

CALLBACK

From NASA's Aviation Safety Reporting System



Issue 409

February 2014

What Would You Have Done?

Once again *CALLBACK* offers the reader a chance to “interact” with the information given in a selection of ASRS reports. In “The First Half of the Story” you will find report excerpts describing the event up to the decision point. You may then use your own judgment to determine the possible courses of action and make a decision regarding the best way to resolve the situation.

The selected ASRS reports may not give all the information you want and you may not be experienced in the type of aircraft involved, but each incident should give you a chance to exercise your aviation decision-making skills. In “The Rest of the Story...” you will find the actions actually taken by reporters in response to each situation. Bear in mind that their decisions may not necessarily represent the best course of action. Our intent is to stimulate thought, discussion, and training related to the type of incidents that were reported.

The First Half of the Story

Situation #1 Cessna 210 Pilot's Report

■ *I was on an IFR flight plan...in cruise at 8,000 feet. The autopilot stopped operating. While I was troubleshooting the problem, I noticed that the battery charge was low and falling rapidly. I attempted to notify Approach of the problem and believe that they understood that I...was about to lose communications.... I started turning off some electrical systems in an attempt to save battery power while troubleshooting the alternator. It did not come back online and I turned off the battery to conserve what power remained. I attempted to make radio contact with a hand-held radio, but either its transmissions were too weak or its battery was too low.... I had a hand-held GPS, an iPad and an ADS-B receiver to use for navigation and weather avoidance....*

To continue along my flight planned route would be hazardous due to thunderstorm avoidance, a possible frozen pitot tube and potential conflict with other aircraft without transponders. During a break in the IFR conditions, I

observed clear air to the southeast and turned toward it.... I decided to continue in the clear air and...descend to a VFR altitude below the cloud bases. Once I got to the east of the line of storms, I turned south paralleling the line of storms.... The more time passed, the more [battery] charge returned.... If I continued on to [destination] there was a reasonable chance that the battery would have sufficient power to lower the gear...[without] an emergency extension procedure....

I...was able to make radio contact briefly. I stated my situation, cancelled IFR and explained that while I was likely to lose contact again, I was going to continue on to my destination. The Controller was very helpful and asked if I required assistance and mentioned that [an alternate field] was to the east if I wanted to land there.

What Would You Have Done?

Situation #2 C45 (Beechcraft Model 18)

Pilot's Report

■ *The aircraft I was flying...did not have a current altimeter and static system inspection which prevented me from filing an IFR flight plan.*

Weather analysis indicated a thin overcast layer with bases between 500 and 900 feet AGL and a second overcast layer at around 7,000 feet. It was VMC 30 miles to the northeast, the direction of my flight. The forecast indicated the low cloud layer would dissipate before reforming with IMC persisting for the remainder of the day.

My plan was to be ready to go when the low cloud layer opened up.... I was comfortable with the fact that I could end up between layers because there was plenty of cloud clearance and visibility for VFR flight...to the clear weather along my course....

When the lower layer opened up...I was granted a Special VFR clearance. Moments prior to takeoff, the lower layer closed back up and the tower advised the ceiling was 700 broken. I thought that I could takeoff, fly to the open area safely, and climb above the lower layer, all while complying with the FARs. I was wrong.

After takeoff...I was...trying to fly toward the area where the lower cloud layer was open. As I pressed on, I realized that the open area I intended to climb through was gone. However, I felt okay as I was still 600 to 700 feet above the ground and clear of clouds.

That didn't last long. The ceiling began to lower and my comfort level rapidly decreased. I was unable to maintain a minimum safe altitude and remain clear of the clouds. I had lost track of where to turn toward better weather. While I was high enough that I was not concerned about flying into terrain, I became very concerned about radio towers.... I realized that I could become a VFR into IMC statistic.

What Would You Have Done?

Situation #3 EMB-145 First Officer's Report

■ Takeoff was normal. At around 400 feet, Tower...[advised] that our left engine was producing smoke. No specifics were given on the amount or color. Tower then asked for our intentions.... Both the Captain and I checked engine and all system instruments. There were no abnormal readings. We could not detect any smell of smoke or any abnormal flight characteristics.... We said we would continue and Tower handed us off to Departure. Departure told us they had received the smoke notification from the Tower. We checked all our instruments and systems again and could still not find any faults.

The Captain then called...Maintenance Control. They said that it was most likely the cold engines that had just warmed up combined with the cold temperature of -2C.

What Would You Have Done?

The Rest of the Story...

Situation #1 Cessna 210 Pilot's Report

The Reporter's Action

■ Given...the fact that I could navigate VFR around the weather and any airspace, and possibly avoid an emergency gear extension, I declined to land [at the alternate airfield]. I lost contact as the battery charge dropped again. I continued VFR to the southeast around the line of storms. A few minutes out, I slowed the aircraft, turned on the battery and had enough charge to extend the gear. With all other

electrical off, other than the rotating beacon, one NAV Comm and the transponder squawking VFR, I made radio calls for the pattern and performed a no flap landing.

In reviewing my decision making in this situation, I believe that the decision to get into VFR flight conditions was a good one as well as to use these conditions to navigate around the storms. I might second guess my decision not to land at [an enroute alternate].

Situation #2 C45 (Beechcraft Model 18)

Pilot's Report

The Reporter's Action

■ My only remaining option was to initiate a climb through the lower layer up to VMC above. As I entered the clouds, I began to think about calling Center to confess my predicament and declare an emergency if necessary. The good news is that after climbing 500 feet I broke out between layers in VMC. Since I was still below any usable IFR altitudes and no longer needed any assistance, I did not call center.

I determined my position by referencing the VOR and GPS and proceeded on course. In reviewing the airspace [in the area], I realized that I probably went through the edges of the Class D and Class E as I searched for the opening in the lower layer. I am not sure my Special VFR clearance covered this possibility.

I have flown many years and I am very comfortable flying VFR and IFR, even VFR when the ceiling is low as long as the visibility is as good as it was this day. However, I let my comfort level lull me into departing without a viable Plan A and no Plan B.

Situation #3 EMB-145 First Officer's Report

The Reporter's Action

■ We continued the flight and no problems were encountered....

While in cruise, the Captain and I reviewed the situation and both agreed that we should have returned after Tower notified us of the smoke. We both agreed that it would have been better to have erred on the safe side and returned, as opposed to continuing based on our instrument indications and flight characteristics.

ASRS Alerts Issued in December 2013	
Subject of Alert	No. of Alerts
Aircraft or Aircraft Equipment	6
Airport Facility or Procedure	6
ATC Equipment or Procedure	2
Company Policy	1
Other	2
TOTAL	17

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 Reporting System**
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December 2013 Report Intake	
Air Carrier/Air Taxi Pilots	4,410
General Aviation Pilots	943
Controllers	630
Flight Attendants	257
Mechanics	146
Dispatchers	103
Military/Other	74
TOTAL	6,563