

Tutorial Flight #2: VFR – Optional Reading

This tutorial covers a basic VFR flight from KACK to KBOS, with only Cape Approach and Boston Approach available. VFR flights are considerably more manageable for new pilots, but can provide navigation difficulties if you aren't familiar with visual reference navigation.

1. Once again, set up your aircraft callsign correctly. Remember, most VFR flights won't have an airliner callsign – although Cape Air does fly VFR depending on the weather. Once again, **set your Aircraft Callsign to “None”, your Flight Number to “0”, and your TAIL NUMBER to whatever you want to be called, say N12345 for this example.**
2. Once again, set up your aircraft before you leave the parking spot, and get ready to contact Ground (or Tower, or Approach, or even Center). In this case, we only have **Cape Approach** online (ACK_A_126.10_chad229), so we'll be calling them for our taxi instructions.

Cape Approach controls the Nantucket area.

3. Because we're departing VFR from a Class D (“Class Delta”) airport, we don't need a clearance to operate in that airspace. We can actually just get taxi instructions from the controller – we don't need a squawk, a clearance, and ATC doesn't really need to know where we're going ... we could just request “VFR to the North”. However, in FSX and the real world it's always a good idea to file a flight plan.

“Cape Approach, Cessna 172 N12345 ready to taxi, with Bravo, VFR to Boston.”

“N12345, Cape Approach. Taxi to runway 24 via A, E”.

“Taxiing to Runway 24 via A, E. N12345.”

4. Once again, don't be in a rush to taxi – your aircraft will be much easier to control at lower speeds.

General Aviation (“GA”: non-airliner) callsigns in the United States all start with an “N”, followed by:

- *Anywhere from 1 to 5 numbers (N42958)*
- *Anywhere from one to four numbers followed by a letter (N2385P)*
- *Anywhere from one to three numbers followed by two numbers (N107KR)*

American callsigns may be abbreviated to “N” followed by the last three digits, or the aircraft type followed by the last three digits.

*Canadian callsigns also differ. They begin with a “C”, followed by an “F” or “G”, and then three other letters, such as C-FKWO. For flight-plan and callsign purposes, remove the dash (this applies for **all callsigns, including airliners**). The callsign should be filed as the “Tail Number” CFKWO for this Canadian GA registration.*

Even when covering ground, still refer to ACK_A_126.10_HoagieF by the callsign “Cape Approach” rather than “Nantucket Ground”.

5. If you are not assigned specific departure instructions in your takeoff clearance (such as “left downwind departure” or “right turnout approved”), you may do whatever you like when your wheels leave the ground.

“Cape Approach, N12345 ready to go, Runway 24.”

“N12345, right downwind departure approved. Winds two-two-zero at one-five, runway two-four, cleared for takeoff”.

“Cleared for takeoff Runway two-four. N12345, we’ll make right downwind departure.”

For a “right downwind departure”, fly the first two legs of the pattern as you normally would, then depart the pattern at altitude and head on your way.

6. Flight following is a VFR service given by an Approach or Center controller, providing their workload allows. When providing Flight Following, the controller will notify you of traffic, and provide weather updates at your destination airport. Flight Following must be requested by the VFR pilot. For now, however, let’s say the traffic is light and visibility is good, so we won’t request Flight Following. As you depart the pattern to the North and leave the Class Delta airspace, the controller (Cape Approach) will switch you to “advisory” or UNICOM frequency, even though you are still in his green TRACON on the map. Since you are clear of the Class D airspace and entering Class E airspace, communication with ATC is not required even though you are in Cape Approach’s TRACON.

“N12345, change to advisory frequency is approved. Enjoy the flight. See you!”

7. Assuming you haven’t requested flight following, you’re on your own for traffic separation and navigation. The responsibility would therefore be on you to contact Boston Approach before you enter his/her Class Bravo airspace. However, let’s say you don’t know (or don’t want to find out) when you’re going to be entering the airspace, you could always call up Boston Approach when you enter his/her green TRACON and request Flight Following from him/her then. Otherwise, you can request a simple Class Bravo entry once you get closer to the Bravo airspace.

“Boston Approach, N12345”.

“N345, Boston Approach, go ahead”.

Aircraft tail numbers (or “N” numbers in the United States) may be abbreviated by ATC as “N” followed by the last three digits, or by the type of aircraft followed by the last three digits. (for example, “November 345” or “Cessna 345”). Pilots may only use this abbreviation if initiated by ATC; otherwise, use your full tail number/callsign.

“Boston Approach, N345 is type Cessna 172, 40 miles southeast of Boston at 4,500’, inbound to Boston with information Charlie, request flight following.”

“Cessna 345, squawk 1252”.

“Cessna 345, radar contact 35 miles south of the Boston VOR. Cleared into the Boston Class Bravo airspace at or below four thousand five hundred.”

“Cessna 345 will be at or below four thousand five hundred through the Class Bravo airspace.”

“Cessna 345, enter right downwind runway 22R. Remain east of the 22L approach corridor at all times. Report mid-field downwind”.

“Make right downwind for 22R, remain east of the 22L corridor, Cessna 345.”

8. Enter the pattern at regular altitude parallel to the runway in a standard right-circuit downwind leg. **Be sure to keep your turn to final tight** to avoid incoming traffic. Depending on the amount of traffic the Approach controller has, he may ask you to report “mid-field downwind” or “turning base”.

“Boston Approach, Cessna 345 is mid-field downwind, Runway 22R, full stop.”

“N345, Boston Approach. Wind 220 at one-two gust one-four, runway 22R, cleared to land. Caution wake turbulence, following a Boeing 737 landing the parallel runway”.

9. Once again, continue to follow ATC instructions as you taxi to the ramp. Once you are parked at the gate, say a quick goodbye to your controller if they aren’t too busy, and make sure **you exit correctly**. Do not just click the “X” in the top right corner. Instead, choose “Flights” > “End Flight”, and go through the briefing room to “Leave Session” and “Sign Out” of Direct Connect mode – this will save many headaches for our controllers.

If you don’t report in with the current ATIS, the controller will also give you weather information from Boston.

If there’s a tower controller online, you won’t get pattern entry instructions from the Approach control, but will get them from the Tower once you’re close enough.

*Because the two parallel runways (22L, 22R) are so close, it is important to keep your turns tight in the pattern to avoid other traffic. **As a VFR pilot, it is your responsibility to avoid traffic, even when in controlled airspace.***

Although controllers can clear aircraft “for the option” (which means a “stop and go”, “touch and go”, or “full stop” landing as the pilot chooses), it is nice to tell the controller what you’re plans are, so he/she can plan around you.