

# CALLBACK

# ASRS

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## Gear Pin Roulette

Pins left installed in an aircraft's landing gear seem to be a thorn in the side of pilots and mechanics alike. Many ASRS reporters have noted that long streamers or REMOVE BEFORE FLIGHT flags attached to the pins are a helpful reminder for both flight and ground crews to check for the presence of landing gear pins. However, the absence of flags in the wheel well area is no guarantee that the gear will retract on command, as a DC-10-30 mechanic discovered:

■ *Center gear pin [on a DC-10-30 was not] removed before flight. There was no log page entry of center pin being installed, and no flag or streamer was visible from the ground. In the air, the center gear failed to retract. Maintenance Control asked the crew how many gear pins they had on board—three, as per...a normal DC-10 checklist. The flight crew failed to count four pins [as are normal for a DC-10-30]. The mechanic who removed the gear pins failed to count in the pouch the fourth pin. I suggest a separate write-up when the center gear pin is installed on a DC-10-30.*

A number of other ASRS reporters, both pilots and mechanics, have admitted to overlooking this important detail associated with the DC-10-30 series aircraft: most

DC-10s have only three gear pins, but the DC-10-30 has four. An aircraft's checklists for both maintenance and flight crews need to be specific enough to indicate the correct number of gear pins used on that particular model and series.

Another air carrier flight crew had all the flags visible and properly stowed in the cockpit as they were supposed to be—and were surprised when their landing gear would not retract. The Captain reports:

■ *After takeoff, we attempted to retract the gear, but the mains stayed down and locked. We checked all the related systems and found no apparent problems, so we returned to the airport. We found the main gear pins installed. We learned later that the aircraft had been ferried here with the gear down, the pins installed, and the flags removed. When I did my preflight of the cockpit, I noted that all the flags were behind the First Officer's seat, per the Company Manual. It never came to mind that the mechanics had removed the flags from the pins.*

The Captain's future preflight plans no doubt will include looking specifically for gear pins attached to those carefully stowed flags!

## Wheel of Misfortune

A pilot began this report to ASRS quite succinctly: "Upon completion of a very short flight, it was determined that the aileron controls were rigged backward." Fortunately, that "very short flight" only got about 30 feet off the ground. The cause of the incident became obvious to the reporter, a manufacturer's test pilot, upon reflection.

■ *I was sent to functional check the aircraft after maintenance. I did a preflight in the hangar, where aileron movement and proper attachment were examined. I am unable to see*

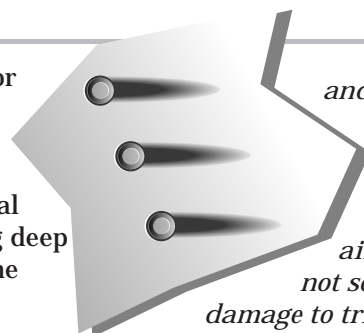
*the control wheel from the exterior of the aircraft. I did a control wheel check in the hangar and again prior to flight. I did use the checklist. I do recall seeing left aileron movement. I am unable to see the right [aileron] from the left seat. My mistake was that I "looked," but did not "see" (notice) the incorrect aileron movement. The incorrect direction did not register in my mind.*

This was a classic example of seeing what was expected—normal aileron movement—not the reality of the reversed aileron controls.

## "Smoking Rivets"

In mechanic's parlance, a "smoking rivet" is a loose or working rivet whose vibration causes a black streak trailing aft. Smoking rivets may be acceptable for continued service for short periods of time under the limited conditions outlined in the aircraft's Structural Repair Manual (SRM). The trick seems to be digging deep enough into all the footnotes in the SRM to determine exactly what the limitations are, as an air carrier Maintenance Controller reports:

■ *The foreman called for the deferral of a working rivet and edge delamination on the aileron trim tab. The foreman stated that the rivet was smoking and delamination was within limits per the SRM for deferral for repair. I instructed the foreman to verify the limits*



*and make an interim repair. The time limit was 25 hours for [final] repair. While researching a similar problem [later], I found a reference that states the [deferral] does not apply to the aileron trim tabs. The foreman either did not see the note or missed the limitations of damage to trim tabs.*

Maintenance personnel must ensure that they are looking at the appropriate section of the SRM for the **exact** problem being researched. Careful reading of all limitations and instructions—including footnotes—should prevent misinterpretation of the corrective action. ▲

### ASRS Recently Issued Alerts On...

A reported antenna hazard near a Texas airport
An MD-80 go-around caused by a taxiing MD-11's jet blast
Incorrect MEL procedure for a BAE-41 yaw damper malfunction
B-747 jetway collision due to faulty docking guidance system
Converging ILS/missed approach paths at a Colorado airport

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### August 1998 Report Intake

Air Carrier Pilots	1859
General Aviation Pilots	827
Controllers	87
Cabin/Mechanics/Military/Other	176
<b>TOTAL</b>	<b>2949</b>

# Gone to Ground

Aircraft incidents on the ground can be as hazardous to persons and property as those that occur in flight. A commuter Captain reports a near ground-collision during a night operation:

■ *While the Tower was closed, a twin airplane landed over the top of our flight that had just arrived. We were on Runway 15, and the other airplane landed in the other direction on Runway 33. All radio calls were made according to standard [recommended] procedure. The [twin] pilot was aware of our position on the runway. He told us to take the [next exit off the runway]. However, due to inadequate [taxiway] lighting, we could not locate the exit and had to roll to the end of the runway.*

*The twin airplane was about 50 feet over the top of us as he proceeded to land on Runway 33. Our aircraft's tail is 21 feet tall. With winds reported to be 140 degrees at 11 knots, I am sure [the twin pilot] exceeded the maximum tailwind component of the aircraft he was flying.*

The commuter crew had the right-of-way until they were clear of the runway. The timely initiation of a go-around by the twin's crew would have prevented this incident.

In another report of a near-collision—this one between the aircraft and a tug and its crew—an air carrier First Officer provides evidence that one departure salute may not be enough.

■ *After the ground crew released us with a salute and cleared the area, we noticed on starting engine #2 that we had no N1 indication and therefore shut down engine #2. Since we were at the top of the alley, I advised company ramp control of the situation and our possible return to the gate. Maintenance was advised, and someone in a go-cart was on the ramp with a thumbs up, then left the area. After we conferred with the MEL [Minimum Equipment List] and maintenance, someone on the radio said he'd confirmed that the N1 was rotating, so we attempted another start. All systems were OK.*

*We advised ramp control and went over to Ground Control. We cleared right and left, and the Captain pushed the throttles up to start our taxi. The mechanic on the go-cart had his arms emphatically in the "X" position, and people were scattering from under our airplane. Apparently the tow crew came up under our plane and were attempting to connect the tow bar without making radio contact. Since we were busy with the MEL and maintenance, we never saw them approach the aircraft. I do believe the first thing any ground crew [should] do when they approach an aircraft is to establish communications either via headset or visually.*

The tug crew's lack of communication set the stage for this incident. It is also possible that the flight crew's distraction over the second engine start caused them to fail to notice the "hold position" signal from the mechanic before commencing movement. Confirm the "go," or the operation is a "whoa." ▲

## Navigational Gremlins

ASRS sometimes receives reports of navigational "gremlins" that are later attributed to interference from passengers' portable electronic devices (PEDs) being used in the cabin. Many of these devices are officially prohibited during specific flight regimes, but continue to be used in spite of flight crews' efforts to ensure that the items are turned off. Other items, such as pagers, are not on the list of prohibited equipment, but should be according to this reporter, an air carrier Captain:

■ *We began to get anomalous indications from both VORs and determined that both our equipment and the ground transmitters were in operable condition. I suspected PED interference, and asked a Flight Attendant [FA] to do a PED survey of the cabin. She returned to say that...no*

## PAs on PEDs

Public Address (PA) announcements made to the passengers during taxi-out may be forgotten later in the flight. Sometimes a repeat announcement is needed to have the desired effect, particularly when PEDs are considered a likely source of erroneous navigation indications. The repeat PA worked for this flight crew:

■ *At cruise, we got several navigation deviation indications from the CDI. After having the FAs check for unauthorized electronic gear, I made a PA announcement*

*TVs, radios, cell phones, pagers or devices with external power appeared to be in use. We continued to suffer navigation indication anomalies through to landing.*

*After landing, the FA informed me that a passenger had received a call to his pager... She had asked him to shut it off, and he refused. I strongly suspect a link between the pager operation and our navigation difficulties. I am concerned that other PEDs (like pagers) should be added to the list of banned items and announcements made to this effect.*

In a callback conversation with an ASRS analyst, the reporter stated that this was his third encounter with navigational interference associated with pagers.

*about turning off any cell phones that might be "on" but not transmitting. Shortly after that PA, the navigation deviations stopped. The same thing occurred on a flight the previous night, with the same PA and the same results. I suggest that the PAs be more direct regarding cell phones that might be "on" but not in use.*

Apparently, the second time's a charm. ▲

