



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-C5230
TWIN COMMANDER LLC 685

OPERATOR: SENTINEL LOGISTIC ENTERPRISE (SLE) INC.

TYPE OF OPERATION: GENERAL AVIATION

DATE OF OCCURRENCE: MARCH 17, 2022

***PLACE OF OCCURRENCE: WATERS OF BARANGAY STO. ROSARIO, IBA,
ZAMBALES, PHILIPPINES***

TABLE OF CONTENTS

(Twin Aero Commander Aircraft LLC 685, RP-C5230 Final Report)

Description	Page
Title Page	----- i
Table of Contents	----- ii
Foreword	----- iii
Synopsis	----- iv
List of Acronyms and Abbreviation	----- iv
1 Factual Information	----- 1
1.1 History of Flight	----- 1
1.2 Injuries to Person	----- 2
1.3 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	----- 3
1.5.2 Engine Data	----- 3
1.5.3 Propeller Data	----- 3
1.6 Meteorological Information	----- 3
1.7 Aids to Navigation	----- 4
1.8 Communications	----- 4
1.9 Flight Recorders	----- 4
1.10 Wreckage and Impact Information	----- 4
1.11 Medical & Pathological Information	----- 5
1.12 Fire	----- 6
1.13 Search and Survival Aspect	----- 6
1.14 Organization and Management Information	----- 6
2.0 Analysis	----- 6
2.1 General	----- 6
2.2 Aircraft	----- 6
2.3 Aircraft Operations/Flight Procedure	----- 8
2.4 Aircraft Engine Teardown Inspection	----- 9
2.5 Flight Crew	----- 10
3.0 Conclusions	----- 12
3.1 Findings	----- 12
3.2 Cause Factor	----- 13
3.2.1 Primary Cause Factor	----- 13
3.2.2 Contributory Cause Factor	----- 13
4.0 Safety Recommendations	----- 13
Signatories	----- 14
Appendices	
Appendix A	----- App-A
Appendix B	----- App-B

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
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MIA Road, Pasay City 1300
www.caap.gov.ph

FINAL REPORT

TITLE: An accident involving a Twin Commander LLC 685 type of aircraft with Registry Number RP-C5230 owned and operated by Sentinel Logistics Enterprise had a ditching occurrence at the waters of Brgy. Sto. Rosario, Iba, Zambales, Philippines, on March 17, 2022, at around 0730H.

Notification of Occurrence to National Authority

The accident was relayed to the CAAP AAIIB by the CAAP Operations Center on March 17, 2022.

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 and a 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 **19 July 2022.**

Synopsis:

On or about 0730H on March 17, 2022, a Twin Commander LLC 685 aircraft with Registry Number RP-C5230 ditched into the waters off Brgy. Sto. Rosario, Iba, Zambales. The aircraft was operated by Sentinel Logistics Enterprise Inc., a general aviation operator based in Manila. The flight had taken off from Iba Community Airport with five (5) passengers on board for a local traffic pattern. The pilot sustained a minor injury, two (2) passengers suffered serious injuries, and the remaining two (2) passengers incurred minor injuries. The aircraft sustained substantial damage as a result of the accident. The investigation determined that the probable cause of the accident was the aircraft encountering low engine power after take-off due to the pilot's non-adherence to standard operating procedures (SOP). It was also found that the pilot was not rated to operate the aircraft at the time of the accident.

LIST OF ACRONYMS AND ABBREVIATIONS

AAIIB	:	Aircraft Accident Investigation and Inquiry Board
AMO	:	Approved Maintenance Organization-
AOC	:	Air Operator Certificate
ATPL	:	Airline Transport Pilot License
BGRY	:	Barangay
CAAP	:	Civil Aviation Authority of the Philippines
CASORT	:	Civil Aviation Safety Oversight Reporting and Tracking Suite
CPL	:	Commercial Pilot License
EQC	:	Equipment Qualification Course
FAA	:	Federal Aviation Authority
FOSI	:	Flight Operations Safety Inspector
FSIS	:	Flight Standards Inspectorate Service
LCD	:	Licensing and Certification Department
LGU	:	Local Government Unit
NAIA	:	Ninoy Aquino International Airport
OFSAM	:	Office of the Flight Surgeon and Aviation Medicine
PIC	:	Pilot In Command
PNP	:	Philippine National Police
TCDS	:	Type Certificate Data Sheet
TSN	:	Time since New
TSO	:	Time since Overhaul
VFR	:	Visual Flight Rules
VHF	:	Very High Frequency
VMC	:	Visual Meteorological Condition



FACTUAL INFORMATION

Aircraft Registration No. : RP-C5230

Aircraft Type/Model : Twin Commander LLC 685

Operator : Sentinel Logistic Enterprise (SLE) Inc.

Address of Operator : Salud Dizon Bldg., Unit 2020, 5 MIA Road, Cor.
P. Mayuga St., Tambo, Parañaque City,
Philippines

Place of Occurrence : Waters of Brgy. Sto. Rosario, Iba, Zambales,
Philippines

Date/Time of Occurrence : March 17, 2022/ 0730H

Type of Operation : General Aviation

Phase of Flight : Landing

Type of Occurrence : Reciprocating engine - fuel starvation

1.1 History of Flight

On or about 0730H of 17 March 2022, a Twin Commander LLC 685 type of aircraft with Registry Number RP-C5230 ditched into the waters of Brgy. Sto. Rosario, Iba, Zambales. The aircraft is being operated by Sentinel Logistics Enterprise Inc., a general aviation operator based in Manila.

The flight took-off at Iba Community Airport with five (5) passengers on-board for a local traffic pattern. While on downwind, the pilot noticed a loss of power on engine no. 1 (LH) and after turning base, same was noted on engine no. 2 (RH). This led to the decision of ditching the aircraft near the shoreline of Brgy. Sto. Rosario, Iba, Zambales.

1.2 Injuries to Person (s)

Injuries	Crew	Passengers	Others	TOTAL
Missing/Fatal	0	0	0	0
Serious	0	2	0	2
Minor	1	2	0	3
None	0	1	0	1
TOTAL	1	5	0	6

1.3 Damage to Aircraft

The aircraft sustained substantial damage.

1.4 Personnel Information

1.4.1 Pilot

Gender : Male
Date of Birth : June 25, 1975
Nationality : Filipino
License : 101961-Airline Transport Pilot License (ATPL)
Valid up to : September 30, 2024
Type Rating : Multi-Engine Land – A320, B737-300/400
Medical Certificate : Class 1 valid until June 21, 2022
Date of last medical : December 21, 2021
Total Flying Time : 12,000 Hours as per Pilot Logbook
Total Flying Time On type : 0 Hours

1.5 Aircraft Information

The Rockwell Commander 685 or Aero Commander 685 (AC 685) is a light twin piston engine aircraft and a variant of the turboprop-powered Rockwell Commander 690, with two wing-mounted 435 hp Continental GTSIO-520K piston engines in a tractor configuration with three-bladed Hartzell feathering propellers. It is a high-wing cantilever monoplane with an enclosed cabin and a retractable landing gear.

The aircraft was originally built by the Aero Commander company, a division of Rockwell International. The Model 685 was type certified by the Federal Aviation Administration on 17 September 1971.

1.5.1 Aircraft Data

Registration Mark	:	RP-C5230
Manufacturer	:	Aero Commander/Rockwell International
Type/Model	:	Twin Commander LLC 685
Serial Number	:	12055
Date of Manufactured	:	1974
Aircraft Total Time	:	3,788 + 27 Hours as of 24 March 2021
Certificate of Airworthiness valid up to	:	Extended to 31 March 2022 per CAAP MC # 04-2022 dated 17 January 2022
Certificate of Registration valid up to	:	November 19, 2022
Gross Weight	:	4,105 Kilograms (Kgs.)

1.5.2 Engine Data

The Continental GTSIO-520-K 520 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 (IO-520), turbo charging (TSIO-520), and gearing (GTSIO-520).

The IO-520 series engines normally produce 285 to 310 horsepower (213 to 231 KW) and are used in numerous aircraft. The IO-520 remained in production in 2019. The 'G' prefix indicated the incorporation of a propeller reduction gearing.

Manufacturer	:	Teledyne Continental Motors
Type/Model	:	Piston/ GTSIO-520-K
Engine Serial Number	:	605161 (LH)/226119 (RH)
Time Between Overhaul	:	1,200 hours
Time Since Overhaul	:	767+52 hours (LH)/801+52 hours (RH)
Time Since New	:	1,572+39 hours (LH)/3,114+55 hours (RH)

1.5.3 Propeller Data

Manufacturer	:	Hartzell
Type/Model	:	Constant Speed/ HC-H3YN-2UF
Propeller Serial Number	:	DV-111 (LH)/DV-118 (RH)
Time Between Overhaul	:	1,200
Time Since Overhaul	:	11+54 hours(LH)/11+54hours(RH)
Time Since New	:	5,611+42 hours(LH)/3,193+59 hours (RH)

1.7 Meteorological Information

Visual Meteorological Conditions (VMC) prevailed at the time of the accident

1.8 Aids to Navigation

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

1.9 Communications

Aircraft is equipped with operational Very High Frequency (VHF) transceiver used for communicating with other pilots in the area.

1.10 Flight Recorders

The aircraft is not equipped with flight recorders and neither relevant regulation requires it.

1.11 Wreckage and Impact Information

The aircraft last position after ditching was at coordinates 15°20'06.6" N, 119°57'35.5" E and about 1 kilometer from the threshold of Iba airport runway 14. Following the aircraft's impact, it eventually submerged under water at around 5-10 feet below. The aircraft was later recovered from the crash site through the effort of the LGU and PNP Maritime Unit. It was towed to the shoreline of Brgy. Bangantalinga, Iba, Zambales which is about 1.3 kilometers from the accident site for temporary safekeeping. Moreover, substantial damage on the aircraft fuselage, wings, tail section and engines were noted because of this water landing. Please see figures 1-3.

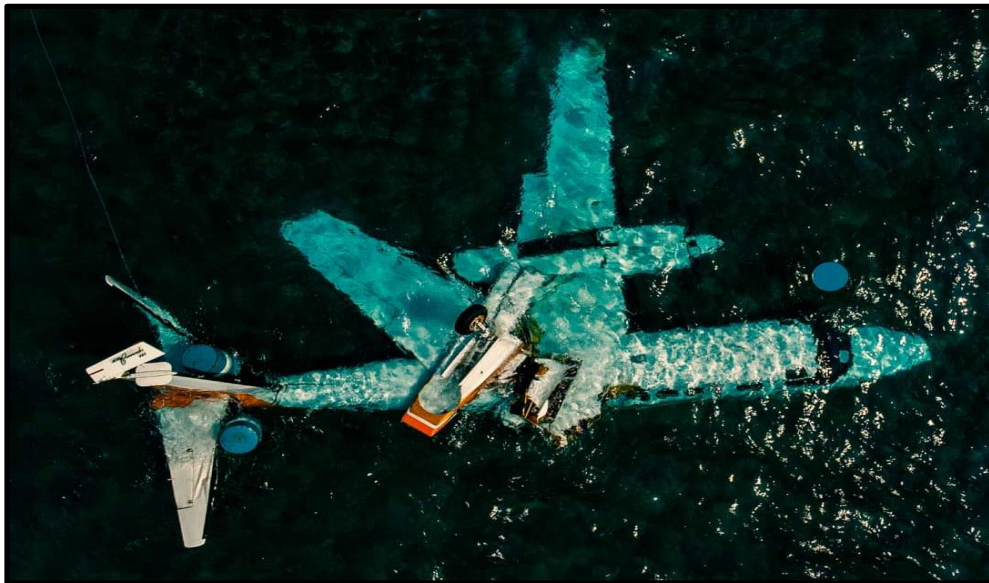


Figure 1 – RP-C5230 at the waters of Brgy. Sto. Rosario, Iba, Zambales



Figure 2 – RP-C5230 being towed near the shoreline



Figure 3 – The aircraft after it was recovered from the water

1.12 Medical and Pathological Information

The pilot and five (5) passengers on-board the aircraft were immediately brought to the nearest hospitals for medical evaluation. The pilot and one (1) passenger sustained minor injuries while two (2) of the passengers were seriously injured. In addition, the pilot had undergone the mandatory drug and alcohol testing which was then endorsed to CAAP OFSAM for the required post-accident medical examination.

1.13 Fire

There was no post-crash fire observed during on-site investigation

1.14 Survival Aspects

Upon impact with the water, the fuselage of the aircraft was totally intact. The occupants were able to immediately egress the aircraft before it became submerged in the water. Likewise, the crash site was near the shoreline thus enabling local fishermen, the LGU Bantay Dagat and PNP Maritime Group to immediately respond to the site and rescue the occupants.

1.15 Organizational and Management Information

Sentinel Logistics Enterprise Inc. (SLE) is a general aviation operator presently based at NAIA and with office address at Salud Dizon Bldg., Unit 202, 5 MIA Road corner P. Mayuga St., Tambo, Parañaque City, Philippines.

2.0 ANALYSIS

2.1 General

The PIC has no rating on the Aero Commander 685 type of aircraft. As for the aircraft, it has a valid issued Certificate of Registration and Certificate of Airworthiness.

2.2 Aircraft

2.2.1 Aircraft Records

On the review of available aircraft maintenance records, the following have been noted:

- a. The Airframe, Engine, Propeller logbooks indicate that the aircraft has its Annual Inspection completed by a CAAP certified AMO, Mactan Aviation Technology Center, Inc. (AMO Certificate No. 91-10) to which the latest was performed last 27 January 2021.
- b. For the most recent Annual Inspection, this was conducted last 24 January 2022 and performed only by a 3rd party maintenance personnel (aircraft mechanic/consultant contracted by the company to perform maintenance works on the aircraft). In addition, record of the inspection was only documented in a piece of paper filed together with the other previous documents (see Appendix A and B0).

Other aircraft maintenance/flight related records were not available for review since these documents were not recovered after it had submerged in the water.

Based on available aircraft records, there have been no previous record of aircraft discrepancies that may have caused the accident.

2.2.2 Aircraft Status

RP-C5230 departed Manila for Iba, Zambales last 16 March 2022 for the scheduled “probing flight”. The said flight was in preparation for the coming trip of one of the aircraft owner’s relative. On board that flight were six (6) pilot trainees and the PIC. No maintenance issues were logged on the aircraft on its departure from Manila.

On the interview with the assigned mechanic, the aircraft arrived at Iba Airport with a reported hydraulic issue on its RH main landing gear. The mentioned mechanic together with another maintenance personnel from Manila were then ordered to proceed to Iba Airport to perform repair on the reported discrepancy. They arrived at the airport at around 1530H of that day and completed the repair late that night to include performance of an engine run-up. After the run-up, no further discrepancy was noted on the aircraft except for the illuminating “low fuel warning” annunciator. Subsequently, refueling was discussed between the pilots and the mechanics but was later decided to have this the following day since it was already late in the evening.

At the morning of the accident, 17 March 2022, an aircraft pre-flight inspection was made by the mechanic in preparation for the “test flight” prior to their departure for Manila. The inspection includes checking of the aircraft exteriors to include fuel check for possible contamination. No further aircraft issues were noted, and the aircraft was released for the flight. The mechanic then reminded the pilot the need to refuel before the flight as the low fuel warning annunciator is still illuminating. However, it was decided again to forego the refueling since per the pilot, the fuel will be enough for a one (1) traffic pattern, and they will just refuel after landing and prior to their departure for Manila. With the desire to bring the aircraft back to service, the pilot override the mechanic concern for a safe flight and decided to fly the aircraft with minimum fuel onboard.

With reference to the Airplane Flight Manual of Aero Commander 685 (FAA Approved 01 September 1971, Revised 14 October 1977) particularly on Section II-Normal Procedures states that: *“Low Fuel Warning: The low fuel warning annunciator will illuminate when the fuel remaining is depleted to approximately 200 lbs. (32.26 gal./122.11 li.) existence.”*

On the interview with the involved flight crew, they departed Manila for Iba with an estimated 90 gal. (340.69 li./558 lbs.) of fuel. There was no refueling made prior to departure from Manila and SLE’s files shows the latest refueling records of RP-C5230 as:

Date	Flight	Refueling
04 Feb 2022	-	777 liters
08 Feb 2022	RPLL-RPUS-RPLL	-
16 Feb 2022	RPLL-RPVK-RPLL	-
08 Mar 2022	RPLL-RPVM-RPMF-RPMW-RPMS	626 liters
09 Mar 2022	RPMS-RPVM-RPLL	4 liters
17 Mar 2022	RPLL-RPUI	-

In addition, the reconstructed Operational Flight Plan provided by SLE indicates that for the RPLL-RPUI flight last 16 March 2022, they have an estimated fuel consumption of 34.3 gals. (129.84 li./212.66 lbs.) and with a fuel remaining of 55.7 gals. (210.85 li./345.34 lbs.) upon its arrival in Iba. Based on these figures, it may appear that there is enough fuel for that “test flight” last 17 March 2022, however, this assumption did not consider the consumption of the engine run-up that had taken place the night before.

On the day of the accident, the pilot decided to fly the aircraft with minimum fuel onboard and ignoring minimum fuel reserve requirement of the aircraft shows the overconfidence and lack of flight planning of the pilot. As a pilot, he should consider that operating without adequate fuel reserve is not worth the risk to be made.

2.3 Aircraft Operations/Flight Procedure

Last 17 March 2022, a flight plan was filed for the alleged “test” flight of RP-C5230 but the pilot that signed the flight plan and the assigned mechanic did not join the flight. There were however other passengers that joined the flight. Also, records shows that the pilot who acted as the PIC that day has no rating on the AC 685 which is in complete disregard of the applicable regulations. Currently, the said pilot was part of the group of flight crew undergoing flight familiarization on the said aircraft. These pilots are planned to be hired by the company in preparation for their planned application to secure an Air Operator Certificate (AOC).

On the statements given during the investigation, it was alleged by the PIC that the aircraft initially experienced low engine power on the left engine followed by the right engine before ditching. Inspection by CAAP investigators of the cockpit during the site investigation, reveals that the fuel boost pump switches of both engines were at OFF position. (Figure 4).



Fuel Boost Pump Switch

Figure 4 – Fuel Boost Pump set to OFF

On further review of the previously mentioned Airplane Flight Manual, there was a required procedure pertaining to the operations of the Fuel Boost Pump to wit:

- a. Section II - Normal Procedures – Starting Engines, Item no. 6: Fuel Boost Pump Switch – OFF
- b. Section II - Normal Procedures – Before Taxi, Item no. 4: Fuel Boost Pump Switches – LOW

- c. Section II - Normal Procedures – Before Take-Off, Item no. 3: Fuel Boost Pump Switches – LOW
- d. Section II - Normal Procedures – Climb, Item no. 5: Fuel Boost Pump Switches – LOW

It was stated on the manual that setting the fuel boost pump switch to LOW position will provide low fuel pressure to the engine-driven fuel pump for vapor suppression. The fuel boost pump switch should remain on LOW during all ground and flight operation. The HIGH position provides high fuel pressure for emergency operation.

In addition to the above, the recovered aircraft pilot’s checklist (Figure 5) indicates the requirement for fuel boost pump switches settings on “BEFORE TAXI” and “BEFORE TAKE-OFF” are all required to be set to “LOW”.

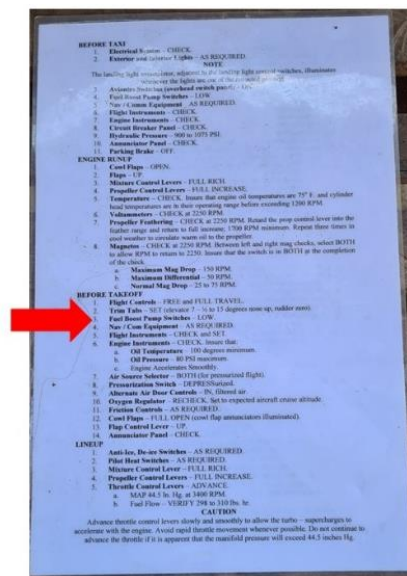


Figure 5 – Aircraft Pilot Checklist

With both fuel boost pump at OFF position suggests that the pilot failed to follow what is in the checklist and is not familiar with the operation of the aircraft.

The pilot’s action demonstrate how he underestimated the operation of the aircraft given that he had already flown much bigger and sophisticated type of aircraft. On numerous occasions, the pilot could have made effective judgement that may have prevented the accident. However, as the chain of events unfolded, each poor judgement left him with fewer options. Making sound decisions is the key to preventing accidents.

2.4 Aircraft Engine Teardown Inspection

A teardown inspection (Ref.: Pegasus Air Services Engine Teardown Report 29 March 2022) of both engines was performed to determine any engine malfunction or failure that might have cause the accident. During the inspection, the following had been established:

- a. The engines show no major damage apart from the consequences of the crash in seawater;

- b. The components complies with the manufacturer’s type certificate (FAA TCDS E7CE);
- c. The general condition of the engines suggests that it was maintained and operated correctly and shows only normal wear;
- d. Fuel and Induction components are in good condition and still have Overhaul Shop Seal.

On the above findings, the inspection of both engines revealed no evidence of any mechanical malfunction or failure that would have precluded the normal operations of the aircraft.

2.5 Flight Crew

2.5.1 Training

During the investigation, the following timeline was established to show the sequence of events related to the training of SLE’s pilots:

Date	Subject
03 Jan 2022	- SLE letter to CAAP requesting approval to conduct ground schooling for AC 685 equipment qualifications and flight transition of two (2) of their pilots together with a rated Instructor.
04 Jan 2022	- CAAP letter reply to SLE requiring the latter to submit their Equipment Qualification Course (EQC) ground and flight training syllabus.
02 Feb 2022	- SLE letter to CAAP, Re: Submission of requirements for the EQC of AC 685 to include additional list of participants for the said course.
18 Feb 2022	- CAAP letter to SLE, Re: Approval for SLE to conduct ground schooling equipment for AC 685.

On the review of other training related documents, it was found that the above training was completed last 17-20 February 2022 (as shown on the certificates issued to all training attendees and on the report of the CAAP assigned Inspector that monitored the activity) though the approval was only released last 18 February 2022 and received by SLE last 03 March 2022.

Moreover, it was noted that the “instructor” who conducted the EQC training was not the original instructor stated on SLE’s letter dated 03 January 2022. In fact, the said “instructor” was listed as one of the supposed to be participants for that training. On further checking with other files, it was found that the identified “instructor” has completed his EQC training on AC 685 last 05-10 December 2021 notwithstanding that SLE only submitted their request to conduct such training on 03 January 2022. Validation made with SLE’s Head of Flight Operations who signed the certificate issued for the training last 05-10 December 2021 revealed that he only signed the certificate as instructed by one of the owners and even without any personal knowledge if the “training” was conducted since he only joined the company last January 2022.

On the report of the assigned CAAP Flight Operations Safety Inspector (FOSI) dated 21 February 2022, Re: SLE’s AC 685 EQC training last 17-20 February 2022, it was confirmed that the instructor that conducted the ground training on the said dates was not

the one stated on the initial letter sent by SLE to CAAP. There was also no mention on the report about the change of the previously submitted name of the instructor or if the assigned FOSI made further verifications about the attendees and instructor involved in the said training.

2.5.2 Rating

Among the group of pilots who were on-board the aircraft that departed Manila last 16 March 2022, only one (1) out of the seven (7) flight crew has a rating on the AC 685. The PIC who flew the aircraft on the day of the accident was part of these six (6) pilots with ATPL/CPL license but still on the process of securing their additional rating on the mentioned aircraft.

As for the lone pilot with an AC 685 rating, his records shows that he was able to secure his rating on the mentioned aircraft last 11 February 2022. He was also able to gain the required minimum 12 hours flying time on this type of aircraft from 17 - 21 January 2022 and has its check ride completed under a CAAP Check Airman last 08 February 2022.

Coordination with the Flight Standards Inspectorate Service (FSIS)-Licensing and Certification Dept. (LCD) was made thru AAIIB letters dated 04 April 2022 and 11 April 2022 to confirm the veracity of information related to the involved pilot with AC 685 rating qualifications. On the documents provided by the said office last 05 April 2022 and 01 June 2022, the following have been received as part of FSIS-LCD files:

- a. CAAP approval letter for SLE to conduct Ground Schooling Equipment for Aero Commander 685 type of aircraft dated 18 February 2022.
- b. Memorandum to FSIS Pilot Examiner/FOSI 1 to conduct Equipment Qualification Course Training Monitoring at SLE dated 14 February 2022.
- c. Equipment Qualification Course Monitoring Report of FSIS Pilot Examiner/FOSI 1 at SLE Inc. dated 21 February 2022.
- d. CASORT entry of Pilot Examiner/FOSI 1 for the conducted Equipment Qualification Course.
- e. AC 685 Additional Rating documents of the involved pilot with AC 685 qualification such as:
 1. CAAP Airmen License Flow Permit and Clearance Form;
 2. Knowledge Test Report C.N. 2022-019;
 3. SLE Certificate pertaining to AC 685 EQC conducted last 05-10 December 2021;
 4. SLE Certificate pertaining to the Total Flight Time of 12+43 hours on AC 685 type of aircraft from 17-21 January 2022;
 5. SLE's RP-C5230 Aircraft Flight Maintenance Logbook dated 08 February 2022;
 6. Application for Airman Personal License form for additional rating on AC 685;

7. Pilot Proficiency Flight Check Test Report (Fixed Wing) dated 08 February 2022;
8. RP-C5230 filed Flight Plan dated 07 February 2022.

Based on the above available documents, the following information were established:

- a. There was no document available during the investigation that SLE requested to conduct training on AC 685 aircraft last 05-10 December 2021. Also, there was no record on file that CAAP issued an approval to the AC 685 EQC training on the mentioned dates. However, there was a certification issued by SLE that the said pilot successfully completed the EQC on AC 685 on the said date. In addition, the pilot with AC 685 rating was able to secure the examination permit based only on the certification issued by SLE.
- b. The pilot with AC 685 rating has no issued CAAP Temporary Airman License to gain time on the subject type of aircraft. Nevertheless, he was able to secure the rating and accumulate the required flying time based only on his submitted copy of his logbook and certification issued by SLE that he has flown and logged a total flying time of 12+43 hours on AC 685. In addition, information was received from CAAP ATS-AIS Operations last 23 June 2022 that there was no record on file of RP-C5230 Flight Plans that corresponds to the flights that took place last 17, 19 and 21 January 2022 which also represents the accumulated 12+43 flying hours of the pilot with AC 685 rating.

Moreover, the only available Flight Plans was the ATS-AIS file dated 07 February 2022/RPLL-RPUS and the one submitted by the pilot with AC685 rating to AAIIB dated 08 February 2022/RPUS-RPLL to which are all associated with the check ride of the pilot with AC 685 rating under the CAAP assigned Check Airman.

2.5.3 Summary

In summary of the above findings and inconsistencies of documents and records, it can be said that the rating obtained by the pilot with AC685 rating is not valid. Further, the EQC training conducted last 17-20 February 2022 where the pilot with AC 685 rating was the instructor should be nullified since the involved instructor has a questionable rating and the training was conducted in contrast with the issued CAAP approval.

3.0 CONCLUSIONS

3.1. Findings

- 3.1.1 The pilot who flew the accident aircraft is not rated and qualified to fly the Aero Commander 685 type of aircraft.
- 3.1.2 The ground school attended by the pilot with AC 685 rating last 05-10 December 2021 has no CAAP approval including his flight training to gain time on the mentioned aircraft type.

- 3.1.3 Other than the Flight Plan filed for the check ride of the pilot with AC 685 rating and Knowledge Test Report dated 03 February 2022, there was no other available document to support that the additional rating of the pilot concerned was obtained thru the prescribed process and requirements of the CAAP.
- 3.1.4 The training last 17-20 February 2022 was conducted by a non-CAAP approved instructor.
- 3.1.5 The aircraft was properly released for flight without any discrepancies, but deviation was noted on the operational procedure of the aircraft.
- 3.1.6 The aircraft has a valid Certificates of Airworthiness and Registration.
- 3.1.7 The aircraft was equipped and maintained in accordance with CAAP-PCARs and approved manufacturer's procedures.
- 3.1.8 The inspection of both engines revealed no evidence of any mechanical malfunction or failure that would have precluded the normal operations of the aircraft.

3.2 Probable Cause

3.2.1 Primary Cause Factor

- a. Low engine power caused by the absence of fuel pressure supplied to the engine-driven fuel pump for vapor suppression.

3.2.2 Contributory Factors

- a. The Pilot is not rated to operate the aircraft.
- b. Non-adherence to the mandatory use of checklist when operating an aircraft.
- c. The pilot's decision to continue the flight with minimum fuel on-board.

4.0 SAFETY RECOMMENDATIONS

4.1 For CAAP-FSIS/LCD to ensure:

- a. That all submitted documents are always reviewed, evaluated and verified diligently by the assigned flight examiners and inspectors prior to processing/approval (i.e. CAAP approval to conduct training, certificate of EQC, certification of flying time, flight plans, etc.).
- b. Inspectors assigned to observe the trainings should initiate validation of documents (i.e. approved syllabus, instructor, etc.) to ensure that the training conforms with the approval given by the CAAP.

-END-

