

CALLBACK

From NASA's Aviation Safety Reporting System



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ASRS To Conduct Security Callback Study

In March 2002 ASRS will launch a "structured callback" telephone survey study of airport and aircraft-related security events reported to the program. The survey study is part of a NASA Ames Research Center effort to assist in national security improvements currently being proposed and implemented.



An ASRS structured callback study involves telephone interviews conducted by ASRS analysts with individuals who have submitted a relevant incident report to the program. The information collected is treated confidentially, and all details that can identify an individual or organization are removed prior to data analysis.

The ASRS analysts that will conduct the surveys are highly experienced pilots and air traffic controllers. Their years of experience are measured in decades and cover the full spectrum of aviation activity, including air carrier, military, general aviation, and air traffic control.

Focus of the Security Study

The ASRS security study will focus on security-related events that occur **at an airport** or **on board an aircraft**. ASRS is interested in hearing from air carrier and general aviation pilots, air traffic controllers, flight attendants, maintenance personnel, and others who have directly experienced or observed security-related incidents that have occurred within the past 90 days.

The goal of the study is to identify current gaps in aviation security measures, as well as potential risks and vulnerabilities to the national aviation system. NASA will evaluate the survey data for its contribution to security and safety improvements.

How the Interviews Work

Aviation system users and FAA personnel may participate in the security survey by reporting relevant incidents on a NASA reporting form obtained from an air carrier or other flight organization, a Flight Service Station, or from the ASRS web site: http://asrs.arc.nasa.gov/forms_nf.htm.

ASRS will contact incident reporters to request their participation in the study and to set up interview appointments. The telephone surveys will last an average 30 to 45 minutes. Reporters will receive their ID strips back as soon as the interview is complete. *No record of survey participants' identity will be retained by ASRS.*

ASRS Survey Contacts

Several aviation organizations representing the potential reporter groups have been contacted and asked to support and promote this ASRS study to their members. These organizations include:

- Air Line Pilots Association (ALPA)
- Aircraft Owners and Pilots Association (AOPA)
- National Business Aviation Association (NBAA)
- International Association of Machinists (IAM)
- Association of Flight Attendants (AFA)
- Regional Aviation Association (RAA)
- Helicopter Association International (HAI)
- National Air Traffic Controllers Association (NATCA).

We encourage all who have experienced security-related events in the past 90 days, or who have security concerns, to file your report with ASRS as soon as possible.

Sample Security Concern

ASRS received the following report from an air carrier Captain describing a security concern about meal service personnel access to aircraft. The incident involved a catering truck driver who arrived at a boarding aircraft without security seals and padlocks already in place on the catering vehicle.

■ *During the boarding process, the crew chief informed me that he observed the catering truck driver arrive at the aircraft in his truck, stop, get out, go to the rear door, and seal the door and padlock it. To his and my understanding, this was not the proper security measure. I spoke with the passenger service supervisor and the catering service driver and catering service security. We agreed that the catering service supervisor and I would inspect each cart...before the catering would be loaded. We did and I was satisfied. I never got the answer as to how and why the driver had seals on him. This defeats the point of security checks and cross checks. How many of my flights have been handled in this manner I do not know. I have heard other stories just like this. I feel catering is one major weak link in the security chain.*

ASRS Recently Issued Alerts On...

B737-400 wrong part installation
CL65 uncommanded engine rollback during climb
F100 high energy ignition unit malfunction/shock hazard
An airport's dim Precision Approach Path Indicator lights
ATC takeoff clearance issued for an occupied runway

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January 2002 Report Intake

Air Carrier / Air Taxi Pilots	1936
General Aviation Pilots	648
Controllers	27
Cabin/Mechanics/Military/Other	101
TOTAL	2712

More on Non-Tower Airport Operations

Training for airports without operating Control Towers emphasizes the use of *proper radio communication procedures* and *see-and-avoid practices*. Both are crucial

for safe operation into uncontrolled fields. ASRS reports can add another dimension of understanding on these subjects, as illustrated by several recent incident reports.

Wrong Frequency, Wrong Runway

An instructor and student were conducting proficiency training at a non-Tower field when an unplanned maneuver – collision avoidance – became necessary:

■ *My student and I were perfecting landings and takeoffs... We stayed in the pattern [and] announced our intentions throughout the pattern... I advised my student to be aware of landing position (Runway 03 active with wind directly down the runway) and to try to land near or on the number "3." Looking at the centerline, he did as I recommended. Our wheels were just touching down, when I saw another aircraft (twin) just about to touch down on Runway 21. I instructed my student to move onto the grass between the runway and taxiway quickly, which he did. The twin flew by us (he had a good tailwind). I got on 122.7 [the UNICOM frequency] asking what his intentions were. A helicopter pilot overhead mentioned on 122.7 that the twin was broadcasting on 122.8, not our UNICOM frequency... [The twin also] had no landing lights on...*

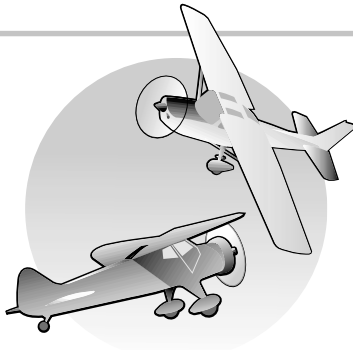
We continued to fly the pattern with more vigilance, making sure no traffic was on Runway 21. Later that day two other pilots mentioned that they heard [the twin] announce entering the pattern on a base leg and turning final, not realizing that he was not on the correct frequency.

The pilot of the twin aircraft delivered a double whammy to this unsuspecting instructor and student by using the wrong frequency *and* wrong runway. Single runway-opposite direction operations are commonly encountered at non-Tower airports, even on occasions (as in this incident) when wind conditions do not favor this use pattern. Pilots who develop an “expectation” of opposite direction traffic on the same runway, and who exercise extra vigilance during takeoffs and landings, will be a step ahead in avoiding conflict situations.

Section 4-1-9 of the *Aeronautical Information Manual* provides a detailed summary of recommended communications procedures at non-Tower airports, and where to look up the various common frequencies used.

Air Brush

ASRS received reports from two pilots involved in a mid-air collision at a non-Tower airport. Fortunately, the mid-air resulted only in minor damage to each aircraft and no injury to the involved pilots. Accordingly, it was not categorized by the NTSB as an accident. This incident involved several elements often seen in conflict events at non-Tower fields:



- a no-radio aircraft
- a non-standard traffic pattern by one aircraft
- ineffective visual scan by both pilots.

■ *[From Pilot #1, Aircraft 'X'] I entered the pattern from its 45 [degree angle]. On downwind while looking at the wind sock, I noticed Aircraft 'Y' taking off. We were obviously the only aircraft in the pattern. I made all my radio announcements as usual. On final a plane in the run-up area made a call to me to pull-up – watch out. I looked to the left and Aircraft*

'Y' was right there. I was already pulling up and to the right. We made contact and Aircraft 'Y' landed as I circled to land. Aircraft 'Y' had minor damage to the right wing skin and I received a dent in my left wheel pants.

Aircraft 'Y' has no radio and did not see me enter the pattern and made a modified short pattern... From now on if I don't hear from an aircraft in the pattern, I am going to do a go-around and get behind the aircraft.

■ *[From Pilot #2, Aircraft 'Y'] I was on the third approach for take-off and landings at airport. Aircraft 'Y' is non-electric and has no radio. Unaware of Aircraft 'X' having entered the pattern, I was turning from base to final...and collided with Aircraft 'X' that was on a longer final. Damage was scuffed paint on the left main wheel fairing of Aircraft 'X' and dented leading edge skin on [Aircraft 'Y'] right wing.*

Better visual scan on the part of both pilots could have prevented this occurrence, and use of a hand-held radio [in Aircraft 'Y'] may have helped. ▲