

# CALLBACK

From NASA's Aviation Safety Reporting System



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## The Lowdown on Visual Approaches: Back Them Up



**Many pilots consider visual approaches to be less demanding than instrument approaches flown in poor weather conditions. But visual approaches can present a number of hazards, particularly when localizer and glide slope**

**indications are not used to backup visual impressions.**

**As these pilots reported to ASRS, a low altitude alert can be an unexpected reminder to get "back up" on the proper visual approach path.**

### Drifting in a Haze

A controller's warning confirmed that this MD-88 flight crew should have relied more on what the instruments indicated than on what they *thought* they saw outside.

■ *We were asked to report the field in sight for a visual approach to Runway 12R. The First Officer stated that he saw the field ahead and we accepted the visual approach. Conditions were very hazy and I thought I saw the field, however the localizer showed that we were right of course. I felt that we were on a shallow intercept and opted to maintain this intercept (due to Runway 12L traffic, which I had visually). As we continued what appeared to be a normal, visual descent, I noted that we were drifting further below glide slope and not closing on the localizer course. The First Officer asked if I saw the airport to the left and I realized that I was looking at something other than the airport. The controller called a low altitude alert.... I should have remained on my original intercept heading until established on the ILS, inbound. Haze and visual approaches just don't go together.*

### A Peak Experience

After clearing a desert peak, this B737 Captain was able to offer some sage advice on visual approaches.

■ *It was a clear night, and we were on vectors to intercept the localizer for a visual approach to Runway 11L. Level at 6,000 feet, approximately 18 miles out...the Enhanced Ground Proximity Warning System (EGPWS) gave a "Terrain, terrain" warning due to a 4,682 foot peak just south of the localizer at 15 miles.... The First Officer had begun a normal descent for landing prior to intercepting the localizer. Mistake #1: As we were anticipating a visual, the ILS approach was not thoroughly briefed. If it had been, the high terrain would have been noted. Mistake #2: Due to a long day, some fatigue, complacency, and a clear*

*night with unlimited visibility, we accepted a visual too far out and began a visual descent too soon.... The good news: technology saved the day!*

### An Alert Controller's Alert

Glide slope information was in this B737 flight crew's backup plan, but not in their scan.

■ *We informed the controller that we should be able to fly a visual if we could get a turn toward the field. The controller gave a descent to 2,000 feet and a turn inbound to intercept the localizer. I immediately began to configure the aircraft while in a descending right turn to final. The Captain called the field in sight. I slightly overshot the localizer while looking for the field and the controller gave us a right turn to re-intercept. I saw a reddish-white light ahead which I thought was the Visual Approach Slope Indicator (VASI) for Runway 12L, but I could not see the runway lights. The controller asked us again if we had the field in sight and then advised that he was getting a low altitude warning on our flight path.... I quickly leveled off. We were at 1,000 feet, four miles from the airport. I then saw the runway lights and continued for an uneventful landing.*

*Lessons learned: Don't attempt to fly a visual approach unless the field is in sight.... Maintain the glide slope.*

*I was so fixated on configuring the aircraft, looking for the field, and maintaining the localizer course that I dropped the glide slope out of my crosscheck....*

### A Lofty Illusion

With no visual approach aids or instrument backup, this DC-10 flight crew was drawn into the "black hole" effect on final.

■ *The controller asked if we had a visual on the airport. The runway was in sight at about eight miles and we were cleared for a visual approach. The ILS to Runway 33R was not working (no electronic glide slope). Runway 33R has no VASI, or Precision Approach Path Indicator (PAPI). We appeared to be on a "normal sight picture" for a visual approach when Tower advised of a low altitude alert. I leveled off...then resumed a corrected visual glide path. Vectoring in the local area, weather avoidance, loading multiple approaches in the FMS (ILS Runway 26, ILS Runway 33, then VOR Runway 33) and ATC communications led to "task saturation" and a visual descent point which began earlier than desired. Also, the dark ground between our aircraft and the runway produced the illusion of being high on the visual glide path.*

#### ASRS Recently Issued Alerts On...

BE90 dual engine flame out
NACO chart mileage discrepancy
SAAB 340B loss of main hydraulics
MD80 dual engine generator failures
NOTAM confusion at an Eastern airport

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#### July 2003 Report Intake

Air Carrier / Air Taxi Pilots	1993
General Aviation Pilots	811
Controllers	40
Cabin/Mechanics/Military/Other	164
<b>TOTAL</b>	<b>3008</b>

# Airport Selection: The Right and Wrong of It

**Cross-checking the instruments on visual approaches can do more than confirm the proper approach path, the procedure can also assist in selecting the right place to land.**

## “Just a Visual Approach” ... to the Wrong Airport

In the following report, a CL65 First Officer was concerned about being high on final, but the instruments indicated that there was also another problem.

■ *We were cleared for a visual approach to Runway 31. I had what I thought was the runway in sight, but I was high and all my concentration was outside the cockpit in order to make the runway. As we got close, the Captain remarked that the runway did not match what the FMS depiction and ILS were indicating. I glanced inside and had just decided to initiate a go-around when Approach told us to go around because we were headed for the [Wrong] Airport. We climbed back to 2,500 feet, lined up on the [Right] Airport Runway 31 ILS and landed. [Right] Airport Runway 31 approach plate carries a warning about [Wrong] Airport, but I didn't notice it. In the future, I will make a careful study of every approach plate, even when it is “just a visual approach!”*

## Right Base, Wrong Airport

A B737 crew reported on the hazards of a common meteorological phenomenon – the sunny, clear day.

■ *We were on vectors to the right base for a visual to Runway 19. I called the field in sight and fully configured the aircraft. As we were turning to final, Tower advised that we may be looking at the [Wrong] Airport and called the [Right] Airport's position to us. At this point I discontinued the approach, climbed up to 2,000 feet and proceeded to the Outer Marker for an uneventful landing at the [Right] Airport.*

*Although there were numerous nav aids to alert me to my loss of situational awareness...I saw what I expected to see.... It would have become obvious that the runway I was looking at didn't correlate with my ILS, but the Tower and my First Officer spoke up first. This event just reinforced the dangers of complacency on a sunny, VFR day and the importance of crew assertiveness during flight deviations. Quick action on the Tower's part made this more of a professional embarrassment than a real incident.*

## Airport Selection II: The Long and Short of It.

Some Callback readers might be tempted to think, “That could never happen to me” when reading a report on what appears to be an “obvious” error. Professionals know better. Mistakes can happen to anyone. Take this report

from a private pilot who didn't notice the difference between a 13,300 foot military runway and a 4,500 foot municipal strip. It could happen to anyone. Well...almost anyone. One thing is certain, it won't happen to this pilot...again.



■ *I took off from [Big City] Airport to go to [Little City] Airport and pick up a friend.... The information I had from a fellow pilot was that there was a new runway at [Little City] Airport. Although I had been there many times, my last time was over a year ago.... I flew a course of 080 degrees and climbed to 5,500 feet until I saw the runway. Then I dropped down three thousand feet and landed at [Huge] Air Force Base thinking it was the new, longer runway at [Little City] Airport. The Military Police took me to Base Operations....*

## From the Maintenance Desk

### The Wrong Parts

This sampling of ASRS reports dealing with the installation of wrong parts indicates an ongoing problem. Factors cited in these incidents include failure to verify part numbers, lack of training, schedule pressure, and failure to update illustrated parts catalogs and job cards.

■ *A B737-200 aircraft requested a constant speed drive change.... After a late start, the drive unit and generator were changed.... As the lead mechanic, I recorded the change in the logbook along with the part number. Later it was found that the wrong part was used. It was for a B737-300.... There were several things I overlooked after the installation due to departure time. The part number should have been verified, but was overlooked by myself and others....*

■ *A cargo fire warning unit was removed from an MD83 and installed on an MD82 aircraft. The MD83 uses part # xxx and the MD82 uses part # yyy.... When the error was discovered, I notified the MD80 technician at the next line station and informed my supervisor and manager that the wrong part had been installed. I was told that the part would be removed and replaced.*

■ *Another technician and I removed and replaced a filler on a B757 number one engine between fan blades 18 and 19. Later we were told that the wrong filler had been installed. We had never been trained on the installation of the annulus fillers. The difference between fillers is the number of tabs on the blade end. The filler that was installed was one tab short. The airplane was stopped at the next line station and the filler error was corrected.*