Back to School

Longtime readers will recognize topics in this CALLBACK that have been discussed many times over the years. Although we all need frequent reminders about these safety issues, an additional perspective has been added to this CALLBACK. In an effort to reinforce the lessons concerning preventable, weather related accidents, each ASRS incident report is accompanied by a strikingly similar National Transportation Safety Board (NTSB) accident report.

These reports represent two schools of thought. ASRS offers first-hand accounts detailing either close calls or disasters averted by taking the proper course of action. These reports often contain valuable insights into human factors and there is no "cost" to those who report to ASRS. NTSB reports are second-hand narratives that often include statements from witnesses. Being the subject of an NTSB report can cost you dearly. There is a lesson common to both schools: it pays to learn from the experience of others.

There is a lesson common to both schools: it pays to learn from the experience of others. Whichever school you prefer, learn the lesson before you take the test. It could be a final exam—with no opportunity for a retake.

Scud-Running

"Scud" is a commonly used term for patches of low, ragged clouds that often form below an overcast. "Scud-running" refers to the practice of flying beneath the scud to avoid Instrument Meteorological Conditions (IMC) and usually involves a violation of Visual Flight Rules (VFR) cloud clearance criteria. Statistically, scud-running is an extremely dangerous practice that accounts for a high percentage of weather related, General Aviation accidents.

The pilots who submitted the following ASRS reports encountered weather similar to the conditions described in two NTSB reports. The successful outcomes related in the ASRS reports were the result of a wise decision in the first instance and a degree of luck in the second.

The specialists advised the pilot that...[ZZZ2], the closest weather reporting point to the accident site, had just dropped down to a ceiling of 900 feet broken, 1,400 feet overcast, 2 1/2 miles visibility, and ceiling variable between about 700 feet and 1,100 feet…. A Senior NTSB meteorologist reported that it was likely that the flight encountered IMC similar to the conditions being reported in the [ZZZ2] area, just prior to the accident.

ASRS Report #1

Aircraft: Piper PA-28. Injuries: None

- I received clearance to [depart] VFR at night, flying at 2,000 feet MSL. I stayed within legal VFR limits until the weather deteriorated within six miles of my destination. Rather than try to scud-run under the clouds, I contacted approach, told them the conditions, and that I needed to turn around. Approach asked which field I wanted to land at and, after I checked ATIS, I chose (ZZZ). Approach was very helpful in giving me a few vectors. I learned a great lesson; that weather can deteriorate very quickly and you should turn around as soon as it does and don't hesitate.

NTSB Report #1


- Approximately 43 minutes after departure on a night cross-country flight, the airplane was substantially damaged when it failed to maintain clearance with terrain in a heavily wooded area.... The non-instrument rated private pilot and his passenger were fatally injured. The pilot contacted the...Flight Service Station...and requested an enroute weather briefing, initially commenting, "Gonna head over to [ZZZ], VFR. Looks like I'll be 'scudding it.'" The specialist advised the pilot that...[ZZZ2], the closest weather reporting point to the accident site, had just dropped down to a ceiling of 900 feet broken, 1,400 feet overcast, 2 1/2 miles visibility, and ceiling variable between about 700 feet and 1,100 feet.... A Senior NTSB meteorologist reported that it was likely that the flight encountered IMC similar to the conditions being reported in the [ZZZ2] area, just prior to the accident.

ASRS Report #2

Aircraft: Beech 35. Injuries: None.

- ...A weather briefing was not obtained. I was scud-running until the weather closed in and all visibility was lost. With concern for ground clearance, I gained altitude, struggled with spatial disorientation, contacted ATC on 121.5, and declared an emergency. With ATC's assistance, we determined there was not enough visibility at my final destination and I accepted vectors to [ZZZ]. The flight was completed with IMC (Instrument Meteorological Conditions) prevailing until final descent to the airport where a VFR landing could be made. There was no damage to the aircraft or injuries of any type. The root cause of the problem was attempting a VFR flight when the weather clearly did not support it. I did have 14 hours of IFR training; otherwise this flight would probably have ended in tragedy.

ASRS Encounters Turbulence

Dear Readers: We feel that it is important to keep you, the aviation professionals who contribute to, and benefit from, the Aviation Safety Reporting System, informed about the status of the program. The ASRS has been flat funded by the FAA since 1997 and experienced a 20% funding shortfall in 2005. While the future budget has not been finalized, indications are that the situation could be even worse in FY '06.

July 2005 Report Intake

- Air Carrier / Air Taxi Pilots: 2,152
- General Aviation Pilots: 794
- Controllers: 48
- Cabin/Mechanics/Military/Other: 295

TOTAL: 3,289

CALLBACK

From NASA's Aviation Safety Reporting System

Number 311 August 2005

A Monthly Safety Bulletin from
The Office of the NASA Aviation Safety Reporting System
P.O. Box 189, Moffett Field, CA 94035-0189
http://asrs.arc.nasa.gov/

ASRS Alerts Issued in July 2005

<table>
<thead>
<tr>
<th>Subject of Alert</th>
<th>No. of Alerts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft or aircraft equipment</td>
<td>9</td>
</tr>
<tr>
<td>Airport facility or procedure</td>
<td>9</td>
</tr>
<tr>
<td>ATC procedure or equipment</td>
<td>1</td>
</tr>
<tr>
<td>Chart, Publication, or Nav Database</td>
<td>1</td>
</tr>
<tr>
<td>Company policy or maintenance procedure</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>
Icing

Icing is another factor often cited in weather related accidents. The following ASRS and NTSB reports deal with events in which pilots encountered icing conditions while flying aircraft that did not have anti-icing or de-icing capabilities. The pilots who submitted the ASRS reports were fortunate to survive...and to learn from their experience.

ASRS Report #3

Aircraft: Beech 35. Injuries: None
- In solid stratus at 4,000 feet, the temperature is -4 degrees C and I start picking up some trace ice.... As I continue down to 2,300 feet for an approach, the precipitation increases significantly and I quickly load up with ice. So at eight miles south of [ZZZ], I tell ATC I'm loading up with ice and request direct (ZZZZ). No delay at all, cleared direct; climb to 3,000 feet; contact approach. At 2,800 feet, I cease climbing. Requested lower; given 2,300 feet. I keep climb power and 140 MPH and continue losing altitude.... Drifting through 2,300 feet, I go to full power; tell approach I can't maintain 2,300, and get a left turn to 090 [degrees] to avoid an antenna farm. Finally, at 1,800 feet with max power, I'm holding altitude. And hey, the ILS for Runway 16 comes in. Great! Break out hot and high at about 600 feet (the runway is over 9,000 feet long), flying down the gear, and hold about 120 till flare. After landing, big chunks of ice begin falling off the leading edges.... I give the tower a brief explanation; thank them profusely for their very quick professional help.... Hindsight: First sign of ice, I should have done the famous 180. In part I had a mind-set to get to [ZZZ], and with the information I had, thought this has got to be just a little patch of precipitation, soon to be left behind. I was just too damn slow to make the 180 degree divert decision. Could have possibly stayed high 'til over [ZZZ], and then done the approach, but maybe then wind up low, not breaking out, and 600 feet over [ZZZ] with a load of ice, and no place to go.

A little older, a little smarter, I'll screw something up again, but it won't be a repeat of this little story. If it's ice, I'm "outta" here!