VFR COMMUNICATIONS FOR IDIOTS

A
CRANIUM RECTUM EXTRACTUS
PUBLICATION

INTRODUCTION

The crowded nature of today's aviation environment and the affordability of VHF transceivers for general aviation aircraft have caused the development of two-way radio communication skills to be included in a modern flight instruction curriculum. While radio communication is not required at uncontrolled airports, safety is greatly enhanced by the use of proper radio technique. Moreover, the inclusion of more and more airspace under the positive control of Air Traffic Control (ATC), inside which two-way radio communication is mandatory, has made mastery of radio skills necessary if general aviation aircraft are to be fully utilized.

This article has been written to introduce the primary pilot to current radio communication techniques by using familiar examples and by avoiding confusing technobabble. Please remember that the phraseology and techniques presented here are not carved in stone! Fashions in radio communications have changed in the past, and they will certainly change in the future to satisfy the requirements of an evolving aviation environment. These recommendations should provide a starting point that will allow each pilot to develop an individual style within a framework of efficient communications.

RADIO TECHNIQUE

1. Make sure the radio is audible. Place the radio power switch in the TEST position or turn down the squelch until static can be heard. Turn up the volume to the desired level, then return the poser switch to ON or turn up the squelch until the static is eliminated. Don't miss critical radio calls just because the volume is too low. This is a very common cause of "communication failure."

2. Make sure the microphone jack is completely plugged in! If you are using a push-to-talk switch, check both jacks for security. **This is the most common form of radio failure!** If you hear the air traffic controller say, "Aircraft calling (tower), carrier only, no modulation," this is almost certainly your problem.

   Also, if the aircraft has concealed jacks, such as in the Cessna 152 (with factory wiring), make sure that the headset microphone jack and the hand microphone jack are not switched.

3. If the aircraft you are flying is equipped with an audio panel, make sure you know how to use it. Improper audio panel operation is the second most common form of "radio failure!" If you are unfamiliar with this type of equipment, get some advice before you use it. (See **Appendix A**)

4. Place the microphone close to you lips, perhaps even touching them. If you are using a hand mike, make sure that your finger is not covering the noise-canceling opening on the back or top of the mike. Failure to follow these instructions will cause only unintelligible noise to be transmitted.

5. Listen before you transmit, especially if you have just changed frequencies. Simultaneous transmissions are counter-productive. Make sure the frequency is clear. Also, you may hear exactly what you need to know without transmitting.

6. Think before you transmit. Knowing what you want to say will shorten the transmission, increasing efficiency of communications.

7. Speak clearly. Communication of information requires that the information be received and understood, as well as transmitted.

8. If you don't receive an immediate reply to you transmission, be patient. The air traffic controller or flight service station (FSS) specialist you are calling has likely received your call, and will answer as soon as workload permits.

9. Always use your full aircraft call sign when making the initial contact with a controller of FSS specialist. For subsequent calls, the last three characters of the call sign may be used. The full call sign should always be used, however, when there are two or more aircraft on the frequency with similar call signs (Example: "Cessna Three Three Three Zulu Hotel" and "Cessna Three Three Three Zero Hotel"). The controller will often warn you of this situation.

GROUND STATION TERMINOLOGY

The following examples demonstrate the proper form of address for ground facilities:

Airport Unicom……..…… "Huntsville Unicom"
Common Traffic Advisory Frequency (CTAF)……. "Navasota Traffic"
Airport Control Tower…… "Easterwood Tower"
Airport Ground Control…….…… "Easterwood Ground"
Flight Service Station (FSS)…….. "Montgomery County Radio"
Enroute Flight Advisory Service (EFAS)…….……. "Houston Flight Watch"
Clearance Delivery…….…… "Austin Clearance Delivery"
Air Route Traffic Control Center (ARTCC)……..……..……. "Houston Center"
Radar Approach Control…….…….. "Austin Approach"
Radar Departure Control……..……. "Hobby Departure"

PROCEDURES AT UNCONTROLLED AIRPORTS

Airport Advisories

If an airport advisory is desired when approaching an uncontrolled airport with an attended unicom, the following format should be used:

Example:

"Weiser Unicom, Cessna Niner Niner Two five Quebec, five miles northwest, inbound for landing, airport advisory please."

Notes:

Information obtained from an attended unicom is advisory in nature **only!** It must NEVER be regarded as any form of air traffic control.

Unicom facilities are often not attended. If airport personnel are fueling aircraft, mowing grass, etc., you may not get a reply to your request. Providing airport advisories is not a mandatory duty of airport personnel, and you should not expect or demand it.

If an airport depicted on an aeronautical chart has a Common Traffic Advisory Frequency (CTAF) of 122.9 (also known as Multicom), it does not have and attended unicom. Asking for and airport advisory on this frequency is a waste of time and VHF bandwidth.

Position Reports

When flying in the traffic pattern at an uncontrolled airport (attended or unattended), radio transmissions should have the following format:

Where you are.
Who you are.
What you intend to do.
Where your are (again).

Example:

"Brenham traffic, Cessna One Zero Seven Echo Sierra, left downwind for runway One Six, touch-and-go, at Brenham."

Notes:

It is always best to end the transmission with a repetition of the airport name. The number of unicom frequencies is limited, so you will receive traffic calls from aircraft at nearby airports using the same frequency. The first announcement of location in you transmission often serves only to catch the attention of other pilots monitoring that frequency. The inclusion of the second location call reduces the possibility of confusion.

Just because you don't hear any other aircraft making traffic calls at the airport you are using doesn't mean that aren't there! Two-way radio communication is not required at uncontrolled airports, and it is each pilot's responsibility to maintain visual separation from other aircraft. Remember: Your primary job is to fly your airplane; the least important aspect of that job is talking on the radio!

Always have a current Sectional Aeronautical Chart on board, even when flying to local uncontrolled airports. Double check to confirm that you are transmitting on the proper frequency. If you aren't, you radio calls are an exercise in futility!

Before flying to unfamiliar uncontrolled airports, check sources to determine traffic patterns and runway orientation. This will help you make radio calls for the proper runway without seeing the runway number (which may not be readily visible).

COMMUNICATIONS WITH ATC

When flying into airspace that is under the authority of Air Traffic Control (ATC), two-way radio communication is mandatory unless prior arrangements have been made. When you receive instruction from ATC, you must comply, as long as you compliance does not violate regulations or create an unsafe condition. If you cannot comply with instructions from ATC, advise the controller as soon as it is possible to do so.

When you receive a transmission from ATC you are required to respond. The nature of you responses is essential to the efficient operation of the air traffic control system. Keep your transmissions as brief as possible, but make sure you communicate your understanding of the controller's instructions. It is best to repeat the controller's instructions "in shorthand"; complete enough to assure the controller that you understand, and brief enough to avoid undue congestion on the frequency.

Poor technique:

Tower: "Cessna One Zero Seven Echo Sierra, Easterwood Tower, enter left base, runway one six, report two mile left base."

N107ES: Seven Echo Sierra, roger."

This response indicates that the pilot has received a transmission, but it does nothing to assure the controller that the pilot understood the instructions.

Good technique:

Tower: "Cessna One Zero Seven Echo Sierra, Easterwood Tower, enter right downwind, runway three four, report midfield abeam the tower."

N107ES: Report midfield, right downwind, three four, Cessna One Zero Seven Echo Sierra."

This response contains all the essentials of the original instructions without cluttering up precious frequency space.

GENERAL PROCEDURES: CONTROL TOWERS WITHOUT APPROACH RADAR

Approaching

The initial contact should be made between five and ten miles from the airport, after acquiring the current recorded airport information from the Automatic Terminal Information Service (ATIS) or the Automatic Surface Observation System (ASOS). Your transmission should follow this format:

Who you are calling.
Who you are.
Where you are.
What you are requesting.
Confirmation that you have received the current airport information.

Example:

Cessna N107ES: "Easterwood Tower, Cessna One Zero Seven Echo Sierra, eight miles southwest, inbound for landing with information (Kilo)."

Note:

This is all the information required for the initial contact in this circumstance. Keep it brief; if the controller needs to know your altitude, your aircraft type, your aircraft color, or the outcome of your mother's gall bladder operation, he or she will request further information.

Easterwood Tower: "Cessna One Zero Seven Echo Sierra, Easterwood Tower, enter right downwind, runway one six, report entering right downwind."

Cessna N107ES: "Seven Echo Sierra will report right downwind, one six."

Cessna N107ES: "Easterwood Tower, Seven Echo Sierra, right downwind, one six."

Easterwood Tower: "Cessna Seven Echo Sierra, cleared to land."

Cessna N107ES: "Cleared to land, Seven Echo Sierra."

Note:

If you have been cleared to land, do not perform a touch-and-go! A touch-and-go clearance is actually two clearances: a landing clearance and a takeoff clearance. If you execute a touch-and-go with a landing clearance, you have made a takeoff without a proper clearance, and you are in violation. Naturally, a go-around may be executed at any time without a specific clearance.

Easterwood Tower (on rollout after landing): "Seven Echo Sierra, turn left next taxiway, contact Ground (Control), point seven, leaving the runway."

Note:

Clearance is not required to leave the runway, so don't expect this instruction.

"Point seven" is controller shorthand for 121.70. Most ground control frequencies begin with 121, so you should interpret "point nine" as 121.90. If you don't understand, ask the controller for clarification.

Do not back-taxi on the runway unless the tower controller specifically clears you to do so.

Cessna N107ES: "Left turn, contact Ground, Seven Echo Sierra."

Note:

If you need time to switch to the ground control frequency, do not stop your aircraft until it is clear of the runway and completely across the hold line (See **Appendix B**).

Taxiing on the airport taxiways requires a clearance. Failure to obtain a taxi clearance is a major cause of controller irritation.

Cessna N107ES: "Easterwood Ground, Cessna Seven Echo Sierra, taxi to transient parking."

Easterwood Ground: "Cessna Seven Echo Sierra, taxi to parking."

Cessna N107ES: "Taxi to parking, Seven Echo Sierra."

Departing

The initial contact with Ground Control after engine start should take the following format:

Who you are calling.
Who you are.
Where you are.
What you are requesting.
Your direction of departure.
Confirmation that you have received the current airport information.

Example:

Cessna N107ES (after listening to the current ATIS): "Easterwood Ground: Cessna One Zero Seven Echo Sierra, at line service, taxi for takeoff with (ATIS information) Lima, southwest departure."

Easterwood Ground Control: "Cessna One Zero Seven Echo Sierra, Easterwood Ground, taxi to runway one six."

Cessna N107ES: "Taxi to one six, Seven Echo Sierra."

Cessna N107ES (on tower frequency, when ready for takeoff): "Easterwood Tower, Cessna One Zero Seven Echo Sierra, ready for takeoff."

Easterwood Tower: "Cessna One Zero Seven Echo Sierra, cleared for takeoff, right turn approved."

Cessna N107ES: "Cleared for takeoff, right turn, Seven Echo Sierra."

Note:

Your aircraft must remain completely behind the hold line until you are cleared onto the runway by the tower controller (See **Appendix B**).

The tower transmission "hold short" means: remain clear of the runway, with your aircraft completely behind the hold line.

The tower transmission "Taxi into position and hold" means: taxi onto the runway, stopping in the takeoff position, awaiting a takeoff clearance.

The tower instruction "cleared for immediate takeoff" means: you are cleared for takeoff, provided it can be done with no delay. If you cannot comply, hold short and notify the tower of your intentions.

You are required to monitor the tower frequency and comply with ATC instructions (if any) until you are five statutes mile away from the airport. No contact is required on your part upon leaving the airport traffic area.

GENERAL PROCEDURES: CONTROL TOWERS WITH RADAR

Approaching

The initial contact should be made about ten miles from the airport or at a distance specified on charts (i.e. 20 nautical miles in the case of Class C airspace). The information required by the approach controller will vary, depending on where you are and the radar equipment installed, but the following format should suffice at most facilities:

Who you are calling.
Who you are.
Where you are.
What your altitude is.
What you are requesting.
Confirmation that you have received the current ATIS or ASOS information (if your intention is to land).

Example:

Cessna N9945Q (after listening to ATIS or ASOS): "Austin Approach, Cessna Niner Niner Four Five Quebec, over Elgin at three thousand, inbound for landing with (information) Lima."

Note:

The inclusion of your altitude in this radio call enables the radar approach controller to confirm the accuracy of his/her Mode C altitude readout without an additional radio call.

Whenever possible, identify your position by reference to the established reporting points depicted on your Sectional and Terminal Area charts by an underlined and boldfaced name, accompanied by a flag:

Approach Control: "Cessna Niner Niner Four Five Quebec, Austin Approach, squawk zero four two two, and ident."

Cessna N9945Q: "Squawk zero four two two, and ident, Four Five Quebec."

Note:

Turn the transponder to the standby (SBY) position before changing the transponder code. This procedure eliminates the possibility of inadvertently passing through assigned discrete or emergency codes. After selecting the code, set the switch to the altitude encoding (ALT) position. Press the IDENT button ONLY if requested to do so by the controller.

Approach Control: "Cessna Niner Niner Four Five Quebec, radar contact, two miles southwest of Elgin, altitude indicates three thousand one hundred."

Note:

Altitude discrepancies of less that 200 feet are acceptable. Greater deviations will require further confirmation.

Cessna N9945Q: "Four Five Quebec."

Approach Control: "Cessna Four Five Quebec, traffic, eleven o'clock, opposite direction, altitude indicates three thousand five hundred."

Note:

"Altitude indicates" means that the controller has a Mode C altitude readout on the traffic, but is not in radio contact with that traffic. Its altitude has not been confirmed verbally.

Just because the radar controller does not call possible traffic conflicts to you does not mean they do not exist! VFR traffic advisories are provided on a workload-permitting basis only. If the controller is busy with IFR traffic, there may not be time to call your traffic. Also, the approach control radar may not "skin paint" aircraft that are not transponder-equipped. Don't become complacent when you are in contact with a radar controller. It is still your responsibility as a VFR pilot in command to maintain traffic separation.

Cessna N9945Q: "Four Five Quebec has traffic in sight."

Approach Control: "Cessna Four Five Quebec, maintain visual separation with that traffic and contact Austin Tower, One One Niner Point Seven."

Note:

When being "handed off" to tower by the approach controller, it is usually not necessary to confirm ATIS of ASOS, or to restate your intentions.

Departing:

A pilot departing an airport that has radar services available will probably have to deal with a more complex set of ATC procedures than will be encountered at a non-radar tower. The sequence of communications described here is typical of situations in which VFR aircraft are assigned discrete transponder codes and are worked into a safe and orderly system of departure from the airport along with IFR aircraft.

The first step in departing a radar-equipped airport is to obtain the current ATIS or ASOS information. In addition to the normal information, VFR pilots will be instructed to contact Clearance Delivery prior to taxi. The clearance delivery frequency will normally be provided on the ATIS recording.

Example:

Cessna N107ES (on clearance Delivery frequency after listening to ATIS): "Austin Clearance Delivery, Cessna One Zero Seven Echo Sierra with information Juliet, VFR to College Station, cruising five thousand five hundred."

Note:

The information usually required by Clearance Delivery: status of the flight (IFR or VFR), direction of flight, intended cruising altitude, and confirmation of ATIS information.

Clearance Delivery: "Cessna One Zero Seven Echo Sierra, Austin Clearance, squawk two three one four, departure frequency will be one two zero point niner."

Note:

Clearance will have the format: transponder code and departure frequency. Make sure you write this information down! You will be required to read it back to the controller. Even if you can remember it for the readback, it is very easy to forget it when it is time to use it.

Cessna N107ES: "Squawk two three one four, departure one two zero point niner, Seven Echo Sierra."

Clearance Delivery: "Cessna Seven Echo Sierra, readback correct. Contact Ground, one two one point niner prior to taxi."

Cessna N107ES: "Contact Ground, Seven Echo Sierra."

Cessna N107ES (on Ground Control frequency): "Austin Ground, Cessna One Zero Seven Echo Sierra, at Austin Aero, taxi for takeoff."

Note:

Since ATIS information has been confirmed with Clearance Delivery, further confirmation at this point is usually not required.

Ground Control: "Cessna One Zero Seven Echo Sierra, Austin Ground, taxi to runway one seven."

Cessna N107ES: "Taxi to one seven, Seven Echo Sierra."

Cessna N107ES (on tower frequency when ready for takeoff): "Austin Tower, Cessna One Zero Seven Echo Sierra, ready for takeoff."

Tower: "Cessna One Zero Seven Echo Sierra, turn left, heading zero niner zero, cleared for takeoff."

Cessna N107ES: "Left to zero niner zero, cleared for takeoff, Seven Echo Sierra."

Tower (on climbout): Cessna Seven Echo, contact departure.

Cessna 107ES: "Contact departure, Seven Echo Sierra."

Note:
This instruction is usually issued at a very busy time. If you are working with two communication radios, or one with "flip-flop" frequencies, you should have the departure frequency already set on standby.

Cessna 107ES (on departure frequency): "Austin Departure, Cessna One Zero Seven Echo Sierra, leaving one thousand two hundred."

Departure Control: "Cessna Seven Echo Sierra, proceed on course."

Cessna 107ES: "Proceed on course, Seven Echo Sierra."

Departure control, (upon your leaving the radar coverage area: "Cessna One Zero Seven Echo Sierra, radar service terminated, squawk one two zero zero, frequency change approved."

Cessna 107ES: "Squawk VFR, Seven Echo Sierra."

Note:
You must continue to monitor the departure frequency until your are released by this clearance.
If you require further flight following services, request it at this time, and the controller will usually provide you with the appropriate enroute ATC frequency.

COMMUNICATIONS WITH FLIGHT SERVICE STATIONS

Services provided by Flight Service Stations include dissemination of weather information; filing, opening, and closing of flight plans; and location and reorientation of lost pilots. Frequencies of Flight Service Stations are found on Sectional Aeronautical Charts above the frequency boxes of VOR facilities. Frequencies at the Flight Service Stations themselves are not usually marked on the charts are obviously (?) 122.20.

Opening a Flight Plan

Although a flight plan is filed with the Flight Service Station (FSS) over the telephone, it is not activated, or opened, until radio contact is made once the flight is in progress. At that time the Flight Service Station Specialist retrieves the flight plan from the computer and enters the actual time of departure.

Example:

Cessna N66464: "Montgomery County Radio, Cessna Six Six Four Six Four, on one two two point six five."

Note:

The Flight Service Station Specialist monitors several frequencies, so it is good practice to mention the frequency you are using.

After making this call, be patient and allow the Specialist time to respond. He or she may be handling an aircraft on another frequency that you can't hear.

Montgomery County Radio: "Cessna Six Six Four Six Four, Montgomery County Radio, go ahead."

Cessna N66464: "Cessna Six Six Four Six Four, I would like to open my VFR flight plan at one seven two two zulu."

Montgomery County Radio: "Roger, I will activate your flight plan at two two past the hour. College Station altimeter is three zero zero five."

Closing a Flight Plan:

A flight plan may be closed by contacting the FSS on the radio while in the air, or by telephone once you are on the ground. If you are going to do this while still airborne, it is good practice to wait until you have the destination airport in sight.

Example:

Cessna 66464: "Montgomery County Radio, Cessna Six Six Four Six Four, on one two two point six five."

Montgomery County Radio: "Cessna Six Six Four Six Four, Montgomery County Radio, go ahead."

Cessna N66464: "Cessna Six Six Four Six Four, I have Navasota in sight. I would like to close my VFR flight plan at this time."

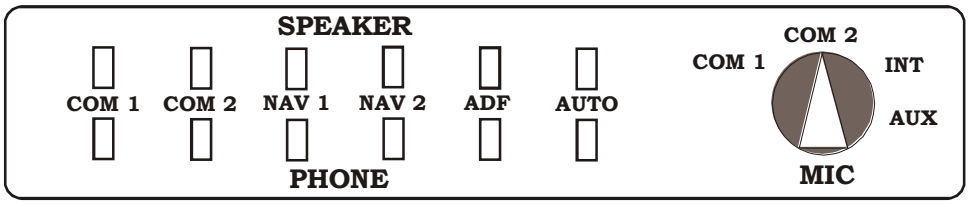
Montgomery County Radio: "Roger, I show your flight plan closed at one niner two five zulu."

APPENDIX A

Audio Panels:

Many modern aircraft are equipped with avionics systems that are more elaborate the the single nav-com found in many smaller training aircraft. Although communications management can be efficiently accomplished by means of an audio panel, misuse of this piece of equipment is a common cause of communication failure. Unfortunately, instructions for the use of the audio panel are seldom available to the renter, and a checkout by an instructor rarely covers the proper use of this equipment adequately.

Most audio panels are similar in configuration to the example below:

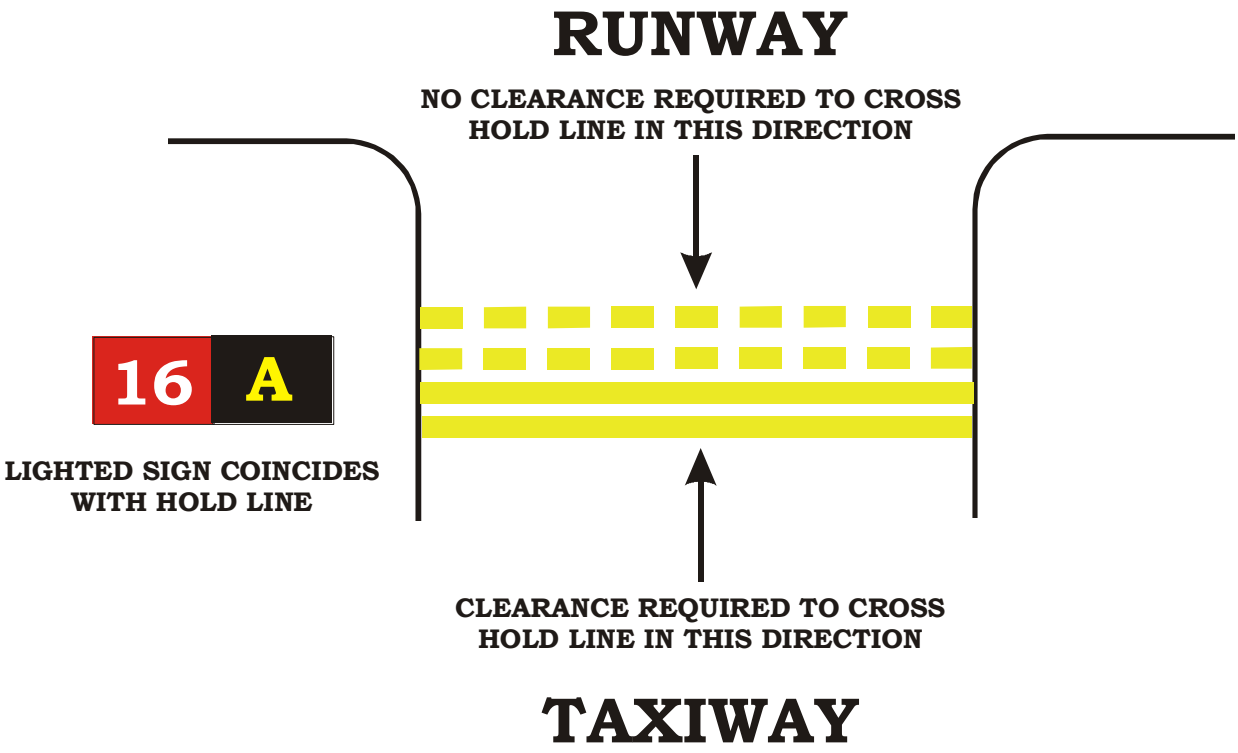


Transmitter selection is controlled by the MIC switch on the right. Reception is controlled by the buttons (or switches) to the left. The top row of buttons (or switch positions) direct audio output to the cabin speaker, while the bottom positions direct output to the headphone jacks.

The AUTO function shifts reception AND transmission authority to the MIC switch. The safest and simplest way to use the audio panel is to engage the AUTO function, leave all the other buttons or switches in the neutral position, and select COM 1 or COM 2 with the MIC switch.

APPENDIX B

Hold Lines:



All aircraft on the runway side of the hold line are under the authority of the tower controller. Before crossing the hold line onto the active runway, pilots of taxiing aircraft must receive a clearance to do so from the tower controller.

Pilots of aircraft on the taxiway side of the hold line must comply with clearances and instructions issued by the ground controller.

When exiting the active runway, pilots must taxi across the hold line and then contact ground control or monitor frequencies as directed by ATC. To be considered clear of the active runway, all parts of the aircraft must be on the taxiway side of the hold line. No other aircraft may be cleared to take off or land until the exiting aircraft has crossed the hold line.

Current standardized airport lighting format requires lighted runway signs to coincide in location with the hold lines, decreasing the possibility of runway incursions in darkness, when hold lines painted on the surface would be invisible to the pilot. In the example above, the hold line is on Taxiway Alpha at Runway One Six.

APPENDIX C

GLOSSARY

ASOS: Automatic Surface Observation System.

ATIS: Automatic Terminal Information Service. This is continuous-loop tape that plays over a discrete frequency and provides current weather conditions and notices to airmen at a tower-controlled field. You should listen to this information and be familiar with it before initial contact with the controller. The ATIS information is updated every hour (on the hour), more frequently if there is a significant change in weather or airport conditions before the regularly scheduled hourly update. Each edition of the ATIS information is identified with successive letters of the phonetic alphabet (see APPENDIX D). Use the appropriate letter to inform the controller that you have the current ATIS information.

Closed traffic: Instruction issued for practicing touch-and-go landings at a tower-controlled field. Closed traffic is a direction for an aircraft to remain in the traffic pattern.
Example: "Warrior One One Seven, after completion of touch-and-go, mike right closed traffic."

Continue downwind: Instruction issued to an aircraft in the traffic pattern to provide adequate spacing between arriving aircraft. Fly downwind, and wait for further instructions.
Example: "Cessna One Zero Seven Echo Sierra, continue downwind. I'll call your turn to base."

Fly runway heading: After takeoff, continue climbout without turning to avoid a traffic conflict. Turning instructions will follow, after the conflict had been resolved.
Example: "Cessna Six Two Zero Niner Quebec, cleared for takeoff, fly runway heading."

Hold position: Stop where you are immediately.

Hold short: Taxi clearance is limited to a specific point on a taxiway.
Example: "Cessna Seven Echo Sierra, taxi to runway one six, hold short of runway two two.
Note: Every hold short clearance must be read back.

Ident: Press and release the IDENT button on you transponder. This causes your radar return to be highlighted, allowing the radar controller to quickly identify you.

Immediate takeoff: Takeoff clearance issued only if the pilot is prepared to taxi onto the runway and depart without delay. If you are not prepared to depart immediately, inform the controller, and the clearance will be cancelled.
Example: "Cessna Six Six Four Six Four, cleared for immediate takeoff, landing traffic two mile final."

Land and hold short: landing clearance issued when two different runways ar in use and a possible conflict exists.
Example: "Cessna Six Six Four Six Four, cleared to land runway one six, hold short of runway two eight."
Note: If you don't think you can comply with the Land and Hold Short instruction, you should decline to accept it, and the controller will issue different instructions.
A student pilot is not allowed to accept a Land and Hold Short clearance.

Line up and wait: Clearance to taxi onto the runway centerline and stop, awaiting a takeoff clearance.
Example: "Warrior Two November Alpha, Runway One Four, line up and wait."

Low approach (only): Clearance to perform a go-around (often received when landing closely behind a heavy aircraft. *Do not land!*
Example: "Cessna One Zero Seven Echo Sierra, cleared for low approach only."

Monitor frequency: Listen to the designated frequency; no transmission by the pilot is required.
Example: "Cessna One Zero Seven Echo Sierra, taxi to parking, monitor Ground."

No delay: Execute the assigned clearance or instruction with all reasonable speed consistent with safety in order to avoid a traffic conflict. If you are not prepared to take action immediately, inform ATC and do not accept the clearance. You will be reissued the clearance or instruction later, after the traffic conflict is resolved.
Example: "Cessna One Two Six Four Golf, cleared for takeoff, no delay, traffic on a one-mile final."
Example: "Seneca One Niner Niner Juliet Sierra, cross Runway One Two Left without delay, traffic on a half-mile final."

Option: Clearance authorizing you to perform a touch-and-go, a landing (full stop), or a go-around.
Example: "Tomahawk Niner Six Echo, cleared for the option."

Say again: Please repeat.
Example: "Cessna Seven Echo Sierra, say again request."

Say altitude: Report your current altitude.

Say intentions: Tell the controller what you want to do.

Say position: Tell the controller where you are.

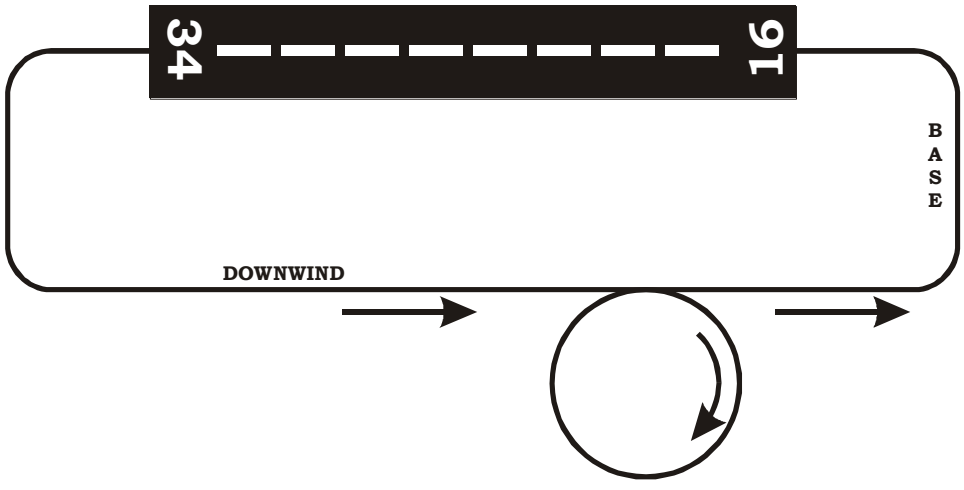
Short approach: Turn base early and expedite your landing.
Example: "Tomahawk Niner Six Echo, make short approach."
Note: If you don't think this procedure can be safely executed, or you don't feel prepared to modify your approach to this extent, notify the tower controller and you will be issued alternate instructions.

Speed and altitude permitting……: Instruction usually issued to an aircraft immediately after takeoff in order to clear the departure path for a faster aircraft departing immediately from the same runway. As always, your compliance with this instruction depends on your ability to comply while maintaining safe operational conditions.
Example: "Mooney Seven Four Three Three Victor, speed and altitude permitting, begin your left turnout."

Squawk: Set your transponder code.
Example: "Cessna Six Six Four Six Four, squawk zero two five four."

Squawk VFR: Set transponder code to 1200.

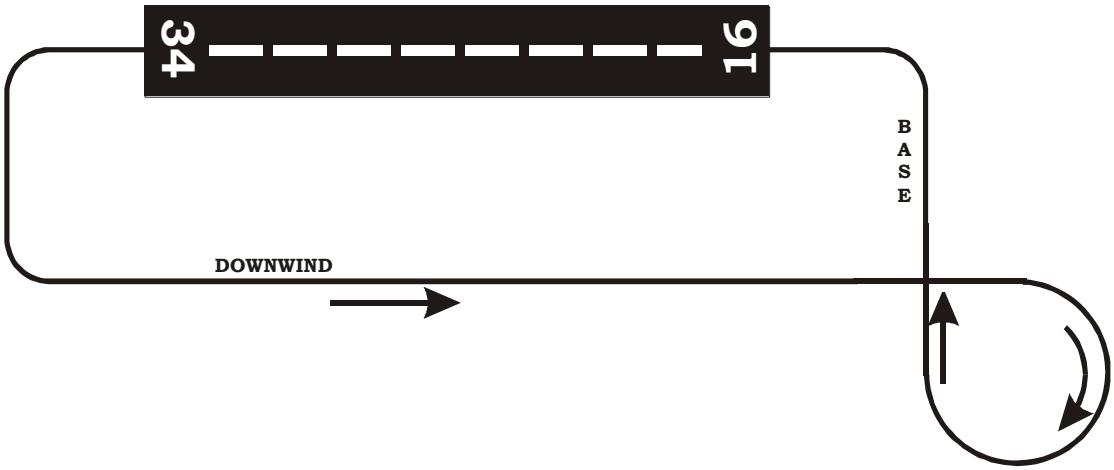
Three-sixty: Execute a 360-degree turn and re-enter the traffic pattern downwind to provide traffic spacing.
Example: "Cessna Four Six Four, make a right three-sixty for spacing."
Required action:



Two-seventy: Execute a 270-degree turn at the end of the downwind leg, and re-enter the traffic pattern on base to provide for traffic spacing.

Example: "Cessna Four Six Four, make a right two-seventy to base for spacing."

Required action:



When able: Comply with the accompanying ATC instruction as soon as it can be safely accomplished.

Example: Tower: "Cessna Six Three Six Niner Hotel, pass behind the Cherokee turning a close-in downwind, on course when able."

APPENDIX D

Phonetic Alphabet

Alpha	**N**ovember
Bravo	**O**scar
Charlie	**P**apa
Delta	**Q**uebec
Echo	**R**omeo
Foxtrot	**S**ierra
Golf	**T**ango
Hotel	**U**niform
India	**V**ictor
Juliet	**W**hiskey
Kilo	**X**ray
Lima	**Y**ankee
Mike	**Z**ulu