Austin's Very Easy Guide to
Proper Radio Phraseology and Technique

2012 Revision 0

THINGS CHANGE OFTEN! CHECK MY WEB SITE PERIODICALLY TO ENSURE THAT YOU ARE USING THE MOST RECENT VERSION.

Volume 4 in the "Austin's Very Easy Guide" (AVEG) series
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For official information specific to your employer, refer to:
- ▶ Your company's operations manual.
- ▶ Your company's FAA operations specifications.
- ▶ Your company's approved training program.
- ▶ Your aircraft's POH or AFM.
- ▶ The applicable Federal Aviation Regulations.
- ▶ Any relevant FAA Advisory Circulars.
- ▶ Standing case law and interpretations published by the FAA Office of the Chief Counsel and/or rulings issued by NTSB Administrative Law Judges.

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Although much of the information contained in this series is generic and could potentially apply to many areas of aviation, it is designed specifically as a study aid for those pilots engaged in on-demand Part 135 single-pilot IFR cross-country operations in small reciprocating aircraft. **THIS MATERIAL IS NEITHER ENDORSED BY NOR APPROVED FOR ANY SPECIFIC OPERATOR. IT IS GENERAL INSTRUCTIONAL AND GUIDANCE INFORMATION ONLY!**

> **For complete, detailed and definitive information on this subject, I urge you to consult the FAA's Aeronautical Information Manual. Specifically, refer to all of Chapter 4, Air Traffic Control, but especially to Section 2, Radio Communications Phraseology and Technique. I also highly encourage you to read the Pilot / Controller Glossary in the Appendices.**

There are often many "right" ways to say it. People frequently have very strong preferences and personal opinions about this subject, just as they do about spelling, grammar, syntax, punctuation and other language conventions. In any case, though, what's really important is that you do the following three things:

1.) Always make yourself clearly understood.
2.) Always comply <u>promptly</u> and <u>correctly</u> with ATC clearances and instructions.
and
3.) Avoid irritating and/or confusing other pilots or air traffic controllers with undisciplined radio technique.

No matter what your individual preferences and techniques, as long as you do those three things, I'm satisfied and so is the FAA! What follows in this booklet are ideas and suggestions to help you meet those three goals. Some are matters of law, some are matters of style, some are matters of courtesy, some are matters of common practice and some are simply matters of convenience and expediency.

> Good radio transmissions are ***timely***, ***precise***, ***concise*** and ***disciplined***. Bad radio transmissions are slow (or late), sloppy, long-winded and disorganized, filled with pauses and extraneous verbiage. Good radio work is the hallmark of a proficient, intelligent professional pilot.

Finally, remember that good manners and politeness are always appropriate. "Please" and "thank you" are often called for, as are such courtesy phrases as "good morning," good afternoon," "good evening" or "good night." On an *extremely* congested channel, however – such as the tower frequency during a peak arrival and departure period at a major international airport – sometimes even these should be dropped in favor of the briefest, most to-the-point calls! When it's busy, let's get down to business.

If you are seriously interested in improving your radio work and making friends with controllers, I recommend reading the excellent book *Avoiding Common Pilot Errors* by controller John Stewart, in which he elaborates at length on the silly and sometimes dangerous lapses of radio procedure that he has seen.

TOP FOUR CONTROLLER COMPLAINTS:

These are the four biggest sources of frustration and aggravation that controllers seem to mention most often. Each controller has his or her own special pet peeves, naturally, but these are the things that have come up most frequently during safety seminars, in articles and books written by controllers, during informal conversations and even on the air.

1. ***NOT LISTENING!*** Few things annoy controllers more than a pilot who is constantly asking, "say again?" or, even worse, not promptly and correctly complying with instructions – especially important instructions, such as heading and altitude assignments.

2. Making long-winded, disorganized, rambling transmissions filled with pauses and extraneous verbiage instead of timely, disciplined, precise, concise calls.

3. Making an initial VFR call "out of the blue" without making it clear that it is an initial VFR call, causing the controller to have to look around in an attempt to find information on the flight that he or she does not have.

4. Not having the required information ready when making requests or reports, forcing the controller to call back repeatedly asking for clarification or additional details.

These issues can be more than just a nuisance; in 1998, the Flight Safety Foundation released an official study in which they concluded that non-standard phraseology and/or "ambiguous communication" played a role in far more incidents and accidents than had previously been widely realized. Many of these bad outcomes, apparently, have resulted at least partly due to the fact that pilots and controllers just aren't communicating effectively.

<div align="center">Topics:</div>

Part I. Precision, Concision and Standardization

Part II. Making Requests With ATC

Part III. Making Position Reports at a Non-Towered Airport

Part VI. Readbacks

Part V. Acknowledging Radio Calls From ATC

Part VI. Readbacks

Part VII. Operating at Large and Busy Airports

Below are a few amusing words of advice from the experts. These selected remarks are rudely stolen by me from an editorial sidebar that appeared in *IFR* magazine. The sidebar is called "Frequency Fluff: More Stuff We Wish We Hadn't Heard."

Here, in no particular order, is our list of the dumbest things we hear on the radio.

"With you at 8,000 feet." It sounds so special to be "with" someone but it conveys no useful information. If you use it, stop.

"Roger, standing by." In street talk, stand by means "shut up, I'll get back to you in a minute."

"Cherokee nine six alpha taking the active" Taking it *where*? And is "active" stenciled on the runway somewhere? Wouldn't it be better to specify the runway – "departing runway two six" – and be done with it in one call? Ditto "clear of the active."

"We'll do the best we can." This is sometimes heard in a LAHSO scenario. Trouble is, if your best isn't good enough, smoking metal will be the payoff. Either you can or you can't. It's "unable" or "wilco."

"Whatever works best for you." Helpful pilots sometimes get the impression that their purpose in life is to fly around and give controllers something to do. Remember, ATC is a service and pilots are the customers.

"Climb and maintain 8,000" in a readback. If you're on the ground, how else are you going to get to 8,000 except climb? Lose the verbiage.

(From *IFR* magazine.)

Part I.
Precision, Concision and Standardization

Rule number one of aviation radio: **Be precise and concise.**

Rule number two of aviation radio: **Follow the standard sequence.**

Eliminate all unnecessary words; get to the point. Say what needs to be said — *no more, no less* — and then unkey the mike to let other people talk. Use only the essential words, eliminating extraneous verbiage. And use only the *right* words; remember that words have very specific legal meanings in the world of aviation radio.

You don't need to talk like an auctioneer, either. Speaking at a normal pace is perfectly fine as long *as you say only exactly what needs to be said.* **Saying three words slowly and clearly is much better than saying twelve words very fast when exactly the same meaning can be conveyed!**

Avoid hesitating, rambling and vocalized pauses such as "uh," "um," "er" and "ah." "And" is also a very common vocalized pause, primarily when it is used to open a transmission. Many pilots do this almost unconsciously. Like all vocalized pauses, it is a sign that the pilot doesn't know exactly what words he wants to use as he begins speaking. Don't leave the mike open while you gather your thoughts! Think about what you want to say *before* you key the mike, and then say it clearly and confidently, without pauses or hesitation. Then unkey the mike and let other people talk. Listen to the way controllers talk; their language is highly standardized because they receive years of specialized training. Most pilots only know what their instructors taught them, and many instructors have never seriously studied this part of the AIM. Many pilots mimic the bad habits that they overhear, and this tends to perpetuate certain common mistakes.

1. If you want to say something lengthy, such as a flight plan or IFR position report, what should you do?
    A) Just key the mike and start talking, figuring out what you want to say as you go.
    B) Jot it down beforehand so you can say it clearly and confidently without hesitation.
    C) Speak loudly and fast instead of using a normal, conversational tone.

Answer: B.

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Think before keying your transmitter.  Know what you
want to say and if it is lengthy; e.g., a flight plan
or IFR position report, jot it down.  (AIM 4-2-2)

Speak in a normal, conversational tone.  (AIM 4-2-2)
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For instance, suppose your call sign is Marconi zero niner, you are flying a Cessna 210, your location is fifteen miles to the northwest of Orlando Executive Airport, you have ATIS information delta and you wish to enter class D airspace and land. When you call Orlando Executive Tower to request landing instructions, what should you say? Let's look at two examples of how this call might sound, one good and the other bad.

Example 1A (BAD):

"*And*, Tower, this is, *uh*, Marconi zero niner with you at, *um*, about ten or fifteen miles to the, *ah*, west . . . no, I mean northwest . . . and we have the ATIS. We'd like to, *uh*, do a full-stop landing."

This pilot made several stylistic errors that made him sound amateurish. Let's consider what they were.

- He used a lot of unnecessary extra words and phrases (such as "this is" and "we have").

- He used a lot of vocalized pauses, including the one he used to open the transmission – "and."

- He didn't have his exact position in terms of range and bearing from the airport ready. (This very understandably exasperates controllers.)

- He rambled and hesitated throughout the transmission.

- He failed to provide the current ATIS code.

- He needlessly specified that he wanted to make a full-stop landing. Tower controllers at most airports will usually assume that an inbound pilot wishes to make a full-stop landing unless he requests otherwise, although there are exceptions. (Be sure to ask about any special local radio procedures.)

Example 1B (GOOD):

"Orlando Executive Tower, Marconi zero niner, Cessna 210, fifteen northwest, inbound with delta."

This pilot said nothing but what he needed to say and he said it without faltering. The controllers already like this guy!

What if the frequency was very congested and the tower controller was really busy and therefore the pilot wanted to really make sure he got it right the first time? Then he might even have (wisely) made a quick shorthand note to himself as a sort of prompt (as strongly suggested by AIM, Section 2, Radio Communications Phraseology and Techniques, Paragraph 4-2-2. Maybe it was something like this:

<div align="center">

OET

M09

C-210

15 NW

i/b D

</div>

When the pilot is ready to transmit, he can simply glance at this note, key the mike and quickly, clearly and confidently say "Orlando Executive Tower, Marconi zero niner, Cessna 210, fifteen northwest, inbound with delta." Then he can immediately unkey the mike to open the frequency. This is not only the right way to do it – precise, concise, timely, disciplined and accurate – it also makes him sound proficient and professional . . . unlike the transmission in example 1A!

Many pilots seem to resist the idea of writing things down before making transmissions, despite the fact that it is much easier than trying to remember multiple elements and then deliver them cleanly . . . and despite the fact that the AIM endorses it. Why do they resist developing this safe, useful, handy and FAA-endorsed habit? I don't really know. Try it sometime – you might find that you can save yourself a lot of stress and mental effort. If I have one single piece of advice to pilots who are struggling with their radio procedures, it is simply this: *write things down, my friend, WRITE THINGS DOWN!*

My own personal guideline is that any time the frequency is busy and I have more than three elements to remember I will write it all down before making the call.

If, for example, all I have to say is, "Gainesville tower, Marconi zero niner outside WYNDS," I will not bother to write it down. If, on the other hand, I have to say, "Gainesville tower, Marconi zero niner outside WYNDS, request circle to land runway 25," I would jot down a quick shorthand note like this first:

<div align="center">

GT

M09

o/ WYNDS

req CTL 25

</div>

"Hold the Mayonnaise!"

One of the keys to effective radio communications is **eliminating all unnecessary words from your transmissions.** This can be accomplished simply by thinking for just a moment about what you want to say *before* you key the mike.

Let's consider a transmission. Then let's replace all the unnecessary words with the word "mayonnaise." Then we'll *hold the mayonnaise* and see how much it cleans up the call.

"And, SoCal Approach, this is, uh, Cessna eight zero one three eight with you."

Wow, that was a lot of unnecessary words.

"~~And~~, SoCal Approach, ~~this is~~, ~~uh~~, Cessna eight zero one three eight ~~with you~~."

    If we replace those unnecessary words with the word "mayonnaise" we get:

"**Mayonnaise**, SoCal Approach, **mayonnaise**, **mayonnaise**, Cessna eight zero one three eight **mayonnaise**."

    So all the pilot really needed to say was:

"SoCal Approach, Cessna eight zero one three eight."

Much better! Precise and concise.

Now let's try it again.

"And, Orlando Executive Ground, this is Marconi zero niner, we are a Cessna 210 and we are at the Showalter Ramp with information Tango. We're ready to taxi to the active runway and we'll be a VFR departure to the northwest today."

    Again, if we replace the unnecessary words with the word "mayonnaise" we get:

"**Mayonnaise**, Orlando Executive Ground, **mayonnaise** Marconi zero niner, **mayonnaise** Cessna 210 **mayonnaise** Showalter Ramp with information Tango. **Mayonnaise mayonnaise mayonnaise mayonnaise** VFR **mayonnaise** northwest **mayonnaise**."

    All the pilot really needed to say was:

"Orlando Executive Ground, Marconi zero niner, Cessna 210, Showalter Ramp, Tango, VFR northwest."

Why say it in 44 words when you can say it in just 15 words?

Many pilots often find themselves in situations where they know they are supposed to say *something*, but they aren't sure precisely what. In such situations they may resort to "cheating" by throwing in a common substitute phrase that is usually either meaningless or redundant. While this is not exactly wrong, it is not exactly right, either. (It's kind of like using fake words like "irregardless" or "nucular." People will know what you mean, but they might also think you're a dumbass.)

When you check in with an approach or center controller after a sector handoff, for example, you are required to: 1) identify yourself and 2) confirm your altitude. When you check in with a tower controller after being handed off from an approach controller, you are supposed to: 1) identify yourself and 2) state your position in terms of an approach fix. Here are examples of how each of those calls should sound:

"Orlando Approach, Marconi zero niner, level two thousand."

"Orlando Executive Tower, Marconi zero niner, outside HERNY."

On many occasions you may hear pilots who, realizing that they are supposed to say something but unsure of which specific terminology to use, throw in a substitute phrase such as "with you" or "checking on." Again, this is not exactly wrong . . . but it's also not exactly right. (Neither "with you" nor "checking on" actually appear in the Pilot/Controller Glossary.) Let's examine this more closely . . .

What is the difference in meaning between the two transmissions below?

1. "Orlando Approach, Marconi zero niner with you level two thousand."

2. "Orlando Approach, Marconi zero niner level two thousand."

Give up? Aha! There *is* no difference in meaning! They mean *exactly the same thing*. "With you" is redundant; it is just two unnecessary extra words. (Why say it in 11 words when you can say it in just 9 words?) Using "with you" is not exactly wrong – it's just unnecessary . . . it's mayonnaise. The second transmission is a little more concise.

What is the difference in meaning between the two transmissions below?

1. "Orlando Approach, Marconi zero niner with you two thousand."

2. "Orlando Approach, Marconi zero niner level two thousand."

In this case, however, the first transmission is actually incorrect, because the pilot did not use the required word "level." (*see AIM 5-3-1*) He used the non-standard phrase "with you" as a **substitute** for the terminology that he was supposed to use – that's poor radio technique. Again, using "with you" is not wrong *per se* – what's wrong is deleting the required word "level."

> In aviation radio (and in life), **clarity and precision of speech reflect clarity and precision of thought.**

THE PROBLEM:

Many pilots don't seem to realize that when a controller is working a large number of airplanes, if someone calls up and only says something like "Bonanza four five tango alpha is with you" it forces the controller to look around and try to figure out which airplane is calling, whether that airplane is IFR or VFR, whether it is a radar handoff or an initial call and so forth. If it is an initial call, this is especially bothersome because the controller won't be able to find anything on that airplane.

PILOT: "Orlando Approach, Marconi zero niner is with you."

CONTROLLER: (*puzzled, looking around for a progress strip*) "Um . . . Marconi zero niner, I can't seem to find anything on you. Who just handed you off to me?"

PILOT: "Uh, nobody. Marconi zero niner is requesting practice approaches at Sanford."

CONTROLLER: (*sighing*) "Roger, please say your location, aircraft type and approach requests. Also, please confirm you have the current ATIS." [Then he turns to his fellow controller and remarks, "I got an idiot here, Murray."]

THE SOLUTION:

The pilot in this case could have avoided confusing and annoying the controller by using something more like one of the initial calls below:

Option 1 (*if the frequency was congested*): "Orlando Approach, Marconi zero niner, VFR, **with request**." (Then he would wait for the controller to call him back.)

Option 2 (*if the frequency was very quiet*): "Orlando Approach, Marconi zero niner, Cessna 210, 7 miles northwest of Vendelton, request a practice ILS at Sanford, ATIS delta."

As one Jacksonville approach controller once put it at a safety seminar, "hey guys, look – if you're squawking VFR, **please** don't just call me up with nothing but your call sign as if I'm supposed to know who you are! That's like me calling you at home and saying, 'hi! This is Phil!' And you would be all like, 'Phil who? Do I know you? Was I supposed to be expecting your call? What do you want?' The only people who are allowed to check in with their call signs are people who are already operating on an instrument flight plan."

Pilots who already have a VFR squawk code given by a previous controller, of course, can also check in with their call signs only. Just be sure it really is a handoff, not a termination of flight following accompanied by a suggested next frequency!

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ACCEPTABLE, BUT NOT GREAT

"Uh, Orlando Executive Tower, this is, um, Marconi zero niner with you out here to the west-northwest, um, two thousand five hundred feet, um, about fifteen miles out, just got a handoff from Orlando Approach, uh, we're a Cessna 210 Centurion on the ILS runway 7 approach . . . uh, full-stop landing, please."

A LITTLE BETTER . . .

"Orlando Executive Tower, this is Marconi zero niner with you out here to the west-northwest, two thousand five hundred feet, fifteen miles out, just got a handoff from Orlando Approach, we're a Cessna 210 Centurion on the ILS runway 7 approach for a full-stop landing."

EVEN BETTER . . .

"Orlando Executive Tower, Marconi zero niner, Cessna 210, fifteen west-northwest, two thousand five hundred, ILS runway 7."

BEST!

"Orlando Executive Tower, Marconi zero niner outside HERNY."

Here is a good rule of thumb: ***always say it in the fewest words necessary to make your meaning clearly understood.*** Thinking for just a moment before you key the mike will enable you to do this. What does the tower controller already know from the radar handoff before you call? She knows that you are shooting a practice ILS approach to runway 7, she knows that you are a Cessna 210, she knows your altitude, she knows that you are planning to make a full-stop landing and obviously she knows you are receiving vectors to final. <u>*You don't need to tell her any of that!*</u>

The phrase "outside HERNY" is an elegant way to convey a large amount of information:

1. It tells the controller that you are reporting inbound on an approach. (As opposed to random VFR traffic making an initial call to the tower without ever talking to TRACON.)
2. It tells the controller *which* approach you are on. (Many airports have numerous different instrument approaches.)
3. It tells the controller exactly where to glance at her radar screen. (She might have dozens of targets swarming in her field of view.)

. . . All that in just two words! Now *that's* precision and concision!   ☺   ☺   ☺

All four of the previous transmissions are technically *legal*, although if the frequency is busy a long, rambling transmission might result in an annoyed comment from a controller and/or inadvertently blocking out other pilots who are also trying to communicate. The last one, however, is the most **precise** and **concise**. Think about it: if you were a busy air traffic controller, whom would you like better – the pilot who made the top transmission or the pilot who made the bottom transmission?

If it takes Pilot X as much time as it takes most pilots to make five or six transmissions to stumble and fumble his way through just one, then Pilot X should probably think about making an effort to tighten up his radio work.

2. If your call sign is Cessna Three One Six Zero Foxtrot, you are at the south ramp and you wish to call Columbia Ground Control to obtain your IFR clearance to Memphis, what should you say?
   A) "Columbia Ground Control, this is Cessna Three One Six Zero Foxtrot, we are at the south ramp and we are ready to pick up our IFR clearance to Memphis now."
   B) "Cessna Three One Six Zero Foxtrot is at the south ramp and we are ready to copy IFR clearance to Memphis."
   C) "Requesting IFR clearance to Memphis, Cessna Three One Six Zero Foxtrot."
   D) Columbia Ground, Cessna Three One Six Zero Foxtrot, south ramp, IFR Memphis."

Answer: D.

Every initial callup should follow a specific four-part sequence – "who, who, where, what."
– **who** you're calling, **who** you are, **where** you are and **what** you want if it's a request or what you're doing if it's a report.

    In other words –

    1.) the full and proper name of the facility being called (on initial callup only)
    2.) your *full* aircraft identification (on initial callup only)
    3.) your location (if needed) and
    4.) the type of message to follow *or* your request (if it's short)

This is in accordance with the Aeronautical Information Manual, Section 2, Radio Communications Phraseology and Techniques, Paragraph 4-2-3.

Let's consider another situation to further illustrate this concept. Suppose your call sign is Marconi zero niner, you are flying a Cessna 210, your location is the Showalter Ramp, you have ATIS information Juliet and you wish to depart VFR to the northwest. When you call Orlando Executive Ground Control to request a taxi clearance, what should you say? Here are two examples of how this call might sound, one good and the other bad.

<u>**Example 2A (BAD):**</u>

"*Uh*, Orlando Ground, this is, *um*, Marconi zero niner and we are, *er*, at the Showalter Ramp, we have ATIS information Juliet and we are ready to taxi to the, *ah*, active runway, please."

Again, this pilot made several errors.

- He used a lot of unnecessary words and phrases such as "this is," "we are at" and "we have." This excess verbiage pads out the transmission, wastes time and makes the pilot sound sloppy and amateurish, like he doesn't know what he's doing.

- He used a lot of vocalized pauses such as "uh," "um," "er" and "ah."

- He incorrectly addressed Orlando Executive Ground as Orlando Ground. (Orlando Ground is over at MCO.) He should have said either "Orlando Executive Ground" or else just "Executive Ground."*

- He forgot to specify his aircraft type.

- He forgot to specify that he wished to depart VFR to the northwest.

> *Where do you find the correct name of the facility being called? **In the frequency box of the approach plate.** Sometimes it's not obvious, so you shouldn't guess. The correct name for the tower in Titusville, Florida, for example, is "Space Coast Tower."

Now let's look at how it *should* be done.

<u>**Example 2B (GOOD):**</u>

"Orlando Executive Ground, Marconi zero niner, Cessna 210, Showalter Ramp, Juliet, VFR northwest."

This pilot "held the mayonnaise" . . . he was both precise and concise. He eliminated all unnecessary words. He got to the point. He said what needed to be said — no more, no less. And then he unkeyed the mike to let other people talk. The ground controller will immediately recognize the fact that he is dealing with a pro who knows what he's doing, and will do whatever he can to be of assistance. This pilot has successfully prejudiced ATC in his favor . . . in the first thirty seconds of his leg!

3. Your call sign is Marconi zero niner. You have just landed on runway 7, clearing at taxiway E. You wish to return to the Showalter Ramp. What should you say?
    A) "Orlando Executive Ground, Marconi zero niner clear seven at echo, taxi to Showalter Ramp."
    B) "Marconi zero niner clear of the active."
    C) "Marconi zero niner with you off seven."
    D) "Ground, Marconi zero niner is with you."
    E) "Marconi zero niner request taxi to Showalter Ramp."

Answer: A.

Too many pilots clear the active runway and then call ground control with something like choice D: "Ground, Marconi zero niner is with you." Oh no, again the dreaded substitute phrase "with you" rears its ugly head!

If this is a busy airport with a lot going on, that is simply not adequate information. First of all, this might be the first time the ground controller has heard of you. What is your full call sign? Did you just land and clear an active runway or are you somewhere else on the field looking for a taxi clearance for departure or repositioning? If you just landed, which runway did you land on? And which taxiway are you currently on? To which ramp do you want to taxi?

Depending on the situation, the ground controller may be able to figure it out or she might have to call you back and ask for clarification. So make it easy on her: tell her what she needs to know, following the standard four-part sequence discussed earlier: "Orlando Executive Ground, Marconi zero niner clear seven at echo, taxi to Showalter Ramp."

(For more examples, refer to AIM 4-3-18, "Taxiing.")

Some controllers get really fed up with pilots who fail to follow this procedure. I've often heard irritated controllers snap at pilots over it. While this is not necessarily the most professional way to deal with the situation, sometimes you can hardly blame them and it's certainly much better to avoid the problem by not exasperating them in the first place!

PILOT: "Orlando Ground, Cessna hotel kilo one four seven is with you."

ANNOYED CONTROLLER: "Cessna hotel kilo one four seven, *EXECUTIVE* Ground, you're with me *where?* And what is your request?"

EMBARRASSED PILOT: "Oh, sorry . . . with you clear of the active." [*SEE NOTE BELOW*]

INCREASINGLY ANNOYED CONTROLLER: "Seven and one three are both in use, sir. Please specify which runway you have cleared, which taxiway you are on and where you would like to go. I have a dozen airplanes down there moving on the surface."

EVEN MORE EMBARRASSED PILOT: "I apologize . . . uh, clear of seven . . . at, um, taxiway, um, echo, I think? Er, we'd like to taxi to the ramp, please."

EXTREMELY ANNOYED CONTROLLER: "To *which* ramp, sir? The east ramp? The west ramp? The Showalter Ramp? The sheriff's ramp?"

HUMBLED PILOT: "The Showalter ramp, sir."

CONTROLLER: "Roger, thank you. Taxi to the Showalter ramp."

"Sheesh, Oscar. I swear, some of these guys are morons."

"I know, Vinnie. Who taught them to use a radio?"

PROFICIENT PILOT: "Executive Ground, Marconi zero niner clear one three at echo foxtrot, taxi to Showalter Ramp."

RELIEVED CONTROLLER: "Marconi zero niner, Executive Ground, taxi to the Showalter Ramp. Thank you, sir! Excellent call! Have a nice day."

NOTE: "The active" is a meaningless phrase. Don't use it. At uncontrolled airports, pilots can use whatever runway they want or need. At controlled airports, ATC can assign any runway that makes sense given the circumstances. ***Use the actual runway identifier – <u>every</u> time!*** Say "taxi to runway seven," not "taxi to the active." It might save your life (or career) someday.

Part II.
Making Requests With ATC

When requesting VFR flight following or other forms of radar service (such as practice approaches, for example), *be ready* to provide all the information that the controller is going to need! This includes:

- Your full and proper call sign (if you are not already in radar contact)

- Your aircraft type (if you are not already in radar contact)

- Your position in terms of range and bearing to a charted navigational point such as an airport or navaid (if you are not already in radar contact)

- Your altitude (if you are not already in radar contact)

- Your request (including, if applicable, your destination *and* requested altitude)

When you first call, please *__don't__* just launch into your request unless the frequency is very quiet at the time. (Controllers hate that!) Instead, let the controller know that you are VFR with a request by saying, for instance, "Jacksonville Approach, Skyhawk niner two eight four six , VFR *with request*."

Always remember that ATC's primary legal responsibility is to provide separation and sequencing for IFR traffic. VFR services are provided only on a time- and workload-permitting basis. In other words, *it's a courtesy!* So treat it that way. By saying "with request," you are letting them know that you are not on an IFR flight plan and therefore are not an immediate priority. Believe me, they will appreciate this, even if they don't have time to say so.

If you just say "Jacksonville Approach, Skyhawk niner two eight four six," the controller will look around fruitlessly to find your progress strip, because you seem to assume that he is supposed to already know who you are!

After the controller calls you back, you can go ahead with your request *if* he indicates to you that he has time to help you. He might just say "stand by," which is a polite way of saying "shut up." (You should *never* acknowledge a call to stand by.) Or he might tell you to "remain VFR outside of class C airspace and call me back in five minutes," meaning that he is too busy at the moment. Or, if his sector is completely saturated, he might even say something like "aircraft calling, maintain VFR. Sorry, I don't have time for you right now."

Assuming that he is able to provide service, be prepared to give him your full request, speaking clearly and including all the important details so that he doesn't have to play 20 Questions with you.

EXAMPLE 3:

M09: "Jacksonville Approach, Marconi zero niner, VFR **with request.**"

TRACON: "Marconi zero niner, squawk zero four two four and stand by."

[*The pilot of Marconi zero niner resets his transponder to 0424 and does not reply*.]

TRACON: (*a moment later*) "Marconi zero niner, Jacksonville Approach, radar contact seven miles southeast of Ocala, say request."

M09: "Cessna 210, request practice approaches at Gainesville beginning with the NDB 29, Marconi zero niner."

TRACON: "Roger, you can expect that. Fly heading three six zero, direct WYNDS when able."

M09: "Three six zero, direct WYNDS when able, Marconi zero niner. Thank you."

EXAMPLE 4:

M09: "Jacksonville Approach, Marconi zero niner **with request.**"

TRACON: "Marconi zero niner, Jax Approach, go ahead with request."

M09: "Cessna 210, seven southeast of Ocala, request VFR flight following to Gainesville at three thousand, five hundred."

TRACON: "Roger, squawk zero four eight eight and ident."

M09: "Zero four eight eight and ident, Marconi zero niner."

TRACON: (*a moment later*) "Marconi zero niner, radar contact seven miles southeast of the Ocala VOR. Proceed on course as requested. Advise prior to any speed or altitude changes."

M09: "Going on course. Thank you. Marconi zero niner."

(If the frequency is very quiet, you can go ahead and give your full request in a single transmission.)

4. You are flying Baron Five Six Three Hotel and you wish to request VFR traffic advisories from Miami Center. What should you say?
   A) "Baron Five Six Three Hotel with you."
   B) "Miami Center, Baron Five Six Three Hotel, request VFR traffic advisories."
   C) "And hello, Miami Center, this is Baron Five Six Three Hotel with you and we would like to pick up some VFR traffic advisories from you now if you have time, please."

Answer: B.

A is incorrect because the pilot did not state the name of the facility he was calling, nor did he specify that he had a request or what his request was. C is incorrect because the pilot padded out the transmission with unnecessary words and phrases.

> **IMPORTANT GENERAL NOTE REGARDING REQUESTS:** Don't *announce* to air traffic control what you want to do – *request* it. Don't simply say, for example, "Orlando Executive Tower, we'll be circling to runway one three on this one." Many controllers find that rude, presumptuous and obnoxious.
>
> Many controllers will respond to this by pointedly saying "roger, I have your *request*" or, depending upon the situation, just denying it. Instead, say "Orlando Executive Tower, Marconi zero niner *request* circle to land runway one three." It's *their* runway – not yours – and they will give it to you if they feel it is safe and operationally efficient to do so.
>
> And finally, making your request *early* and *clearly* is usually going to be much more likely to result in a cheerful approval than blurting out a muddled statement on a half-mile final!

Part III.
Making Position Reports at a Non-Towered Airport

When flying into or out of a heavily used airport that does not have an operating control tower, courtesy, patience, professionalism and style on the radio are extra important.

If the airport has ASOS or AWOS, listen to it as soon as you are in reception range – this is often 20 miles or more.

If you are anything less than totally familiar with the airport, pull out the A/FD or approach plates and take a second to review the airport diagram, the navaids on or near the field and any other pertinent information.

Monitor the UNICOM and/or common traffic advisory frequency or frequencies to see what's going on. By listening for a minute or two, you should be able to figure out which runway is in use, whether it's right or left traffic and how many airplanes are presently inbound, outbound or in the pattern. Then you won't have to call to request an airport advisory. How often have you been flying at a non-towered airport with half a dozen planes doing touch-and-goes, all of them constantly making position and intention reports, when suddenly some idiot calls up right in the middle of it and asks for an airport advisory? If he had listened, even for a moment, to the CTAF then he would have been able to almost immediately figure out everything he needed to know without contributing to the congestion!

This is a quotation from the Aeronautical Information Manual, 4-2-2:

> **Listen** before you transmit. Many times you can get the information you want through ATIS or by monitoring the frequency.

There is a difference between UNICOM and CTAF. UNICOM is for communicating with the FBO. CTAF is for communicating with other pilots in the air or on the ground. (At some airports, such as Sebastian Municipal, it's the same frequency. At others, like Orlando Executive, it's two or even three different frequencies – often each FBO will have its own UNICOM.) Use the CTAF to make position reports beginning 5-10 miles out. Report on every leg of the traffic pattern. Use the following format:

1.) State the full, proper name of the airport and the word "traffic." (This clarifies that you are talking to other airplanes in the vicinity of this airport as opposed to someone on the ground or a particular individual.)

2.) State your own full, proper call sign – including aircraft type.

3.) State your location. This can either be in the form of range and bearing to the airport or your position in the traffic pattern. If it is the latter, then you should include which leg you are on as well as whether it is left or right traffic and for which runway. If the pattern is especially busy, you may wish to be even more specific. For example, you might say "midfield left downwind" or "abeam the numbers left downwind" instead of just "left downwind."

4.) If you plan to make anything other than a normal approach to a normal full-stop landing, clarify. For example, you might say "touch and go," "short approach," "long landing," "low approach only," "stop and go" or "simulated engine failure."

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5.) Repeat the name of the airport. (Many airports share CTA frequencies and pilots often only catch the end of a transmission.) You do *not* say the word "traffic" this time, however.

Example 5A (BAD):

"*Um*, local traffic, two four two niner niner is on a, *uh*, a downwind leg now. *And*, this will be a, um, a . . . full stop landing."

This pilot made several errors.

- He failed to identify the airport at the beginning and end of his call. (Now pilots at all the airports within a hundred miles or more that share the same CTA frequency are looking around to see who's on downwind!)

- He failed to use his full call sign.

- He failed to say his aircraft type.

- He failed to say whether it was a left downwind or a right downwind.

- He failed to specify which runway he was planning to land on.

- He needlessly said that this will be a full-stop landing. (A full-stop is always assumed unless otherwise advertised.)

- He used a lot of vocalized pauses.

Example 5B (GOOD):

"Magnus traffic, Cherokee eight one four niner zero, right downwind runway two six, Magnus."

*Notice that this correct example is **shorter**, **faster** and **more informative** than the incorrect example shown previously!*

Saying it right is almost always shorter and faster!

5. You are operating a 210 as Marconi zero niner. You are turning left base for runway 13 at the Vendelton Regional Airport. What call should you make?
   A) "Vendelton, Marconi zero niner, left base."
   B) "Marconi zero niner turning left base."
   C) "Vendelton traffic, Marconi zero niner, Cessna 210, turning left base runway one three, Vendelton."
   D) "Marconi zero niner landing runway one three."
   E) "Vendelton traffic, we're turning left base runway one three, Vendelton."

Answer: C.

A is incorrect because it did not begin with the word "traffic," it did not conclude with "Vendelton," it did not include aircraft type and it did not include the runway. B is incorrect because it did not begin with the phrase "Vendelton traffic," it did not conclude with "Vendelton," it did not include aircraft type and it did not include the runway. D is incorrect because it did not begin with the phrase "Vendelton traffic," it did not conclude with "Vendelton," it did not include aircraft type and it did not specify a leg of the traffic pattern. E is incorrect because it included neither the call sign nor the aircraft type.

A Complete Set of Perfect Traffic Pattern Transmissions at a Non-Towered Airport:

"Sebastian traffic, Marconi zero niner, Cessna 210, five miles northwest, inbound to enter the traffic pattern, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, one mile to the northeast, entering forty-five degree midfield right downwind runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, abeam the numbers, right downwind runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, turning right base runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, turning final runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, clear of runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, taxiing to runway two six, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, taking off runway two six, canopies is sight. Departing straight out to the west to avoid parachute jumping activity, Sebastian."

* * *

"Sebastian traffic, Marconi zero niner, Cessna 210, on the upwind off runway two six, departing straight out to the west, final call, Sebastian."

For practice, try reading this series out loud several times in a row. Think about how it sounds, how it flows.

Part IV.
Handling Handoffs

When one air traffic controller directs you to call another air traffic controller you should do things differently from when you are making an initial callup.

<u>When an approach controller hands you off to a tower controller:</u>

This typically occurs while being vectored for an approach – visual or instrument – and therefore it is usually a fairly high-workload time for the pilot. As a result, the pilot often panics and bungles the handoff call.

First, *listen* on the tower frequency for at least a couple of seconds before making a transmission! Don't just switch frequencies and immediately start talking, as far too many pilots do in this potentially stressful and distracting situation. Remember, *the tower controller already knows you're there!*

By definition, when a radar handoff occurs, the new controller has your information in front of her. If you can't break into a congested frequency to make a call, don't worry about it; don't let it frustrate you or divert your attention. If you can't call the tower, *sooner or later the tower will call <u>you</u>* – it's not a problem!

Also, bear in mind that the tower controller *already* knows *everything* he needs to know about you – when you call, there is no need to tell her anything other than who you are. It is considered a standard courtesy, however, to state your position in terms of an approach fix so that she knows where to glance at the radar screen.

Example 6A (BAD):

"*Uh,* Orlando Tower, this is Marconi zero niner with you on the, *er,* ILS runawy 7 approach; *um,* two thousand feet, inbound from the . . . southwest for a . . . full stop landing, please."

Wow, that was really a *lot* of unnecessary information! (The tower controller is sighing and rolling her eyes.)

Example 6B (GOOD):

"Orlando Executive tower, Marconi zero niner outside HERNY."

Now the controller can simply glance at her radar screen to find the target outside the outer marker. Then she will respond with "cleared to land," "continue inbound" or something similar, as appropriate.

<u>When a tower controller hands you off to a departure controller:</u>

Again, since the controller at TRACON already knows everything he needs to know about you from the handoff, all you have to do is identify yourself and confirm your altitude.

Example 7:

"Orlando Departure, Marconi zero niner through one thousand,
climbing to one thousand, five hundred."

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When an approach (or center) controller hands you off to another approach (or center) controller, either at the same facility or a different one:

Once again, since the next controller already knows everything he needs to know about you from the handoff, all you have to do is identify yourself and confirm your altitude.

6. Your call sign is Marconi 09. You are level at 5,000. When you are told by Jacksonville Approach to switch to Tallahassee Approach, what should you say?
    A) "Tallahassee Approach, Marconi zero niner, level five thousand."
    B) "Tallahassee Approach, this is Marconi zero niner with you level at five thousand, heading 330, IFR to Pensacola."
    C) "Tallahassee Approach, Marconi zero niner, five thousand."
    D) "Tallahassee Approach, Marconi zero niner with you five thousand."

Answer: A.

B is incorrect because the pilot provided a lot of unnecessary information, including his assigned heading and his destination. He also used extraneous verbiage such as "this is" and "with you." C is incorrect because the pilot left out the word "level." And what if the pilot had said "with you five thousand" instead of "level five thousand," as he did in D? Then the controller would not immediately know if the pilot was climbing, descending or level. Note what the AIM has to say about this subject:

Section 3. En Route Procedures

5-3-1. ARTCC Communications

2. The following phraseology should be utilized by pilots for establishing contact with the designated facility:

> **(a) When operating in a radar environment: On initial contact, the pilot should inform the controller of the aircraft's assigned altitude preceded by the words "level," or "climbing to," or "descending to," as appropriate; and the aircraft's present vacating altitude, if applicable.**

When an approach (or center) controller terminates VFR radar service and suggests a frequency where you can request further flight following:

In this case, the next controller you contact will have no idea who you are, where you are or what you want. So you should use the procedure explained in Part II, Making Requests With ATC.

7. As you are cruising along at 3,500 feet, Miami Center tells you "Marconi zero niner, radar service terminated, squawk VFR, for further flight following suggest Tampa Approach frequency 119.9. Good day." What should you say when you contact Tampa?
   A) "Tampa Approach, Marconi zero niner, level three thousand, five hundred."
   B) "Tampa Approach, Marconi zero niner, Cessna 210, eleven miles west of Lakeland VOR at three thousand, five hundred feet, request VFR flight following to St. Petersburg."
   C) "Marconi zero niner with you at three thousand, five hundred."
   D) "Marconi zero niner with you."

Answer: B.

Miami Center cancelled radar service, which means that Tampa Approach has no idea who Marconi zero niner is, where he is or what he wants. So the pilot must make an initial call.

Let me point out that it would also be equally acceptable to say "Marconi zero niner *with request*" and then wait for the controller to call back before providing all of the information included in choice B.

A, C and D are incorrect because the nature of the pilot's transmission seems to imply that he assumes the controller is already supposed to know who he is, which will cause the controller to look around for a progress strip – which, of course, he will not find. C and D are also incorrect because they include the common "mayonnaise" phrase "with you." A would be correct if this were a radar handoff, which it isn't.

HELPFUL HINT: Many pilots greatly increase their workload by trying to pick up ATIS and monitor the approach control frequency at the same time. But this only works when the approach control frequency is not very congested *or* the ATIS is relatively short and uncomplicated.

If ATIS is lengthy and complex and/or the approach control frequency is busy, I would suggest that trying to listen to them both at once probably won't work very well. Aside from creating stress in the cockpit, this practice also leads to missed calls from ATC and an incomplete or muddled comprehension of the airport information, some of which may be very important.

So do yourself a big favor. Say, "Orlando Approach, Marconi zero niner request frequency change to get ATIS." 95% of the time they'll say, "approved, report back up." Then you can copy ATIS with no distractions. When you call them back a minute later, simply say, "Orlando Approach, Marconi zero niner, back up."

Part V.
Acknowledging Radio Calls From ATC

When given instructions:

Respond by repeating the instructions *first* – using essential words only! – and then *conclude* with your abbreviated call sign (or your full call sign if there is a similar-sounding call sign on the same frequency). Don't open with your call sign – this makes it sound like you are trying to call someone else.

EXAMPLE 8:

TRACON: "Marconi zero niner, turn left heading two seven zero."

M09: "Two seven zero, Marconi zero niner."

_____

When given information:

Respond by saying "Roger" if you received and understood the entire transmission. It is neither necessary nor preferred that you read back the information you were given. Do not say "Roger" unless you received and understood the entire transmission. If you need something repeated or clarified, use the words "say again," "confirm" or "verify." You may conclude with your abbreviated call sign, but this is optional.

EXAMPLE 9:

TRACON: "Marconi zero niner, Orlando Executive Airport is now VFR, winds calm, scattered at one thousand five hundred, overcast at three thousand, altimeter two niner niner seven, runway seven in use, expect vectors for the visual approach."

M09: "Roger."

    - or -

M09: "Marconi zero niner."

    - or -

M09: "Roger, Marconi zero niner."

    - or, if the pilot missed all or part of the transmission -

M09: "Please say again for Marconi zero niner . . . ?"

    - or, if the pilot is unsure about some specific component of the transmission -

M09: "Confirm vectors for the visual runway *seven* for Marconi zero niner . . . ?"

When given instructions mixed with information:

This is where some pilots *really* get confused! Respond by reading back only the instructions, *not* the information.

8. Orlando TRACON says "Marconi zero niner, turn right heading three six zero, this will be vectors for the final approach course ILS seven at Orlando Executive Airport, ASOS now reporting wind zero niner zero at one one gusting to one five." What would be the best response?
    A) "Roger, understand vectors for the final approach course ILS seven at Orlando Executive Airport, Marconi zero niner."
    B) "Right turn to heading three six zero, vectors for the ILS seven, wind zero niner zero at one one gusting to one five, Marconi zero niner."
    C) "Three six zero, Marconi zero niner."
    D) "Roger, Marconi zero niner."

Answer: C.

9. What response is expected when ATC issues an IFR clearance to pilots of airborne aircraft?
    A) Read back the entire clearance as required by regulation.
    B) Read back those parts containing altitude assignments or vectors and any part requiring verification.
    C) The read-back should be unsolicited and spontaneous to confirm that the pilot understands *everything* that the controller said.
    D) Acknowledge with "Roger" unless you have a specific question.
    E) Read back only altitude assignments unless something has been amended.

Answer: B.

You may recognize this one – it is the FAA's own test question, #4395. According to the Aeronautical Information Manual, Paragraph 4-4-7, pilots of airborne aircraft should read back those parts of ATC clearances and instructions containing altitude assignments or vectors and any part requiring verification. Pilots, not realizing this, often try to read back every single thing ATC told them. This contributes to frequency congestion and often annoys the controller. All he wants or needs to hear is that the pilot received and understood the actual *instructions* he was given. If the pilot has a question about something else in the transmission, he should use the words "say again," "confirm" or "verify."

Suppose, for example, you have just departed from Opa-Locka airport and you hear, "Marconi zero niner, radar contact two miles northwest of Opa-Locka. Cleared to Orlando Executive Airport via radar vectors Victor 531 as filed. Turn right heading three six zero. Climb and maintain two thousand, expect five thousand as your final. Expect vectors west of Fort Lauderdale's airspace to join Victor 531 northwest of Palm Beach." If you try to repeat everything that controller just told you, he will probably angrily advise you to keep your transmissions short – especially if you hesitate, pause or ramble. Miami TRACON is a very busy facility and they don't have time for that.

All he needs to hear is, "three six zero, two thousand, Marconi zero niner."

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When asked a yes-or-no question:

Respond with either "affirmative" or "negative." Do *not* say "Roger" instead of "affirmative!" **"Roger" does *not* mean "yes!"** It means "I received and understood all of your last transmission." Likewise, do not use potentially ambiguous or silly-sounding slang such as "ten-four," "OK" or "you bet." Some controllers just groan and roll their eyes when they hear things like that, but others do get deeply irritated.

As it says in the AIM, 4-2-1, "Jargon, chatter and 'CB' slang have no place in ATC communications."

(Saying your call sign at the end is typically not necessary, since in this case it is usually quite obvious who responded. If there may be any doubt, however, go ahead and use your call sign.)

10. Orlando Executive Tower asks, "Marconi zero niner, will this be a full-stop landing?" It will. What should your response be?
    A) "Roger."
    B) "Affirmative."
    C) "Wilco."
    D) "Yes."

Answer: B.

"Roger" means "I received and understood all of your last transmission," but it is *not* actually an answer. "Wilco" means "I will comply with your instructions." "Yes" should not be used because single-syllable responses can be difficult to understand over the radio, especially when transmission or reception quality is poor.

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When provided with traffic reports or alerts:

Respond with either "traffic in sight" or "negative contact." (See the Pilot/Controller Glossary.) Do *not* use military slang such as "tally ho" or "no joy" unless you are a military pilot in a military airplane on a military mission. Avoid using indefinite or ambiguous phrases like "okay" . . . which does not make it clear whether you see the traffic or not!

EXAMPLE 10:

TRACON: "Marconi zero niner, traffic at your ten o'clock and two miles, eastbound at two thousand, a Piper Navajo."

FLX T3: "Traffic in sight, Marconi zero niner."

   -or -

FLX T3: "Negative contact, Marconi zero niner."

When in Rome . . .

Another very good rule of thumb is that if the controller uses certain terminology, you should use the same terminology. For example:

- If the controller uses your full call sign, you should also use your full call sign. If the controller begins abbreviating your call sign, you may do the same.

- If the controller refers to you as "Flight Express one zero one," you should refer to yourself the same way. If the controller uses "Flight Express one oh one" instead, you should consider that acceptable.

- If the controller uses "tree" for "three," "fo-wer" for "four" and "fife" for "five," then you should also do that. (Controllers generally resort to this when transmission or reception quality is poor or when pilots seem to be having a hard time understanding the numbers.)

THE PROBLEM:

Many controllers get tired of this type of exchange:

M09: "Orlando Executive Tower, Marconi zero niner."

TOWER: "Marconi zero niner, Orlando Executive Tower."

M09: "Orlando Executive Tower, Marconi zero niner requests a touch and go."

THE SOLUTION:

The pilot could have simply made the last transmission: "Orlando Executive Tower, Marconi zero niner requests a touch and go." The first call was not really necessary. While it is true that it is not always appropriate to launch into an extended transmission without first establishing contact, it is also not always appropriate to initiate contact without any message, question, request, announcement, advisory or report of any kind, especially when the frequency is relatively quiet.

As one of the most experienced controllers at the Orlando Executive Tower once said while he was giving a presentation on ATC radio procedures to a ground school I was teaching, "most of the time, most controllers would rather you just go ahead and say what you've got to say, unless it's long or complicated. We don't need all those extra transmissions cluttering up the frequency. If we need for to you to repeat something, don't worry – we'll ask."

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Part VI.
Readbacks

There are only three things that you are actually *required* by federal law to read back. The first is a Land And Hold Short Operation (LAHSO) clearance, which you must read back in its entirety. The second is a runway hold short clearance, which you must also read back in its entirety. The third is a taxi clearance with a runway assignment and/or a runway hold short assignment. (At some airports, you are required to read back *all* taxi clearances.) All other things may or may not be read back – that is left up to your discretion. ***The final responsibility for getting a clearance right always rests with the pilot, however, so <u>it is almost always a good idea to read INSTRUCTIONS back</u> . . . and also to request verification if you are at all in doubt about what a controller said.***

As I have mentioned before, it is usually neither necessary nor encouraged to read back information . . . only instructions.

In general, when reading anything back, use only the essential words. As always, try to eliminate excess verbiage.

Also note that the AIM 4-4-7 unambiguously instructs pilots as follows: "when conducting an IFR operation, <u>make a written record</u> of your clearance." [Emphasis added by me.]

WHEN CLEARED ONTO A RUNWAY, CLEARED TO LAND, CLEARED TO TAKE OFF, CLEARED TO LINE UP AND WAIT OR INSTRUCTED TO HOLD SHORT, <u>ALWAYS</u> INCLUDE THE FULL RUNWAY IDENTIFIER IN YOUR READBACK!

A Quick Word About Practice Approaches

This is an area where many pilots inadvertently reveal their lack of knowledge about the structure and function of the ATC system. When an approach controller asks a pilot, "how will this approach terminate?" he is *really* asking, "when I hand you off to the tower am I finished with you? Or do I need to give you climbout instructions and be ready to receive you back into my airspace and provide continuing radar service? And if you're coming back, what do you want to do next?"

Many pilots respond with something like, "this will be a missed." That doesn't tell the poor frustrated controller what he needs to know. The real question is: <u>what do you want to do *after* this approach?</u> The same approach again? A different approach? Or what? The controller needs to make plans.

Other pilots respond by saying something along the lines of, "we'll just be remaining in the pattern for touch and goes after this, but we'd like to get a stop-and-go on this one if that's all right." That is of no particular interest to the *approach controller*. That is something that you want to tell the *tower* controller *after* the handoff. All the approach controller needs to know is that this will be your last approach – you won't be coming back. (The only way the approach controller can get this kind of information to the tower controller is to pick up the phone and call him.)

So the next time you are asked "how will this approach terminate?" reply with one of two answers:

1. "Full stop."

2. State your next request. I.e., "after this requesting vectors for the VOR/DME runway 7 at Orlando Executive, full stop."

Or . . .

If the tower controller and the approach controller need any additional information to coordinate a special request, such as an opposite-direction approach, provide that information at this time.

Different ATC facilities around the country often have to do things differently depending upon how their airspace is set up, so when in doubt, just ask! A phone call to the local ATC facility that owns the airspace is often very helpful. Most controllers will be more than happy to tell you how they want or need it done at their particular location, based on the special local circumstances. ATC will not operate the same way in Washington, D.C. as they do in Valdosta, Georgia.

Part VII.
Operating at Large and Busy Airports

Some pilots – such as those who previously worked as first officers or military aviators – have had extensive operational experience at large and busy airports. Others – such as those who previously dusted crops, towed gliders, dropped skydivers, flew sightseeing flights or gave flight instruction at small and quiet airstrips – may have had relatively little.

Our purely imaginary and completely hypothetical Part 135 operator, Austin's Air Service, LLC., has several bases and numerous stops at large and busy airports. Some of our routes pass through Atlanta's Hartsfield-Jackson International Airport, for example, which recently surpassed Chicago O'Hare as the world's busiest! It is therefore extremely important to be able to function in this environment. This is no place for amateurs and no place for complacency. The three major hazards to consider are:

1. Loss of separation in the air

2. Runway and taxiway incursions

3. Wake turbulence

Remember that you will be flying a light airplane in a context oriented primarily towards heavy airplanes. Although everyone is, at least in abstract theory, equally important, ATC tends to be prejudiced (by necessity) towards serving the needs of a 300-passenger turbojet rather than the needs of a single-pilot Cessna. Logically, a controller would rather make the Cessna pilot wait five minutes while the Boeing takes off or lands than make the Boeing wait five minutes while the Cessna takes off or lands. If you want to cope and make friends, take my advice: be **READY** and be **FLEXIBLE**.

Whether they want you to fly 360s over a shopping mall while you wait for an arrival slot or shoot the first half of your final approach at 160 knots, be prepared to cheerfully comply and you will be able to operate with a minimum of stress. If you complain or say "unable" on a regular or frequent basis you will quickly acquire a bad reputation and your service will suffer. This is practical reality. If it is a safe and legal clearance – accept it and comply with it. If it is not – advise ATC immediately.

While flying into or out of a major international airport, put yourself in a "high alert" mode. Scan aggressively for traffic, listen attentively on the frequency and obey all directions promptly. Don't be shy about making special requests if they are necessary to stay safe and legal. The controller might make incorrect assumptions about your airplane's capabilities. For example, he may offer you a land and hold short clearance without enough available runway for you to be sure you can come to a complete stop with today's load and temperature. Or he may offer you an intersection takeoff without enough available runway to get airborne and then clear all obstacles with today's load and temperature. Or he may offer you a descent through developing icing conditions when you are flying an airplane that is not ice approved, requiring vectors around and away from the clouds. Or he may give you an altitude change and airspeed change combination which your airplane cannot achieve.

Remember that even when you are flying under VFR if you are in Class B airspace you are under the direct and continuous control of ATC and you must immediately comply with any and all safe and legal clearances issued to you, including all airspeed, altitude and heading assignments. *If you can't comply for some reason, you must advise ATC right away.* You are expected and required to promptly and clearly refuse clearances that you cannot accept.

Carelessness in this area can lead to a loss of separation . . . or worse, a mid-air collision!

Moreover, do whatever is necessary to avoid wake turbulence. Follow the tips and guidelines published in the AIM and presented in the FAA's "Wake Turbulence Avoidance" video, even if it means making a special request with ATC.

Flight crews of scheduled airlines have an excellent procedure – the captain taxis and the first officer handles such things as clearances and checklists. As a single-pilot crew, you don't have that luxury. So you'll have to be extra vigilant if you want to keep yourself (and your career) alive. Do the following:

1. Review the airport diagram carefully and in detail prior to arrival and departure if you are not thoroughly familiar with the field.

2. Even if you are familiar with the field, keep the airport diagram available as you taxi.

3. Read back all instructions completely and carefully.

4. **<u>Write everything down</u>**, especially when the instructions are complex. I find that pilots often resist writing things down, and I honestly don't know why. It just makes sense. There is no reason not to do this. It can save you from an embarrassing or unsafe situation!

5. Listen for amended instructions – especially for sudden commands.

6. Be *absolutely fluent* with all standard airport markings and signs. Pay special attention to the subtle distinctions between similar surface symbology. Unfortunately, many pilots seem to greatly overestimate their knowledge in this subject area.

7. When in doubt – **ASK!**

(Refer to the FAA Advisory Circular 91-73A for much more on this topic.)

As a final reminder, comply PROMPTLY with all controller instructions. You don't necessarily have to move *fast*, but you do have to move **<u>NOW!</u>**

If a controller says, "Marconi zero niner, cleared for takeoff runway seven, straight out departure approved," for example, then by the time she finishes saying the word "runway" your feet should be off the brakes and the power should be smoothly coming up as you begin to roll towards the runway edge line.

If she says, "no delay" or "expedite," then hustle! And if she says, "cleared for IMMEDIATE takeoff" – for goodness sakes, **GO!** And in any case, don't wait until she's done talking, then read the whole thing back, then run your pre-takeoff flow and THEN start to slowly roll towards the runway – if you do that, it could ruin her plan (especially if it was a squeeze play) and she may cancel your clearance. If you need a little extra time to get underway, either request a delay or else refuse the takeoff clearance.

If you are ever given a clearance that confuses you, query immediately. Never just accept a clearance that you don't fully understand, hoping that everything will turn out all right. Use the U-word ("unfamiliar") if the controller seems to incorrectly assume that you have local knowledge. Use the *other* U-word ("unable") if the controller wants you to do something that is beyond your ability or the ability of your aircraft.

FLY SAFELY!