Date : 22 June 2016

Type : Grumman AGCAT G-164B

Registration : 9M-IMI

Operator : Systematic Aviation Services Sdn. Bhd.

Fatality : 0

Nature : Airccraft crashed into vegetation

Location : Cameron Highlands, Pahang

**SUMMARY**

On 22 June 2016, a Malaysian registered aircraft, 9M-IMI aircraft took off from the Cameron Highlands Airstrip, Perak on 22 June 2016 with only 1 (one) person on board, i.e. pilot. The pilot was also the Captain of 9M-IMI aircraft. The Captain did the aerial crop spraying mission at the Boh Tea Plantation. In fact, the Captain did aerial crop spraying through shuttle flights in every mission. What the Captain actually did was that he did quite a number of shuttle flights after every refueling. Before the shuttle flights of that incident mission, the Captain had already done two refuels on 22 June 2016.

In one of the missions that the Captain carried out on 22 June 2016, after he executed the aerial crop spraying shuttle flight, the aircraft experienced partial engine failure. With the partial power status, the Captain knew that his aircraft could not make it to the Cameron Highlands Airstrip. He then decided to look for a clearing area with the intention to do forced landing. Well, the Captain managed to get good visual contact with one small clearing area, i.e. a vegetation area on a hill slope. Then, he decided to do the forced landing at that particular area.

During the forced landing, the aircraft got in contact with the clear area of the hill slope. However, after the contact, the aircraft came to an immediately halt, i.e. about 12ft after getting contact with the slope.

Although 9M-IMI aircraft suffered a write-off condition, the Captain of the aircraft only sustained slight injury. With reference to the actual visual condition of the aircraft, its engine and propeller were destroyed, its wing spar was broken off from the main airframe of the aircraft, its canopy door was damaged and the front part of the aircraft was heavily damaged.

Two officers from Systematic Aviation Services Sdn. Bhd. rushed to the crash site by road from Sultan Abdul Aziz Shah Airport. The investigators from the AAIB went to the 9M-IMI aircraft crash site two days after the incident, i.e. 24 June 2016. The investigation team made a ground study of the crashed aircraft and also had a bilateral session with the Captain.

**PROBABLE CAUSE**

* The Captain of 9M-IMI aircraft was not very positve about the takeoff and landing parameters, ie. takeoff speeds and landing speeds, at both Sultan Abdul Aziz Shah Airport and Cameron Highlands Airstrip.
* The Captain of 9M-IMI aircraft was weak in following the standard air traffic standard and procedures. He was not aware that both the Cameron Highlands Airstrip and Boh Tea Plantation are with the Ipoh CTR of Ipoh Air Traffic Control.

**SAFETY RECOMMENDATIONS**

It is recommended that:

**DCA Malaysia**

1. To ensure that the DCA Airworthiness – Checklist for Issuance of Certification of Airworthiness form is used by both DCA Malaysia and Systematic Aviation Services Sdn. Bhd.

2. To ensure that the DCA Airworthiness – Checklist for Renewal of Certification of Airworthiness form is used by both DCA Malaysia and Systematic Aviation Services Sdn. Bhd.

3. To ensure that Systematic Aviation Services Sdn. Bhd. is complying with the AIC/2005 (dated on 15 September 2015) in the application on the changing of ELT code for aircraft that is purchased from foreign countries.

4. To ensure that both 9M-IMI and 9M-ICC aircraft are assigned with the new ELT codes. Along this line, Systematic Aviation Services Sdn. Bhd. needs to make applications for these two aircraft’s new ELT codes.

**Systematic Aviation Services Sdn. Bhd.**

1. To esnure that the Operations Room of Systematic Aviation Services Sdn. Bhd. is to function in coordinating, planning, execution and monitoring of all flying operations that are undertaken by Systematic Aivaiton Services Sdn. Bhd.

2. To ensure that the NOTAM is promulgated for the aerial crop spraying operations that are going to be conducted by Systematic Aviation Services Sdn. Bhd. at the vicinity of Cameron Highlands.

3. When the NOTAM is not being promulgated, flight plans are required to be submitted for every individual flying operations.

4. To ensure that the pilots that are flying at the Ipoh Air Traffic Control’s Ipoh CTR are to comply with the standard air traffic procedures.

5. To comply with the DCA Airworthiness’s Checklist for the Issuance or Renewal of Certification of Airworthiness with reference to Paragraph 11 of the Checklist about ELT subject.

6. To ensure that all the flying hours that are recorded in the 9M-IMI aircraft flying hours records are done to reflect relevant details, ie. by number of sorties or mission.

7. To ensure that the removal and transfer of ELTs from one aircraft to another aircraft are carried in accordance with the proper maintenance practice.

8. To ensure that the aircraft’s flying hours is recorded properly, ie. 9M-IMI aircraft had a night stop at an airstrip near to Bernam River on 6 May 2016. However, there was no flying hours record that was entered in the 9M-IMI aircraft Maintenance Log Book.

9. To ensure that the pilots that are operating at Cameron Highlands Airstip and Cameron Highlands’ aerial crop spraying have two-way radio communication with Ipoh Air Traffic Control.

10. To ensure that outside parties such as DCA Malaysia, Subang Air Traffic Control Centre and Ipoh Air Traffic Control are involved in the aerial crop spraying operations at Cameron Highlands area.

11. Pilots that are conducting flying operations from Cameron Highlands Airstrip and over Cameron Highlands are to seek forecasted and actual weather from Ipoh Air Traffic Control before and during the conduct of their missions.

12. To ensure the aircraft that is or are conducting the flying operations at Cameron Highlands does or do have SAR coverage.

**Captain of 9M-IMI Aircraft**

1. To abide by the standard air traffic procedures while conducting the flying operations or aerial crop spraying missions at Cameron Highlands.

2, To record the flying hours during the conduct of aerial crop spraying operations in details, ie. by missions or sorties.

3. To ensure that he had two-communication with the Ipoh Air Traffic Control during the conduct of aerial crop spraying operations.

4. To use the fixed telephone landlines or mobile telephone communication in maintaining two-communicationi before and after the conduct of aerial crop spraying operations.

5. To submit flight plans for the conduct of the aerial crop spraying operations at Cameron Higlands.

6. To ensure that his aerial crop spraying operations do have SAR coverage at all times.

7. To ensure that he should use the Grumman AgCat Pilot’s Handbook is used at all times in calculating the takeoff and landings at all operating levels of runway (Sultan Abdul Aziz Shah Airport) or airstrip (Cameron).

8. He should know that both Cameron Highlands Airstrip and aerial crop spraying operations at Boh Tea Plantation are within Ipoh CTR. He should comply or abide with standard air traffic procedures in submitting flight plans in the conduct of the aerial crop spraying operations from Cameron Highlands Airstrip.