

The following pages were excerpted from our VFR Communications Manual.

VFR Communications

A Pilot-Friendly[®] Manual



Master VFR Radio Communications with this Simple Guide

Request Taxi to Runway (Class D)

TIP (1) PILOT Palomar Ground, Cessna Two Three Six Taxiways are named by letter: A, B, C, etc. When Papa Whiskey. At Magellan Aviation taxiways are parallel to runways, the short with Information November. VFR connecting sections are called intersections and, eastbound. usually, are numbered A1, A2, A3, and so on. So this taxi could also be assigned as, "... Runway (2) GROUND CONTROLLER Two Four at Alpha One, taxi via Alpha." Cessna Two Three Six Papa Whiskey, Palomar Ground. Runway Two Four, taxi via Alpha. (3) PILOT Runway Two Four, taxi via Alpha. Cessna Two Three Six Papa Whiskey. Mc Clellan-Palomar Airport (KCRQ) Carlsbad, CA N_{2} Ground 121.8 A.3 73 &3 Be sure to state both your location on the air-

To taxi from the ramp to the runway at a towered airport, (across the "movement area"—see "Non-Movement Areas, Movement Areas, and Runways" on page 13), you need to receive a taxi clearance from the Ground controller. First listen to the current ATIS broadcast (see page 5). Then call Ground with your request, mentioning the phonetic alphabet code of the ATIS you heard. The format is:

[Airport name] Ground, [Full call sign], [Location on the airport] with Information [Current ATIS letter] VFR [Destination or direction of flight]. [Special requests]. Be sure to state both your location on the airport and your destination or direction of flight. This makes it easy for the controller to quickly plan how to get you from your current location to the active runway that's most aligned with where you're going. If you don't know what locals call the area where you're parked, give the best (short) description you can.

Add any special requests to the end of your transmission. Examples include requesting a different runway than most aircraft are using, or requesting an intersection departure because you don't need the whole runway (see page 22).

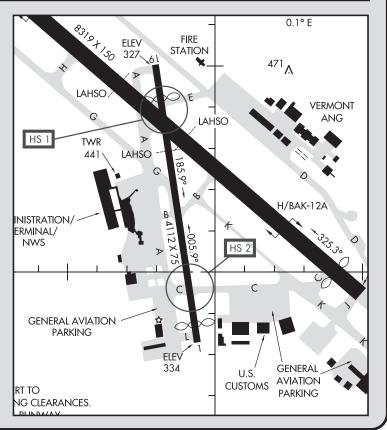
The simplest response from Ground will be instructions to taxi to your departure runway via taxiways, without crossing any runways, taxiing on any runways, or having to hold anywhere along the way.

WATCH OUT FOR RUNWAY HOTSPOTS

Certain airport designs just lead to trouble, and by "trouble" we mean runway incursions, which is FAA speak for taxiing onto a runway without permission. Taxiways that cross narrow runways or runways that meet at odd angles are common culprits. Runways with land-and-hold-short operations (LAHSO) can also cause problems.

In an effort to curb these runway incursions, the FAA collects reports of pilots crossing into places where they weren't cleared and look for fixes. That might be better signage, repainting of hold-short markings, or changes in airport procedures.

They also label problem areas as "hot spots" on airport diagrams. These are marked in brown on runway charts with "HS" with a number. Note where these hot spots are in relation to your taxi route. If other pilots missed the memo on where to stop, so might you.



HOW TO ADDRESS A CONTROLLER

Radio calls at non-towered airports fall into one of two categories: Either you're speaking on CTAF, "[Airport name] traffic ..." or you're speaking to UNICOM, "[Airport name] Unicom ..."

With controllers, there are more options. The key to addressing a controller is to use the name of the job he or she is performing at that moment.

Tower. The tower controller controls operations inside the airport's Class D airspace. That's ideally a cylinder around the airport with a 4 NM radius and extending to 2500 feet AGL, however, local variations are probably more the rule than the exception. Tower also controls all runway operations, and might control some taxiway sections. The person speaking is usually in a control tower with a view of the airport. That controller answers to "[Airport name] Tower."

Ground. The ground controller owns most or all of the taxiways and other movement areas that aren't runways (see "Non-Movement Areas, Movement Areas, and Runways" on page 13). Ground issues taxi instructions, including any airport personnel in trucks you see driving around the movement area. At most Class D airports, the ground controller also delivers IFR clearances to IFR departures. The actual person is usually in the control tower, sipping coffee next to the tower controller. The ground controller answers to "[Airport name] Ground."

At quiet airports, Tower and Ground are often the same person. Don't let that bother you. When you're talking to someone in their role as Ground, address them as Ground. When you're talking to them in their role as Tower, call them Tower. Usually, these two roles are being conducted on separate frequencies, so it's pretty easy. Just don't be surprised if you hear the same voice in both roles.

Some other roles include **Clearance**, **Approach**, **Departure**, and **Center**. These roles are discussed elsewhere in this book.

PHRASES CONTROLLERS USE WHEN THINGS DON'T GO WELL

There are probably many phrases controllers utter when things don't go as expected that we pilots never hear (and we couldn't print in this book). However, there are certain stock phrases that have specific meanings you should know.

"Say again." This is self-explanatory. Whatever was just said went in one headset earcup and out the other. This is usually combined with as much identifying information as the controller has, such as "Aircraft calling ready for taxi, say again?" This is an invitation for you to repeat your entire transmission.

"Say call sign only." Because aviation communications follow a basic script, the controller can often figure out what you said even if he or she missed a few bits. Your call sign, however, is essentially a random string of characters. In this case, you may hear something like, "Aircraft at Magellan calling for taxi, say call sign only." The correct reply would be, "Cessna Two Three Six Papa Whiskey," and nothing else.

"Blocked." This is similar to "say again," except it includes the reason: Two people transmitted at once. Used in context it might be, "Cessna calling Ground, you were blocked." That's an invitation for the Cessna to "say again"—and the other aircraft calling to stay silent for the moment.

"Standby." This is controller-speak for "Don't call me; I'll call you." It could sound like, "Aircraft

calling Ground, standby" or "Cessna Six Papa Whiskey, standby." Either way, just wait patiently for the the controller to call you back. The magic words are, "Say again request" or "Go ahead," as in, "Cessna Six Papa Whiskey, sorry for the delay. Say again your request." Now, transmit your entire request again.

"On the land line." Someday you'll transmit on a seemingly quiet frequency and a controller will ask you to repeat a request because he or she was "on the land line." Controllers coordinate between themselves a lot via internal digital voice connections that have replaced real phones. We pilots can't hear these.. Make your request again.

"Unable." It's the phrase pilots would rather not hear, but whatever request you just made ... it ain't gonna happen. At least, not the way you specifically requested it. View "Unable" as an invitation to negotiate. Sometimes it works out.

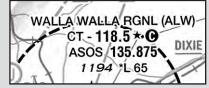
Remember that you can use terms like "say again," "standby," "blocked," and even "unable," if the situation warrants it. (However, saying you missed a radio call because you were on the phone probably won't go over well.) Remember that controllers can speak plain English. If they say something you don't understand, ask for clarification.

You can also find a fairly complete listing of all the standard aviation radio phrases in the back of the AIM titled, "Pilot/Controller Glossary."

TOWER AFTER HOURS, AND ON FREQUENCIES YOU CAN'T USE

A frequency gotcha with towered airports is it's hard to talk to Tower and Ground controllers after

they go home for the night. (Their cellphone numbers are rarely published.)



A star beside the CT (control tower) frequency means a part-time frequency. After hours, the towered airport becomes a non-towered airport where all pilots announce their positions and intentions. That's why just after the star, there's the C inside a circle, signifying it's also the CTAF.

To see when the tower is open, check the Chart Supplement, or your favorite airport website or app. If the tower is closed when you arrive (or depart), you use the radio calls for a non-towered airport, because that's what the airport is now.

TOWER 118.5 (1400–0230Z‡) GND CON 121.6 AIRSPACE: CLASS D svc 1400–0230Z‡ other times CLASS E. RADIO AIDS TO NAVIGATION: NOTAM FILE ALW.

Request Taxi to Runway (When Runway Crossing is Assigned)

TAThen a taxi route assigned by Ground doesn't cross any runways, the consequences of taxiing where you shouldn't are rarely more serious than getting lost. When your taxi route crosses a runway where aircraft could be taking off or landing, the consequences are much more serious.

That's why you must be specifically told that you may cross a runway on your taxi route. It used to be that a taxi route crossing a runway implied clearance to cross that runway. Today, the crossing clearance

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must be specifically stated-and you must read it back. If your route will cross two runways, the controller will only issue one runway crossing at a time. As long as you read back the runway you're crossing, you can omit the specified taxiway or intersection.

Even though you are cleared across a runway, it's a good practice is to check for aircraft as you approach. There's no need to stop before crossing, and no need to tell the controller you're crossing if you've already been cleared across.

Beverly Regional Airport (KBVY) Beverly, MA Ground 121.6

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\bigcirc PILOT

Beverly Ground, Cessna Two Three Six Papa Whiskey. At Magellan Aviation with Information Zulu, VFR to Nashua,

(2) GROUND CONTROLLER Cessna Two Three Six Papa Whiskey, Beverly Ground. Runway Nine, taxi via Papa, Alpha, Foxtrot, Delta. Cross Runway 34 at Papa.

(3) PILOT

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Runway Nine via Papa, Alpha, Foxtrot, Delta. Cross Runway 34. Cessna Two Three Six Papa Whiskey.

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Request Taxi to a Runway (When Hold Short is Assigned)

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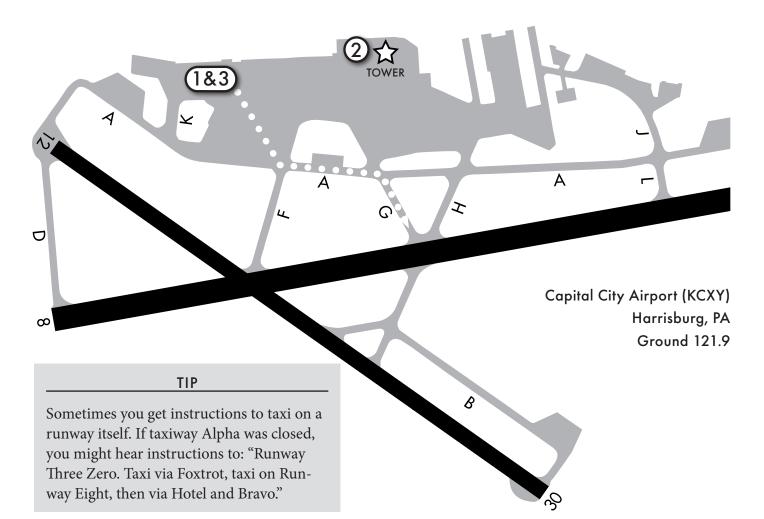
Capital City Ground, Cessna Two Three Six Papa Whiskey. At Skyport Aviation, with Information Yankee, VFR to Morristown.

(2) GROUND CONTROLLER Cessna Two Three Six Papa Whiskey, Capital City Ground. Runway Three Zero, taxi via Alpha, Golf, Hotel, Bravo. Hold Short of Runway Eight at Golf.

(3) PILOT

Runway Three Zero via Alpha, Golf, Hotel, Bravo. Hold short of Runway Eight at Golf. Cessna Two Three Six Papa Whiskey. Multiple runways add a potential twist to Ground's taxi instructions, because the best route might require crossing a runway. If that happens, Ground first assigns your departure runway, and gives you taxi instructions to it. Next, he or she will either clear you to cross the intervening runway (see page 17), or tell you to hold short of it.

If the controller had said to "cross Runway Eight" in call ②, then you could taxi right across Runway Eight without stopping (although you should still double-check for landing or departing aircraft). Never cross a runway unless ATC gives you explicit instructions to do so.



In this case, though, you were instructed to hold short, so you must read back the hold short instruction and stop before the runway hold short lines (see "Non-Movement Areas, Movement Areas, and Runways" on page 13).

There's no need to say anything while holding short. The ground controller will clear you across, when ready (4). Often this happens before you even come to a stop.

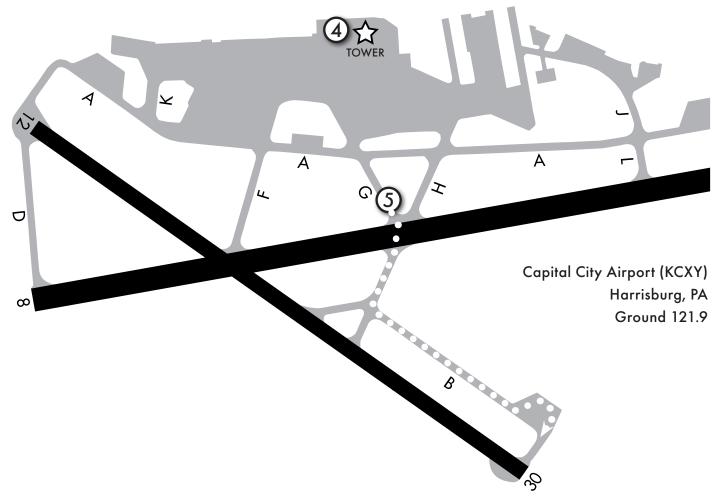
GROUND CONTROLLER Cessna Six Papa Whiskey, cross Runway

Eight at Golf.

Cross Runway Eight at Golf. Cessna Six Papa Whiskey.

TIP

When first contacting any new controller (Ground, Tower, etc.), use your complete call sign. If the controller abbreviates your call sign in his or her response, that's your permission to use the shortened version.



Request Taxi to Runway (With Hold for Other Aircraft)

1) GROUND CONTROLLER

King Air Four Three X-Ray Sierra, taxi to North Atlantic Air via Foxtrot, Alpha. The Cessna will hold for you.

(2) KING AIR PILOT

Taxi to parking via Foxtrot, Alpha. Cessna will hold for us. King Air Four Three X-Ray Sierra.

(3) GROUND CONTROLLER Cessna Six Papa Whiskey, hold short of Foxtrot for the King Air.

(4) PILOT

Hold short of Foxtrot for the King Air. Cessna Six Papa Whiskey.

TIP

Another term you'll hear is "give way." If you were already taxiing down Foxtrot and the King Air was waiting south of Delta, Ground might have told the King Air, "Give way to the Cessna." The King Air would have waited until you turned on Delta before continuing.

Beverly Regional Airport (KBVY) Beverly, MA Ground 121.6

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Once the King Air has turned onto Alpha:

(5) GROUND CONTROLLER Cessna Six Papa Whiskey, continue to Runway Niner via Foxtrot and Delta.

(6) PILOT

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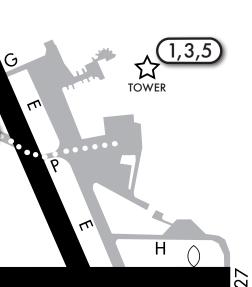
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Continue to Runway Niner via Foxtrot, Delta. Cessna Six Papa Whiskey.

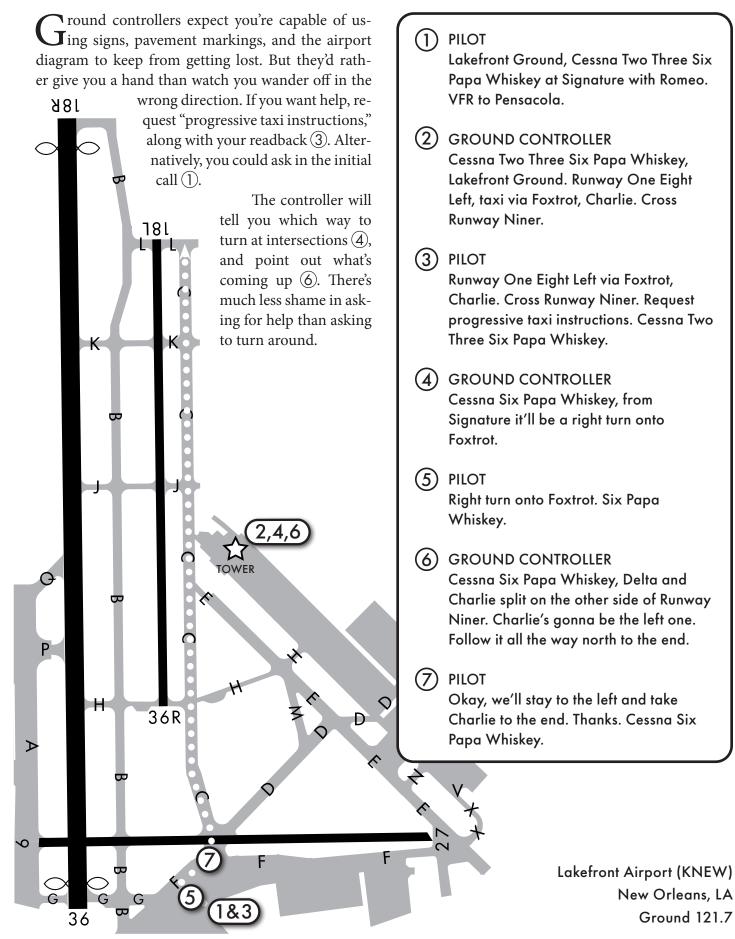
Taxiing at a non-towered airport sometimes means playing a game of chicken with other taxiing aircraft. At a towered airport, the Ground controller should see any upcoming conflicts ahead of time, and head them off for you.

Suppose your taxi instructions to Runway 9 were via Papa, Alpha, Foxtrot, Delta. While you're halfway along Alpha, a King Air lands on Runway 9 and turns off the runway at Foxtrot. His taxi up Foxtrot and Alpha to the ramp might conflict with yours.

With (1) and (3) the ground controller resolves the conflict. Your readback occurs while taxiing, but you don't stop until short of Foxtrot. Once the King Air has passed, the controller will clear you to continue (5), which you read back (6).



Request Progressive Taxi Instructions



Request Taxi for Intersection Takeoff

Note: Phoenix Sky Harbor is a Class B airport, so the following is after talking to Clearance Delivery (see page 24).

(1) PILOT

Phoenix Ground, Cessna Two Three Six Papa Whiskey, at Cutter Aviation with Information Golf. Request intersection departure at Hotel Seven.

(2) GROUND CONTROLLER

Cessna Two Three Six Papa Whiskey, Phoenix Ground. Runway Two Five Left at Hotel Seven. Taxi via Hotel.

(3) PILOT

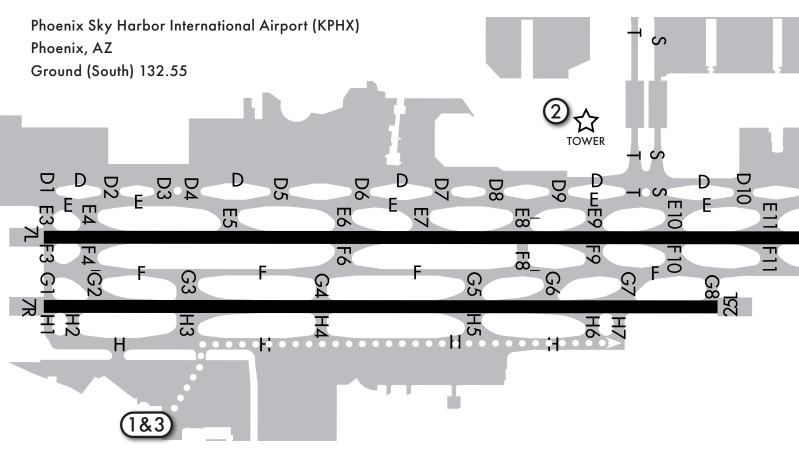
Runway Two Five Left at Hotel Seven, taxi via Hotel. Cessna Two Three Six Papa Whiskey. Thanks. At a towered airport, ATC expects you want all the available runway for takeoff. If that would mean miles of taxiing and you don't need all the runway, you can ask for an "intersection departure."

At Phoenix Sky Harbor, GA aircraft parked on the southwest ramp will often be assigned Runway 25L. However, taxiway Hotel doesn't extend that far, so you have to cross Runway 25L at H7 and then taxi on Foxtrot to G8 to use all 7800 feet of the runway. It's more efficient to depart from the H7 intersection (assuming the remaining 6600 feet of runway is enough).

The controller may have reasons for denying your request, but there's no shame in asking.

TIP

Ground may offer, or assign, an intersection takeoff without you asking. You can decline the offer by simply saying, "Request full length." You can do that on your initial call if you don't even want them to offer an intersection departure.



Request VFR Departure Clearance (Class C or TRSA)

To depart from a typical Class D towered airport, you just call Ground for a taxi clearance with the current airport information and your destination or direction of departure. However, at Class D airports with a Terminal Radar Service Area (TRSA), or at a Class C, you request VFR departure instructions from Clearance Delivery. This frequency is listed in the Chart Supplement. At smaller Class C or TRSA airports, Clearance Delivery and Ground are often the same person. In rare cases, they may even use the same frequency.

The VFR departure clearance provides VFR radar services, which means you'll have a discrete squawk code for your transponder and a controller advising you about other traffic as you depart the airspace. Sometimes, you can keep that service all the way to your destination (see VFR flight following on page 44).

The process and phraseology is similar at both types of airports. First, listen to the ATIS. There may be information relevant to VFR departures. Then, make your request. The format is:

[Airport Name] Clearance, [Call sign], [location], Information [ATIS letter code]. VFR to [destination/direction], [desired altitude].

Clearance Delivery will respond.

[Call sign], [Airport Name] Clearance. On departure [instructions], maintain VFR at/ at or below [altitude]. Departure [frequency], squawk [squawk code].

The departure instructions might include a heading that you must turn to after takeoff, or state, "fly runway heading." They might not specify a heading at all, in which case you should fly runway heading until cleared "on course." Whatever the specif-

ics, write them down so you can refresh your memory prior to takeoff. Then read the clearance back to the controller ③. The controller will tell you that your readback is correct ④, or correct any errors.



Santa Barbara Clearance, Cessna Two Three Six Papa Whiskey, Cessna one seventy-two on the south ramp with Information Bravo. VFR to Santa Monica at three thousand five hundred.

(2) CLEARANCE DELIVERY CONTROLLER Cessna Two Three Six Papa Whiskey, Santa Barbara Clearance. On departure, fly runway heading, maintain VFR at or below one thousand five hundred. Departure frequency one two zero point five five, squawk seven one one zero.

3 PILOT

Fly runway heading, maintain VFR at or below one thousand five hundred. Departure on one two zero point five five, squawk seven one one zero. Cessna Two Three Six Papa Whiskey.

(4) CLEARANCE DELIVERY CONTROLLER Cessna Two Three Six Papa Whiskey, readback correct. Contact Ground when ready to taxi.

TIP

Radar service is technically optional in a TRSA. To decline the service, contact Ground as you would at a Class D and add "Negative Radar Service" to your initial call. Note: ATC might sound disappointed you turned it down.

> Santa Barbara Municipal Airport (KSBA) Santa Barbara, CA Clearance Delivery 132.9

COMMUNICATIONS: CTAF 119.7 ATIS 132.65 UNICOM 122.95 (R) APP/DEP CON 120.55 (151°–329°) 125.4 (330°–150°) 124.15 (R) L.A. CENTER APP/DEP CON 119.05 (0700–1400Z‡) TOWER 119.7 (1400–0700Z‡) GND CON 121.7 CLNC DEL 132.9 AIRSPACE: CLASS C svc ctc APP CON svc 1400–0700Z‡ other times CL

1) PILOT

Boston Clearance, Cessna Two Three Six Papa Whiskey, at Signature with Information Hotel. VFR to Nashua, NH, at four thousand, five hundred.

(2) CLEARANCE DELIVERY CONTROLLER Cessna Two Three Six Papa Whiskey, cleared VFR out of the Boston Class Bravo airspace via ATC assigned heading, maintain VFR at three thousand. Departure frequency one two zero point five five, squawk three five one five.

3 PILOT

Cleared out of the Boston Class Bravo airspace via ATC assigned heading, maintain VFR at three thousand. Departure frequency one two zero point five five, squawk three five one five. Cessna Two Three Six Papa Whiskey.

(4) CLEARANCE DELIVERY CONTROLLER Cessna Six Papa Whiskey, readback correct. Advise this frequency when you're ready to taxi. The initiation of a VFR departure request from a Class B is the same as it is at a TRSA or a Class C airport ①. However, you will receive an actual clearance to fly in the Class B airspace rather than just departure instructions. This is why you'll hear "cleared into the Class Bravo airspace," "cleared out of the Class Bravo airspace," or something similar ②. The clearance will contain headings and altitudes to fly.

Listen to the departure ATIS, and then make your call to Clearance Delivery. Expect a wait between your call and the response, or a "Cessna Two Three Six Papa Whiskey, standby." Be patient. This is why it's often good to call for your clearance before starting your engine. You can call again after startup when you're ready to taxi.

TIP

Clearances have the format, "CRAFT": Clearance limit (destination) Route (direction) Altitude Frequency (for Departure) Transponder (squawk code)

<u>558</u>

General Edward Lawrence Logan International Airport (KBOS) Boston, MA Clearance Delivery 121.65

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(1) PILOT (on 121.65)

Boston Clearance, Cessna Six Papa Whiskey at Signature, Information Hotel, Ready to taxi.

(2) CLEARANCE DELIVERY CONTROLLER Cessna Six Papa Whiskey, monitor Ground one two one point niner.

(3) PILOT

(4)

Monitor Ground one two one point niner. Cessna Six Papa Whiskey.

After a seeming eternity waiting just outside the movement area at $(5)_{,}$ and listening intently to 121.9:

GROUND CONTROLLER

November Two Three Six Papa Whiskey, Boston Ground. Runway Two Two Right, taxi via Bravo, hold short of Zulu.

(5) PILOT (on 121.9)

Two Two Right via Bravo, hold short of Zulu. Cessna Two Three Six Papa Whiskey. After more expensive time idling at 📿 ...

GROUND CONTROLLER November Two Three Six Papa Whiskey, continue taxi via Bravo, November, cross Runway One Five Right.

(7) PILOT

Continue Taxi via Bravo, November, Cross Runway One Five Right. Cessna Two Three Six Papa Whiskey.

8 GROUND CONTROLLER November Two Three Six Papa Whiskey, monitor Tower one two eight point eight.

When you tell Clearance Delivery you're ready to taxi at some (but not all) big Class B airports, you'll be told to "monitor ground." Don't call them; they'll call you. Taxi up to the edge of the non-movement area, listening to the frequency. However, read back taxi instructions and runway crossings or hold-

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shorts. Eventually, Ground will tell you to monitor a Tower frequency for takeoff (8).

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General Edward Lawrence Logan International Airport (KBOS) Boston, MA Clearance Delivery: 121.65 Ground: 121.9 Tower for 22R: 128.8 GROUND OPS