

Overcoming Comm Failures

Except for a beat-up portable intercom that suffered some unknown failure preventing us from transmitting, we've never had a for-real comm failure. There have, however, been occasions when we needed to switch radios, headsets or microphones. Indeed, we'd guess most communication losses result from selecting the incorrect frequency: The cockpit equipment is working, but no one's listening.

That says volumes about modern avionics reliability, but doesn't help much when it comes to diagnosing and troubleshooting a comm failure. Indeed, most "failures" aren't failures at all; just misconfigurations. For example, whatever you just did to "break" comms, undo it! If that doesn't work, try these tips:

TRY A DIFFERENT FREQUENCY

Especially if ATC doesn't answer after a frequency change, go back to the previous controller and report "unable." If there's no previous frequency, use an IFR en route chart or your panel's avionics to find a good frequency. You also can try ATC on 121.5 MHz, or dial up the nearest FSS.

SWITCH RADIOS/ADJUST SQUELCH

Most of us using the en route ATC system these days have two comm radios in the panel. Either dial in or transfer the desired frequency to the other radio and try it. While certain antenna or wiring failures/configurations can make this fruitless, it's a logical next step.

EXCHANGE MICROPHONES/HEADSETS

The comm failure may only involve the equipment you use to interface with the panel, like a headset or handheld microphone. Let the right-seater try through his/her headset, or try the handheld mic. While you're at it, check connections to make sure turbulence or a hard landing didn't dislodge something.

USE A HANDHELD HANDHELD TRANSCEIVER

The ultimate backup to a failed panel-mounted comm radio is a portable radio capable of transmitting and receiving on the appropriate frequencies, like the Yaesu unit pictured here. They're good outside the airplane for monitoring nearby ATC facilities. Often, however, their built-in antennas don't work all that well inside an airplane—many owners have installed connections allowing them to use one of the aircraft's comm antennas (you do have two comm antennas, one for each radio, right?).

An example of a cable necessary to connect a handheld to an installed, external antenna is pictured at bottom. In the middle is a generic headset adapter, which allows using a standard aviation headset with a handheld comm radio.

PANEL MISCONFIGURATION

Going back to the "Did you mess with it? Don't do that!" failure mode, ensure the audio panel and comm radios themselves are correctly configured, including volume and squelch. I once had to cancel an instructional flight because someone turned off the audio panel—I didn't even know it *could* be powered off.

