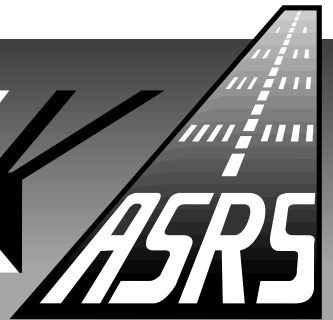


# CALLBACK



From NASA's Aviation Safety Reporting System

Number 188

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## Winter's Tales...



### Snowbirds

To escape the harsh northern winters, "snowbirds, and some pilots, fly south. Unfortunately, a few (pilots, that is!) got tangled in the ADIZ trap.

From the Bahamas: *I flew through the ADIZ [Air Defense Identification Zone] without knowing that mandatory flight plans, whether [the aircraft is] landing or not, are to be filed.*

From the Florida Keys: *I noticed a local NOTAM outlining required DVFR flight plan filing for all flights into and out of the Keys... Most pilots would be unaware of the ADIZ crossing within the same state (i.e., coastline of Florida to Florida Keys).*

The ADIZ is an area of airspace in which ready identification, location, and control of civil aircraft is required in the interest of national security. FAR 99, "Security Control of Air Traffic," outlines procedures for aircraft operation associated with an ADIZ. Sectional charts may carry a variety of notations regarding the ADIZ, from warnings ("National Defense Operating Area") to instructions ("Report to FAA Radio prior to entering ADIZ"). But some sectional charts displaying coastal or border areas have no instructions or information at all.

Pilots operating aircraft into, within, or across an ADIZ must file a flight plan with a Flight Service Station or other ATC facility. Aircraft on an IFR flight plan automatically conform with this ADIZ regulation. VFR aircraft must file a DVFR (Defense Visual Flight Rules) flight plan and comply with specific time- and position-reporting requirements.

Take AIM. The Airman's Information Manual (Paragraph 5-90) explains the aircraft equipment and reporting requirements for ADIZ flights, and offers this further caution: "An airfiled VFR flight plan makes an aircraft subject to interception for positive identification when entering an ADIZ. Pilots are therefore urged to file the required DVFR flight plan either in person or by telephone prior to departure." The following reporter, inbound from the Bahamas, discovered this the hard way:

■ *[After several unsuccessful attempts to reach ABC Tower], we made the decision to use UNICOM frequency and get our flight plan in the air... We contacted Center and told them our request and intentions. They gave us a squawk code and brought us into airport XYZ. [Upon landing], we were ordered out of the aircraft at gunpoint and made to lie face down on the taxiway.*

Perhaps the best advice for preventing ADIZ entanglements comes from a government pilot and reporter to ASRS. He

was questioned by U.S. Customs officials about his lack of a flight plan, even though he was talking to the customs office throughout his flight. His advice: *File and call customs and whoever else (Coastal ATC) and let them know what your intentions are. Avoid the lack of communication between government agencies!* ▲

### It's Still Flying Until...(Part 1)

Following three or four blasts of power to reach the signalman's mark on a slippery ramp, the turbojet finally arrived at the gate. Then, according to an ASRS reporter...

■ *The last few feet were on an incline to the gate. I set the brakes and received a chock-in signal... After the parking checklist was complete and upon moving my seat back to fill out the aircraft logbook, the brakes accidentally disengaged. Apparently the chocks had slipped on the slick ramp, or due to the incline the aircraft jumped the chocks. The right wing aileron assembly impacted a fuel truck [parked] behind the wing. Then I realized we had moved backwards approximately six feet. I moved my seat forward and physically held the brakes. I think the ground crew were possibly put off guard by the power [applications] and attempt to get the aircraft to the gate. As the Captain, I feel I am responsible, but some circumstances, like the slope, slippery ramp, and the chocks not holding, are beyond what I control.*

There is a truism in aviation that until the airplane is chocked in and tied down, the machine is still flying. Additional testimony is supplied by our next report.

### It's Still Flying Until...(Part 2)

The Captain submitting this tribute to padded jetways was justifiably pleased with a successful landing in 30-knot winds and blowing snow. At the last moment, however, the aircraft slid on the ramp and weathervaned. The reporter continues:

■ *The forward fuselage left side grazed the padded bumper area with the temperature probe, tearing the padding. All engines were running but brakes and nose steering and thrust reverse could not prevent contact with the jetway padding. I felt appropriate precautions had been taken for taxi in existing conditions.*

A tow to the gate might have been the precaution of choice in both of the above situations. In addition, perhaps airport management also needs to be reminded that ramp maintenance is vital to safety, especially during slippery winter conditions. ▲

#### ASRS Recently Issued Alerts On...

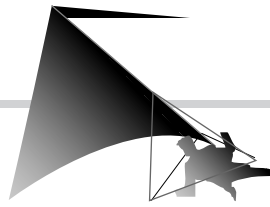
Loss of control of an EMB-120 attributed to clear ice
Reports describing compliance problems with SFAR 71
Cabin PA interference with a B-757 cockpit chime system
A MOA extending to FL280 and not marked on jet charts
A high intensity laser in use on a Hawaii airport's approach

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#### November 1994 Report Intake

Air Carrier Pilots	1933
General Aviation Pilots	691
Controllers	66
Cabin/Mechanics/Military/Other	60
<b>TOTAL</b>	<b>2750</b>

# TCAS to the Rescue



## Just Hangin' Around

ASRS often receives reports singing the praises of TCAS in preventing mid-air collisions. It's gratifying to know that TCAS is doing its job, as it did for this widebody's crew:

■ *During initial descent after a trans-Atlantic crossing, Air Traffic Control issued a clearance to descend to FL260. The altitude alert device was selected to FL260, I read back FL260, and the Captain, who was flying the aircraft, set FL260 in the FMS. All four crew members were wearing headsets at the time. Passing FL270, a TCAS traffic advisory sounded. The aircraft was located, both on TCAS display and visually, at 11 o'clock opposite direction, and TCAS displayed him at FL260. Descent continued to FL268, and a resolution advisory was issued by TCAS to stop descent... A climb back to FL270 was initiated. At this point, I queried Control as to what altitude he had cleared us to, and pointed out the traffic we had. He said we were cleared to FL270, and the traffic was no "problem" because it was at FL 260 [Reporter emphasis]. I have no doubt that if the descent had not been stopped, the two aircraft would have collided.*

*This is a typical readback/hearback error. The language difficulty and accent of the controller may have contributed to the problem...*

Meanwhile, closer to home, the next reporter also appreciated the TCAS advisory of an aircraft that he didn't see until it was almost too late:

■ *I was cleared for the profile descent with the 250 knot airspeed constraint at intersection removed. I informed Center that I intended to maintain 300 knots in my descent until reaching intersection at 17,000 ft. ATC concurred. When approaching intersection, Center informed me of slow-moving, southwest-bound traffic at 15,200 feet in a climb at my 11 o'clock position. Since I could not immediately see the target, I expanded the range scale on my HSI TCAS presentation to give me a better picture of the developing situation. I indicated to Center that I had the target on TCAS. It was still climbing southwest toward fix... Finally the TCAS TA warning alerted us just as we started to the right to avoid a rapidly-developing altitude conflict. As the TA/RA alert was sounded by our equipment and we responded with the nose-up conflict resolution, the aircraft was spotted on our left in our 10:30 o'clock position, at our altitude, quite close to us. TCAS may have saved us from a mid-air. TCAS did what it was designed to do.*

This Captain also makes an interesting observation about expectation and the hazards of making assumptions.

*I perceived the "slow moving" aircraft to also be slow climbing. Wrong... He was climbing much faster than I thought. I had experienced a TCAS arrival the previous day with numerous small TCAS targets with minimal performance demonstrated. The experience lulled me into thinking "slow moving" also meant slow climb performance.* ▲

The see-and-avoid concept is one of the first lessons taught in flight school, and with good reason—it works! An air carrier crew member reports:

■ *[We were] in the departure phase of flight...when a commuter flight called traffic to Departure Control...saying it appeared to be a motorized hang glider. Almost immediately we saw the traffic at 12-1 o'clock, closing rapidly [at] 10,500-11,000 feet. We took evasive action immediately...requiring approximately a 25 degree left bank and an increase in the rate of climb. The red and yellow hang glider passed less than a 1/4 mile to our right. Without the extended maneuver, I feel we would have hit the glider. After the incident we had many questions, such as how did the vehicle get there, why was he there, etc. We will probably never know.*

We also wonder what the hang glider pilot was thinking to be at that altitude, on a departure route, in close proximity to several major airports. Meanwhile, kudos to the flight crew for their quick response in avoiding a mid-air collision. And a last word from the air carrier's First Officer to the commuter crew: *Thanks for the visual call out; they are still imperative.* ▲

## A Funny (?) Thing Happened On the Way to the Air Show...

Low-level obstructions, such as poles and electrical wires, are well known hazards to aerial spray operations. But capricious winds can stir up just as much trouble, as discovered by an "ag" pilot reporting to ASRS:

■ *I started early [and] had 4 loads to do that day to spray 200 acres... In the preceding days, the wind had staled to pick up in the morning, so I hoped to finish before the wind picked up. My first 3 loads went well, but on my last load the wind started to gust pretty good (10-15 knots). At 10 knots we usually stop spraying, but I only had my ends of the field to cut [in order to] finish the field.*

*Later in the day I received a phone call from our Flight Standards District Office (FSDO) that I had sprayed an FAA car on the way to a local air show. I knew the FAA official in the car because I was to perform in this air show. I felt terrible about the situation. The FAA official and I talked about what happened: I was cutting an end of the field and as I pulled up over a 25-30 foot power line and shut my spray off, a gust of wind took the spray over the highway where it came in contact with the FAA official's car. I cut the other ends while he watched me and had no other problems...*

*I should have terminated my spraying, but the farmer needed the application very badly and I had only very little left to go to finish the field. I have [several thousand] hours experience in aerial applications...but this reaffirms that you can never be too careful. Always know local conditions.* ▲

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