CALLBACK

From NASA's Aviation Safety Reporting System

Issue 494 March 2021

What Would You Have Done?

This month, *CALLBACK* again 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 an event or situation up to a point where a specific decision must be made, an immediate action must be taken, or a non-normal condition must be actively managed. You may then exercise your own judgment to make a decision, determine a possible course of action, or devise a plan that might best resolve the situation.

The selected ASRS reports may not provide 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 refine your aviation judgment and decision-making skills. In "The Rest of the Story…" you will find the actions that were taken by reporters in response to each situation. Bear in mind that their decisions may not necessarily represent the best course of action, and there may not be a "right" answer. Our intent is to stimulate thought, training, and discussion related to the type of incidents that were reported.

The First Half of the Story

In the Terminal Environment

General Aviation Pilot's Report

■ *I was flying VFR above a broken/scattered layer with tops at about 9,500 feet after having climbed above the layer. Though I get flight following on 95 percent of my flights, traffic was so light, due to the pandemic, that I chose not to speak with ATC this day. I knew I had to fly well south of my destination before I could descend in relatively clear conditions. As I was descending and turning to the northwest, I was suddenly staring directly at a commercial jet crossing my path from right to left [approximately] 3 miles directly ahead and below less than one thousand feet.*

What Would You Have Done?

A Window for Decision

B737 Captain's Report

■ *On climbout…at about 25,000 feet, the First Officer's (FO's) front window completely shattered. Our actions as a crew…*

What Would You Have Done?

Hidden in Plane Sight

Air Carrier Captain's Report

■ *The FO returned from the exterior preflight and informed me that the left fixed landing light was inoperative. We confirmed this and [deferred it per the Minimum Equipment List (MEL)]. After pushback, we accomplished the after-start flow, and the CAPT PITOT light stayed on. The circuit breaker was in, so we contacted Dispatch and Maintenance via phone to [defer] this. We were able to continue per the MEL and taxied for takeoff. On the takeoff roll, I noticed, at about 70 knots on the FO's side, that I had no airspeed indication.*

What Would You Have Done?

The Last Line of Defense

A319 First Officer's Report

■ *While on the…RNAV arrival into Newark,…ATC vectored us off the arrival to a heading of 230 [degrees] and assigned us a descent from 7,000 feet MSL to 4,000 feet MSL. The vector placed us about 5 miles behind a VFR aircraft at 3,500 feet MSL. The VFR aircraft was also heading roughly 230 [degrees]. We were overtaking the VFR aircraft with approximately 40 knots of overtake. There was a 600-foot broken cloud deck from 3,500 feet to 4,100 feet MSL, which kept us in Instrument Meteorological Conditions (IMC). ATC pointed out the VFR traffic, but we told them we were not [in] visual [conditions].*

At roughly one to two miles from the VFR traffic and leveling at 4,000 feet, our TCAS showed the traffic climbing…. Inside of a mile, estimated…on TCAS, I perceived an impending conflict based on the TCAS trend and our overtake.

What Would You Have Done?

The Rest of the Story...

In the Terminal Environment

The Reporter's Action

■ *I initiated a hard turn to the right and a shallow climb, and I noticed the jet banking to its right. I was surprised to see a jet in this location at this altitude.... I fly this route often for training, but rarely above 6,000 feet, so later after landing, I studied the [local] STARs and saw that this jet was right where it was supposed to be on the STAR. I had collected the weather soon after the traffic encounter, and it was reporting 5,500 [feet] broken, which equates to an MSL ceiling of 7,000 [feet] and is about where the jet was. I realize, now, that the jet was descending through the cloud layer that I flew around, and the jet speed was such that it must have emerged from the cloud layer during my momentary heads down to get the frequencies at my destination. The encounter was rattling, and I can imagine the pilots of the jet making a colorful comment or two about general aviators.*

There are many obvious lessons here. Talk to ATC, maintain a traffic scan, and pay closer attention to any traffic information available on the Multi-Function Display (MFD). Nevertheless, I realize, now, that I do not have a full understanding of the STARs in my area, since they are generally used by turbojet aircraft capable of 250 knots and arriving from the flight levels. In particular, I note that there are 25 STARs published for the airports under the [local] Class B Airspace. I believe it would be helpful for all general aviation pilots in this crowded airspace if there was a chart, showing all the routes, that was color coded for altitude. A chart with high glance value would be worth checking when traversing the region VFR. Better yet would be a layer on ForeFlight or other Electronic Flight Bags (EFBs) showing all STAR routes with a selectable altitude, say, between 6,000 and 7,000 feet, or between 7,000 and 9,000 feet, etc.

A Window for Decision

The Reporter's Action

■ *[We made] an immediate level off and communicated with ATC. Reading the checklist, [we] came to a point of putting on shoulder harnesses. At this point, I requested a turn [back to the departure airport]. We worked together to get the airplane turned around with a new routing. The FO worked with ATC, and I went back to the checklist for its completion. The last item on the checklist asked if the [damaged] glass was the inner or outer [pane]. In our case, it was the outer. The final line on [the outer pane] checklist reads, "Continue as normal and take off shoulder harnesses." So, this is where I recognized the error. As dire as "put on shoulder harnesses" is, this was not the time to turn around.*

We once again discussed our situation with one another with a completed checklist, and we cautiously went with the checklist, [concluding] that this [condition] is [directed] to continue to [destination]. Our fuel situation was fine, as we proceeded to destination fairly quickly. We were left separated in situations and busy unnecessarily. This is my disappointment.

Hidden in Plane Sight

The Reporter's Action

■ *I rejected the takeoff at that point. We cleared the runway, ran...brake cooling numbers, and requested taxi back to the gate. A three-minute cooling at the gate was returned via [performance calculations].*

At the gate, after writing up the discrepancy, I asked the FO to do a walk around, as we were going to terminate the aircraft and likely would not take this aircraft out. He returned immediately and informed me that the entire pitot tube was missing. I was met on the jetway by company maintenance personnel, [who had been] working on another aircraft. After discussing various possible ways the pitot tube could have been torn off, we suspected that it had happened in or out of the gate the previous night or on the remote pad where the aircraft overnighted. Shortly thereafter, the actual pitot tube was found on the ramp at the remote pad. We simply missed the pitot tube damage...and clearly missed the missing pitot tube on the originating exterior preflight.... The FO could have been distracted by the actual runway turnoff light in his face, or by attempting to tell if, in fact, a left fixed landing light was inoperative. Regardless, we missed the damage. We [applied the MEL to] the cockpit indication correctly and applied all MEL procedures properly, to my knowledge.

The Last Line of Defense

The Reporter's Action

■ *I turned off the autopilot and initiated an aggressive climb. Moments after initiating the climb, the TCAS RA aural alert sounded with an initial descend command followed immediately by a climb command. I followed the climb command with the vertical speed in the green until "clear of conflict" was heard, which happened at about 4,500 feet MSL. The Captain informed ATC that we were climbing as a result of the RA. ATC acknowledged and assigned us back down to 4,000 feet MSL. The rest of the approach and landing was uneventful.*

ASRS Alerts Issued in January 2021	
Subject of Alert	**No. of Alerts**
Aircraft or Aircraft Equipment	2
Airport Facility or Procedure	6
ATC Equipment or Procedure	2
TOTAL	**10**

494

A Monthly Safety Newsletter from

The NASA Aviation Safety Reporting System

P.O. Box 189, Moffett Field, CA 94035-0189

https://asrs.arc.nasa.gov

January 2021 Report Intake	
Air Carrier/Air Taxi Pilots	3,166
General Aviation Pilots	999
Flight Attendants	364
Military/Other	214
Mechanics	189
Controllers	187
Dispatchers	141
UAS	2
TOTAL	**5,262**