Issue 479 December 2019

# ASRS Year End Roundup

NASA's Aviation Safety Reporting System (ASRS) receives, processes, and analyzes voluntarily submitted incident reports from pilots, air traffic controllers, dispatchers, cabin crew, maintenance technicians, and others. Reports submitted to ASRS may describe both unsafe occurrences and hazardous situations. Information is gathered from these reports and disseminated to stakeholders. ASRS's particular concern is the quality of human performance in the National Airspace System.<sup>1</sup>

The ASRS Staff is composed of highly experienced pilots, air traffic controllers, and mechanics, as well as a management team that possess aviation and human factors experience. ASRS Analysts' experience is comprised of over 600 cumulative years of aviation expertise covering the full spectrum of aviation activity: air carrier, corporate, military, and general aviation; Air Traffic Control in Towers, TRACONs, Centers, and Military Facilities. Analyst cumulative flight time exceeds 175,000 hours in over 90 different aircraft. In addition, the ASRS Staff has human factors and psychology research experience in areas such as training, fatigue, crew resource management, user interface design, usability evaluations, and research methodology.

Says ASRS Director, Dr. Becky Hooey, about the Program, "ASRS reporters can know that every report submitted to ASRS is important. Each one is evaluated and processed by our uniquely qualified team of aviation safety analysts. We are passionately committed to improving aviation safety by helping you share your concerns and lessons learned with all who could benefit or need to know."

At the current rate, ASRS will receive over 108,000 reports this year that cover a broad range of topics. This month ASRS extends Season's Greetings in a lighthearted medley of reports. The narratives exemplify praiseworthy performance, reiterate sound aviation wisdom, and sprinkle a dash of humor over some good old common sense.

#### What's in Your Back Seat?

This private pilot had an interesting learning experience departing an airport near the DC Flight Restricted Zone (FRZ) with a dog in the rear seat.

■ I departed this morning on a Special Flight Rules Area (SFRA) flight plan, and my intention was to maintain 1,400

feet until [laterally] clear of [Class] B airspace, which would keep me clear of the Flight Restricted Zone and all [Class] B airspace. At approximately 1,200 feet in my climb, my dog, which had been harnessed in the back seat, leapt into the front passenger seat. In doing so, he hit the dash, somehow managing to clear my flight plan out of my Garmin 430. He pulled my GDL 39 out of the cigarette lighter (my backup navigation), he knocked my tablet (also my backup navigation) onto the passenger side floor, and he ripped the microphone port of my headset out at the connector. I didn't initially realize that had happened, and I could still hear the radio because the listening port was still plugged in. In trying to keep my dog off of the controls, and flipping the autopilot off to hand-fly, I inadvertently made a climbing turn to 2,200 feet and may have broken into Class B airspace. Upon recognizing this, I immediately descended and made my initial radio call to Potomac. At the time, I thought they had acknowledged my call, but in retrospect, I don't think they did. A few minutes later as I was still trying to re-trim the airplane, Potomac was trying to reach me, and it was clear to me they couldn't hear me. It was at this point that I realized my microphone port had been unplugged, and the cord was now wrapped around my 50 pound dog, which was dead weight on top of it. I finally freed the cord and made contact with Potomac. In doing so, my concentration was broken, and when I looked at my position, I was either in or very close to violating the FRZ. I immediately turned around and again made contact with Potomac. At this point forward I stayed clear of Bravo and the FRZ.

# **Dispatching Details**

This air carrier Dispatcher made a rare, but significant discovery. Without the revelation, confusion would have been likely for pilots and controllers alike.

■ Aircraft X...was delayed into [the following day].
[Aircraft Y, using the same call sign, was] operating on time.
Both flights were in the air at the same time and would both
be in ZZZ Center at the same time. Actually, both flights
would have been line of sight with each other just north of
ZZZ1 VORTAC. The Dispatcher noted this just after takeoff
for Aircraft X. The ATC Coordinator was notified, who,
in turn, contacted ZZZ Center. A temporary call sign was
assigned to the eastbound flight for crossing ZZZ airspace.

Dispatch notified both flights of the situation, the remedial action, and of the similarity between [the two] call signs.

A long delay of twenty hours had caused [the call sign] overlap in this date-change flight. Do not delay flights into the next day without setting them up as an extra section or by stubbing immediately upon determining the length of the delay.

#### If the Nozzle Fits

This twin Bonanza pilot exhibited sound aviation wisdom after the aircraft was serviced improperly. Distraction was one link in the chain of events that could have been costly.

■ This aircraft is equipped with "AVGAS ONLY 100LL" placards.... I requested, "Top off the main tanks only." I then became ... distracted with securing the aircraft for heavy weather... When I finished,... I noticed the...fuel truck was labeled with the black placard, "JET-A." [The fueler] told me he had just added 29 gallons of JET-A to my aircraft, a twin Bonanza.... This aircraft is clearly an old vintage aircraft and does not resemble in any fashion a turbine powered engine cowling or exhaust system. It was apparent...that the fueler was...new to this position.... When I examined the fueling nozzle, there was no duckbill [fixture]. I could not understand how he could have inserted a JET-A duckbill style refueling nozzle into my AvGas tanks. In place of the duckbill was a conventional round AvGas nozzle.... The fueler was unaware of the difference between the... designs. Further discussions...revealed he was unaware of the deadly consequences of this error. His ... supervisor, who had been there during part of this refueling, ... suggested they would drain and refill the tanks for me. I told him that only an A&P would be doing any work on the aircraft...The fuel tanks were drained and flushed by the local A&P. However, prior to the next engine start, further research...with my *A&P...revealed that the electric fuel pump...would hold...* jet fuel even though the tank was drained of fuel.... This small but significant amount of Jet-A would be delivered to the engines. I then disconnected the fuel supply lines at the firewall and drained the fuel lines and crossfeed system prior to the next flight.

# **A Menacing Memory**

This MD11 Captain reported that his First Officer (FO) had allowed the aircraft to descend below the assigned altitude. The Captain suggested a possible root cause and mitigating strategy.

■ We were descending on the arrival. The FO...decided to hand-fly, announced it, and disconnected the autopilot. As we were approaching level off, the aircraft started a slight left turn away from course. He said, "What's it doing?"

and went up to the Flight Control Panel (FCP) to select a heading back to course; then he reselected NAV. The aircraft stayed in a slight left turn, and as we approached our level off, he made no effort to raise the nose. I said, "There's your altitude," as we passed through it, and he raised the nose to level off. We descended 200 to 300 feet below our assigned altitude. As he was correcting, he responded, "I forgot the motion was on!" meaning he forgot he was hand-flying. Nothing was heard from ATC about the deviation.

[The FO] managed to remember he was hand-flying for the rest of the descent and approach. For some reason the FO decided to hand-fly the arrival then promptly forgot he was doing it! This was our second leg of the night, and we were definitely on the back side of our body clocks. When you even remotely feel tired, let the automation be your friend.

### A Classic, Costly Error

This B777 Captain discovered a discrepancy in the paperwork prior to flight. The classic error could have resulted in serious consequences if not corrected.

■ As Pilot-in-Command (PIC), ... I was reviewing the operating flight plan and load sheet prior to flight. I discovered a discrepancy between the two and found the operating flight plan to be 118,989 pounds lighter than the load sheet data. I contacted the Flight Dispatcher on duty and voiced my concerns. A new operating flight plan and load sheet were generated with the correct data.

I was informed it was confusion between kilograms and pounds that was the cause of the paperwork error.

## **Inquiring Minds**

A Pilatus pilot learned a lesson from a situation exhibiting a hint of hindsight humor. The public was allowed access to the aircraft interior, and Murphy prevailed.

■ The aircraft Emergency Locator Transmitter (ELT) was inadvertently activated...at an airport event. The Medical Crew was on an outside call and...was not present. The public was allowed access to the aircraft interior. Children in the cockpit flipped several switches, including the ELT. After removing the children, the ELT was reset. The Communications Center called to inquire. The pilot and copilot seat belts were cross-connected from left to right to restrict cockpit access.

Always have at least two crew members monitoring the aircraft during public events. Do not allow public access to the aircraft interior.

1. https://asrs.arc.nasa.gov/docs/ASRS ProgramBriefing.pdf

| ASRS Alerts Issued in October 2019 |               |
|------------------------------------|---------------|
| Subject of Alert                   | No. of Alerts |
| Aircraft or Aircraft Equipment     | 7             |
| Airport Facility or Procedure      | 1             |
| ATC Equipment or Procedure         | 2             |
| Company Policy                     | 1             |
| TOTAL                              | 11            |

| 479   |  |
|---|--|
| A Monthly Safety<br>Newsletter from             |  |
| The NASA<br>Aviation Safety<br>Reporting System |  |
| P.O. Box 189<br>Moffett Field, CA<br>94035-0189 |  |

https://asrs.arc.nasa.gov

| October 2019 Report Intake  |       |
|-----------------------------|-------|
| Air Carrier/Air Taxi Pilots | 5,570 |
| General Aviation Pilots     | 1,456 |
| Flight Attendants           | 916   |
| Controllers                 | 470   |
| Military/Other              | 317   |
| Mechanics                   | 284   |
| Dispatchers                 | 173   |
| TOTAL                       | 9,186 |