Radio Work terminology!

GROUND facilities 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…………………………………….......……… "Alliance Tower"
Airport Ground Control……………………………………….......…… "Denton 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"

Position Reports When flying in the traffic pattern at an uncontrolled airport , radio transmissions should have the following format:
Where (airport) you are.
Who you are.
What you intend to do.
Where (airport) your are (again).
Example:
"Northwest regional traffic, Cessna One Zero Seven Echo Sierra, left downwind for runway One Six, touch-and-go, at Northwest regional."

Other Position reports : 10 miles out: " Bridgeport traffic Cessna One Zero Seven Echo Sierra 10 miles east inbound, Bridgeport." can also name a obvious landmark like a town, lake, powerplant etc for indicating direction flying from.
5 miles out: " Decatur traffic Cessna One Zero Seven Echo Sierra 5 miles east(or landmarks), (can add in crossing over top for downwind/wind check or entering downwind/base leg/final) Decatur.
be prepared if other traffic is entering or in the pattern also non standard questions may get asked and answered like where on the downwind located, or if left or right pattern etc. it is uncontrolled so focus on the information not terminology, but always fly the plane first!

ATC
When you receive a transmission from ATC you are required to respond. The nature of your 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. If in the event your unable to respond and comply due to an unexpected event in the aircraft (pax panicing, a fault indication light, unexpected changed in engine power, etc) you can say standby or wait one. This gives a clue something is up but they will be expecting info soon as capable.

Poor technique:

Tower: "Cessna One Zero Seven Echo Sierra, Alliance Tower, enter left base, runway one six left, 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, Alliance Tower, enter right downwind, runway three four right, report midfield."

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

Approaching The initial contact should be made between five and ten miles from the airport (before entering airspace), 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.

Example: Cessna N107ES: "Alliance 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, mothers maiden name, he or she will request further information. If you didn't get the information code, and they ask you can say was unable or no and they will give you the shorthand version.

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

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

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

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

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

Note: If practicing touch n goes, the tower may say "cleared for the Option", or possibly "cleared for stop and go and I'll call your go". Repeat what you have been told and clarify as required.

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 (which might occur after a touch that bounced hard and are in fact flying again)

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): "Alliance Ground: Cessna One Zero Seven Echo Sierra, at line service (FBO etc), taxi for takeoff with (ATIS information) Lima, southwest departure."

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

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

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

Alliance 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

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. Tower may say "frequency changed approved prior to leaving the airspace, which you answer with "frequency changed approved your aircraft number and perhaps even a "good day".

GLOSSARY

ABEAM—An aircraft is "abeam" a fix, point, or object when that fix, point, or object is approximately 90 degrees to the right or left of the aircraft track. Abeam indicates a general position rather than a precise point.

ACKNOWLEDGE—Let me know that you have received my message.

AFFIRMATIVE—Yes.

BLOCKED—Phraseology used to indicate that a radio transmission has been distorted or interrupted due to multiple simultaneous radio transmissions.

CLEARED FOR TAKEOFF—ATC authorization for an aircraft to depart.

CLEARED FOR THE OPTION—ATC authorization for an aircraft to make a touch and go, low approach, missed approach, stop and go, or full-stop landing at the discretion of the pilot. It is normally used in training so that an instructor can evaluate a student's performance under changing situations.

CLEARED TO LAND—ATC authorization for an aircraft to land. It is predicated on known traffic and known physical airport conditions.

CLOSED TRAFFIC—Successive operations involving takeoffs and landings [touch-and-goes] or low approaches where the aircraft does not exit the traffic pattern.

EXPEDITE—Used by ATC when prompt compliance is required to avoid the development of an imminent situation.

FLY HEADING (Degrees)—Informs the pilot of the heading he should fly. The pilot may have to turn to, or continue on, a specific compass direction in order to comply with the instructions. The pilot is expected to turn in the shorter direction to the heading unless otherwise instructed by ATC.

FUEL REMAINING—A phrase used by either pilots or controllers when relating to the fuel remaining on board until actual fuel exhaustion. When transmitting such information in response to either a controller question or pilot initiated cautionary advisory to air traffic control, pilots will state the APPROXIMATE NUMBER OF MINUTES the flight can continue with the fuel remaining. All reserve fuel SHOULD BE INCLUDED in the time stated, as should an allowance for established fuel gauge system error.

GO AROUND—Instructions for a pilot to abandon his approach to landing. Additional instructions may follow. Unless otherwise advised by ATC, a VFR aircraft or an aircraft conducting visual approach should overfly the runway while climbing to traffic pattern altitude and enter the traffic pattern via the crosswind leg. A pilot on an IFR flight plan making an instrument approach should execute the published missed approach procedure or proceed as instructed by ATC; e.g., "Go around" (additional instructions if required).

HAVE NUMBERS—Used by pilots to inform ATC that they have received runway, wind, and altimeter information only. Not always considered official terminology, but is used frequently.

HOW DO YOU HEAR ME?—A question relating to the quality of the transmission or to determine how well the transmission is being received.

IDENT—A request for a pilot to activate the aircraft transponder identification feature IDENT button. This will help the controller to confirm an aircraft identity or to identify an aircraft. Do not confuse this with squawk, which means to tune the transponder code or transponder operating mode, such as Mode C, altitude reporting, a controller gives you.

IMMEDIATELY—Used by ATC when such action compliance is required to avoid an imminent situation.

MAINTAIN—Concerning altitude/flight level, the term means to remain at the altitude/flight level specified. The phrase "climb and" or "descend and" normally precedes "maintain" and the altitude assignment; e.g., "descend and maintain 5,000." Concerning other ATC instructions, the term is used in its literal sense; e.g., maintain VFR.

MAKE SHORT APPROACH—Used by ATC to inform a pilot to alter his traffic pattern so as to make a close/short final approach.

MAYDAY—The international radio telephony distress signal. When repeated three times, it indicates imminent and grave danger and that immediate assistance is requested.

MINIMUM FUEL—Indicates that an aircraft's fuel supply has reached a state where, upon reaching the destination, it can accept little or no delay. This is not an emergency situation but merely indicates an emergency situation is possible should any undue delay occur.

NEGATIVE—"No," or "permission not granted," or "that is not correct."

NEGATIVE CONTACT—Used by pilots to inform ATC that the previously issued traffic is not in sight. It may be followed by the pilot's request for the controller to provide assistance in avoiding the traffic. Used by pilots to inform ATC they were unable to contact ATC on a particular frequency. Also often used/heard is "looking for traffic".

RADAR CONTACT—Used by ATC to inform an aircraft that it is identified on the radar display and radar flight following will be provided until radar identification is terminated.

RADAR SERVICE TERMINATED—Used by ATC to inform a pilot that he will no longer be provided any of the services that could be received while in radar contact. Radar service is automatically terminated, and the pilot is not advised in the following cases: 1. An aircraft cancels its IFR flight plan, except within Class B airspace, Class C airspace, a TRSA, or where Basic Radar service is provided. 2. An aircraft conducting an instrument, visual, or contact approach has landed or has been instructed to change to advisory frequency. 3. An arriving VFR aircraft, receiving radar service to a tower controlled airport within Class B airspace, Class C airspace, a TRSA, or where sequencing service is provided, has landed; or to all other airports, is instructed to change to tower or advisory frequency. 4. An aircraft completes a radar approach.

READ BACK—Repeat my message back to me.

REPORT—Used to instruct pilots to advise ATC of specified information; e.g., "Report passing Hamilton VOR."

SAY AGAIN—Used to request a repeat of the last transmission. Usually specifies transmission or portion thereof not understood or received; e.g., "Say again all after ABRAM VOR."

SAY ALTITUDE—Used by ATC to ascertain an aircraft's specific altitude/flight level. When the aircraft is climbing or descending, the pilot should state the indicated altitude rounded to the nearest 100 feet.

SAY HEADING—Used by ATC to request an aircraft heading. The pilot should state the actual heading of the aircraft.

SPEAK SLOWER—Used in verbal communications as a request to reduce speech rate.

SQUAWK (Mode, Code, Function)—Activate specific modes/ codes/functions on the aircraft transponder, e.g., "Squawk two-one-zero-five." Squawk does not mean pilot should press the transponder's IDENT button.

STAND BY—Means the controller or pilot must pause for a few seconds, usually to attend to other duties of a higher priority. Also means to wait as in "stand by for clearance." The caller should reestablish contact if a delay is lengthy. "Stand by" is not an approval or denial.

TAXI INTO POSITION AND HOLD—Used by ATC to inform a pilot to taxi onto the departure runway in takeoff position and hold. It is not authorization for takeoff. It is used when takeoff clearance cannot immediately be issued because of traffic or other reasons.

THAT IS CORRECT—The understanding you have is right.

TRAFFIC—A term used by ATC to refer to one or more aircraft.

TRAFFIC IN SIGHT—Used by pilots to inform a controller that previously issued traffic is in sight.

UNABLE—Indicates inability to comply with a specific instruction, request, or clearance.

VERIFY—Request confirmation of information; e.g., "verify assigned altitude."

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.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. <u>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.</u>
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." (you respond repeating code back)
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."
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."