CALLBACK

From NASA's Aviation Safety Reporting System

Speak Up!

As the summer flying season gets into full swing, we respond to an impassioned plea from a pilot who seeks nothing more than some basic communication at a local uncontrolled airport.

■ *The wind was 120 degrees upon arrival at ABC, and I announced entering a right downwind for runway 16, ABC. Then I heard another aircraft announcing he was entering a left downwind for runway 34, touch and go...no airport was stated. I announced my turns to base and then final, runway 16, ABC. On final, I noticed lights descending towards runway 34. I banked to the east. The other aircraft banked west.*

Please publish the need for everyone to broadcast "blind" at uncontrolled airports their entries into downwind, base and final; and to preface and end their transmissions with the name of the airport.

Firefighting Follies

Speaking of speaking up, summer is also the time when numerous fire fighting aircraft are on the airwaves, trying to coordinate patrols, water and retardant drops, and deployment of equipment and personnel. Monitoring of nearby UNICOM frequencies by local pilots provides a margin of safety for the fire fighters, who are engaged in an already hazardous enough occupation. A report to ASRS illustrates:

■ *Our aircraft were working a small forest fire. I was concerned when I saw a sight-seer approach and begin circling right in with the two working aircraft, at the same altitude and within 100 feet at times. Several attempts were made to get him to leave the immediate area, including use of several radio frequencies, and a siren and loudspeaker. Nothing worked! It is recommended that non-working aircraft remain at least 2000 feet above the highest fire fighting aircraft. A mid-air is not a satisfactory way to end a sight-seeing trip.*

Nor a satisfactory way to end a fire fighting mission! Remember, too, that temporary flight restrictions (FAR 91.137) are often set up around many forest fires. Check NOTAMs and get good briefings before flying into these areas.

"In the Blind"–and Dark

About the <u>only</u> thing that went right for this military pilot on a civilian pleasure flight was his continuing to broadcast in the blind, in an effort to make everyone aware of his intentions:

I took off from [a military airport] for a local flight. I met with a friend, and then decided to call the base...to let the Staff Duty NCO know that I needed the runway lights on. [During the flight back to the base], I couldn't get anyone on the radio. I constantly broadcasted in the blind. I decided to shoot the ILS approach, because when I identified the airport, the runway lights were not on. While I was circling to orient myself, I drifted into the nearby Class B airspace. We train making approaches and landings with and without night vision goggles. Therefore I was comfortable with landing at an unlit runway. After I touched down, I noticed the red light coming from the Tower. I thought they had a disabled aircraft following me, because the fire trucks and security patrol cars were racing toward the runway. It never crossed my mind that it was because of me.

As it happened, the pilot <u>did</u> have a radio failure. From the Tower's point of view, however, this pilot was an intruder: no radio contact, conducting an IFR approach without a clearance, landing at night without runway lights. On top of all that, the base aero club had been searching for him because he had failed to close his outbound flight plan. ◢

LOFTY Perceptions

Visual perceptions account for about 70 percent of the information most people absorb, and are the basis for simulator training for pilots. When reality doesn't quite jibe with those perceptions...well, the Captain of a widebody cargo aircraft explains what can happen:

■ *Pushback 20 minutes late. Pushback ended well to the left of taxiway centerline. I taxied about 100 feet before realizing how far off the taxiway centerline I was and how at risk I was of contacting taxiway lights. Stopped aircraft, summoned maintenance, and requested visual inspection of the aircraft, tires, and taxiway lights. Aircraft was undamaged, but a taxiway light was damaged...apparently not hit by us. We proceeded to destination without incident.*

Contributing factors: failure to use taxi lights out of courtesy to other aircraft; positioning of aircraft after pushback; and confusion about position on taxiway, exacerbated by fatigue (middle of the night) and recent experience in simulator earlier the same day. A LOFT training scenario involved taxiing under nearly identical circumstances using taxiway centerline lighting which exists <u>in the simulator</u> for that taxiway at that airport, but <u>not in reality</u>. ◢

The Whole Crew, and Nothing But The Crew

The concept once known as Cockpit Resource Management is now referred to as Crew Resource Management (CRM), with an emphasis on the ideas that everyone involved with the aircraft is part of the team, and no one is a mere observer. Still, CRM skills sometimes get overlooked. This Part 135 commuter Captain on a round-robin night flight experienced two failures of CRM practices during one flight.

■ *I have been extremely pleased with the CRM training I have received. I have tried to incorporate such lessons into my briefings with my crew and consider myself a very approachable Captain. Even so, I experienced a total breakdown of communication...Twice in one night my crew withheld information I needed to do my job, for no good reason.*

During a low visibility approach, my First Officer apparently became disoriented after breaking out of the clouds and assuming visual control of the aircraft for landing. However, he never said a word about it until after we had made a rather firm landing. He stayed quiet and took a chance that could have resulted in much worse conclusions than a hard landing.

After shutting down, I inspected the exterior of the airplane...everything OK. The passengers were boarded, and we returned to XYZ without further incident.

When the flight attendant got off the airplane, she said she was suffering from a headache because she had hit her head against the bulkhead during the [previous hard] landing. She had said nothing then because she was in a hurry to get home.

In the next report, the usual CRM efforts of the flight and cabin crews were complicated by the Passenger Service Agent (PSA) at the gate, as well as the behind-the-scenes team members (dispatch and load control). Add an electronic information display, and confusion–with lack of CRM–reigns:

■ *A final load and weight of 106,300 lbs. was sent to the aircraft via ACARS prior to push. I questioned this because by my math we should have weighed 107,800 lbs. Just prior to push...107,300 lbs. appeared, which was closer to what I expected. The PSA re-opened the door...and put on [four more passengers]. Because of opening the door, all previous data dumped from the ACARS. After a call to dispatch for a takeoff alternate due to deteriorating weather, a call was made to load control to ask for a new weight for takeoff. They said it appeared we were over weight [max. takeoff weight=108,000 lbs.], but moments later, we received a new weight of 107,600 lbs.*

Just after lift-off, we received two ACARS messages that we were over weight, and should return to the gate.

Who's Flying the Aircraft?

A three-person crew, inbound on an ILS, found themselves having a little trouble getting it all together for the final approach. The First Officer overshot the localizer, then discovered that the Captain had dialed in the wrong ILS frequency. All of this led to *two* offers by ATC to execute a go-around. The First Officer and Second Officer agreed, but the Captain declined, insisting that the approach could be salvaged. Finally, someone made a decision, as the Second Officer reports:

■ *The First Officer said he was going around, and called for climb power. He did not remove his hand from the throttles, nor did he push the throttles to a climb power setting. I then pushed the throttles full forward with the First Officer's hand still on them, and called for gear up. The Captain told ATC we were going around...The pilots flying were late and indecisive in initiating a go-around.*

CRM principles worked in this case (eventually!), but could have worked even better in all these reports if the whole crew had accepted the principles from the start.

SOP or SOL?

SOPs (Standard Operating Procedures) can be a useful form of communication among crew members, especially when radio contact is not available. Deviation from SOPs by *anyone* can leave a pilot-in-command SOL (Sure Outta Luck). An ASRS report describes an incident that led to an adrenalin rush for all concerned.

■ *[This airport] has a light system for parking. The red light coming on is the signal to stop the aircraft. When the light goes off our company procedures specify that...the chocks are in. The light is turned off by a ramp agent who then follows that action with hand signals indicating the chocks are in. While waiting for the light to go out...I inadvertently released the brakes (the parking brake was not set). Because the ramp is not level, the airplane began to slowly roll backwards. This movement was not apparent to me or the First Officer. Contributing to our lack of recognition [was] the movement of the jetway,...[which] gives the sensation of [the airplane] moving; this optical illusion is well-known and routinely disregarded, so it took several seconds before I realized we were moving and reapplied the brakes.*

While it is obvious my mental lapse is not excusable, there are several considerations...Ramp workers have or display different levels of compliance with the parking procedure described above. The effect of these differences is the tendency to not pay attention to the very things that we should.

The reporter neglects to mention that the company SOP quite probably lists the flight crew's first priority as setting the parking brake! ◢