

Ask the CFI

What are the benefits of VFR flight following?

Many pilots are aware of VFR flight following but do not truly understand the benefits and rarely use this valuable service. For some, this is because they get very little exposure to flight following during their initial private pilot training and for others it could be because they don't feel proficient using air traffic control (ATC) services in general. Whatever the reason, it is not used nearly as much as it should be.

It's no surprise that pilots are unfamiliar with the benefits of VFR flight following because hardly any information is provided about these services in the traditional private pilot education materials. There is a very brief paragraph describing the service in the FAA Pilot's Handbook of Aeronautical Knowledge (FAA-H-8083-25B), but they refer to it as "Radar Traffic Advisories." Although we all know it as "flight following," it is in fact officially called "basic radar service" and this is properly described in the Aeronautical Information Manual (AIM) section 4-1-18.

Private pilot training usually only includes two to three cross-country flights with a flight instructor (a minimum of 3 hours). But because there are other skills we also practice during those training flights, such as diversions and managing emergencies, it is not always appropriate to use VFR flight following during these lessons. Consequently, by the time the student is ready for their solo cross country flights, they may only have used flight following once or twice, or maybe not at all.

Students training at non-towered airports have minimal experience interacting with ATC services in general and are therefore even less confident using VFR flight following than those who train at towered airports. But even students who regularly fly out of controlled airports exhibit an extreme reluctance to engage with ATC when it is not absolutely required. This is because interacting with ATC is complicated and frequently confusing to students and new pilots and there is potential for very real and legal consequences if they get it wrong. Add to this the perceived embarrassment that comes with missing a radio call or messing up a read back, and pilots may think they have a good excuse to avoid controlled airspace and related ATC services at all costs!

As with most things related to aviation, flight following is really not that complicated and all it takes is some good information and a bit of practice to get comfortable with it.

The Benefits of VFR Flight Following

VFR flight following means that air traffic control (ATC) is tracking your aircraft in real time on radar systems (where coverage is available). One advantage of being tracked is that controllers can alert you to potential traffic conflicts with IFR or VFR targets they see on their radar system. They may sometimes provide vectors to maintain separation with IFR flights but you are still conducting a VFR flight and therefore you are not absolved of your responsibility look for and avoid other traffic.

Controllers also will provide safety alerts in situations where the radar indicates an aircraft is descending below a safe altitude or in close proximity to terrain, obstructions or other aircraft. When sky diving operations are in progress ATC also must vector you around the relevant active areas.

If you need navigational assistance you can ask ATC for vectors. After providing you with vectors a controller will most likely tell you to "resume own navigation," and from that time you are back to navigating by yourself.

ATC also provides hazardous weather information such as SIGMETS and PIREPs.

VFR flight following makes it easier to navigate through military operations areas (MOA), restricted airspace and class C airspace because they can provide the necessary advice and appropriate clearances.

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But perhaps the most important benefit to pilots is that if you have any kind of problem controllers are trained professionals ready to assist you. For example, they can provide vectors for lost pilots, nearest VFR airport if the weather starts to deteriorate, and if the worst happens and you need to make an emergency, off-airport, landing they will track your aircraft and immediately alert the local emergency response services. This is an improvement on a VFR flight plan when they would only begin to look for you 30 minutes after you were expected at your destination.

How to use VFR Flight Following

The only equipment you need for VFR flight following is a two-way radio and a transponder (and ADS-B if you plan to fly through airspace where that is required). VFR flight following must be requested by the pilot and it is important to note that sometimes it might not be available when controllers are too busy with IFR traffic to provide the service to VFR traffic. Remember that even while receiving VFR flight following you are still flying VFR and therefore responsible for your own navigation, altitudes, maintaining VFR (appropriate cloud clearances and avoidance of any weather) as well as avoiding other traffic.

Who do you call for VFR Flight Following?

To obtain VFR flight following you call the nearest published Center or Approach frequency, which can be found in the Chart Supplement, ForeFlight or on your GPS. We do this in the air at an altitude that allows you to communicate with ATC. This altitude varies from one area to another but could be as low as 300-500 feet. When you are departing from a class C airport you can request VFR flight following on the ground from Clearance Delivery or in the air after you contact the departure controller. You cannot initiate VFR flight following with a tower controller - if you try they will most likely just give you the departure frequency to call once you are in the air.

How do you ask for VFR Flight Following?

Initially, you will simply say you have a VFR request. This alerts the controller to your presence and gives them an opportunity to get ready to copy down your information. For example, ***“Rockford approach, N-13364, VFR request.”*** ATC should respond with something like ***“N-13364, Rockford Approach, go ahead.”***

You can then provide all the details of your flight, which the controller will enter into a computer system. Each ATC facility may vary in the order they prefer the information, but this is what they need:

1. Call sign
2. Position
3. What you want
4. Destination
5. Aircraft type
6. Altitude

For example, ***“Rockford Approach, N-13364, ten miles east of Rockford, request flight following to Iowa City, Cessna 172, four thousand five hundred.”***

If ATC is able to accommodate your request, the controller will acknowledge your position, assign you a unique transponder “squawk” code (which you must enter into your transponder), and provide the local altimeter setting (which you enter on your altimeter).

En route, ATC won't need to talk to you much unless they have traffic advisories, an updated altimeter setting, or maybe if you are deviating from your expected course they might ask you about that. If you do have a problem, remember to declare an emergency and if you are able, keep the controller apprised of your situation and intentions.

If your flight takes you beyond a controller's sector or into the airspace of another Air Route Traffic Control Center (ARTCC) or Terminal Radar Approach Control (TRACON) they will hand you off to the next facility or controller. Your flight information will be passed to the new controller and they will be expecting

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you to check in. The first controller will say something like **“Cessna 13364 contact Quad City Approach on one-three-three-point-two-seven-five.”** After acknowledging this hand-off (**“one-three-three-point-two-seven-five, Cessna 13364, good day”**) you switch frequencies and check in with the next controller, **“Quad City Approach, Cessna 13364, level, four-thousand-five-hundred.”** At a minimum, the new controller will acknowledge you and give you an altimeter setting.

While en route, pay attention and listen continuously for your call sign on the assigned frequency and always be ready to copy down the next frequency. It is also a good idea to monitor the emergency frequency, 121.5, on your second radio. If you miss multiple calls from a controller they will often use 121.5 as a last resort to reach you. If you need to leave the frequency briefly to call flight service or to listen to ATIS you just tell them what you are doing. **“Quad City Approach, Cessna 13364, request frequency change to listen to ATIS.”** (Ideally, you should listen to ATIS on your second radio, if you have one, while remaining on the controller’s frequency.)

If you decide to change your destination, route or altitude for any reason you just advise the controller of what you are doing. For example, perhaps you need to descend below a cloud layer; **“Quad City approach, Cessna 13364 descending three-thousand-five-hundred.”**

Terminating Flight Following

Pilots may cancel flight following at any time but occasionally ATC will deny that request! This sometimes happens in busy, controlled airspace when the controller needs to talk to you to ensure positive separation from other aircraft.

If you wish to terminate the radar service don’t just switch frequencies leaving the controller wondering what happened to you! You must request to cancel. You tell them **“Quad City Approach, Cessna 13364, cancel radar service, airport in sight,”** and they will respond with **“Cessna 13364, radar service terminated, squawk VFR, frequency change approved.”** You will acknowledge with **“Radar service terminated, squawk VFR, frequency change approved, Cessna 13364.”** From this point they will no longer provide traffic advisories, safety alerts, etc. Enter “1200” on your transponder immediately but you can remain listening on their frequency for as long as you need to. ATC can also opt to cancel your radar service due to a high workload or some controllers automatically cancel with you when you are within 10 miles of your destination.

Your VFR flight following will be automatically terminated when you land at a controlled airport. Arriving at a non-towered airport sometimes the controller will initiate the cancellation with you when you are about 10 miles out or when you confirm you have the airport in sight. Or they will wait for you to cancel when you are ready to switch to the CTAF frequency.

In my humble opinion, the benefits of VFR flight following far outweigh the excuses pilots use to avoid using it. Like everything else with flying, it takes a little bit of practice to get good at it but that should not put anyone off using the service. It is also a great way to improve your situational awareness by listening to other pilots and is also a good way to practice and improve your radio communication skills.

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