

**Proposed findings and safety recommendations to the NTSB safety
board on case CEN09LA605
Aircraft accident in Troy Michigan, 9/24/2009 Registration N4864S**

To: National Transportation Safety Board
Office of Aviation Safety
490 L'Enfant Plaza East
Washington, DC 20594

CC: Sandy Rowlett AS30
Chief of Regional Investigations
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Washington, DC 20594

Todd Fox, Investigator in charge
David Bowling, Supervisor of Mr. Fox

Fm: Robert Jeffrey King, (pilot of accident flight)

Date: 11/3/2010

RE: Proposed findings and safety recommendations to the NTSB safety board on case
CEN09LA605, Aircraft accident in Troy Michigan, 9/24/2009 Registration N4864S

Overview

Under but not limited to the provisions of USC C.F.R. 49 831.14, I wish to file a proposed factual findings and safety recommendations on this accident with the NTSB. In addition, I wish to alert the NTSB board of factual errors and chronological omissions in the NTSB factual report and ask the factual findings published record be corrected.

Petitioner

Robert J. King, the pilot in command during this accident and owner of the accident aircraft, is a private pilot, with 650+ hours total time, IFR rated and with 441 hours in the accident airplane, 47 hours of this in the preceding 90 days before the accident. He is representing himself as a private citizen, and his only objective here is that the factual report be accurate and as a result, the proper safety recommendations are derived from it.

Facts and chronological order materially mis-represented in the NTSB's factual report

For the NTSB to properly generate safety findings, it is critical that factual findings be as accurate as possible. It is my contention such is not the case here, and there are serious chronological and factual mis-representations in this “factual” report.

I had the NTSB's Factual Report independently reviewed by aviation attorney Don Frank, shortly after it was released. Mr. Frank is an aviation attorney who is an AOPA board attorney, a member of the NTSB bar association, and a private pilot with 40 years experience as a flight instructor, including the PA32-260 in question. Mr. Frank also owned a Piper dealership in the 1970's (the accident aircraft is a 1970 model).

I have attached Mr. Frank's report as Exhibit One (1020_2010_OpinionLtr.pdf. This was also provided to the Investigator in Charge, a Mr. Andrew T. Fox, on October 21st, 2010. I have attached this letter as exhibit 2 (Errors and clarification requested in NTSB factual report on N4864S) and requested Mr. Fox to correct the factual report.

Engine data & GPS data/flight profile not included in docket

Engine “black box” data flight recorder

On September 28th, 2010 I provided accident engine analyzer data to Todd Fox and David Bowling of the NTSB. Exhibit 3 (Cover letter N4864S 'black box' data recorder files.pdf). Prior to the e-mail, I had talked with Mr. Fox earlier in the month on the telephone about this data, and he seemed reluctant to accept it from me at this late date, since the pilot provided it. I did point out that that wasn't my fault; since it was very obvious the airplane had a data recorder, yet neither the NTSB nor FAA made any effort to download the data.

GPS data and flight profile

On October 25th 2010 I provided GPS data files and graphical flight profiles of the accident flight to Todd Fox and David Bowling of the NTSB. See attached exhibit 4 cover letter (GPS data on N4864S.pdf). On October 26th, 2010 David Bowling of the NTSB acknowledged receipt of this data, and indicated he would include it in the docket. Exhibit 5 Bowling - GPS data on N4864S.pdf

On October 29th, 2010 I responded to Mr. Bowling, and reminded him that I also sent engine “black box” data recorder files on September 28th, 2010 and asked they be recorded in the report docket. See Exhibit 6 Bowling- GPS & Errors and clarification

requested in NTSB factual report on N4864S.pdf. Mr. Bowling did not respond to this e-mail nor follow up with the requested phone call.

As of 5pm on 11/03/10 I am not seeing either of these data files in the NTSB's online report docket, despite Mr. Bowling's written assurance he would include the GPS data files.

Timing

831.14 (b) states:

"Timing of submissions. To be considered, these submissions must be received before the matter is calendared for consideration at a Board meeting. All written submissions are expected to have been presented to staff in advance of the formal scheduling of the meeting."

Mr. Bowling indicated on 10/26/10 that *"It will take some time for the case docket to come up for consideration"*. As a layperson, new to these proceedings, I am not sure if this means calendar or what, but I do believe there are some special considerations to be noted and an exception granted if need be, for the following reasons:

1. I was never notified that the factual findings were released. As a principle in this matter, I would have expected this, especially since I specifically asked this of Todd Fox on September 28th, 2010 (Exhibit 3). I eventually learned of them by periodically checking the NTSB's web site.
2. When I did see the factual report, there were some misrepresentations in the factual findings. As I was closely connected to the issue, I felt it best to have an independent party review this (Exhibit 1). However, as soon as this was complete I forwarded this to Todd Fox on 10/21/10 (Exhibit 2). Consequently, I would asked that if any "clock" be started here, it start no later then 10/21/10, and ideally no later then 9/28/10, since I was clear with Mr. Fox I wanted to be in the loop.
3. I have dealt with both the NTSB and FAA in good faith and been very cooperative. The FAA even notes this in their initial pilot interview report. Frankly, I feel that neither the FAA nor NTSB has reciprocated here. AOPA and other aviation attorneys have told me that the NTSB has little time and interest in GA, unless a death occurs. Nothing I have seen to date counters this opinion. As a taxpayer and a pilot, this is unacceptable to me. I believe a potential safety issue exists here, and it is only through fair and factual reporting of the facts, that we can warn other pilots and learn from this accident.
 - ***It is for all the above reasons it is critical the factual report be corrected and my proposed findings and recommendations be considered by the board.***

Importance of correct and full factual report to the NTSB board

GPS data/profile and engine analyzer

The GPS data and profile, couple with the known angle of attack at V_x, is significant in determine a potential probable cause if it is related to fuel tank unporting. Please see exhibit 4. This angle can be cross-checked with the security camera of the aircraft taking off, which is contained within the NTSB report docket.

- *The petitioner asks the NTSB consider the angle of the wing to ground, in this case ~28 degrees, as a possible causative effect.*

Aircraft Flight Manual VB-156

In the NTSB factual, the NTSB reviews my FAA required “Aircraft flight manual”, (VB-156) the optional 1970 handbook and another handbook for a 1974 PA32. This distinction is critical in making a safety recommendation. Please reference the NTSB’s communication with Piper dated August 24th, 2010 in which Piper states the 1970 Handbook, with the NTSB references, is NOT required by the FAA. As such, the NTSB cannot make factual claims against documents that are not required.

As these aircraft are 40+ years old, it is a challenge to even get all the required paper work together, let alone material that is not required by the FAA. The fuel procedure in my FAA required flight manual was the following: “FILL TIP TANKS FIRST, USE MAIN TANKS FIRST”. *I totally complied with this procedure*

Even if the NTSB wants to give some credence to the optional 1970 handbook, it should be noted the specific recommendations for take-off fuel configuration are NOT contained within the takeoff section, but confusingly contained within the cruise section. And while I recognize the value of the comments in the 1974 handbook (and they are part of my safety recommendation), I certainly cannot be expected to be held to a flight manual that isn’t even for my aircraft!!

For additional discussion please see exhibit one.

- *The petitioner asks that the NTSB only consider the legal and required flight manual for his aircraft in generating probable cause and as a baseline for safety recommendations (that is, to make corrections to).*

Fuel readings

This accident potentially involved fuel starvation. As such, an accurate idea of how much fuel is in the airplane is critical. The difference between 4.5 gallons and 9.5+ gallons is significant. FAA investigation order 8020.11 clearly call for the fuel to be measured on the scene of the accident before the airplane is moved, NOT 4 weeks later **after** the

engine has been run-up and 2 weeks later after the airplane has been released. Please see exhibit one.

There was no substantive mistake made by the pilot in taking the preflight fuel readings, the left tip tank was substantially full (3/4's of a tank ~ 14 gallons). The pilot has 440 hours experience in this very aircraft and was familiar with this particular airport.

Further, after the crash, the pilot observed readings taken at the accident scene by a Mr. Harvey Messler under the telephone instruction of FAA investigator Steve West. This showed the left tip tank substantially full.

Mr. Messler indicated to Mr. King he was taking these readings so the FAA would release the airplane from the scene (which **is** consistent with FAA order 8020.11). Mr. West indicated to Mr. King he took notes of Mr. Messler's fuel readings, but they were missing from the FAA FOIA as well as the NTSB report docket.

The FAA did a visual fuel check on the left tip tank on 9/28/09, and indicated the tank was 1/2 to 3/4 full (8.5- 14 gallons). This is consistent with Mr. King's preflight as well as what was observed at the scene of the crash. It should also be noted that the right main wheel was missing, cause the airplane to rest on its right wing (right wing low). This caused the angle of incidence of the left wing to increase. As the left tip tank's fuel port is at the left outside part of the tip tank (highest point), this would cause any visual fuel readings to show a SMALLER amount of fuel in the tank.

While the petitioner has no idea why the fuel discrepancy exists, it is not lost on him that the difference is about 5 gallons... the same size as a portable gas can. In addition, the insurance company, in writing, noted numerous items stolen from the aircraft as it went into auction.

Regardless, as the aircraft was released by the NTSB and unsecured after 10/13/09 as well as the additional fact the aircraft was run on the left tip tank BEFORE the fuel measurement was taken on 10/26/09, the petitioner asks the following:

- ***The petitioner asks NTSB board reject any fuel measurement data taken after 10/13/09 (release date of the aircraft) and instead use the fuel readings taken while the aircraft was secured by the NTSB/FAA. This then would put the left tip tank at 1/2 to 3/4 full (8.5 to 14 gallons).***

Petitioner Proposed findings:

Aircraft experienced previously undocumented tip tank un-porting scenario due to high angle of climb (~28 degrees) caused by combination of aircraft being 1100 lbs under gross and maximum effort Vx climb (short field takeoff). Possible fuel sloshing during flap retraction may have contributed

Petitioner's Proposed safety recommendations:

The following text to be added to the FAA required Airplane Flight Manual VB-156 (Piper PA32-260 1970):

- Takeoff's prohibited on tip tanks
- The shape of the wing fuel tanks is such that in certain maneuvers the fuel may move away from the tank outlet. If the outlet is uncovered, the fuel flow will be interrupted and a temporary loss of power may result. Pilots can prevent inadvertent uncovering of the outlet by avoiding maneuvers which could result in uncovering the outlet. Extreme running turning takeoffs should be avoided as fuel flow interruption may occur. Prolonged slips or skids which result in excess of 2,000 feet of altitude loss, or other radical or extreme maneuvers which could cause uncovering of the fuel outlet must be avoided as fuel flow interruption may occur when tank being used is not full.

Conclusion and certification

I believe what I am recommending, both the factual correction as well as the proposed findings and safety recommendations, are true and accurate. I believe the recommendations I am making, both factual corrections, findings and safety recommendations, will enhance the safety of all pilots who fly airplanes similar to mine.

The additional material referenced (GPS and engine data) has already been provided to the NTSB, but should the board require another copy, please feel free to contact me and I can provide copies.

Respectfully submitted,

Robert Jeffrey King 11/3/2010

Attachments

Exhibit 1 – Opinion letter from Don Frank on NTSB factual 1020_2010_OpinionLtr.pdf

Exhibit 2 - e-mail to Todd Fox from King (pilot) on Oct 21, 2010 titled: Errors and clarification requested in NTSB factual report on N4864S.pdf)

Exhibit 3 Cover letter-mail from king to Fox/Bowling 9/28/10 titled (N4864S 'black box' data recorder files.pdf).

Exhibit 4 cover letter from King to Fox/Bowling 10/25/10 titled GPS data on N4864S.pdf

Exhibit 5 e-mail from bowling to King October 26th, 2010 titled Bowling - GPS data on N4864S.pdf

Exhibit 6 e-mail from king to bowling Oct 29, 2010 Bowling- GPS & Errors and clarification requested in NTSB factual report on N4864S.pdf