



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-CR4418
AGCAT G-164A

OPERATOR: SOUTH PACIFIC AERIAL SPRAYING SERVICES

TYPE OF OPERATION: AGRICULTURAL SPRAYING

DATE OF OCCURRENCE APRIL 27, 2019

***PLACE OF OCCURRENCE: LAMBAYONG AIRSTRIP, SULTAN KUDARAT,
PHILIPPINES***



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BASIC INFORMATION

Aircraft Registration No. : RP-R4418

Aircraft Type/Model : Agcat G164 A

Operator : South Pacific Aerial Spraying Services

Address of Operator : Old International Airport Sasa, Davao City

Place of Occurrence : Lambayong Airstrip, Sultan Kudarat, Philippines

Date/Time of Occurrence : April 27, 2019/ 0550H

Type of Operation : Agricultural Spraying

Phase of Flight : Take-off

Type of Occurrence : Engine failure upon take-off

EXECUTIVE SUMMARY

On April 27, 2019, at about 0550H, an Allied AG CAT Productions, Inc. G-164A agricultural aircraft with registration no. RP-R4418 sustained minor damage following an engine failure upon take-off at Lambayong Airstrip, Sultan Kudarat. The aircraft is registered, owned, and operated by South Pacific Aerial Spraying Services (SPASS) holder of Agricultural Aircraft Certificate (AAC) authorized to perform aerial work agricultural operations. The pilot who was the sole occupant sustained minor injuries. Visual Meteorological Conditions (VMC) prevailed at the time of the accident. Interview with the pilot revealed that on his 3rd load of swathing operation upon take-off was normal. During the initial climb at approximately 100 feet AGL, The Pilot experienced engine vibration followed by a decrease in engine RPM, the engine continued to lose power.

The pilot decided to dump the chemicals and elected to force land the aircraft in an open field. After touchdown, the aircraft rolled for approximately 150 meters. The aircraft came to a complete stop in an inverted position near Lambayong Airstrip, Sultan, Kudarat with the last heading of 60 degrees and with coordinates of 6° 51.847 N, 124° 38.521 E. The aircraft sustained damage on the propeller, engine, portion of both wings, horizontal stabilizer, vertical fin, and elevator.

PROBABLE CAUSE

- **Primary Cause Factor**

- a. Separation of cylinder head from cylinder barrel that subsequently resulted to loss of engine power. (Material failure)

- **Contributory Factors**

- a. Non adherence to Memorandum Circular (MC) No. 28-18 dated October 1, 2018, compliance with the General Operating Instructions (GOI) for R985 engines on specific temperature.
- b. The pre-flight checklist and post flight checklist do not include visual inspection on the area of the cylinder head cooling fins for exhaust emission stains and exhaust carbon deposits.

SAFETY RECOMMENDATIONS

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

- a. Adhere to Memorandum Circular (MC) No. 28-18 dated October 1, 2018, compliance with the General Operating Instructions (GOI) for R985 engines on specific temperature.
- b. Included in their pre-flight checklist and post-flight checklist visual inspection on the area of the cylinder head cooling fins for exhaust emission stains and exhaust carbon deposits.
- c. All aircraft being operated with R-985 engines should be fitted with CHT gauge to monitor the cylinder head temperature.

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