



Pacific Region
Unit 4 - 3071 No. 5 Road
Richmond, B.C. V6X 2T4

27 October 2010

Our file Notre référence

825-A10P0266

Attention: Coroner Michael Barrett
BC Coroners Service
Unit 400 - 10470 152nd Street
Surrey, B.C. V3R 0Y3

RECEIVED

NOV 16 2010

Aircraft Accident: Piper PA24/ C-FLQS
Apex Mountain, British Columbia
17 August 2010, 17:20 PDT

MINISTRY OF SOLICITOR GENERAL
BC CORONERS SERVICE
INTERIOR REGION

Dear Coroner Barrett:

As you are aware, Transportation Safety Board (TSB) investigators Tony Pleasants and Neil Hughes attended the scene of this fatal accident and examined the wreckage on site. A review of the details gathered at the site, and information resulting from subsequent follow-up work, indicates that a formal TSB investigation of the accident is not likely to provide new information that will lead to a reduction of risk to persons, property, or the environment. Accordingly, the following factual information gathered by the TSB is provided to assist you.

The aircraft with the pilot, 3 passengers and full fuel tanks departed Kelowna and flew directly to Penticton, landing at 1659 PDT. Two duffel bags, weight unknown, were off loaded and the aircraft departed Penticton at 1709 PDT for Victoria. The last radio call was made to the Penticton Flight Service station (FSS) just after departing from runway 16. When the aircraft did not arrive at its destination a search was initiated.

The wreckage was located 8 days later at position N49° 18.968' / W119° 54.435'. This position is approximately 15 nm southwest of Penticton airport.

The aircraft was equipped and maintained in accordance with regulations and approved procedures. Its flying time since manufacture was 3881 hours.

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Weather conditions at the Penticton airport at 1700 PDT, about 20 minutes before the accident, were good for VFR flight with a light southerly wind, scattered clouds and good visibility,

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except for some smoke from nearby forest fires. However, the surface temperature was 34°C and the aircraft's performance would have been reduced due to temperature and density altitude effects. s.22 the pilot's s.22 may not have been fully aware of these effects.

The accident site was located on the east side of a ridge line running south from Apex Mountain, at an altitude of approximately 6300 feet asl. The height of the ridge in the vicinity of the accident site was about 6500 feet asl. The aircraft was approaching the ridge on a westerly heading, climbing to clear the ridge, but struck trees 100-200 feet below the summit. The aircraft first struck trees with its right wing, severing the right wing at the root. Several other trees were struck in sequence and the aircraft came to rest inverted on a southerly heading, indicating the aircraft was turning to the left before impact.

All control surfaces were found and all control cables appeared to have been intact at impact.

The propeller blades were found in a coarse pitch position with extensive leading edge damage on both blades, which would indicate the engine was producing considerable power on impact.

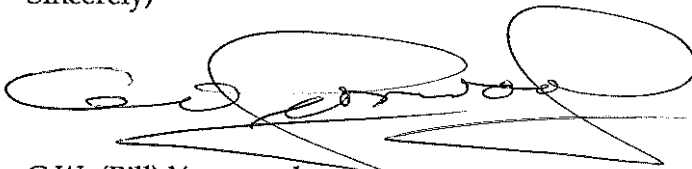
It was determined that the aircraft's fuel tanks were filled to capacity before departure from Kelowna. The fuel tanks were found to be breached and empty, and there was no smell or evidence of fuel on the ground underneath the wreckage. By the time of examination, more than a week had passed since the accident. During that period, fuel would have leaked from the damaged tanks, soaked into the ground and evaporated in the high ambient temperature.

The aircraft's weight on departure from Kelowna was calculated to be above the maximum allowable takeoff weight of 2550 pounds by at least 23 pounds. As it is known that two duffel bags of unknown weight were off loaded during the brief stopover in Penticton, the actual takeoff weight at Kelowna would have been even higher, but could not be calculated exactly since the weight and location of the two duffel bags is unknown. The aircraft's weight and center of gravity were determined to be within limits at the time of takeoff from Penticton, but within 3 or 4 pounds of the maximum allowable, which would affect aircraft performance.

This accident is similar to historical accidents in which pilots who are inexperienced in flying in mountainous terrain, and unfamiliar with the effects of high temperature and high density altitude on aircraft performance, put themselves in a situation where rising terrain in the flight path exceeds the climb capability of the aircraft under the prevailing ambient conditions.

I hope that the foregoing information is helpful. If the TSB can be of any further assistance, please contact either Tony Pleasants or myself at the Pacific regional office at 604-666-0869 or 604-666-4972 respectively.

Sincerely,

A handwritten signature in black ink, appearing to read 'C.W. Yearwood', with a large, stylized flourish at the end.

C.W. (Bill) Yearwood
Regional Manager (Aviation)
TSB Pacific Region