

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
Aircraft Accident Investigation and Inquiry Board
Aircraft Accident Report

BASIC INFORMATION

Aircraft Registration No. : RP-R5858

Aircraft Type/Model : Grumman Ag-Cat 164A

Owner/Operator : Mindanao Rainbow Agri. Dev. Corp.

Address of Operator : Solidwood Hangar, Bangoy Airport
Sasa, Davao City Philippines

Place of Accident : Brgy. Nanyo Panabo City, Davao del Norte

Date/Time of Accident : April 16, 2011/ 0935H

Type of Operation : Crop Dusting (Aerial Application)

Phase of Operation : Swathing Operation

Type of Accident : Lose of engine power

EXECUTIVE SUMMARY

On April 16, 2011, RP-R5858, a Grumman Ag Cat 164A type of aircraft took off from Kasilak Aerodrome for its 7th load and final sortie of its aerial spraying operations for the day. At around 0635H after several passes to the area assigned, with approximately 100 liters of chemical remaining the pilot experienced loss of engine power and immediately the engine started to sputter. At 200 feet altitude and approximately 5 miles from the airstrip, the Pilot opted to make a forced landing in a rice field. The aircraft rolled for approximately 200 feet before its main landing gear collided with a rice paddy and subsequently flip over and came to complete stop upside down. The pilot escaped unhurt. No injuries to the persons on the ground were also reported.

PROBABLE CAUSE

The Aircraft Accident Investigation and Inquiry Board determined that the probable cause of the engine malfunction was due to cylinder head fracture caused by metal fatigue.

SAFETY RECOMMENDATIONS

As a result of this investigation, the Aircraft Accident Investigation and Inquiry Board made the following safety recommendations:

- To include in the engine's 50 hours inspection the visual examination of all cylinder assemblies specially cylinder head cooling fins for exhaust emission stains that could be an indication of developing a crack.
- Strict implementation of FAA Airworthiness Directive 78-08-07 and FAA Airworthiness Directive 56-06-02.
- Adherence to the R-985 Specific and General Operating Instructions (Vol. 1) particularly cylinder head temperature limitations.