

Pilot Counsel: Lessons from an ILS approach

By John S. Yodice

Here is a recent federal court decision describing an accident that has real-life lessons for instrument-rated pilots. A Gulfstream III crashed during bad weather while attempting an ILS approach to William P. Hobby airport in Houston, Texas. The two experienced ATP crewmembers were killed, along with the only other occupant, a flight attendant. The representatives of the deceased crewmembers, along with the insurer of the \$8 million jet, sued the U.S. government, alleging that air traffic controllers were negligent in not monitoring the flight more closely on radar during the approach. The government ultimately won the cases. The circumstances of the accident and the court's conclusions are among the important lessons to be shared.

An early morning departure from Dallas Love Field had been delayed because of bad weather at both the departure and destination airports. After departure, the flight crew picked up the ATIS from Hobby that reported calm winds, visibility one-eighth statute mile, fog, RVR for Runway 4 variable between 1,600 and 2,400 feet, clouds broken at 100 feet agl, overcast at 9,000 feet. Minimums for the ILS Runway 4 were a decision altitude of 244 feet msl (200 feet agl) and an RVR of 1,800 feet. This segment was operated under Part 91, which allows a "look see" privilege even if the weather is reported below landing minimums.

The captain was handling the aircraft's flight controls; the first officer handled the radios and communications with ATC. The first officer set the aircraft's navigation radio to the Hobby VOR (which is on the airport—an important fact). After contacting Houston Tracon, the flight was instructed to descend to 3,000 feet and proceed to the CARCO intersection on the ILS Runway 4 approach to Hobby. The first officer then told the captain, "I'll

set up our ILS, in here, one, oh, nine-nine," entering it in the standby position but failing to toggle the ILS frequency to the active position. Minutes later he told the captain, "I'll go ahead and set your CDI up to your inbound course of zero three nine degrees."

ATC instructed the flight to fly a heading of 70 degrees, to maintain a minimum altitude of 2,000 feet until established on the localizer, and issued the approach clearance. A minute later the flight was instructed to contact Hobby Tower. The flight reported to the tower "with you on the ILS" (the ILS frequency was still in the standby position and the flight probably intercepted the 039-degree radial of the VOR). The captain said, "I can't get...approach mode on my thing." The first officer responded, "I can't get an approach mode on mine either. Huh, I wonder why?"

Trying to puzzle things out, the captain finally said, "[We're] just gonna have to do it this way." A minute later he said, "We're high on the glideslope now." The pilots continued to puzzle over their inability to engage the approach mode of the flight guidance system, which requires an ILS signal to operate. As the aircraft descended through 1,000 feet, the first officer discovered his mistake and switched the ILS frequency to the active position. The captain, seeing his instruments suddenly shift, remarked, "Oh, my, what'd you do to me? Whoa! [expletive]. What happened? Did you change my frequency?" The first officer answered, "Yeah. The VOR frequency was on." The captain said, "I don't know if I can get back on it in time."

The first officer said, "Yeah, you will. You are all squared away now." The captain replied, "Yeah, but...."

The aircraft descended below decision altitude. Hobby Tower, getting a low-altitude alert, tried to warn the pilots but received no response. The aircraft hit a light pole, lost a wing, and crashed about three miles southwest of the airport, on the localizer but obviously well below the glideslope.

On this evidence, the court found the pilots to be fully at fault, ascribing no fault to air traffic control. "Once [the crew] realized their radio error [less than

one minute before the crash], both pilots knew why the ILS navigational aids, including the glideslope information, had not operated properly. At that point, the pilots had all the information about what had gone wrong so far, while the air traffic controllers had none. Under these circumstances, it was incumbent on the pilots to climb to a safe altitude, check the instruments again, and only then return for a landing. Instead, the mindset of the pilots, as represented by [the captain's] comment that 'we're just gonna have to do it this way' [attempting to save the approach] was reckless.... The pilots of [the aircraft] descended below the minimum decision altitude even though they were unable to see the runway. Without visual confirmation of the runway at the minimum altitude, they were required to abort the landing. The court finds that this error was the sole proximate cause of the accident."

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