

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

**BASIC INFORMATION**

Aircraft Registration	:	RP-R3100
Make and Model	:	Pawnee Brave PA 36-375
Owner/Operator	:	Lapanday Food Corporation
Address of Operator	:	Maryknoll Drive, Lanang, Davao City
Date/Time of Accident	:	05 April 2014 / 0801h/0001Z
Type of Operation	:	Agricultural Spraying Flight Operation
Phase of Operation	:	Cruising
Type of Occurrence	:	Collision with an electric cable wires during flight
Place of Accident	:	Purok 6 Katipunan, Kapalong, Davao Del Norte

**EXECUTIVE SUMMARY**

During the regular conduct of the Aerial Spraying Operation in the vast cadabra banana plantation in Delta Farms, Mabantao, Sto Tomas, Davao Del Norte, RP-R3100 with one (1) pilot and approximately twenty (20) gals of fuel as well as five hundred (500) liters chemical solution on board, took-off on or about 0525h/0055Z within the maximum allowable takeoff gross weight of 2,118.81 kgs from FADI Airstrip to perform its first swathing operation mission. On its 4<sup>th</sup> and last sortie, take-off time was on or about 0725h/0075Z and just like the previous three (3) sorties, all flights were conducted normally. While completing the 4<sup>th</sup> and last swathing flight mission at Delta Farms, Mabatao area of operations (AOR), the pilot pulled up to a safe level altitude as a standard operating procedure (SOP) and decided to proceed back to station (FADI Airstrip) for a full-stop landing. However, while enroute, when the pilot saw the Mabantao-Katipunan Dam along Libuganon River, which was less than a kilometer away from the boundary of Delta Farms, he curiously and intentionally decided to deviate and perceived to view and make a low pass over the said dam outside of his swathing flight mission AOR. Hence, on or about 0801h/0001Z, 05 April 2014, while cruising on a low level maneuver approximately 50-60 feet AGL and 100 kph airspeed with the intent to cross the dam, the pilot at a glance observed that the propeller accidentally struck three (3) obscure layers of the DANECO electric power lines that crossed the dam. As a result, the propeller strike produced electrical sparks that caused the aircraft to experience a sudden and severe vibration simultaneous with an increased rate of descent. At this juncture, the pilot instinctively decided to maintain aircraft control, focused straight ahead, glided and immediately performed an emergency forced landing procedure to the nearest open field, a cardava banana farm. Consequently, the pilot was able to perform shutdown procedures, close the throttle, mixture idle cut-off, magneto off, master switched off before the abrupt hard touchdown. When the aircraft settled disabled on the ground covered by banana trees and leaves, the pilot was able to extract himself from the cockpit unharmed without injury. Still the pilot was able to

perform 360° visual inspection, assessed the damage and checked for possible aircraft fire and found none. Nevertheless, what compounded the aircraft to incur substantial damage was when it struck a huge dead ipil-ipil tree during the emergency landing (Appendix 3). Five (5) minutes after the crash, local residents within the vicinity started to arrive and volunteered to help and assist the pilot. The pilot was advised to undergo medical examination as a standard operating procedure after an accident. Likewise, an on-the-spot interview was conducted by the AAIIB investigators on the pilot at the crash site aside from the scheduled formal interview at the office of AAIIB, CAAP as soon as possible (ASAP) with the primary objective of making the aircraft accident investigation official. Information of the accident was relayed to the CAAP Operations and Rescue Command Center (ORCC) on or about 0830h/0195Z, April 5, 2014 through a call to OIC, AAIIB by the Operations Officer of Lapanday Foods Corporation.

## **PROBABLE CAUSE**

The Aircraft Accident Investigation and Inquiry Board determined that the probable cause of this accident was:

- **Cause Factors**

- **Primary Cause Factor**

The pilot while crossing on a low level maneuver over a water dam, failed to maintain aircraft control when the aircraft flew directly and struck an obscure electrical power cable lines caused by pilot's misjudged vision illusion. (Human Factor)

- **Contributory Factors**

- a. The pilot failed to recognize and anticipate the environmental condition of a hazard blending with the vegetation, an unforeseen obstruction during a low level maneuver significantly affecting the pilot's normal line of sight where foresight and precautionary measures would have been considered. (Human Factor)

- b. Despite being a skilled and experienced high timer, over-confidence and complacency may have been contributory factors when the pilot purposely disregarded the fundamental tenets of flight safety rules and regulations when he intentionally diverted his flight outside of his authorized flight plan and itinerary. (Human Factor)

- **Underlying Factor**

There was a supervisory lapse on the part of Lapanday Foods Corporation, as it overlooked an apparent oversight on its failure to manage, monitor and control their aircraft during the spraying operations which obviously require close supervision of all of their pilots. (Human Factor)

## **SAFETY RECOMMENDATIONS**

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

- CAAP through FSIS shall strictly enforce the proficiency training as well as psychomotor skills focused on critical conditions to fully grasp and experience all emergency events during annual proficiency check-rides of all pilots of agricultural sprayer aircraft.
- CAAP through FSIS shall lay down provisions for all sprayer aircraft companies to strictly enforce disciplinary measures on all of their employed sprayer aircraft pilots in the proper conduct and decorum on professional maturity of their chosen field of occupation.
- CAAP through FSIS shall lay down provisions for all sprayer aircraft companies to strictly monitor, supervise and oversee flight missions in their area of operations that would guarantee and enhance flight safety and accident prevention.
- CAAP shall conduct an exhaustive review/update of the existing procedures for the Philippine Banana Grower and Export Association (PBGEA) managing and overseeing flight missions involved in agricultural spraying operations in the entire Banana Plantation Area in order to ensure that the highest degree in safety of flight conditions are considered.