



The Best of *Flight Training Magazine*

Brought to you by the Aircraft Owners and Pilots Association

Communicating With ATC

Learn to Talk Like A Pro

By Karen M. Kahn

Communicating with air traffic control (ATC), at least for student and low-time pilots, has to rank right up there with stalls and steep turns when it comes to stress-inducing maneuvers. To help you overcome what has to be a universal fear of talking on the radio, let's see what's behind the words you use and how you can sound more professional while using either the VFR or IFR systems.

By listening to ATC, you can readily pick out the pilots who know what they're doing and those who seem lost, frightened, and confused by the goings-on. To put you in the know-what-they're-doing category, if you're not already there, I'd like to suggest some specific ways to professionalize your radio style and become more comfortable and adept at communicating your needs to ATC.

Let's begin with the cardinal rule of radio communications: Think first; talk second. Rehearse in your mind what you're going to say before you say it, particularly if it's anything out of the ordinary. Organize your thoughts into the "Who Am I? Where Am I? What Do I Want?" categories. Being organized will help you to make the best use of the airwaves, particularly when they're busy and it's tough to get a word in edgewise.

This rule works for any pilot, flying any size airplane, at any airport. I use the same plan-ahead technique whether I'm in an MD-80 airliner trying to get pushback clearance at LAX (*Ground, Continental One-Five-Four-Two, Gate 66 with Charlie, ready for pushback, [first fix is] Thermal*) or if I'm in our light twin preparing to taxi (*Ground, Baron Seven-Three-Zero-Six-Romeo, Stratman Aero with Bravo, taxi for takeoff*).

When you're ready to begin your transmission, don't! First, listen and make sure your radios are set properly (volume is up, you've selected the correct frequency, and the transmitter switch is positioned to the radio you're actually listening to). Then, take the amateur's classic "San Diego Ground Control, this is Cessna Two-Three-Four-Five-Charlie..." preamble and change it to the less-wordy, infinitely more professional "Ground, Cessna Two-Three-Four-Five-Charlie." From there, give your location on the airport (said as a brief description, such as "North-east transient parking" or "Big Bucks FBO") and add your request.

Less-experienced pilots stand out like sore thumbs when they give the full airport name and address with every transmission. The first time you call a particularly facility, however, it is a good idea to state who you're calling, just in case you've got the wrong frequency. Subsequent requests to the same controller should be made without the extra verbiage, since he knows who he is and doesn't need to hear it repeated by you with every transmission.

If you have a lot of information to give ATC, such as a request for a tower en-route clearance or an en-route destination change, key the mic, say the facility name (usually shortened to "Clearance" or "Center") plus your aircraft type and N number. Then wait. "Clearance, Skylane Nine-Two-Eight-Juliet-Charlie." That tells ATC you've got a relatively long message to convey and want them to call you back when they get a moment. It's kind of like their warning to you, when they have a new clearance for you to fly. Rather than shoot it to you when you're not prepared, they'll preface it with "Eight-Juliet-Charlie, Bay Approach, I have a re-route for you; advise when ready to copy."

So, if you've got a longish or complex request, take care of the prerequisites first. If you're on the ground, be sure you've copied and digested the automatic terminal information service (ATIS) before you call for clearance. That means determining which runway you'll be departing from and, if you're on an IFR flight, which departure procedure you're likely to be assigned. This is particularly important if they're using other than their usual runway or traffic flow, as your brain is likely to be spring-loaded to the usual clearance. You'll save yourself a lot of "Say again" and "What's that fix?" if you've done your homework.

When you do get the callback from ATC, you know they've got the time to listen to your longer-than-normal request. That doesn't mean they have all the time in the world. Give them the information in a concise, logical order. Let's say you want to request a tower en-route clearance to a nearby airport. There are several bits of information the controller will need to know about you. If you can provide all the data ATC needs on that second call, it will warm the controller's heart. "Clearance, Skylane Eight-Juliet-Charlie's requesting an IFR climb to VFR-on-top. We're a Cessna 182 slash Uniform, destination Monterey."

On your first call to a particular ATC facility, give them your full call sign, and say it relatively slowly so they can understand it. If they get it correct when they acknowledge your first call, then use the abbreviated form (Eight-Juliet-Charlie) from then on. If they don't get it right, correct them immediately so they don't start calling you by a wrong N number that you won't reply to because it's not yours and you're not listening for it.

When you're ready to call the tower for takeoff, tell them, "Tower, Skylane Nine-Two-Eight-Juliet-Charlie ready for departure, Runway One-Five-Left, IFR Los Angeles." It's short, sweet, and to the point. When you're cleared for takeoff, or into "position-and-hold," turn your transponder on. Now the departure controllers will see your target on their scope, know your departure is imminent, and be listening for your call shortly after you're airborne. That call, by the way, isn't a mystery or surprise to them. They've seen your target come alive on the runway as you turned your transponder on, and just as the controller tells you to contact departure control, so he lets the departure controller know you're headed his way and that he's given you instructions to switch to his frequency.

OK, you've been cleared for takeoff and the tower tells you to contact departure control. What do you say? What do they want to hear? Remember that as in any ATC frequency change, what's most important to them is to verify your altitude and make sure you understand your altitude restrictions, if any. We can take a great load off their minds and ease the congestion on frequency by combining these two factors into one simple sentence. Since it's your first call to this facility, give them your full call sign and then tell them where you are (altitude-wise) and what you're doing (altitude-wise). "Departure, Skylane Nine-Two-Eight-Juliet-Charlie leaving 800 climbing 4,600." (You can delete the word "feet" as it's obvious and just adds verbiage to your transmissions.)

Did you recognize the old "who, where, what" formula in this transmission? It works, sounds professional, and gives ATC all the information needed to verify your encoding altimeter, their radar display readouts, and your understanding of your clearance altitude. This is error management at its finest and a great piece of insurance for you.

Let's spend a moment talking about phraseology because that's what really makes or breaks a professional pilot. Did you notice I didn't clutter my transmission with any useless or confusing words? I just said "Cessna Nine-Two-Eight-Juliet-Charlie, leaving 800, climbing 4,600." And I said the full altitude - that's four thousand, six hundred, not forty-six hundred. Why? For the same reason that I don't use the words "to" or "for" when I report climbing or descending. (I don't say "leaving 800 for 4,600" or "climbing to 2,000.")

The word *to* can easily be confused with the number two, just as the word *for* can be confused with the number four. Make your communications clear and distinct by saying "leaving 800, climbing four thousand, six hundred." Or, as you vacate your assigned altitude (a required report during IFR and a good practice when VFR), advise the controller, "Eight-Juliet-Charlie's leaving six thousand, descending four thousand."

It takes a bit of getting used to because you hear so many pilots - many of them professionals - say it wrong. Just remember to leave out the word *to* and only use the word *two* if it relates to an assigned number. For example, assume you are assigned a left turn to a heading of 200 degrees. If you read it back with that *to* word inserted before your assigned heading, it sounds like you're turning left "to-two-zero-zero." It's much easier to key the mic and say "Left, heading two-zero-zero, Eight-Juliet-Charlie" or "Eight-Juliet-Charlie's turning left, heading two-zero-zero," which leaves no question that you understood the instruction.

When you switch from one frequency to another, all you need to say is your full call sign and your altitude data, be it "level 6,000" or "leaving 6,000, descending 3,000." If you're climbing, as we were a while ago, it would be "leaving 5,000, climbing 6,000." By telling the controller that that you're leaving your present altitude, you comply with the regulation to report leaving an assigned altitude (IFR), verify that you did get the new altitude information correct, and save a second call. That's certainly easier and much more professional than first acknowledging the new altitude and then calling the controller back to say you're leaving your assigned altitude of 6,000.

The same system works well when you're assigned a new heading. Just advise ATC you're turning to heading 030. Frequently, they'll pair it with an altitude change, and now they're the ones who are saving radio space. We can follow their lead and use our verbal shorthand to let them know we understand and are complying. Let's try it with this clearance: "Skylane Eight-Juliet-Charlie, turn left heading two-six-zero. Descend and maintain 2,500." Upon hearing that transmission, you'd key the microphone and say "Eight-Juliet-Charlie's turning left heading two-six-zero, leaving 4,000, descending 2,500." The order in which you read back the data is not as crucial as is making sure you understand the instructions. By reading back any instructions you'll be able to double-check their accuracy and question them, if necessary. You'll also hear yourself say the numbers and will tend to remember them better.

When you arrive in the terminal area serving your destination, start speeding up your "approach thinking." Tune in the ATIS as far out as possible and copy it down. When you're handed off to the approach controller for your area, let him know on your first call that you've got "Kilo," or whatever the current information is called. You'll save another unnecessary transmission because he won't have to ask if you have Information Kilo. By the way, some busy controllers won't even bother to ask if you have Kilo. They'll just say "Advise when you have Kilo," implying that if you haven't got it, you'd better get it and don't even think of calling back until you do!

When the controller clears you for the approach, the instructions are likely to come at you at Mach 1. Just how much of this do you have to repeat back? As always, the object is to let the controller know that you understand what you're expected to do. Let's say he gives you the following clearance: "Skylane Eight-Juliet-Charlie's five from the marker, turn right heading two-three-zero, cleared for the approach, maintain 3,000 until established. Contact tower at the marker."

That's a lot of information to digest in a short space of time, but you should have expected to hear most of it. The heading, the altitude, the fact that you're cleared for the approach, and where to change frequencies all are important.

The controller wants to hear you repeat back the "meat" of his message so he knows you understand and will comply with his instructions. Your transmission should sound like, "Eight-Juliet-Charlie is turning right two-three-zero, cleared for the approach, 3,000 'til established, tower at the marker." Headings, altitudes, and important details need to be repeated, and this will help you remember them as well.

Once you're cleared to land by the tower, acknowledge the transmission and be sure to include the runway number and your airplane ID. Think of this as a little insurance against a possible runway incursion or excursion. "Roger" or "wilco" just doesn't cut it in this crucial phase of flight. Many a pilot has been saved from landing on the wrong runway because he or she repeated the clearance and an alert controller caught and corrected the error.

Your radio style will develop as your flying matures. Pilots who speak very quickly on the radio will find ATC talking back to them at the same rate. Caution: If you can't copy a clearance at lightning speed, don't make your request so fast! Otherwise, you'll get what you deserve and find yourself very chagrined at having to ask the controller to "say again" after all.

Student pilots, new pilots, and those flying in unfamiliar territory should consciously slow down their transmissions to alert air traffic controllers to do the same thing. A slow callup signals that you require a bit of special handling. If you are a student pilot, you may choose to tell the controller that right up front. Being a student is nothing to be embarrassed about, and telling the controller is another signal that you may need a little extra help. Why not use all of the resources that are available to you? It's just good common sense and good cockpit resource management.

While you're working to sound like a pro on the radio, you can also benefit by using a pleasant tone of voice and adding a "thank you" to the end of your transmissions when appropriate. You'll find that controllers, like pilots, are just plain folk who appreciate the same courtesies you do. Many a time I've been delighted to have a special request granted when I least expected it, just because I was patient and polite and phrased it with a nondemanding "we'd sure appreciate it" tone of voice.

Finally, I'd like to pass on a word of advice I received during my beginning IFR training (many moons ago) from a savvy controller in the Pacific Northwest. "If you don't understand it, ask 'em to say it again. Better that they have to repeat themselves than that you make a mistake." Great words to live, and fly, by.

Want to know more?

Additional information on topics discussed in this article may be found at ft.aopa.org.

Free Flight Training resources and educational tools for students!

Take advantage of AOPA's FREE, no risk six-month Student Trial Membership, including six FREE issues of Flight Training magazine. Zero obligation! Get your FREE student membership by going online to: ft.aopa.org/free2



421 Aviation Way • Frederick, MD 21701-4798 • 800-USA-AOPA (872)-2672 • ft.aopa.org

The free student membership is available to students in their initial training who reside in the U.S. It cannot be combined with a paid AOPA membership.