

Discovery Flight

NIGHT VFR



The Pilot Club

March 23, 2024

01:00Z | 8PM EST

Not a TPC Member?! Click [here](#) to join!



- Recommend airplane: single or twin engine 100-150kts. No jets or airlines please.
- Set the weather to either live weather (if VMC) or clear skies.
- **Turn off ATC voices in your sim.**
- You must be a VATSIM member with an approved pilot client installed prior to this flight – see the end of this document for instructions for registering.
- Download airport charts prior to flight
- **WANT TO LEARN MORE?:** Sign up for the TPC Flight School's Private Pilot License Course (PPL) which mimics real world flight training: [The Pilot Club Flight School](#)



Suggested add-ons & charts

FSX/P3d	X-Plane 11	MSFS 2020
		We Love VFR - Region 2 » Microsoft Flight Simulator

Flight plan

KVNC - KMKY (76 NM)

Alternative flight plan

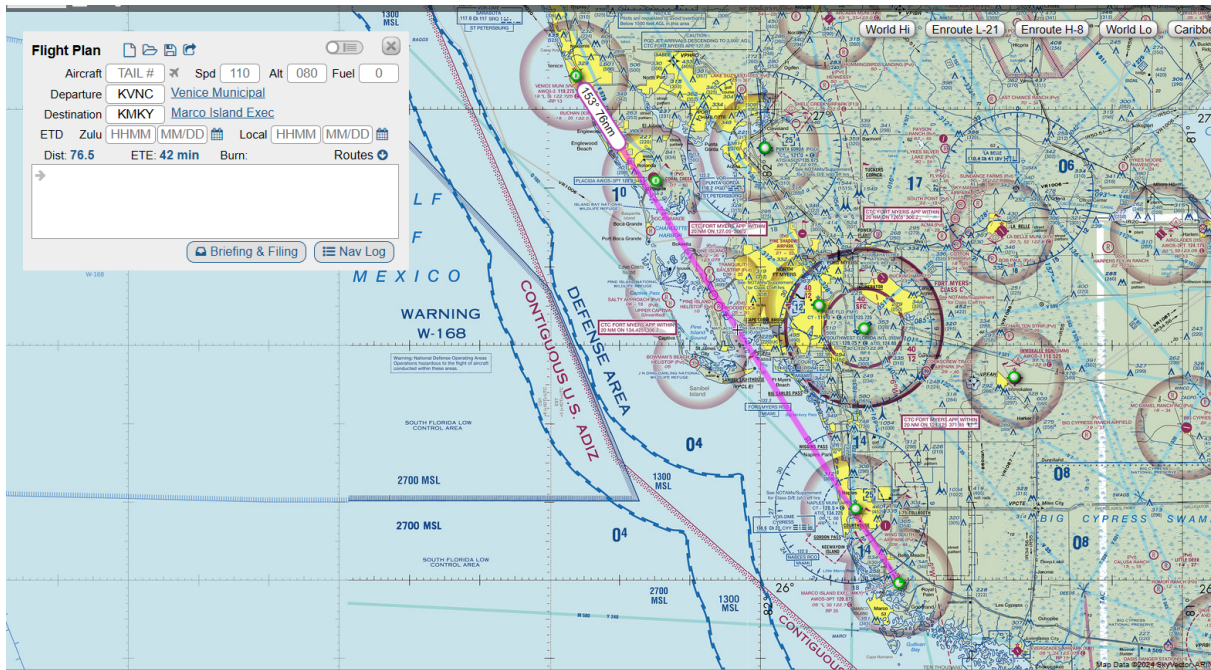
There are several small uncontrolled airports along the route that we can use as an alternate if needed.

Using **SkyVector** to get flight route and airport information:

Use the Briefing section of this document to understand the flow of the flight. Use Sky Vector, a free website ([SkyVector: Flight Planning / Aeronautical Charts](#)) to visualize the route and obtain important airport chart supplements.

Once you load up Sky Vector, click on "Flight Plan", then enter the departure and destination airports (highlighted in yellow below). A magenta line will appear showing you direction of flight and heading)

Hover over the hyperlink of each airport name and click "Airport Information" to get a diagram of each airport.



Night VFR Flight

Discovery Flight Purpose

The purpose of the discovery flight is to experience the thrill of (simulator) flying and introduce some foundational skills. There is a lot to flying, including navigation, chart reading, flight rules (VFR v IFR), knowing the weather and weather minimums, knowing your aircraft and its performance, and communicating with Air Traffic Control (ATC). We're going to use the "crawl, walk, run" model and focus on just the essential basics to fly to: **"Aviate", "Navigate", and "Communicate"**. That is, we're going to always fly the airplane safely (**Aviate**), know where we are and how to get to our destination (**Navigate**), and talk to ATC (**Communicate**) All other details, like route of flight, fuel requirements, weight and balance, etc. will already be handled for you.

Briefing

After a 10-15 minute introduction in Discord, we'll all spawn in at **Venice Municipal (KVNC)**. If you're using VATSIM, connect to vPilot once at KVNC. Since we're flying VFR, a Vatsim flight plan is encouraged but not required.

This flight will have several distinct phases including startup, departure (aka takeoff), enroute, arrival (aka arriving at our destination airport) and landing. Key points are bolded below, additional knowledge points are in italics:

STARTUP: Weather, Ground, Taxi to Runway

It's HIGHLY encouraged that you know how to start your aircraft prior to this flight. If you don't know how, please use a Cessna 172 or 152 and one of our instructors can assist.

- **It is highly encouraged to use appropriate checklists during your flight, please consult the TOM or TC if you are unfamiliar with checklists.**
- Check AWOS for current weather conditions and takeoff runway.
- Communicate over CTAF when taxiing so other pilots know what you're doing.
- **Runways are aligned pointing to a magnetic compass heading, with the last 0 of the heading removed.** *For example, if we're taking off from runway 33, when your aircraft is at the end of runway 33, you'll be pointing to 330 magnetic, which is almost directly North.*
- While holding short of runway, make an announcement over CTAF to tell other pilots you're departing.
- Safely take off, continue climbing, and depart to the northwest unless otherwise instructed by the Tower controller.

TAKEOFF/DEPARTURE: Up, up, and Away!

- Once cleared for takeoff, depart and climb using V_y speed (best rate of climb)
- Continue to communicate with ATC and follow all instructions
- **Continue to climb to a cruising altitude of 2,500.** This altitude is our safe altitude, guaranteeing we won't crash into any mountains or obstacles. *This was obtained from the large blue numbers on the chart. For example, 2^d means if we fly 2400 feet MSL, we're clear of obstacles in that chart grid.*
- **If ATC is available, you can request flight following**

ENROUTE: Stay on course!

- Maintain altitude of 2,500 feet and follow the course outlined on Sky Vector
- Monitor CTAF to know what other pilots are doing.
- **Verify your position using several different methods: such as visual scanning (called "pilotage"), GPS, and other forms of radio navigation. There are numerous VOR stations if you want to practice using VORs.**
- This route follows the coastline. Even though it's nighttime, there are still visual references to use to know your position.

ARRIVAL: I'm going in....

- At 15 NM away from KMKY, announce your position from the airport, including altitude, and your intentions.
- **Listen to what other pilots are doing and visualize where they are to remain clear of traffic!**

LANDING: Wheels Down, look out below

- **Announce your intentions and where you are in the traffic pattern (downwind, base, final)**
- Follow your landing checklist items
- **Land Safely.** If you feel as if you're not set up for a safe landing, GO AROUND and inform the tower controller. Better to go around and try again then crash and burn (reference: <https://youtu.be/lr5d3sGxSXQ>)
- Once safely on the ground, exit the runway at an available taxi way.
- **Communicate on UNICOM that you're clear of the runway**
- Taxi to parking.

Airport information

Take a few minutes to become familiar with the airport, the runway diagrams, etc. Most of the information can be found on Skyvector's site. Each airport links to their respective pages.

Departure

Name	ICAO	Elevation ¹	Runways
Venice Municipal	KVNC	18 ft	13/31, 5/23

Venice Municipal (KVNC) is a non-towered controlled airport within **Class E** airspace. **This means pilots MUST communicate with other pilots on Common Traffic Advisory Frequency (CTAF) to avoid collisions and manage traffic flow.**

Arrivals

Name	ICAO	Elevation ¹	Runways
Marco Island Exec	KMKY	5 ft	17/35

Marco Island Exec (KMKY) is a non-towered airport in Class E airspace.

¹ All elevations are indicated as feet mean sea level.

VATSIM

One of the goals during the flight is to have air traffic control support from real people through the VATSIM network. Register for a free account at vatsim.net and complete the new member orientation in order to join the network.



When filing a flight plan with VATSIM make sure to add the following remarks to help support the club and increase our presence on the network.

/RMK OPERATED BY THEPILOTCLUB.ORG

The Pilot Club Training Operations Team

- Elliot J, TPC24 – TPC Training Coordinator
- Mike D, TPC1079 - TPC Training Ops Manager

For more information about this organization visit thepilotclub.org. There is also good information on the [Standard Operating Procedures](#) page. We also have a very active Discord server.

References

1. https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/vfr/
2. <https://notams.aim.faa.gov/notamSearch/nsapp.html#/>