Communication problems are mentioned in a high percentage of incidents reported to ASRS. Misunderstandings account for the greatest number of communication errors, but improper radio operation and equipment malfunctions are also culprits.

A Private Conversation

A misplaced switch, apparently overlooked during the cockpit preflight, resulted in this A300 Captain transmitting to a very limited audience.

The First Officer handled the radios as we taxied. When we were cleared for takeoff (First Officer’s leg), I responded using my boom mic (microphone) and we commenced our takeoff. Tower made no query as to whether we received the takeoff clearance (presumably because they saw us on the roll). As we passed through 2,600 feet, Tower called and instructed us to turn right to 650 degrees and contact Departure. I acknowledged… Tower called again (with a more urgent tone) with the same instructions, and asked if we had received their instructions. I then switched to my hand mic and replied again. Tower repeated the last instruction in a more urgent tone and also stated, “Ident” if you can hear me or contact Departure.” I looked at the Com #1 (Captain’s) audio box and noticed that it was set if you can hear me or contact Departure.” I looked at the Instruction in a more urgent tone and also stated, “‘Ident’ hand mic and replied again. Tower repeated the last instruction, and was told, “Ident” if you can hear me or contact Departure.” I looked at the Com #1 (Captain’s) audio box and noticed that it was set to transmit on Intercom not Com #1….

A Classic in D - Unplugged

“Check the plug” is the classic first step for troubleshooting many electronic devices. An unplugged headset caused an embarrassing departure for this BE35 pilot.

I approached Class D airspace and called the Tower. I got no response after several calls and made the assumption that the Tower was closed. I then made the proper Common Traffic Advisory Frequency (CTAF) calls all the way to the Initial Approach Fix (IAF) for the ILS approach. At about 1,200 feet MSL on the ILS, I noticed several planes over the runway in the pattern. I thought it was strange that that many planes were not using the CTAF. I started looking around in the cockpit to find out why I was not hearing the traffic or the Tower. I found the headset unplugged. When I plugged it in, Tower immediately came on the air and advised me to execute a missed approach. I did that and departed the pattern….

Communication problems are mentioned in a high percentage of incidents reported to ASRS. Misunderstandings account for the greatest number of communication errors, but improper radio operation and equipment malfunctions are also culprits.

A Classic in D - Unplugged

“Check the plug” is the classic first step for troubleshooting many electronic devices. An unplugged headset caused an embarrassing departure for this BE35 pilot.

I approached Class D airspace and called the Tower. I got no response after several calls and made the assumption that the Tower was closed. I then made the proper Common Traffic Advisory Frequency (CTAF) calls all the way to the Initial Approach Fix (IAF) for the ILS approach. At about 1,200 feet MSL on the ILS, I noticed several planes over the runway in the pattern. I thought it was strange that that many planes were not using the CTAF. I started looking around in the cockpit to find out why I was not hearing the traffic or the Tower. I found the headset unplugged. When I plugged it in, Tower immediately came on the air and advised me to execute a missed approach. I did that and departed the pattern….

ASRS Recently Issued Alerts On…

B737-300 flight control malfunction
Southern airport landing traffic conflict
CL65 horizontal stabilizer trim problem
ATC handling of weather deviation request
MD-80 lavatory serviced with automotive fuel

A Monthly Safety Bulletin from The Office of the NASA Aviation Safety Reporting System, P.O. Box 189, Moffett Field, CA 94035-0189
http://asrs.arc.nasa.gov/

September 2003 Report Intake

Air Carrier / Air Taxi Pilots 2114
General Aviation Pilots 781
Controllers 51
Cabin/Mechanics/Military/Other 136

TOTAL 3082

Talk, Don’t Squawk

A corporate pilot reported on a number of difficulties encountered when flying with a contract pilot. The problems started with this communications error.

…ZZZ Departure handed us off to Center, but the contract SIC (Second In Command) had a problem changing the frequency on the Com 2 radio. [He] put the frequency in the transponder and tried to speak, but he was talking to Departure again….

Stealth Communications

While military pilots might be familiar with radio silence procedures, such operations are never intentionally conducted at civil airports. This private pilot, when confronted with the phrase “carrier no voice” apparently assumed that “zip lip ope” were in effect. What the controller was trying to convey to the pilot was that his radio was transmitting an unmodulated, constant tone (carrier frequency) without a discernable voice pattern.

I …called Ground [Control], but did not receive any confirmation and concluded that I might be out of range or blocked by another aircraft. After three attempts, I heard Ground reply, “Carrier no voice.” I tried to call again and was again told, “Carrier no voice.” I had already filed a VFR flight plan. I had been given a special squawk code because of the Temporary Flight Restriction (TFR) issued for [a nearby area]. I assumed that the term “carrier no voice” meant that, for some reason, they were suspending voice communications… As I was taxiing on the ramp toward the taxiway, I called Ground Control once more and was told, “[Aircraft] calling, carrier no voice.” This reassured me that I had clearance to taxi since they identified my plane which was now moving on the ramp. Yet I was still bothered by this procedure, so I made sure to check the tower for any light signals. During taxi, I did not receive any light signals. In the run-up area I attempted to contact Ground again to clarify the situation. They replied, “Carrier no voice. If you are contacting Ground, click your mic two times.” I complied and they acknowledged saying, “We got your clicks.” Again, I interpreted this as a clearance because they heard and acknowledged my mic clicks. I finished my run-up and taxi’d to the runway hold short point. While doing this, I called the Tower and was told politely, “Carrier no voice.” I continued to taxi up to the hold short line when the Tower said, “[Aircraft] on the active, turn around and return to your starting place. You are not cleared for takeoff, repeat, you are not cleared for takeoff.” It was now obvious that we had not established proper two-way communications and I immediately complied with their instructions….

A little “amplification” of the problem by Ground Control might have prevented this pilot from going as far as he did.
Miscommunications

Misunderstandings cause many communication errors. The following ASRS reports illustrate the need for clear, unambiguous phraseology in all aviation operations.

A Recipe for Miscommunication

Blend distractions, assumptions, and misinterpretations. Add a little pressure. Arrange on a long, flat surface. For “well done” communications, clarify all ingredients before lifting off. For “half-baked” communications, lift off early—even if it feels wrong.

My aircraft departed ZZZ airport without being released…. The ultimate reason was a miscommunication between the First Officer and myself…. I work hard never to rush the First Officer beyond his or her ability, yet in this case, I believe I did. Even if I said nothing verbally, I probably said it with my actions because we were running late and I was moving quickly…. During taxi, while the First Officer got the clearance, I wanted to verify the winds. This created a situation where I was listening to ATIS while the First Officer was picking up the clearance…. We taxied to the hold short line just north of another aircraft. The First Officer briefed the clearance…but never indicated that we were being held for release and I never asked at that time. We then proceeded to wait for the other aircraft to taxi out. Finally we asked them if they were going to go. They indicated, “Yes” (it turned out that this was a reference to all the checklists being cleared). With that confirmation I departed…. Departure let us know that we had departed without being released.

Runway Confusion… by Request

In two similar incidents, key information was left out of otherwise clear communications. In each case there were two different interpretations of the same phrase.

I was told, “Cleared to land Runway 24” while on final. As I came closer to the airport the Tower said, “Can you make Runway 15L?” I said, “Yes, I can” (it was my understanding that I was to enter a base leg and land on Runway 15L). When I was [on] short final the Tower proceeded to confirm that I could make Runway 15L. My understanding was that I should try to land on Runway 15L because of other traffic. The Tower meant for me to land on Runway 24 and make the first available left turn onto Runway 15L due to traffic on final. The aircraft behind us did a go-around. This runway incursion occurred because of a miscommunication. I will clarify a request like that in the future. If both the Tower and I were clearer in what we said, I believe something like this would never have happened.

After being cleared for the ILS Runway 1L approach and then cleared to land, I noticed that the taxiways were loaded with aircraft heading for Runway 1L. Also, my destination on the field was at the end of the runway. I requested a long landing. The controller said that he was unable due to landing aircraft behind me, but I could use Runway 31. As I was getting ready to turn mid-field final for Runway 31 the controller asked if I intended to go around. I replied, “No” and that I was starting my turn for Runway 31. After landing the controller stated that he meant that I should land on Runway 1L and turn off on Runway 31…. There was clearly a miscommunication.

A Bad Sign

Sign language is one of the oldest forms of communication, but even hand signals can be misinterpreted, especially when they are intended for someone else.

The ground marshaller signaled for us to start our taxi out from the gate. During turnout the Captain stopped the aircraft midway through the turn. When I asked him if there was a problem, he replied that the marshaller “had an odd look on his face” so he elected to stop the aircraft…. The marshaller then gave the stop signal and notified us that the left wingtip had contacted the jetway, causing a slight indentation on the left wingtip and breaking a fiberglass panel on the jetway. The aircraft was shutdown where we stopped, the flight was cancelled, and the passengers were offloaded. After the incident, we learned that the jetway was not fully retracted away from the aircraft. A wing walker had been motioning to the jetway operator to retract the jetway. Our marshaller saw the wing walker’s hand motions and interpreted them to mean that it was OK for the aircraft to move and directed us to begin taxi out.

Lessons learned: 1. Everyone in the ground crew was trying to do a good job, turn the aircraft quickly, and not inconvenience the passengers. 2. Lack of proper communication between the wing walker and the marshaller led to the mixed signals that caused the incident.