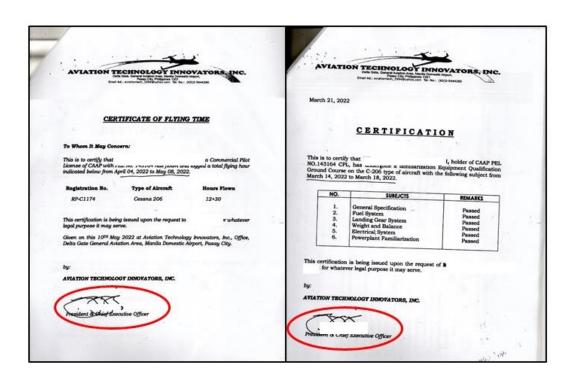


Figure 5 – Documents submitted by the involved pilot during his application for additional aircraft type rating which was allegedly issued by ATII.



Figure 6 – Sample document issued by ATII with the valid signature of their Accountable Manager.

2.1.2 Duty Time and Rest Period

A copy of Cauayan Airport Control Tower records on the flying history of RP-C1174 discloses the following:

1. Since the aircraft arrives at Cauayan airport last July 25, 2022, it has been solely operated by the involved pilot. He has the following number of flights for the months stated:

a. July 25 -31, 2022 : 16 total flights
b. August 01-29, 2022 : 102 total flights
c. September 05-23, 2022: 98 total flights
d. January 06-24, 2023 : 91 total flights

Note: There was no recorded flights for RP-C1174 from September 24, 2022 – January 05, 2023 due to scheduled maintenance actions.

- 2. For the month of September 2022, the pilot involved has been observed flying for eleven (11) consecutive days from September 13–23. Likewise, he was also noted to be on flying duties for eighteen (18) consecutive days on January 06-23, 2023 prior to his involvement in the accident on January 24, 2023.
- 3. Under PCAR Part 8.11, the authority clearly defines the regulation pertaining to Fatigue Management for flight time, flight duty periods, duty periods, and rest periods of pilots operating under Commercial Air Transport. On PCAR 8.11.1.3, the operator is required to have all crew members be relieved of flight duty after seven (7) consecutive days.

However, there is no available regulation governing the duty time of pilots involved in general aviation.



Figure 7 – CAAP Cauayan Tower records showing that RP-C1174 had been flying daily from January 06-24, 2023.

2.2 Aircraft Status

2.2.1 Pre-flight Inspection

According to the statement given by the maintenance personnel assigned to RP-C1174, the required pre-flight inspection was performed on the aircraft prior to its first flight on January 24, 2023. There was no discrepancy noted on the aircraft, and it was released for its first flight, which departed Cauayan airport at around 0910H and returned at around 1013H. The aircraft again departed Cauyan three (3) more times that day without any maintenance discrepancy or pilot report of problem in the aircraft.

2.2.2 Maintenance Records

The majority of the aircraft documents and records were on board, and unfortunately, none of them were recovered after the accident due to damage caused by prolonged exposure to the elements at the site. The investigators managed to secure only the second copy of the Aircraft Flight and Maintenance Logbook covering the period of January 7–23, 2023, which was in the possession of the assigned maintenance personnel of RP-C1174.

On the review of the subject documents, there was no record of any defect or discrepancy noted on the aircraft during the dates mentioned.

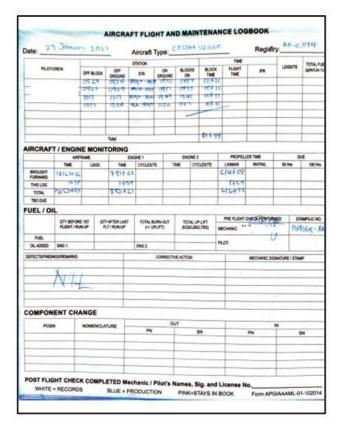


Figure 8 – Aircraft Flight and Maintenance Logbook of RP-C1174 last January 23, 2023.

2.2.3 Test and Research

On March 16, 2023, the AAIIB team was able to locate the aircraft engine at the accident site. Arrangements were then made with local guides, military and police personnel for assistance in retrieving the subject and having it transported for the planned engine teardown inspection.

On March 27, 2023, the engine arrived at the Pegasus Air Services Inc. facility in Plaridel, Bulacan. Pegasus is a CAAP Approved Maintenance Organization (AMO) certificate holder with certificate number 155-16 valid until October 21, 2027, and with a powerplant rating on the Continental series of engines under its approved Specific Operating Provisions. Under the supervision of the AAIIB, Pegasus personnel started the disassembly and evaluation of the subject. A copy of the Engine Teardown Report dated March 27, 2023, was later furnished on March 29, 2023, with the following summary of findings:

- 1. The engine shows major damage from the consequence of the crash;
- 2. All engine components that were found to be defective, structurally damaged during disassembly and visual inspection appear to have been damaged due to impact.



Figure 9 – Pictures of the engine during the teardown inspection last March 27, 2023.

2.3 Operations

Within the aviation community of Cauayan airport, there were undocumented reports saying that RP-C1174 flights to and from Cauayan were being managed by "AIRJUAN Airline". Everything from booking and ticket issuance up to the actual facilitation of its flight operations was said to be handled by its known personnel. This was likewise supported by the next-of-kin of passengers fatally injured in the accident, who stated that they had purchased their tickets for the flight from Cauayan to Maconacon on January 24, 2023, at "AIRJUAN's" office.

On records secured from the CAAP office in Cauayan, it indicates that personnel attending RP-C1174 were being requested airport access passes by the "Operations Manager of AIRJUAN Airline". However, the involved aircraft, RP-C1174, was not registered nor part of the Operations Specifications of "AIRJUAN," as verified with CAAP files. Likewise, the aircraft Certificate of Registration (CoR) is registered under Our Builders Warehouse Inc., but with a denied transfer of ownership application to HML Technologies and Services Inc. with the CAAP FSIS. Moreover, flight plans submitted to the Cauayan Airport Air Traffic Service (ATS) as well as records on the Cauayan Airport Daily Monitoring Report on Aircraft Operations and Airport Traffic also present confusing information since these documents registered RP-C1174 under Associase Pilot Garudo (APG), a local flying school based in Subic Airport in Zambales.

During the interview with the Accountable Manager of APG, he made it clear that the school has no direct involvement with the concerned aircraft. He stressed that all transactions pertaining to it were conducted on a personal basis, exclusively between himself and both the previous and current owners of RP-C1174. His role was primarily limited to facilitating the sale of the aircraft and providing maintenance support when there was a need to replace a major engine component. However, he admitted that he cannot definitively explain how APG's name appeared on all the flight plans filed for the involved aircraft. Likewise, his statement that APG personnel only provided support to RP-C1174 for a limited period of time contradicts the statement gathered from his maintenance personnel. According to his mechanics, they have been stationed at

Cauayan airport since the aircraft's arrival and have consistently provided regular maintenance services whenever the aircraft had a scheduled flight.

The AAIIB also conducted an interview with the President and Accountable Manager of Air Juan Aviation, Inc., a CAAP Air Operator Certificate (AOC) holder with AOC number 2013053, valid until April 14, 2026. Based on its issued AOC, Air Juan Aviation, Inc. is authorized to perform commercial operations (domestic scheduled and non-scheduled air transportation services) as defined on its approved Operations Specifications and in accordance with its Operations Manual and PCAR Part 9. Likewise, the company's approved Operations Specifications list the following aircraft under its fleet:

Registry Number	Type of Aircraft
1. RP-C193	Cessna 208B
2. RP-C1087	Cessna 208B
3. RP-C2612	Bell 429
4. RP-C7513	Cessna 525C

During this interview with Air Juan Aviation, Inc., the following have been clearly established:

- A. An official statement was released by Air Juan Aviation, Inc. last January 25, 2023 stating that the company does not own or operate RP-C1174;
- B. Air Juan Aviation, Inc. is not the same with "AIRJUAN Airline". The latter was the organization indicated on the files gathered from CAAP Cauayan airport;
- C. The person identified on the letter submitted to CAAP Cauayan as the "Operations Manager of AIRJUAN Airline" was not an employee of Air Juan Aviation, Inc. as confirmed by the President itself and corroborated by his Account Officer and Quality Manager;
- D. Air Juan Aviation, Inc. had an operation at Cauayan airport as part of their charter services. However, they have temporarily ceased their operations at the said airport last June 2022 because their aircraft, RP-C193, was scheduled to undergo an engine overhaul after reaching the required 4,000 hours time between overhaul. The aircraft has just been released back to service this September 2023;
- E. The management of operations at Cauayan airport for Air Juan Aviation, Inc. is under their contracted sales agent. The AOC holder is responsible solely for providing the aircraft and crew for the charter service;
- F. Air Juan Aviation, Inc. does not have any physical office at Cauayan. All transactions related to their charter services are being done within the office of their sales agent;
- G. Following the temporary cessation of Air Juan Aviation, Inc.'s operations at Cauayan airport, their contracted sales agent continues to provide charter flight services under the name "AIRJUAN Airline" utilizing aircraft from different operators.

From July 25, 2022, until the day of the accident, CAAP FSIS records indicate that RP-C1174 operated under the premise of general aviation operations. However, according to the Cauayan airport Daily Monitoring Report on Aircraft Operations and Airport Traffic, the involved aircraft has been regularly engaged in transporting revenue passengers and cargo to and from Cauayan since July 26, 2022. This includes flights covered by the letter addressed to CAAP Cauayan Airport Manager from the Mayor of Palanan, Isabela, informing the CAAP that they have borrowed the involved aircraft to cater passengers and cargoes to and from Palanan-Cauayan-Maconacon for humanitarian reasons. Based on this information, it appears that RP-C1174 is

being operated under the guise of a general aviation operator while functioning within the realm of commercial operations. In addition, there were no records within the CAAP FSIS indicating that prior authorization was issued to RP-C1174 to conduct humanitarian flights.

Based on the aforementioned conclusion, it is evident that the flight duty and rest period requirements applicable to the concerned pilot can be directly linked to this issue, and consequently, the pilot falls under the scope of PCAR Part 8.11 provisions due to the nature of its operations, which are operated under commercial operations. Accordingly, this practice of both the operator and the pilot runs counter to the published regulations of the Authority particularly on flight and duty time restrictions.

Furthermore, efforts have been made by the CAAP AAIIB to invite the Operations Manager of the AIRJUAN Airline or its authorized representative for a meeting, unfortunately, there has been no response received from the said organization.

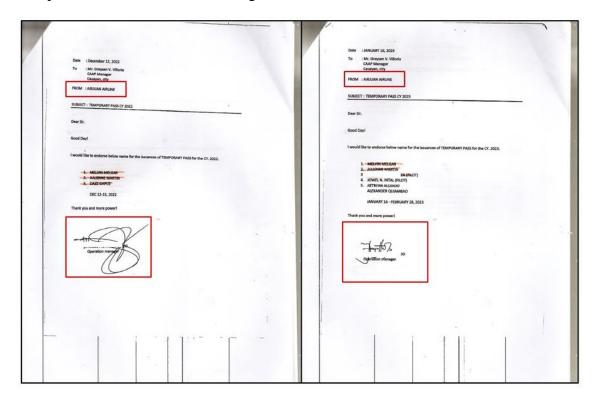


Figure 10 – Airport access passes application of AIRJUAN airline submitted to CAAP Cauayan Airport Manager dated December 12, 2022 and January 16, 2023.



Figure 11 – CAAP issued AOC and approved Operations Specifications of Air Juan Aviation, Inc.



Figure 12 – Certificate of Registration of RP-C1174 under Our Builders Warehouse, Inc.

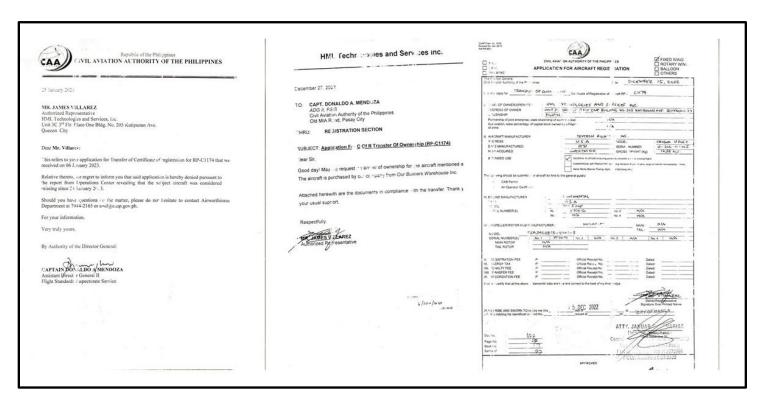


Figure 13 – Documents related to the application for transfer of ownership of RP-C1174 from Our Builders Warehouse, Inc. to HML Technologies and Services, Inc.

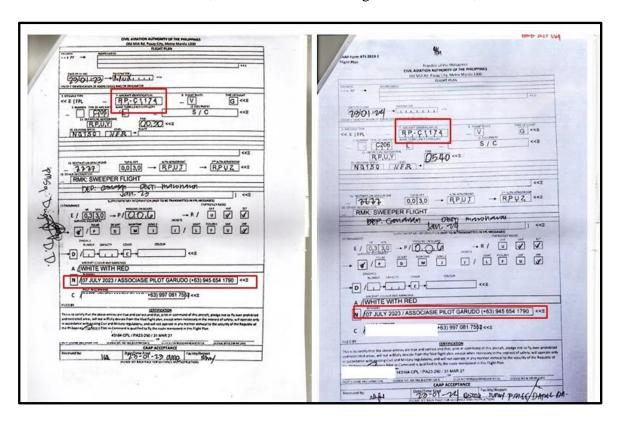


Figure 14 – Flight Plans filed for RP-C1174 under APG.



Figure 15 – Official statement from Air Juan Aviation, Inc. dated January 25, 2023 stating that the company does not own or operate RP-C1174.

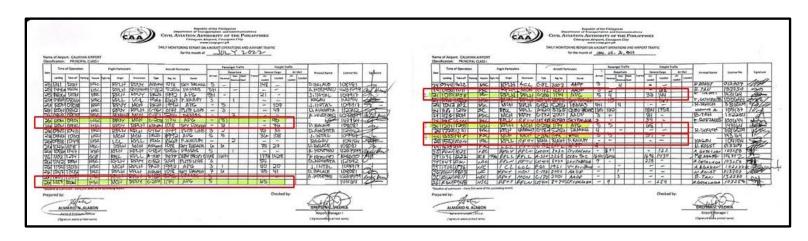


Figure 16 – Cauayan Airport Daily Monitoring Report on Aircraft Operations and Airport Traffic indicating that RP-C1174 regularly operates with revenue passengers.

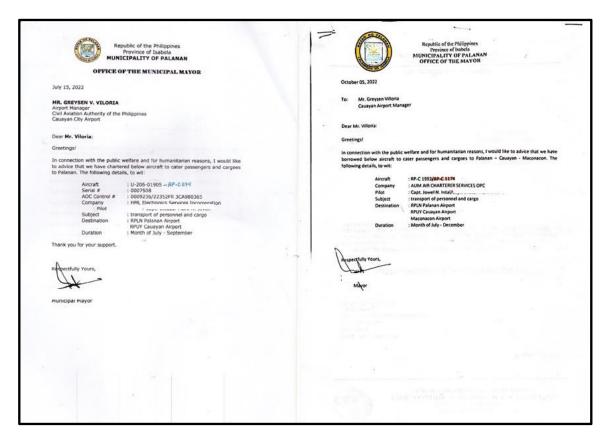


Figure 17 – Letter from the LGU of Palanan, Isabela informing CAAP Cauayan that they will utilize RP-C1174 for public welfare and humanitarian reasons.

2.4 Weather and Flight Route

Interviews were conducted with pilots who routinely operate the Cauayan to Maconacon route. This includes the two (2) pilots who have flown the route prior to and after the accident flight on January 24, 2023. These interviews revealed that it was common knowledge among pilots that weather conditions within the Sierra Madre mountains and Maconacon area can swiftly and unpredictably shift from good to worse.

On the day of the accident, the weather in the Cauayan area was reported to be good. However, a light rain shower had already started over Maconacon, as mentioned by the last pilot, who departed the station at around 1100H utilizing RP-C2001. There was also a report received from their known weather "spotter" stationed in Maconacon indicating that the wind conditions in the area had already begun to gust like a "typhoon signal no. 1". Similarly, a passenger onboard RP-C1174 during its first flight from Cauayan to Maconacon that departed at around 1255H described experiencing thick clouds (per the said passenger, all they could see outside of the aircraft was white) and rain over Sierra Madre, resulting in a very turbulent flight prior to landing. Furthermore, the pilot who conducted the initial search operation sortie just after receiving the report of the missing aircraft disclosed that they were unable to proceed towards the Sierra Madre range at that time due to a powerful downdraft. As a result, their search was confined only to the flatlands of Isabela.

Pilots heading to Maconacon typically depend on their pre-flight weather briefings primarily based on the data provided by the "Windy" application and weather observations shared by their designated weather "spotter" in Maconacon. However, it's worth noting that the mentioned application does not provide immediate real-time information, while the "spotter" does not possess any documented or formal training in meteorology. Instead, the latter relies on firsthand observations of his surroundings, such as cloud cover and wind conditions, and provides this information to pilots flying the route. Furthermore, the involved operator does not have the process to monitor and track their aircraft flying to uncontrolled airports.

During the on-site investigation at Maconacon airport, efforts were made to locate the "spotter," who relayed the latest weather observation to the pilot of RP-C1174. Unfortunately, his whereabouts were unknown during the inquiry by AAIIB investigators. Additionally, investigators had the opportunity to speak with the Mayor and the head of the Municipal Disaster Risk Reduction and Management Office (MDRRMO) of Maconacon. They mentioned that the weather conditions at the time of the accident were characterized by strong winds and light rain. The part of the Sierra Madre mountains facing the runway was also barely visible during that period. They also added that at that time, they had no access to real-time information coming from PAGASA's weather instruments. Likewise, the airport itself is not equipped with standard weather instruments to support the daily flight operations.

As for the flight between Cauayan and Maconacon, pilots flew the route under VFR procedure, which was also the flight plan filed by the pilot of RP-C1174 with Cauayan ATS. They also operate in an uncontrolled airspace after leaving or prior to entering the Cauayan Airport Flight Service Station (FSS) managed area. The flight route requires traversing the Sierra Madre range via waypoints known as north gap 1, north gap 2, and north gap 3. These waypoints have been established by seasoned pilots who have been flying the route for a longer period of time and were then shared with other pilots serving the area. These waypoints are usually plotted on their personal portable GPS devices in addition to the GPS installed in the aircraft.

Navigating over the Sierra Madre mountains presents pilots with a number of challenges, mainly due to the presence of elevated terrain and the potential for sudden and erratic localized weather conditions. Under VFR, pilots are expected to be able to see outside the cockpit, control the aircraft's altitude, and avoid obstacles as well as other aircraft. Given the details about the prevailing weather at the time of the accident and the terrain features along this route, it is evident that these factors played a substantial role in the occurrence of this accident.

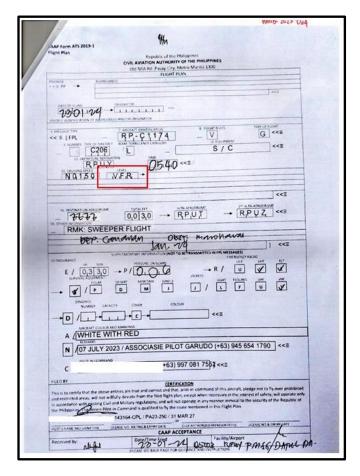


Figure 18 – Flight Plan filed by RP-C1174 last January 24, 2023 indicating that the flight is a VFR flight.

2.5 Accident Site Investigation

Ocular investigation of the site revealed the following:

- 1. The accident site is located within the known flight path of aircraft flying the Cauayan Maconacon route particularly between waypoints identified as north gap 2 and north gap 3;
- 2. The accident occurred shortly after the aircraft crossed north gap 2, approximately 1.16 nautical miles from the said waypoint;
- 3. The accident location exhibits a minor deviation from the normal track enroute to north gap 3:
- 4. The aircraft was located on the mountain on the right-hand side of the course at an elevation of approximately 1,870 feet and with a last heading generally oriented leading towards Maconacon airport;
- 5. According to the statements provided by pilots familiar with this route, the accident location lies within the juncture of the flight where pilots typically commence their descent towards the airport for landing.

Further, site inspection revealed that the disintegration of the aircraft upon impact can be conclusively attributed to its collision with large hardwood trees at the crash site. The presence of broken tree trunks and twigs scattered around the wreckage area provides substantial evidence supporting this cause. This collision between the aircraft and the hardwood trees generated

Final Report RP-C1174, Cessna U206F

extremely high impact forces, causing the fragmentation and breakup of the aircraft structure. The combination of the aircraft's velocity and the robustness of the trees likely resulted in the latter. Analysis of the wreckage pattern and the distribution of debris from aircraft components clearly indicates that the aircraft encountered these sturdy trees during its descent.

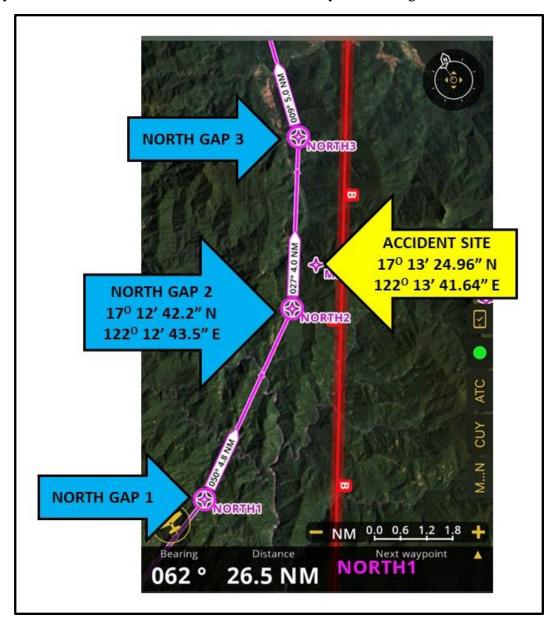


Figure 19 – Waypoints North Gap 1 to 3 located within the Sierra Madre and the accident location site.

2.6 Maconacon Airport

Maconacon Airport is the primary gateway to the Municipality of Maconacon in the Province of Isabela. Maconacon is one of the four coastal towns of the province, facing the Philippine Sea to the east and separated from the rest of the province by the Sierra Madre Mountain range. Due to its remoteness and isolation, air travel is considered the fastest way in and out of the area.

The airport is being managed and operated by the LGU of Maconacon. Based on the records secured from the CAAP AANSOO, a temporary Permit to Operate (PTO) for Maconacon Aerodrome was granted through the CAAP letter dated February 16, 2023, with a validity of February 15, 2023, up to May 15, 2023.

With the above information, it was found that the airport had been operating and providing flight operation services to general aviation and commercial operations without the required PTO for an airstrip when the accident happened on January 24, 2023



Figure 20 – Maconacon airport.

3.0 CONCLUSION

3.1. Findings

- **3.1.1** The involved pilot is a holder of a valid pilot license and medical certificate issued by the CAAP. However, the pilot involved submitted falsified documents to the CAAP during his application for an additional rating on the Cessna 206 in May 2022.
- **3.1.2** The aircraft has valid Certificates of Airworthiness and Registration.
- **3.1.3** The aircraft was released for flight without any recorded maintenance issues. Likewise, teardown inspection of the engine disclosed that all engine components that were found to be defective or structurally damaged during disassembly appear to have been damaged due to impact.
- **3.1.4** Upon the temporary termination of Air Juan Aviation, Inc.'s operations at Cauayan Airport, their contracted sales agent continues to provide air charter flight services under the name "AIRJUAN airline" utilizing RP-C1174. The said aircraft was utilized for commercial operations in and out of Cauayan Airport since July 2022, despite its classification in CAAP records as a general aviation aircraft.
- **3.1.5** According to the documents secured from the CAAP Cauayan Airport, the aircraft was chartered by the LGU of Palanan, Isabela, for public welfare and humanitarian reasons for the months of July to December 2022. However, there was no existing documentation that there was prior approval from the CAAP FSIS on the subject.

Final Report RP-C1174, Cessna U206F

Likewise, records indicate that the aircraft had been utilized for commercial operations with revenue passengers and cargoes during that specified period.

- **3.1.6** The pilot and the operator completely disregarded the provisions under PCAR Part 8.11 on flight duty and rest periods by operating RP-C1174 commercially and not observing the published flight and duty time restrictions for pilots.
- **3.1.7** The pilot continued the flight beyond VFR restrictions by pressing on towards the destination despite being aware of the emerging localized adverse weather conditions along the flight path. In addition, he proceeded with the flight even if he was not an instrument-rated pilot.
- **3.1.8** There is no available source of official real time weather information at Maconacon that will provide real time data to pilots operating IN and OUT of the airport. Likewise, the operator has no means of monitoring and tracking their aircraft flying to uncontrolled airports.
- **3.1.9** Signs of a high-speed collision during the aircraft's descent were evident in the wreckage pattern and the impact on the mountain's vegetation at the accident site.
- **3.1.10** Maconacon Airport had been operating and providing flight operation services without the CAAP required PTO for an airstrip during the accident last January 24, 2023.

3.2 Probable Cause

3.2.1 Primary Cause Factor

a. The pilot failed to clear off the terrain during the cruise-descent phase of the flight due to reduced visibility as a result of inclement weather conditions.

3.2.2 Contributory Factors

- **b.** The decision of the pilot to continue the flight even with the initial information of a developing localized adverse weather condition within the flight route and destination.
- **c.** Lack of available real time accurate weather data at Maconacon Airport.
- **d.** The aircraft is being operated commercially without established internal procedure (i.e., SOP on weather briefing and flight following) to ensure the safe completion of every flight.
- **e.** Non-observance of flight duty time and rest periods restrictions for commercial like operations which could have compromise the sound judgement and decision-making ability of the pilot.

4. SAFETY RECOMMENDATIONS

The following Safety Recommendations were proposed and forwarded to the **CAAP-FSIS** dated September 28, 2023:

- **a.** Implement additional measures by collaborating with aerodrome operators as well as with the Air Traffic Services in order to monitor and identify general aviation flights operating illegally as commercial flights.
- **b.** Ensure that the veracity of submitted airmen documents (i.e., Certificate of Flying Time, Certificate of Completion of EQC, etc.) from personnel applying for CAAP-issued licenses is thoroughly validated and checked prior to their processing.

In addition to the above, the following additional recommendations are being proposed as a result of the investigation:

For **CAAP- FSIS** to ensure that:

- **a.** Review be made on possible implementation of appropriate procedures on the flight and duty time restrictions of general aviation pilots.
- **b.** Enhanced measures have been implemented in the evaluation process of entities/organization applying for CAAP authorization to conduct humanitarian flights to include the conduct of random surveillance to those operating this type of operations.
- **c.** Operators consider establishing proper monitoring and tracking of their aircraft flying to an uncontrolled airport.

For **CAAP- AANSOO** to ensure that:

- **a.** Additional measures are implemented in order to monitor and identify Aerodrome that are being operated without Permit to Operate.
- **b.** Review and consider mandating all aerodrome operator to provide a readily available source of weather information for all operators operating at their respective airport.

5. SAFETY ACTIONS

- **5.1** Following this occurrence, the Maconacon LGU initiated the following safety actions:
 - **a.** Installed a VHF radio communication equipment at the airport to monitor incoming and outgoing traffic and make the necessary advisories if required.
 - **b.** Submitted to the CAAP their request for issuance of a temporary Permit To Operate Maconacon aerodrome last February 07, 2023.

-END-