

Silliman James

From: Randy Peckham <[REDACTED]>
Sent: Monday, September 10, 2018 8:16 PM
To: Silliman James
Cc: [REDACTED]
Subject: NTSB Ref: CEN18FA371; C-GLKX Fuel Operations SOP

Mr. Silliman,

When we spoke today, we discussed details of the fuel management operations that were normally followed in the accident airplane. The procedures and concepts below constitute that SOP.

Please note: I previously mentioned that I fueled up before he departed. I fueled on Sunday the 2nd of September. I learned that Mr. Maisonneuve also flew on September 4, for approximately 3 hrs with three takeoffs and landings. I am unsure if he fueled between the 4th and the time he departed on the 5th. I will enquire if he did, as he would have used his fleet card, which would record the volume of fuel taken. I hope to have that answer for you tomorrow.

Warm regards,

Randy Peckham

President
FLEX Air Services



Concepts:

- Main Tanks: 50 gal. useable each, aluminum tanks located on the wing tips.
- Aux Tanks: 33.5 gal. useable each, rubber bladder tanks located in the wings, outboard of the engine nacelles, constituted of two separate cells, interconnected and gravity fed to sump
- Locker tanks: 20 gal. useable each, aluminum tanks located behind the firewall in the engine nacelles
- Total useable capacity: 203 gal.
- Fuel is unconsumable in locker tank and must be transferred to mains to be consumed
- Transfer from each locker is ~20 gal/hr → 1 hr transfer for 20 gal.
- Aux tanks feed at 2x engine consumption, returning 50% of fuel to mains (not to Aux).
- Mains are baffled with a protected sump and a full time transfer pump ensuring that regardless of the flight attitude, if there is fuel in the main tank, it is being delivered to the sump. The pilot is unable to disable the tip transfer pump unless disabling breakers, which also disables landing light on that wing. There is no emergency procedure that requires this action.

SOP:

1. Always fly with the maximum permissible fuel aboard, including locker tanks.
2. Engine start, runup and takeoff on main tanks only.
3. Start engines (no pumps)
4. Engage electrical fuel pumps on Low once engines are started (listed three times on digital checklist, twice on printed list). Leave in normal (Low) position for entire duration of flight.

5. Approach and land on main tanks only.
6. Climb-out on main tanks, initiate fuel transfer from locker tanks once established in cruise climb and stable. Transfer all of locker tanks to mains until transfer indicator signals transfer complete (approx. 1 hr.)
7. Continue to run on main tanks until at least 1/3 main tank capacity consumed (approximately 2hrs after departure and following transfer of Locker tanks)
8. Once 1/3 – 1/2 main fuel tank consumed, switch to Aux tanks.
9. Monitor that main tanks do not overfill due to return excess fuel to main tanks.
10. Once an Aux tank is at 50 lbs or less remaining, switch back to Mains. Do not wait for Aux tank depletion.
11. Cross feed if necessary after all transfers are complete and consumption of Aux tanks is complete to balance fuel load (not normally required)
12. When transitioning to approach, shut off locker tank transfer if in progress, switch to Main if on Aux tanks.

Silliman James

From: Randy Peckham <[REDACTED]>
Sent: Saturday, September 15, 2018 12:22 AM
To: Silliman James
Subject: CEN18FA371: Preliminary Report

Hi Jim,

I just noted the preliminary report on the NTSB web site. In the report it indicated fuel staining on the nacelle tank originating from the filler cap. Please note that this is a normal occurrence on this airplane and other Cessna 340's that have the nacelle tanks. When filled to full, upon departure, the angle of climb submerges the fuel cap vent if the tank is filled to full, resulting in the fuel staining backwards over the nacelle. This would not be a sign that any substantial amount of fuel vacated the tank, and only that it was filled into the filler neck.

The fact that there was 1/3 of the tank of fuel remaining in the locker tank is abnormal, given the amount of flying that was conducted prior to the accident. I would recommend reviewing the position of the electrical fuel pump and fuel transfer switches that were located to the lower left of the pilot yoke. If the small red transfer switches were in the up position, the transfer pumps were active. Down would be inactive. Also the position of the electrical fuel pump switches should both be in the down position, which is on/low, and they should not be in the off or up/high position.

I was wondering if you could let me know what happens now – has a cause been determined, and assuming it has not, what is normal for the investigation process? Will this go on for a long time? How best would I get additional information as it is released?

Many thanks,

Randy Peckham
FLEX Air Services

