



History of the Flight

On Monday, April 4, 2005 a Cessna 172S aircraft, registered 6Y-JCG was on the final leg of a cross-country flight (the pilot's second cross-country solo). The planned route was Tinson Pen, ¹Sangster, Boscobel, Tinson Pen. The pilot flew to Sangster, then departed Sangster for Boscobel. He did not land at Boscobel and his last recorded radio transmission, was to the Norman Manley International Airport (NMIA) Tower, inbound to Tinson Pen from the Boscobel area at 08:14 hours local time. The aircraft did not arrive at its destination as scheduled, and Air Traffic Control (ATC) at NMIA was advised by the Caribbean Aviation Training Centre (CATC), that it had been declared missing.

Aircraft and Occupants

The aircraft was owned and operated by Caribbean Aviation Training Centre, and was at the time of the accident, being maintained by Tara Couriers Services Limited, an Approved Maintenance Organization (AMO). The Cessna 172S aircraft is a high wing monoplane, powered by one Textron Lycoming IO-360-L2A piston engine.

The pilot was the holder of a Jamaican Student Pilot Licence, with a medical certificate valid until March 31, 2006. There were no other persons on board.

At the Crash Site

Jamaica Civil Aviation Authority (JCAA) Inspectors, having been appointed investigators, arrived at the site by Jamaica Defense Force (JDF) helicopter at approximately 13:40 hours local time, the day of the accident. Eyewitnesses were immediately interviewed by the two inspectors, during which the JDF Coast Guard carried out a search operation.

It was reported that oil was seen in the area [Blowing Point, Robins Bay] and as a result, the Coast Guard dispatched divers to search for the wreckage. The search continued for two days, utilizing the services of both the Air Wing and the Coast Guard (April 4 - 5, 2005) but no evidence was found.

However, on April 6, fishermen, five (5) miles due west of the suspected crash site recovered a main wheel and a seat cushion. The items were later retrieved from the Port Maria Police, and were identified as being parts from the aircraft.

¹ "Sangster" is short for the Donald Sangster International Airport – Montego Bay



Accident and Eyewitnesses' Reports

Four ²eyewitnesses reported that at some time after 08:00 hours local time, on Monday, April 4, 2005, the aircraft was seen flying unusually low in rainy weather conditions. The aircraft was flying in a north westerly direction, and seemed headed for a mountain in the area called Mount Pleasant (estimated height - less than 200 feet above sea level), when an increase in the sound of the engine was heard, (suggesting that power was applied). The aircraft climbed suddenly, banked to its right, and shortly after, a loud bang was heard. It appears that the aircraft crashed into the sea.

Inspection of Aircraft

The only parts recovered were, one main wheel assembly, and a grey seat cushion, containing the information as detailed below:

Wheel & Brakes

Manufacturer:	<i>Cleveland Wheel & Brakes</i>
Part Number:	<i>40-113</i>
Cessna Part Number:	<i>C163001-0104</i>
Date of Manufacture:	<i>02/01 [February/2001]</i>

Air Hawk Tyre

Manufacturer:	<i>Specialty Tires of America Inc.</i>
Part Number:	<i>50844</i>
Other Number:	<i>B3E43704</i>

Seat Cushion

No Part Number or other information available.

Maintenance History

A review of the aircraft's maintenance records covering the period July 7, 2004 through to March 23, 2005 has been carried out. No evidence of any unusual or recurring defects has been found. All maintenance has been accomplished in accordance with the Approved Maintenance Schedule and all Airworthiness Directives (ADs) have been complied with.

The total airframe time as recorded in the ADLOG Aircraft Maintenance Recording system at the time of the accident, was 2,083.6 hours. The engine total time was 2,083.6 hours. The last maintenance action completed, was a Cessna Phase Card, Phase II Inspection, at 2,074.9 hours.

² Refer to Exhibit #s 1, 2, 3 & 4 for details.



Pilot's Training Records

The pilot's training records were reviewed and it was determined that he had satisfactorily completed all the required training.

Instructor's Qualification and Records

The files of the pilot's most recent instructors were carefully examined, and it was found that their licences, medical certificates and instructor ratings were valid throughout the period in which he was under their training.

Pilot's Medical History

The pilot's last medical examination was completed March 9, 2005 and he was assessed as fit to hold a Student Pilot Licence. The medical report noted a high blood pressure reading (within limits) and that he was taking medication for hypertension. He was required to fly using glasses. On the day of the accident it could not be determined if the pilot was wearing his glasses or whether or not he had taken his hypertension medication.

Prevailing Weather Conditions

- The pilot was given a weather briefing from the Jamaica Weather Service for a route from Tinson Pen to Sangster to Tinson Pen, which indicated that the worst weather to be expected, would be scattered clouds based at 2, 200 feet above ground level [AGL], (less than ½ the sky covered in clouds, which indicates good weather for the flight).
- The forecast for the Norman Manley International Airport (NMIA), indicated that broken cloud layers at 3, 400 feet AGL (more than ½ but less than all of the sky covered in clouds) would be encountered beginning at 15:00 hours local time, and for the Donald Sangster International Airport, the broken cloud layer would be based at 2, 200 feet AGL beginning at 12:00 hours local time. A sky condition of broken cloud layers is not as favourable for Visual Flight Rules (VFR) flying, especially since the base of these clouds would be far lower in the mountains between Tinson Pen and Montego Bay. This weather information was not given to the pilot nor would it have been, since the estimated arrival time back at Tinson Pen was 08:30 hours local time.



Analysis

Due to the evidence gathered, it can be determined that:

1. The aircraft was properly maintained during the period of being registered in Jamaica.
2. The aircraft was serviceable for its departure on the day of the accident.
3. The aircraft had fuel for 5.5 hours of flight, sufficient for the route planned.
4. The pilot was in possession of a valid ³pilot licence and medical certificate.
5. The pilot was qualified and fit for the proposed flight. He had completed his training syllabus as required, and was authorized to fly solo. At the time of departure for this flight, he had acquired 48.9 total flying hours of which 6.9 hours were cross country flights, including 1.2 hours solo cross country, and 3.0 hours were solo flights [non-cross-country].
6. The pilot was given a weather briefing from the Jamaica Weather Service for a route from Tinson Pen to Sangster to Tinson Pen.
7. The pilot received a weather briefing for the route Tinson Pen to Montego Bay to Tinson Pen, which did not include the Montego Bay – Boscobel – Tinson Pen legs. (However, this is not considered a factor in the accident because the same sky conditions would have been forecast for the Boscobel area).
8. The pilot air-filed his routing from Tinson Pen to Montego Bay with the Norman Manley International Airport (NMIA) Tower.
9. The pilot air-filed his routing from Montego Bay to Boscobel with the Sangster Tower.
10. The weather deteriorated below forecast levels on the leg, Sangster to Boscobel, precluding a landing at Boscobel.
11. The weather conditions at Boscobel at the time of the aircraft passing, according to eye witnesses were low clouds, rain and reduced visibility.
12. The pilot did not land at Boscobel airport but passed by and next contacted NMIA Tower at Richmond Hill.
13. The weather conditions in the area of the accident at the time of the accident were rain squalls and low clouds.
14. The aircraft was not able to proceed past Richmond, returned to the coast and subsequently crashed.

³ Refer to Exhibit #5 for details.



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Conclusion

The available evidence indicates that, the severe weather and the inexperience of the pilot in flying in these conditions, were the major contributing factors to this accident. It appears he was following the coastline as a guide, but was unaware of his position when he suddenly came upon a mountain (Mount Pleasant), necessitating a sharp right turn, which resulted in the aircraft going into a stall, from which he could not recover due to the aircraft's low altitude.

This matter is still open, due to insufficient parts of the aircraft recovered, and the body of the pilot not yet found.