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

BASIC INFORMATION

Aircraft Registration No.	:	RP-C229
Aircraft Type/Model	:	Cessna 172M
Owner	:	Sherwin Tachado
Address of Owner	:	B5 L8 Johnson Circle, San Jose Heights, Robinson Homes East, Antipolo City
Date/Time of Accident	:	February 1, 2008 / 0730 UTC
Type of Operation	:	Company Flight training
Phase of Operation	:	Cruising
Type of Occurrence	:	Fuel starvation
Place of Accident	:	Reclamation Area near S & R, Paranaque City

EXECUTIVE SUMMARY

RP-C229, a Cessna 172M type of aircraft, owned and operated by Aviation Dynamics Flying School with two (2) personnel on board, one (1) Pilot-in-Command and a Co-Pilot (CP) departed Manila Domestic Airport for Plaridel Airport, Bulacan on a company flight training on or about 0730 UTC February 1, 2008 . According to the PIC, while cruising at an altitude of 2000 feet over Malabon, enroute to Plaridel Airport on or about 0745 UTC, the PIC noticed that his engine power dropped to 2000 RPM despite setting the throttle to full power. Instinctively, perceiving that the aircraft will not be able to reach their destination at Plaridel Airport, with the insufficient power, the PIC decided to contact Manila Tower for their clearance back to Manila. Subsequently, Manila Tower cleared RP-C229 for the landing approach on the return flight. While cruising South Harbor, the aircraft was instructed by Manila Tower for a right downwind approach for RWY 13 landing. After passing South Harbor, the PIC noticed a slight engine vibration, so he requested the tower for a straight-in approach for RWY 13. After passing Headquarters Philippine Navy, the aircraft experienced abnormal loss of power and altitude. At that instance, the PIC was given a clearance to immediately land at RWY 13. Once the aircraft passed the shoreline, the PIC noticed that he did not have enough power and altitude to make it to the runway, so he finally decided to make a right turn and performed an emergency force landing on a vacant lot near S&R along Roxas Blvd., Baclaran. As a consequence, the aircraft initially rolled smoothly after touch down, but unfortunately, it tumbled upside down when its nose landing gear hit a large open hole. Both pilots escaped the aircraft unhurt while, the aircraft sustained major damage.

PROBABLE CAUSE

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

- Immediate Cause Factor

  a. The primary cause of the aircraft accident was engine malfunction due to fuel starvation caused by lack of fuel supply to the engine resulting to clogged up carburetor fuel inlet strainer.

- Contributory Factor

  a. Failure of maintenance organization to properly keep the aircraft on full mission capable (FMC) status by accurately checking the operational condition of the fuel system; fuel tank, fuel lines, fuel filter and carburetor.

  b. Failure of pilots and crew to follow the mandatory standard operating procedures (SOP) of manually draining (activation of the drain plug to open position) the fuel tank sump before first flight of the day to dispose the fuel tank of impurities, dirt, water, sediments etc… and ensure the declogging of the fuel system.

SAFETY RECOMMENDATIONS

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

- AMO shall be required to conduct the mandatory check of all components of the fuel system including the fuel tank, fuel lines and more specifically the carburetor fuel inlet strainer during the twenty five (25) hours periodic inspection.

- AMO shall strictly enforce the standard fuel sump drain before first flight of the day to check on fuel contamination with specific task responsibility and manifested in aircraft maintenance log.

- AMO shall strictly ensure the proper training and qualification of AMO personnel in order to safely handle the aircraft maintenance tasks assigned them.

- CAAP shall study regulatory requirements to include pilots' compulsory simulator training in emergency procedures and psychomotor skills specially forced landing to fully grasp and experience the standard technique of emergency force landing procedures aside from the regular proficiency event in training and check-rides.