This manual is organized around communications tasks. Each task is an action you take: monitor a frequency, request a departure, and so on during a flight. The actions tell you quite a bit about the situation. For example, you “announce” your intentions at a non-towered airport, but you “request” the equivalent operations at a towered airport.

The tasks are divided up by phase of flight, from the ramp area, through taxi, departure, enroute, and arrival. Closed pattern ops merit its own section, as do the items that don’t happen on every flight. You can think of this list as the 55 most likely VFR communications you’ll take part in while flying, including a few times when you’re just listening.
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Ground controllers expect you’re capable of using signs, pavement markings, and the airport diagram to keep from getting lost. But they’d rather give you a hand than watch you wander off in the wrong direction. If you want help, request “progressive taxi instructions,” along with your readback. Alternatively, you could ask in the initial call.

The controller will tell you which way to turn at intersections, and point out what’s coming up. There’s much less shame in asking for help than asking to turn around.

**Request Progressive Taxi Instructions**

1. **PILOT**
   - Lakefront Ground, Cessna Two Three Six Papa Whiskey at Signature with Romeo. VFR to Pensacola.

2. **GROUND CONTROLLER**

3. **PILOT**

4. **GROUND CONTROLLER**
   - Cessna Six Papa Whiskey, from Signature it’ll be a right turn onto Foxtrot.

5. **PILOT**
   - Right turn onto Foxtrot. Six Papa Whiskey.

6. **GROUND CONTROLLER**
   - Cessna Six Papa Whiskey, Delta and Charlie split on the other side of Runway Niner. Charlie’s gonna be the left one. Follow it all the way north to the end.

7. **PILOT**
   - Okay, we’ll stay to the left and take Charlie to the end. Thanks. Cessna Six Papa Whiskey.
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.

Yellow Sky Harbor International Airport (KPHX)
Phoenix, AZ
Ground (South) 132.55
Request Flight Following (a.k.a. Radar Advisories) from a Tower

The FAA’s “Radar Traffic Information Service” is more commonly called “flight following,” because air traffic controllers at facilities along your route “follow” your VFR flight on radar (see page 44). At a Class D airport, you ask the controller to coordinate this for you before takeoff. Simply add the request to your initial call.

It may take several minutes, but eventually you will get a frequency for contacting Departure and a discrete squawk code, as opposed to the generic 1200 for VFR flight. You’ll use this frequency after you take off.

If you’re departing from a Class B, C, or TRSA airport, you automatically get the Departure frequency and squawk code from Clearance Delivery. However, the controller may simply terminate the service when you leave the local airspace. To better ensure traffic advisories all the way to your destination, request flight following when you ask for your VFR departure clearance.

Flight following is only performed when ATC workload permits, so it still might be terminated, but at least it’s more likely you’ll get what you want.

TIP

There is no frequency 126.37 on an aviation radio. It’s actually 126.375, but the .005 part is assumed because the frequency changes in .025 kHz jumps: 126.35 ... 126.375 ... 126.4 .... etc.
DEPARTING AMIDST OTHER TRAFFIC AT NON-TOWERED AIRPORTS

When you’re departing a non-towered airport, it’s completely up to you to see and avoid other aircraft. The radio calls usually don’t change, but timing your departure to fit in can be a challenge. While you need to use your eyes as well as the radio, the radio helps everyone in the vicinity “see” what may not yet be visible.

During your taxi, paint a mental picture of all the aircraft you hear on the airport’s CTAF. Remember that multiple airports can use the same CTAF, so listen closely for “[Your Airport Name] Traffic” in the radio calls. Also listen for your runway numbers, as that’s a clue this traffic call is for your airport.

When you reach the hold-short line for the departing runway, position your aircraft so you can see anyone coming in on final. Remember that radios are technically optional at a non-towered airport. There could be landing traffic that’s not announcing on CTAF. If there’s another aircraft there waiting to depart, etiquette dictates that they get to depart first. However, if you’re ready and they aren’t, it’s fine to transmit on CTAF, “Piper holding short at [Airport Name], are you about to depart? If not, may we depart ahead of you now?”

Next, think about who you’re getting in front of and who you’re behind. As a general rule, don’t enter a runway to depart until a landing aircraft is at least turning off the runway onto a taxiway, and don’t enter the runway to depart if any aircraft is on the final leg of the traffic pattern.

If the nearest landing aircraft is on a typical base, there might be enough time to depart safely. It depends whether that aircraft is a Piper Cub (plenty of time) or a Mitsubishi MU-2 (not so much time). If the nearest landing aircraft is still on downwind, you’re probably good to go.

NEGOTIATING THE RUNWAY IN USE AT A NON-TOWERED AIRPORT

A non-towered airport is a dynamic environment that calls for a flexible mindset. Just because you thoughtfully made a plan for which runway to use based the ASOS/AWOS, doesn’t mean that’s what has to happen.

When you tune CTAF, you might hear an inbound aircraft planning to use a different runway, or even the opposite runway you want. A quick look at the windsock might prove the winds by the ASOS/AWOS were different than on the runway. Or, it might show that an aircraft heading for the airport is planning to land downwind—and probably without realizing it.

You have a responsibility to see and avoid other aircraft, so departing head-on towards a landing aircraft is generally bad form. Landing aircraft also have right-of-way over all other powered aircraft in the pattern and on the surface.

Best practice is to negotiate with stated facts. For example, you might say on CTAF, “Aircraft inbound for [Airport Name], winds currently favor Runway Two.” That might be enough to convince the other pilot to switch runways. If not, and there’s enough time before that aircraft enters the pattern, you can announce and depart a different runway, as you see fit.

It’s more complicated when several aircraft are using a runway other than the one you want. You could try transmitting on CTAF, “All aircraft in the pattern at [Airport Name], winds now favor Runway Two. Can we switch to Runway Two?” If you feel the point needs emphasis, you could make that, “... switch to Runway Two so everyone isn’t landing downwind?”

It might not work, in which case you must weigh departing the less favorable runway, or waiting until there’s a lull long enough that you can depart from your runway of choice.
Request a Special VFR Departure Clearance and Depart

**DEPARTURES**

1. **PILOT**
   Hyannis Ground, Skyhawk Two Three Six Papa Whiskey on the GA ramp with Information Echo. Request Special VFR northwest-bound.

2. **GROUND CONTROLLER**
   Skyhawk Two Three Six Papa Whiskey, Hyannis Ground. Let me see if I can work that out for you. How long until you’ll be ready to depart?

3. **PILOT**
   We’ll be ready after a run-up, so about five minutes.

4. **GROUND CONTROLLER**
   Skyhawk Six Papa Whiskey, Runway Three Three, taxi via Bravo.

5. **PILOT**
   Runway Three Three via Bravo, Skyhawk Six Papa Whiskey.

6. **GROUND CONTROLLER**
   Skyhawk Six Papa Whiskey, when you’re ready to depart, Tower will have the Special VFR clearance.

7. **PILOT**
   Terrific. Thanks. Six Papa Whiskey.

When a towered airport is reporting less than 1000-foot ceilings and 3 miles visibility, VFR traffic can’t arrive or depart—unless they receive a Special VFR (SVFR) clearance. SVFR during daylight hours permits flying in controlled airspace with a minimum of only one statute mile visibility and a requirement to simply stay clear of clouds.

ATC is forbidden from suggesting SVFR—you must request it. There’s no guarantee you’ll get it, or it might be a long wait, but it can be worth asking if you can safely reach VFR conditions just a few miles from, or just above, the airport.

To depart SVFR from a Class D airport, add the request to your initial call to Ground 1. If it’s a Class C or TRSA, make the request with Clearance Delivery. If it’s a Class B ... don’t even try, unless you’re a professional flying a helicopter. It ain’t gonna happen.

The clearance format is:

Cleared out of the [airspace], [direction]. Maintain Special VFR conditions. [Optional altitude restriction].

ATC will separate you from any IFR, or other SVFR traffic, but the clearance—and the relaxed VFR condition requirements—only apply within the lateral boundaries of the airport’s surface area of five miles. Be sure you’ll be in VFR conditions by the time you reach the boundary.
After pre-takeoff actions and checklists:

8 PILOT
Hyannis Tower, Skyhawk Two Three Six Papa Whiskey, ready to depart Runway 33, request Special VFR.

9 TOWER CONTROLLER
Skyhawk Two Three Six Papa Whiskey, cleared out of the Class Delta airspace to the northwest. Maintain Special VFR conditions at or below one thousand five hundred feet. Runway Three Three, cleared for takeoff.

10 PILOT
Cleared out of the Class Delta to the northwest. Maintain Special VFR at or below one thousand five hundred. Cleared for takeoff Runway Three Three. Skyhawk Two Three Six Papa Whiskey.

After weaving around to avoid clouds and leaving the Class D airspace:

11 PILOT
Hyannis Tower, Skyhawk Six Papa Whiskey, clear of the Class Delta to the northwest, in VFR conditions.

12 TOWER CONTROLLER
Skyhawk Two Three Six Papa Whiskey, roger. I have no known traffic to the northwest. Frequency change approved. Have a good flight.

TIP
SVFR is possible from non-towered airports if they have controlled airspace to the surface (magenta dotted circle around the airport on the Sectional Chart). Contact FSS or the ATC facility controlling that airspace to request the SVFR.
Request Flight Following in the Air

While it’s easier for both you and ATC if you set flight following up on the ground (see page 26), you can request it in the air. This is usually your only choice when departing non-towered airports.

After you find the right frequency (see sidebar on page 46), contact the ATC facility with just your identification, location, that you’re VFR, and you have a request. They’re not expecting your call, so you want to give them a moment to find you on the scope. Once acknowledged, the format is:

[ATC facility], [Full call sign] is a [Air- craft Make and Model], [Current location], [Current altitude/Cruise altitude]. Request flight following to [Destination].

Flight following is provided only if ATC workload permits, so don’t take it personally if you hear “unable at this time.” However, if a squawk code is assigned (4), then you can expect service once the controller sees you on radar.

When you hear “radar contact” (5), you know your flight is being “followed.” Change your altimeter setting to the one offered by the controller so both of you agree on what the aircraft’s current altitude actually is. This is an added benefit of flight following on a long trip. You’ll automatically get updated altimeter settings along the way. Another benefit of flight following is if you have an emergency, you’re already talking to someone who can help (see page 70).

Venice Municipal Airport (KNVC)
Venice, FL
Tampa Approach 119.65

AIRPORT MANAGER: 941-486-2711
WEATHER DATA SOURCES: AWOS–3 119.275 (W)
COMMUNICATIONS: CTAF/UNICOM 122.725
TAMPA APP/DEP CON 119.65
APP/DEP CON 124.95
CLNC DEL 118.075

ENROUTE OPS
While on flight following, you’ll hear many other pilots conversing with ATC. Sometimes, they’re models of clear, concise communications. And then, there are the other pilots. Here are a few things to avoid with flight following.

**Checking in with your life story.** There are only a few words needed when you change from one controller to another (see page 43). Anything more wastes everyone’s time, and might delay an important transmission to another pilot.

**Missing a radio call.** You’re responsible for paying attention, and replying to transmissions containing your call sign. Failure to reply is rude, and you might fly out of range before ATC can give you the next frequency.

**Changing to the wrong frequency.** If you check in on a new frequency and hear nothing but dead air, go back to the previous frequency and verify you heard the frequency correctly. You might simply try again in a few miles. Or, you heard it wrong and you’ll get the correct one. Just make sure you still have the old frequency in standby or written down.

**Saying, “Got him on the fish finder.”** There are two correct responses to an ATC traffic alert: that you are looking for the traffic, or that you see it. The fact that you see traffic on a digital display doesn’t count as “in sight.”

### HOW TO FIND THE RIGHT FREQUENCY FOR CONTACTING ATC

Contacting ATC in the air for an airspace transition usually requires only a glance at the Sectional Chart. The correct frequency for the area you’re approaching from appears in a box. If you were departing an airport in this same area and wanted flight following, that would be the frequency to use.

The vast majority of airports, however, aren’t close to terminal airspace, so the Approach and Center frequencies aren’t published. Departing these airports, you can look in the Chart Supplement. Sometimes, you’ll only see frequencies for an approach facility. In more rural areas, you’ll only see a frequency for Center. In some places, such as Fryeburg, ME (right), you’ll see both, with the times each one controls that airspace.

If you forgot to look up the frequency before departure, many tablet apps let you search airport data in the air. Pick the airport close to your departure and look in the list. Even if you don’t find exactly the right frequency, the controller you reach should be capable of providing the right one. You can also contact FSS the same way you would to open or close a flight plan (see page 38) and ask them for the best frequency.

Note that if you use a website, such as SkyVector, to look up Approach or Center frequencies, you may see some in the 200-300 Mhz range, such as 269.35. These are for military pilots and you can ignore them.
Flying through Class B airspace can be faster, simpler, and safer than going around, over, or under it. However, you need an actual clearance to enter the airspace, and you’re under positive ATC control the entire time. You must fly the heading and altitude assigned, and can’t deviate without permission.

The general format for the call is

[Full call sign], [Location] at [Altitude], request Bravo transition to [Direction/Destination].

Hearing your call sign and getting a squawk code is not a clearance to enter the Class B. Listen for some variation of “Cleared into the Class Bravo airspace.” These are the magic words that allow you to legally enter and fly through the Class B. You’ll receive traffic advisories, vectors, and altitude changes as necessary as you transition. Once you’re clear of the airspace, the controller should tell you, and let you resume your own navigation.

The utility of a Class B transition often depends on which way you want to go versus which way the airliners are landing that day.

Many miles and traffic advisories later ...

Sample
Land and Hold Short Operations (LAHSO) mean only part of a runway is available for landing, usually because another aircraft is using a crossing runway. Often the ATIS will notify pilots that LAHSO is in effect. LASHO points are depicted on charts, so that’s a heads up to check the Chart Supplement and see how much runway is available in case you receive a LASHO clearance. You can also ask ATC if you forget to check. Many rules control how ATC can assign LAHSO, but the radio work is similar.

If you receive a LAHSO clearance 5, consider whether or not you can accept it. If you’re not certain you can land safely and stop in time, tell the controller you’re “unable,” and request a full-length landing clearance. Student pilots may not accept a LAHSO landing clearance.

**TIP**

LASHO runways have hold-short markings on the runways themselves.
Request Landing (Class C or TRSA Airport)

1. PILOT

2. APPROACH CONTROLLER

3. PILOT
   Squawk five six six seven. Skyhawk Two Three Six Papa Whiskey.

4. APPROACH CONTROLLER
   Skyhawk Two Three Six Papa Whiskey, radar contact two two miles southwest of the Des Moines Airport. Maintain VFR at or below three thousand.

5. PILOT
   At or below three thousand for Skyhawk Two Three Six Papa Whiskey.

6. APPROACH CONTROLLER
   Skyhawk Two Three Six Papa Whiskey, contact Tower one one eight point three.

7. PILOT
   Tower on one one eight point three. Skyhawk Two Three Six Papa Whiskey.

8. PILOT
   Des Moines Tower, Skyhawk Two Three Six Papa Whiskey, five southwest.

9. TOWER CONTROLLER
   Skyhawk Two Three Six Papa Whiskey, Des Moines Tower. Enter right base for Runway One Three.

10. PILOT
    Enter right base for Runway One Three. Skyhawk Two Three Six Papa Whiskey.

Des Moines International Airport (KDSM)
Des Moines, IA
ATIS 119.55
Approach 123.9
Tower 118.3

TIP
Note the base altitude of the outer ring of a Class C as you approach (2200 feet MSL here). If you haven’t heard your call sign from the controller, you can descend below that altitude and continue a bit closer, because you’re below the Class C, not in it. The inner ring, however, reaches the surface.
The communications for landing at an airport in Class C airspace starts just like a Class D airport: Get the current ATIS while more than 20 miles out, and then contact Approach (1). The format is:

[Facility Name], [Full call sign], [Your location], Information [ATIS Letter], [Your intentions].

You can state your location relative to the airport, such as “22 miles northwest.” Or, sound like a local by using a VFR reporting point from the Sectional Chart, which is “Winterset” in this example. (See “Unlocking the ‘Secret’ Charted VFR Waypoints and Routes” on page 49.)

Give Approach at least a minute to respond. The controller may be talking to other aircraft on a different frequency you can’t hear, or busy with other tasks. Enter the Class C airspace after you hear your call sign, even if you don’t have landing instructions yet.

The Approach controller will radar identify you, and either tell you to continue inbound (4) or give you a vector to fly. The controller might also issue altitude changes to keep you separated from IFR traffic.

Approach will hand you off to Tower (6). From here, it’s just like landing at a Class D airport.

With TRSA airspace, approach services are optional. To use them, treat it just like a Class C. Skipping those services isn’t recommended, but it can be done. Contact Tower as you would for a Class D airport, but with this addition: “[Name of Airport] Tower, Skyhawk Two Three Six Papa Whiskey over [Location], Information [ATIS letter], inbound for landing. Negative radar service.”

TIP
When you check in with Tower, there’s no need to say your altitude (8). However, if you have specific instructions from Approach, such as “enter right base,” you should add that information, “... inbound for right base Runway One Three.”
A satellite airport is an airport within the lateral boundaries of Class B or Class C airspace. Sometimes it’s just underneath the shelf of airspace. Other times that satellite airport is close enough that there’s an airspace cutout, such as Simsbury and Skylark near Bradley International in Hartford, CT. Rarely, there’s an airport inside the surface area.

Landing at a satellite airport is trivial if it’s towered. You’ll be handed off from Approach to Tower. Landing at a non-towered airport is done by specifying your destination in your initial request. Once you report the destination in sight, expect a description of traffic observed between you and the airport, and “Radar service terminated. Frequency change approved.” Usually, you will keep your transponder code.

Departing can be trickier. Departing a towered airport, it’s best to request a squawk code and departure frequency from Ground as part of your initial call, just as if you were getting flight following (see page 26). Tower can then hand you off on departure. But before you enter the overlying airspace, you still must hear your call sign (Class C) or get a clearance to enter (Class B).

Departing a non-towered airport, the most common tactic is simply staying clear of the overlying airspace until you can contact them. If the primary airport is close enough, you may be able to reach them on the ground by radio. You may even be able to reach them by cell phone.

Technically, when departing from an airport inside the surface area, you can take off and contact the approach facility “as soon as practical.” This is a rare situation, and it’s probably worth a phone call to the Tower or Approach of the primary airport before flight to learn the correct local procedure.

Instrument approaches are divided into segments: initial, intermediate, final, and missed approach. Instrument pilots talk to Center or Approach until roughly the time they transition from intermediate to final approach. They then change to CTAF. Even if their CTAF radio call isn’t VFR-friendly, you may still be able to figure out their location.

The final approach segment shown here begins at ZIRMU and ends at the Runway 25 threshold (RW25). A pilot on this approach at ZIRMU should transmit on CTAF, “… five miles out, straight-in for Runway Two Five.” ZIRMU is 4.8 NM from the runway (3.5 NM+1.3 NM).

A pilot might only say, “… final approach fix for Runway Two Five.” Most final approach fixes are between four and six miles from the runway threshold. Pilots often change frequencies a couple miles before that, so guessing a pilot at the “final approach fix” is five miles out won’t be too far off.

The least helpful call would be “… at ZIRMU.” Without the instrument approach chart, you don’t know this fix’s location. In that case, your best option is to ask, “Pilot at ZIRMU, how far out are you from Runway Two Five?”
Flying in formation with other aircraft poses a communication challenge: The aircraft must talk to each other, and the entire group of aircraft must talk to ATC and make traffic calls. Communication between aircraft in formation is done on the air-to-air frequencies or by hand signals.

To simplify communication between the group and ATC or non-participating aircraft, the entire formation operates as a single aircraft, with the flight leader doing all the talking. As a rule, the flight leader appends “flight of n” to the aircraft call sign (where “n” is the number of aircraft in the formation flight). Sometimes this gets shortened to simply “flight” when talking to ATC, but you should always check in as a “flight of n” with each new controller. This includes contacting Ground to taxi as a flight.

ATC assumes individual aircraft within the flight will separate themselves from each other. It’s best for everyone but the lead aircraft to turn off their transponders, which means Approach and Center controllers often only see one aircraft.
The preceding were sample pages from the “Pilot-Friendly VFR Communications Manual” from PilotWorkshops. For more details, visit our website at:

www.pilotworkshop.com