CALLBACK ASRS

From NASA's Aviation Safety Reporting System

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Ready for the Millennium

The New ASRS Web Site

Early in January 2000, ASRS will unveil a redesigned internet Web site. It will have a new address (Uniform Resource Locator) as well as a more contemporary look and feel—and all your favorite information from the old site will still be available. The new site's address will be easier to remember, too: **http://asrs.arc.nasa.gov**.

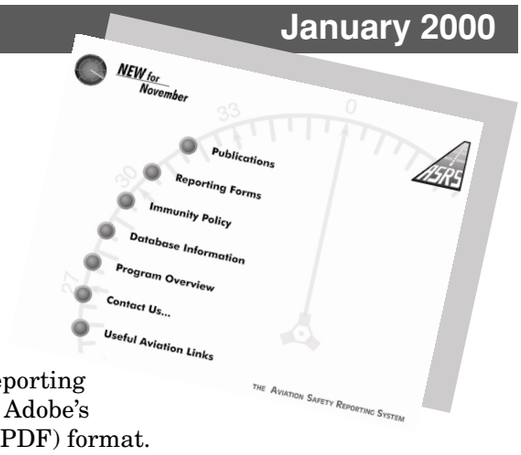
When you access the new ASRS Home Page, you will be able to choose a browser option that is compatible with your computer's software. One option is an updated *html* version for those with older browsers. The other utilizes Macromedia's Flash technology, a component of many new browsers, also available as a free plug-in (a link to Macromedia's download site is provided). Both versions have been optimized to reduce download times.

The old ASRS web site will be maintained for a short time, after which a direct link from the old site to the new will be provided.

What's Available?

Here's what will be available on ASRS's new web site:

- Current and past issues of the ASRS publications *CALLBACK* and *Directline*
- Operational Issues Bulletins



- NASA Reporting Forms in Adobe's Acrobat (PDF) format.
- Information on ASRS immunity policies, including Advisory Circular 00-46D, Federal Aviation Regulation (FAR) 91.25, and Facility Operations and Administration Handbook (7210.3M), Para. 2-2-9.
- ASRS database report sets (in Rich Text Format). There are currently 27 report sets available for downloading on topics of broad interest to the aviation community.
- ASRS Program Overview, including a brief overview of ASRS functions and products, as well as a more detailed Program description.
- Contact information for ASRS services/staff.
- Other useful aviation links.

Come visit us soon at **http://asrs.arc.nasa.gov**.

Y2 Confirm Altitude Assignments

A First Officer's report of a crossing altitude deviation illustrates how cockpit procedures may be vulnerable to a multiple error chain. In this instance, the error chain included distraction, a common clearance misunderstanding, and forgetting to confirm the altitude assignment with ATC.

■ *The Captain was the Pilot Flying (PF), the autopilot was engaged, and he was making the FMS entries and selections on the mode control panel. He had programmed the FMS VNAV to cross intersection at 250 knots and 11,000 feet altitude, as depicted on the STAR [Standard Terminal Arrival Route]. I confirmed this entry as correct. Center cleared us to "cross [fix] at 11,000, 250 knots," which is what I read back. At that time the Lead Flight Attendant (F/A) came forward with 2 cabin discrepancies. I briefly reviewed them to see if they were considered "airworthiness items" by our company policy, as those require a logbook entry. This all took about a minute. I feel that this distraction broke down my PNF habit patterns of back-up and confirmation of the PF's navigation.*

Our company promotes an…altitude confirmation technique [by both PNF and PF] for what altitude is set in the mode control panel. Because of the F/A call bell, I don't recall pointing to the Altitude Window after the Captain was supposed to enter 11,000... The Captain thought he had 11,000 in and doesn't know how 10,000 got selected...

I have read that ten and eleven thousand feet are the most often confused altitudes and I believe it. In the future I intend to train myself to be extra vigilant with clearances and setting to those altitudes.

The last chance to break the chain of events came with the ATC hand-off to Approach Control. Because of congestion on the frequency Approach Control called us first with a spacing vector behind a B-747. This is not at all unusual in a busy terminal environment. The radio chatter is non-stop… The lesson learned here is that if the controller initiates communication, read back your…current and cleared-to altitudes to ATC, even if [you] must tack the info onto another readback.

In addition to heeding our reporter's words of wisdom, readers may want to check out a widely reprinted *ASRS Directline* article on the 10,000-11,000 foot clearance confusion problem. The article, "One Zero Ways to Bust an Altitude," is available from the ASRS web site, and was originally published in *Directline* Issue No. 2 (1991).

ASRS Recently Issued Alerts On…
LR-25 stuck throttle incident at FL370
Nose gear collapse during evacuation of a DC-8-71
"Land and Hold Short" confusion at a Midwest airport
Cabin overhead bin smoke attributed to a butane lighter
Vision obscuration problems with A-320 full-face masks

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Moffett Field, CA
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November 1999 Report Intake	
Air Carrier / Air Taxi Pilots	2021
General Aviation Pilots	678
Controllers	66
Cabin/Mechanics/Military/Other	154
TOTAL	**2919**

Unhappy Landings

Several recent reports to ASRS offer fresh insight into landing problems on both land and sea. Our first reporter, a General Aviation pilot, describes how a new type of headset contributed to a gear-up event:

■ ***Problem****: on landing, gear was unlocked but up.* ***Contributing factors****: busy cockpit. [I] did not notice the gear down-and-locked light was not on.*

Discovered*: Gear up was discovered on landing.*

Corrective action*: [I] was unable to hear gear warning horn because of new noise canceling headsets. I recommend removal of one earpiece in landing phase of flight to allow audible warning devices to be heard by pilot. The noise canceling headsets were tested by three people on the ground and all three noted that with the headsets active that the gear warning horn was completely masked by the headsets.*

Splash!

The First Officer of an air carrier float plane operating in the South Atlantic relates how missing the landing spot led to a rough ride for crew and passengers:

■ *I was the First Officer [on the air carrier flight]. It was my flying leg and the Captain and I both agreed to land in the protected waters on the leeward side of bay by approaching from the northwest (wind 060º 20kts). The water in our landing area was [in] ideal conditions, with a light chop. During the approach I touched down slightly long of my aiming point in the protected area. As we slowed, the Captain put the aircraft into beta to help stop us from getting into the unprotected water. As we approached the rough water, we were launched into the air by a wave that was larger than all the rest. Crosswind corrections were applied as we landed left wing low back into the water (during which, the left float became dislodged from the wing). Quickly afterwards, the aircraft rolled to the right, breaking the right float as it went under the water. The right float remained attached to the wing by the fuel lines only.*

We taxied towards the ramp area using extra power to keep the wings out of the water as much as possible. We completed a normal ramping and secured the aircraft using standard procedures.

This incident would have been prevented if we had performed a go-around when I realized that I had overshot my aiming spot. Also, we should have landed directly into the wind. Although the water was rougher, our ground speed would have been less.

O_{xygen} Irregularities

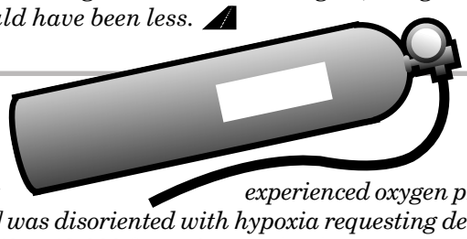
Both pilots and controllers are educated to recognize the effects of oxygen deprivation and hypoxia. This training can be vital in safely resolving oxygen-related pilot incapacitation. Several ASRS reports illustrate:

■ *While at FL250 on an IFR flight plan, my oxygen line became disconnected from the regulator. I could hear the oxygen escaping and thought the regulator had not sealed on the portable tank behind the passenger seat. As I had changed tanks within the past 15 minutes, I attempted to tighten the regulator, but to no avail. I recognized hypoxia coming on, pulled power back, disconnected the autopilot, and lost consciousness. I became conscious at 17,000 feet. The plane was descending and in a bank. I leveled the plane and declared an emergency and told the controller I had lost my oxygen supply and had lost consciousness. I landed at the nearest airport. Upon landing, I saw the line to the regulator had come off…*

I have since found that if the oxygen line is kinked the line will pop off the barbed fitting on the regulator, so in the future I will secure a clamp at this attachment.

Portable oxygen tanks and lines should be inspected and secured during preflight to prevent potentially lethal "kinks" in the oxygen supply.

In another oxygen-related emergency reported to ASRS by an air traffic controller, ATC gave a superlative flight assist to the incapacitated pilot of a high-performance twin-engine aircraft.



■ *Aircraft experienced oxygen problems and [pilot] was disoriented with hypoxia requesting descent from FL250 to 13,000 feet. I issued the clearance but [pilot] couldn't descend the aircraft due to his inability to focus. A flight instructor came to the sector and talked the aircraft into a descent and the pilot recovered, changed his destination to a closer airport, and landed safely.*

In a callback to the reporter, ASRS learned that the controller kept the pilot conscious by talking to him and asking questions until a supervisor could locate another controller who was qualified and type-rated in the aircraft involved. This second controller instructed the pilot to disengage his autopilot, which started the aircraft down.

FAA Advisory Circular 61-107 alerts pilots who are transitioning to complex, high-performance aircraft capable of operating at high altitudes and high airspeeds "of the need to be knowledgeable of the special physiological and aerodynamic considerations involved within this realm of operation."

In addition to the guidance provided by AC 61-107, pilots who fly at altitudes requiring supplemental oxygen may want to consider equipping portable oxygen tanks with flow indicators that can be easily monitored within the instrument scan range. Flow indicators can provide an early warning of oxygen system problems – before the onset of debilitating hypoxia.