CALLBACK
ASRS
From NASA's Aviation Safety Reporting System

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Incidents at Non-Towered and Tower Closed Airports

Safe operations at non-Towered airports require good communication practices (transmitting one's intentions and listening actively), cooperation with other pilots, courtesy, and constant vigilance. In this month's selection of *CALLBACK* reports, we take a closer look at specific areas of non-Towered airport operations:

- Back-taxiing on an active runway
- Selection of correct radio frequencies
- Adherence to standard traffic patterns
- Use of collision avoidance tools for enhanced situational awareness

Back-Taxi with Caution

Pilots back-taxiing on an active runway should always exercise caution, especially in marginal, IMC, or nighttime conditions. Here is one pilot's experience with a "pop-out" surprise.

■ *My home base...is an uncontrolled airport with an AWOS. [It has] one runway, 18/36. Runway 36 has a parallel taxiway, Runway 18 does not. I received my weather briefing (DUATS), filed a flight plan and got my plane ready to go...I announced on the UNICOM that I was back-taxiing on Runway 18. I was back-taxiing on Runway 18 when an aircraft announced they were on a 2-1/2 mile final to Runway 18. They called...and asked if I was still on the runway. I replied that I was but would be out of the way in time. I was out of the way – but barely. Just as I turned into the holding area, they popped out of the clouds at about 100 feet AGL, less than 1/8 mile and about 100 feet west of the runway. He corrected his approach and landed. The whole incident lasted about 1 minute.*

I made a poor decision: 1) I expected to see them long before I did as the AWOS was reporting 600 and 2. 2). I thought I had more time to taxi because they said they were 2-1/2 miles out. I was wrong on both counts. Turning back was not an option for me...but I could have pulled off into the grass. I should never be in that position again, because from now on, after announcing that I am going to taxi on the active, I will stop and wait for a time to see if anyone says they are on an approach.

Double-Check Frequency Selection

A Cessna 210 pilot reporting aircraft position heard no one on frequency for a lengthy period of time (an important clue), and subsequently experienced a conflict in the traffic pattern.

■ *Aircraft #1 was entering a left downwind leg for Runway 11. Started announcing position, intentions, altitude about 12.5 nm north of field. Heard no one talking on frequency. Announced at 10, 7.5, and 2.5 miles out (a habit I have). Heard no one on frequency. Announced a mid-field 45-degree entry and noticed an aircraft on downwind, about approach end of downwind. Thought it strange that he was not responding on frequency. Announced that I would enter in behind that aircraft. While turning from my 45-degree to downwind, was able to see clearly to my left and noticed #2 aircraft near and above my altitude. I had cut that aircraft off when entering the pattern. I wondered why 2 aircraft [were] not communicating on frequency. Double-checked my radio, found I had dialed in 122.8. Should have been 122.7. Reset [radio] and announced a go-around. Seems the #2 aircraft may never have seen me...*

Make Standard Traffic Patterns

A PA-28 pilot discovered that his traffic pattern was not in the "right" place.

■ *I heard an aircraft in the pattern giving position reports. The runway in use was 13. A call to UNICOM appeared unnecessary since I had the weather information*

ASRS To Conduct Wake Vortex Encounters Study

In conjunction with the FAA, NASA's Aviation Safety Reporting System (ASRS) will examine Wake Vortex Encounter incidents at JFK, STL, and SFO airports. While the initial focus of the study will be wake encounters for closely-spaced parallel runways, and single runway in-trail events in these three terminal environments, ASRS will also examine wake vortex incidents at other airports and in the enroute environment.

Some of the factors to be analyzed will include magnitude of wake encounter, aircraft spacing, aircraft type, runway configuration, and consequences from the encounter. This effort began in March 2007.

In order to provide the level of detail needed to fully understand these hazards and the factors affecting them, ASRS will contact pilots who report wake vortex encounters to ASRS to request their voluntary participation in completing a web-based supplemental question set. All identifying information (names, company affiliations, flight numbers, etc.) will be removed before ASRS research data is provided to the FAA. To support FAA and industry efforts to fully understand wake encounter events, ASRS strongly encourages pilots who experience a wake vortex encounter to report these incidents to ASRS and to participate in the ASRS Wake Vortex Encounter Study.

ASRS Alerts Issued in March 2007	
Subject of Alert	**No. of Alerts**
Aircraft or aircraft equipment	27
Airport facility or procedure	22
ATC procedure or equipment	22
Chart, Publication, or Nav Database	5
Company Policy or Maintenance Procedure	5
TOTAL	**81**

March 2007 Report Intake	
Air Carrier/Air Taxi Pilots	2694
General Aviation Pilots	877
Controllers	174
Cabin/Mechanics/Military/Other	234
TOTAL	**3979**

from AWOS and the runway information from the local traffic. As I approached the airport from the north, a light jet began making announcements for Runway 13 as well. Since I was close to the field, but not in the pattern and not in a hurry, I elected to make a simple 360 at 1,000 feet AGL to give the faster jet the time it needed. Afterwards, I proceeded to enter the pattern myself as the only plane airborne and landed without conflict or incident.

As I was taxiing in, another aircraft called UNICOM asking for an airport advisory, and was told that Runway 13 was active and that it was right traffic. The problem is I had just flown left traffic, and so my procedure was improper. No conflict occurred because there were no other aircraft in the pattern at the time. A conflict could easily have resulted from this, however. The "cause" was my failure to note the proper information in a timely fashion... I did get a full weather brief and checked the airport information before departure, but...did not notice that Runway 13 was right traffic.

Both...aircraft [that] landed before me did call their turns properly, but failed to mention "left" or "right." Whenever I fly to an uncontrolled field, I make it a point to say "left downwind" or "right base," etc. I've noticed other pilots do this as well in many places, and I've seen more than one get corrected in the process, either by other aircraft or by UNICOM.

Straight-in approaches to non-Towered fields by VFR aircraft are discouraged to ensure safe and predictable traffic pattern flows. A Comanche pilot learned that straight-in approaches are problematic for another reason – they may inhibit the use of landing checklists that are commonly linked to traffic pattern legs.

■ *While on third straight-in final for Runway 3, I lowered the gear switch, added 1 notch of flaps, and called my position on CTAF. One other aircraft reported his position as I thought and felt the familiar drag of gear. I located [the] other aircraft as I continued my approach, added more flaps, and prepared to land...I failed to verify down and locked. Once flared over the runway, my aircraft continued to "float" and then started to sink farther than normal. I decided to go around and added full power just as the bottom started to scrape. I kept full power in, nose-up attitude, normal soft field speed. Once airborne, I realized gear had not extended... I reset circuit breaker and gear came down and locked then made a safe landing. Once shut down, I discovered I had significant prop strike, but very little other damage.*

Three things I will do differently: 1) No more straight-in landings at uncontrolled airports, I will fly the normal pattern; 2) I will keep my hand on landing gear switch till down and locked; 3) If by chance I land gear up again, I will shut down and walk away. Taking off with a broken airplane could have been disastrous.

The Right Tools for the Right Job

For a corporate aircraft departing a non-Towered airport, TCAS provided extra time to maneuver clear of fast-closing traffic.

■ *I had just departed Runway 28 and had announced on CTAF that we were on the published VFR departure and I was approaching Lake from the east. Just about then, I picked up a target on the TCAS at the 6-mile range at 12 o'clock and approaching rapidly. The numbers were getting smaller very quickly and I decided to level off immediately and acquire the traffic. Seconds later he was in the 2 mile range. I acquired the traffic but he obviously had not seen me and I had to turn to the right to...avoid him. It was an A36 and he was close enough to read his N-number. He was not on CTAF or Center as I had both frequencies up and was talking on CTAF. He passed off my left wing about 50 feet above me and 200 feet away.*

One of the things that came to mind during this whole event was that TCAS is a remarkable asset to have...The TCAS gave me about 30 seconds of "extra" time that I would not have had otherwise. I figure the closure speed was about 320 knots as I was climbing at 140 knots and Bonanzas do about 180 in the descent...Personally, I always know where the dirt is, but can't always see the little speck coming at me at 300+ knots closure speed.

Coming Soon! – New Export Capabilities for the ASRS Database Online

In 2006, ASRS provided direct electronic access to its database through the ASRS web site at http://asrs.arc.nasa.gov. Users of ASRS data can perform their own database searches, download incident records, and have immediate access to a valuable source of safety information. The response to the Database Online has been phenomenal, with more than 14,500 searches performed by users from August 2006 through March 2007.

ASRS is now adding a new capability to the ASRS Database Online – the ability to export incident record downloads to Microsoft Excel® (.xls) or Comma Separated Value (.csv) formats. Up until this point, the only format available for downloading incident records was Microsoft Word®. With the addition of the .xls and .csv formats, ASRS incident report data will be easier to analyze and sort.

The content of the .xls and .csv formats will be exactly the same as the on-screen incident record. The exports will generate one row for each incident record. The exports will be limited to 10,000 incident records per download, due to speed considerations.

The .xls and .csv formats are intended to serve a wide community of data users. Microsoft Excel® is a widely used and popular spreadsheet application. The .csv format is supported by virtually every kind of database and data management utility. The Microsoft Word® format will continue to be available to users who prefer that format.

As always, we would appreciate your feedback about the ASRS Database Online, and our enhancements.