

CALLBACK

From NASA's Aviation Safety Reporting System



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ASRS Launches Aviation Security Study

Following the terrorist attacks of September 11th, ASRS has received an increasing number of reports detailing airport and aircraft security concerns. Beginning in December 2001, ASRS will conduct a 3-month study of the security-related reports received.

The ASRS security study will be based in part on "structured callbacks" (telephone surveys) with ASRS reporters. ASRS analysts will contact reporters who submit relevant incident reports to request their participation in the study. The callback survey data will be evaluated for possible expansion into a continuing analysis of aviation security incidents.

Your Security Concerns Count. ASRS strongly encourages pilots, air traffic controllers, maintenance personnel, cabin crew members, station agents, airport security personnel, and others involved in commercial and general aviation operations to submit your security-related incident reports to ASRS as soon as possible.

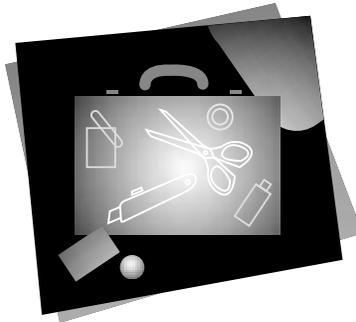
Participation in the ASRS security study is voluntary, and information collected from reporters will be treated confidentially. All names, company affiliations, and other information that potentially identifies a reporter will be removed from incident reports and survey data prior to preparation of a final report.

Following are examples of the types of security-related incidents that ASRS has received and has continuing interest in reviewing.

Types of Security Incidents. Most of the security-related reports received during the past 60 days by ASRS fall into several categories:

Passenger screening issues. At some airports, passengers may slip through security check points with knives and other potential weapons. A Captain's report to ASRS:

■ Approximately 5 minutes before scheduled departure Flight Attendant brought to the cockpit a folding pocket knife. She advised me that a passenger had dropped the knife out of her purse while boarding the airplane, that numerous passenger call lights came on from passengers who witnessed the knife fall from the purse, and that the knife lying on the floor was stepped on by the passenger in an effort to conceal the knife. Flight Attendant then retrieved the knife...and brought it to me in the cockpit. I immediately brought the knife...to the attention of the security supervisor for the gate... He shrugged his shoulders and said, "Yeah."



Cockpit/cabin security issues. These incidents concern issues of access to the cockpit by flight crews and other authorized personnel, as illustrated by another Captain's report:

■ Entering the jetway to prepare for flight, a man in the line of passengers told me that he "worked for the FAA and wanted to ride on the jump seat." He appeared to be unshaven and dirty, wearing a wrinkled black denim outfit and

cowboy boots. The passengers near him seemed to be concerned by his request. I told him that he could not ride the jump seat because he appeared to be inappropriately dressed... He made at least four (4) attempts to get into the cockpit... I told the passenger agent that I wanted her to call security, detain this man, and check his credentials, so that we could determine what kind of security threat he was. I [also] called our Flight Ops Duty Manager and explained the situation to him... We cannot allow any unstable individual to bully his way into the cockpit under the threat of fines or certificate action!

Airline employee access to aircraft and gate areas. Airline and airport employees are able to avoid thorough security checks at some airports, as described in this report:

■ At the [airport security] check point I saw local workers who appeared not to take security screening seriously... A young woman...was 5 to 6 feet away from the checker who obviously could not spot a picture at that distance, but who let her through... A young man...was verbally stopped by the checker and told to display his badge... Again at a 5 foot distance, the young man complied... Unless all [employee] access IDs have pictures and are closely checked, we are not secure.

Additional examples of security topics are listed below:

- ✦ Aircraft external/internal security inspections
- ✦ Carry-on baggage contents
- ✦ Catering and meal service issues
- ✦ Dissemination of security-related information
- ✦ Photo ID verification practices
- ✦ Pre-boarding screening practices
- ✦ Access to general aviation airplanes
- ✦ Security procedures for rental aircraft
- ✦ Storage of cockpit keys ▲

ASRS Recently Issued Alerts On...

A319 multiple ECAM system warning messages
A conflict incident involving two jets at a Florida airport
Latching problems with a B767-300 engine pylon panel
DUATS/NOTAMS deficiencies during the national emergency
Runway incursion incident at a major Southeastern airport

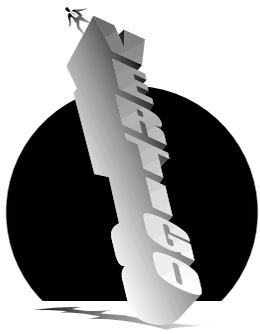
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October 2001 Report Intake

Air Carrier / Air Taxi Pilots	1897
General Aviation Pilots	857
Controllers	46
Cabin/Mechanics/Military/Other	102
TOTAL	2902



Vertigo is a disturbance of the inner ear equilibrium characterized by a sensation that a person, or objects around the person, are spinning. It is well known that attacks of vertigo can be induced by sudden head movement when pilots are flying in IMC conditions. A vertigo attack may also occur in the passenger cabin, as described by

this Flight Attendant's report to ASRS:

■ Approximately 1 hour into flight, I started feeling a bit strange – it was really bumpy and with the combination of that and a bad headache, I decided to sit down. As soon as I tried to stand up and keep working, I became extremely dizzy and couldn't stay standing. My purser knew I was experiencing vertigo, so he paged for a doctor. An emergency room doctor responded. The purser got oxygen and an enhanced medical kit. After about 1 hour, the doctor suggested that he give me two injections for nausea and dizziness... The doctor was wonderful. He sat on the floor and held my hand for hours.

Flight attendants should be educated about vertigo. I didn't know that the ear infection I had could end up becoming such a horrible, maddening experience!

A B767 Captain filed a report about a different type of vertigo that can be induced on the ground or in the air.

■ While doing [the] pre-flight walkaround, I had to shade my eyes from a very bright yellow strobe. This strobe was on top of the fuel truck, about head level high. All the fuel trucks have them and they cannot be turned off. The ramp agents were also blinded by the brilliant flash and had to walk with their heads turned away to avoid being blinded / disoriented by the flash. This could cause 'flicker vertigo,' nausea, or temporary blindness. The ramp area around aircraft is the most dangerous on the airport and this is potentially a very bad addition to the danger...

"Flicker vertigo" is a term that describes an imbalance in brain cell activity created by light sources that emit a flickering rather than steady light. Light flickering from 4 to 20 times per second can produce dangerous and unpleasant reactions in some people, including nausea, dizziness, migraines, unconsciousness, and even epileptic seizures.

Both natural and artificial light sources – especially florescent lighting and television screens – may precipitate flicker vertigo. In aviation operations, problematic light sources include windmilling propellers that cut the sun to give a flashing effect, and rotating beacons or strobes in certain lighting and atmospheric conditions.

Chapter 8-1-5 of the Aeronautical Information Manual, *Medical Facts for Pilots*, offers a comprehensive discussion of other illusions of motion and position. ▲

Information Sources for Airspace NOTAMS

The November CALLBACK carried an article on Enhanced Class B airspace and cited the internet address of the FAA web site where information on the most recent airspace changes can be found:

<http://www.faa.gov/apa/update.htm>

A CALLBACK reader reminded us that additional up-to-date airspace information is available from several aviation organizations. The Aircraft Owners and Pilots Association (AOPA) offers updated airspace information on its Home Page, and will send members a personalized e-mail alert notifying them if airspace rules change within 250 miles of their home airport. The AOPA web site address is: <http://www.aopa.org>.

The Experimental Aircraft Association (EAA) and National Business Aircraft Association (NBAA) also offer updated airspace information at <http://www.eaa.org> and <http://www.nbaa.org>, respectively.

Pilots using internet sources for NOTAM information should be aware that the information is subject to constant (even daily) changes. It is extremely important that all pilots check with Flight Service for applicable NOTAMs prior to every flight.

Uninvited

The Captain of a corporate jet narrowly avoided an airspace intrusion when complacency and a "let's get home" attitude set the stage for a rushed departure:

■ After a quick stop for fuel, luggage and passengers, we were on our way. Took off VFR, contacted Approach for the IFR clearance. Controller's first instructions were: "Stay out of the Class C airspace, squawk XXXX." I missed the Class C airspace by climbing and turning. Approach gave me the IFR clearance, cleared me into the flight levels, and we had an uneventful trip the rest of the way home...

Complacency and being in a hurry were factors leading to this situation. I had the enroute chart out and folded to the general area, but didn't take the time to review it before takeoff. I just assumed there was nothing in my way...

In the future, I will specifically review the applicable enroute chart BEFORE departing ANY airspace VFR. I would not enjoy being an uninvited guest in certain classes of airspace.

Especially since uninvited guests in certain classes of controlled airspace may be intercepted by F16's. ▲