

BRUSHING OFF THE RUST

Pilot Qualifications and Currency

Airworthiness

Non-Towered Airport Procedures

Airspace

Weather

Cross Country Flying

FAA Safety Team WINGS Credit

FAASTeam
Safer Skies Through Education



FAA
Aviation Safety

Please don't forget to sign in for WINGS credit!

www.faasafety.gov

Who is your presenter?

Andrew Focks is a:

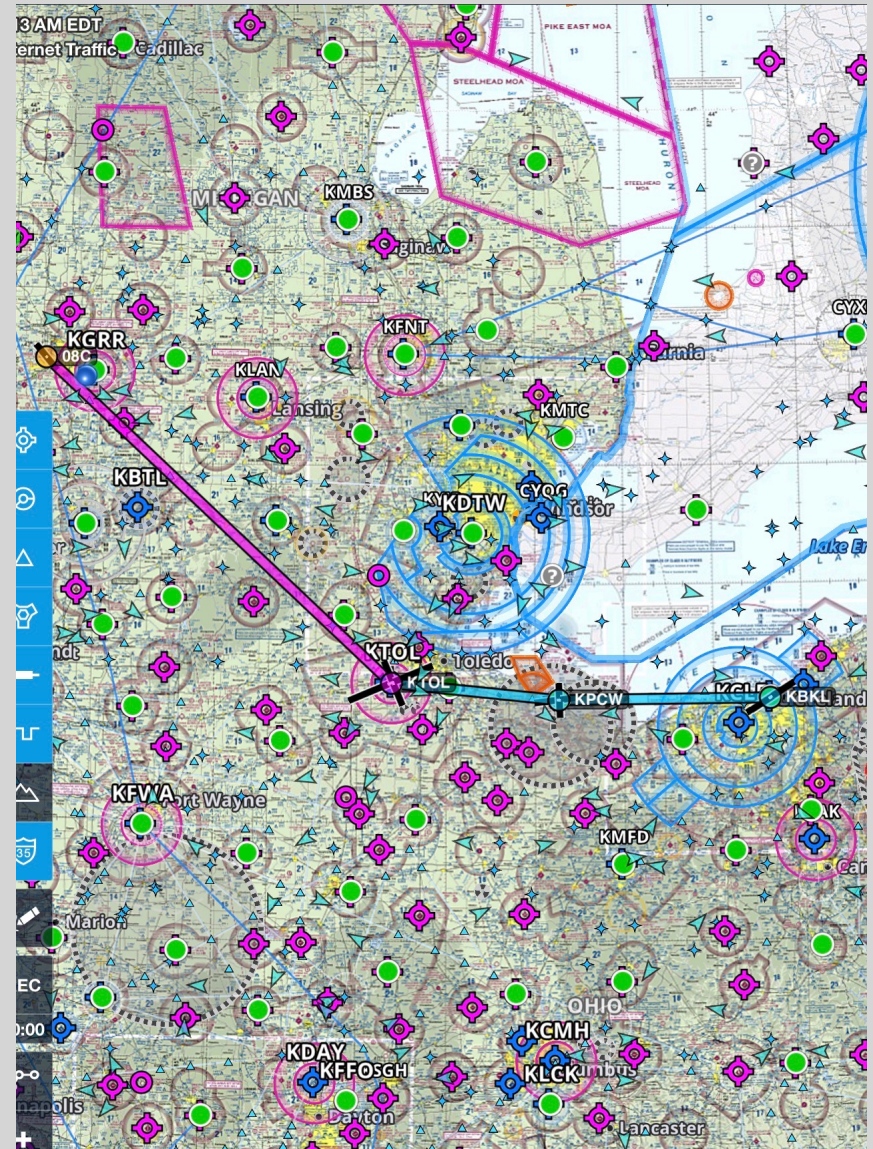
- **CFI, CFI-I, IGI**
- **FAA Safety Team Representative**
- **Instructs at Executive Air Flight School (MKG)**
- **Instructs at the West Michigan Flying Club (MKG)**
- **Works privately with flight students**
- **Conducts multiple Flight Reviews, IPCs, etc.**
- **International Concert Pianist; lecturer; professor; author; head of multiple music organizations (students include GRAMMY award winners, touring artists)**
- **Doctor of Piano Performance**
- **Research in cognitive learning, pedagogical methods, and peak performance practices**
- **Trained many teachers, university professors, and students over 15 years**



Overview

Scenario for the day:

I plan to fly myself and my friend from Riverview Airport (08C) to Burke Lakefront Airport in Cleveland, OH (KBKL) to visit the Rock and Roll Hall of Fame.



Overview

Am I legal to act as PIC on this flight?
In what kind of airplane?
Is the airplane legal?
Am I proficient?
What about the weather?
What about the airspace and equipment?
What if something breaks?
How do I operate at the non-towered field?
How do I program ForeFlight?
What altitudes and route?

Review Topic I

PILOT QUALIFICATIONS AND CURRENCY



Required Documents

**Pilot License
Government Issued Photo ID
Current Medical**

This image shows two FAA forms. The top form is a "REPORT OF EYE EVALUATION" from the Federal Aviation Administration. The bottom form is a "MEDICAL CERTIFICATE FIRST CLASS AND STUDENT PILOT CERTIFICATE" for TOMASZ WISNIEWSKI. The certificate includes fields for Date of Birth (22 MAY 1977), Height (70), Weight (157), Hair (BROWN), Eyes (GREEN), and Sex (M). It also includes a signature of the Administrator and a date of issue (APR 2016).This image shows a United States Pilot License for Charles Christopher. The license is issued by the Federal Aviation Administration. It includes the following information: Name (CHARLES CHRISTOPHER), Address (GROVE AVE, CINCINNATI OH 45227-3327), Nationality (USA), Date of Birth (3 JUL), Sex (M), Height (65), Weight (135), Hair (BLACK), and Eyes (BROWN). The license is for a Student Pilot and includes a Certificate Number (385385) and a Date of Issue (APR 2016). It also features a signature of the Administrator and a small image of a pilot.

Aeromedical - Medicals

Under 40	Privilege	Duration	Reverts to
First Class	Airline Transport Pilot	12 calendar months	Third Class
Second Class	Commercial Pilot	12 calendar months	Third Class
Third Class	Recreational Pilot, Private Pilot, CFI (when PIC)	60 calendar months	Expired

Aeromedical - Medicals

Over 40	Privilege	Duration	Reverts to
First Class	Airline Transport Pilot	6 calendar months	Second Class, then Third Class
Second Class	Commercial Pilot	12 calendar months	Third Class
Third Class	Recreational Pilot, Private Pilot, CFI (when PIC)	12 calendar months	Expired

Aeromedical - BasicMed

To Qualify:

- Current US Driver's License
- Held valid medical after July 14, 2006
- Never revoked

To Obtain:

- Visit normal physician every 48 months (no AME) to fill out form
- Aeromedical course (AOPA) every 24 calendar months
- (Issue of calendar/non-calendar months)

Limitations:

- No more than 5 passengers
- Airplane must be less than 6,000 lbs
- Stay less than 250 KIAS
- Stay below 18,000' MSL
- No more than 6 seats
- Can't fly for compensation or hire
- Limited to US + Bahamas



Privileges:

- Private Pilot
- CFI

Currency?

FLIGHT REVIEW

Every 24 calendar months

Minimum of 1 hour of ground and 1 hour of flight

Receive logbook endorsement

Cannot fail a flight review

Some Exceptions:

Wings Credit

Renewal of flight instructor certificate

Completed a new practical test



PAVE - PIC to Carry Passenger Currency 61.57

To carry passengers during day:

Within the previous 90 days, must have completed 3 takeoffs and landings

To carry passengers during the night:

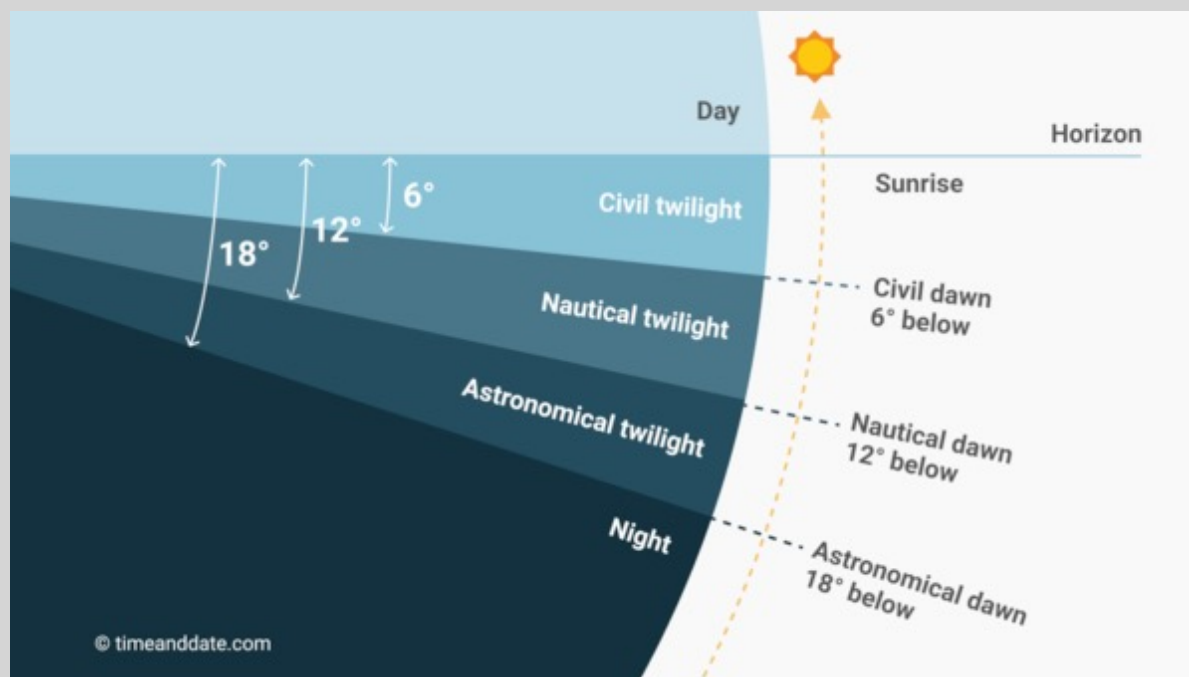
Within the previous 90 days, must have completed 3 takeoffs and landings
(to a full stop) at night

****night counts for day; day doesn't count for night****

Must be in same category and class aircraft!



What is Night?



Sunset to sunrise: Nav Lights

End of civil twilight to beginning of civil dawn: log night time

1 hour after sunset until 1 hour before sunrise: log night landings

Can you log night time without a night landing?

Can you log a night landing without night time?

Instrument Currency

“6 HITS”

Within the past 6 calendar months do you have:

1) 6 instrument approaches

2) Holding procedures and tasks

3) Computing and tracking courses through the use of navigational electronic

NO? You have 6 more calendar months to get current again!

Been more than 12 calendar months? IPC!

Pilot - Additional Endorsements 61.31

Complex Airplane

Adjustable pitch propeller
Retractable landing gear
Flaps



Tailwheel Airplane



High Performance

More than 200HP (201)

What kind of training is required for each?

Pilot - Currency vs. Proficiency

Just because you're legal, doesn't mean you're proficient!



Currency = Legal
Proficiency = Safe

Pilot - Personal assessment

Illness
Medications
Stress
Alcohol
Fatigue
Emotions/eating



91.17

“8 hours bottle to throttle”

No more than 0.04% BAC

No feeling any effects of alcohol

Applying Personal Minimums



AOPA AIR SAFETY
INSTITUTE

VFR PILOT PERSONAL MINIMUMS CONTRACT

PILOT

MIN. HOURS (LAST 30/90 DAYS) ____/____

MIN. HOURS IN TYPE (LAST 30/90 DAYS) ____/____

MIN. LANDINGS (LAST 30/90 DAYS) ____/____

NIGHT HOURS (LAST 30/90 DAYS) ____/____

☐ VFR INTO IMC TRAINING COMPLETED WITHIN LAST 12 MONTHS

☐ MIN. RECURRENT TRAINING COMPLETED (circle one) PAST 6 / 12 / 24 MONTHS

► ASI recommends recurrent training every 12 months with a CFI who's familiar with the aircraft make, model, and equipment.

AT A MINIMUM, MY OVERALL WELLNESS SHOULD BE

ADEQUATE OK WELL VERY WELL
□ □ □ □

► ASI recommends considering sleep, medications, alcohol, stress, and other factors that could affect the safety of flight.

WEATHER

MAX. WIND VELOCITY AND GUST _____

MAX. CROSSWIND _____

MIN. CEILING DAY _____ NIGHT _____

MIN. VISIBILITY DAY _____ NIGHT _____

AIRPORT

RUNWAY MIN. LENGTH _____

RUNWAY MIN. WIDTH _____

► Aircraft performance degrades when density altitude is above 1,000 feet. As a result, ASI recommends adding 50 percent to the POH takeoff or landing distance over a 50-foot obstacle.

AIRCRAFT

MIN. FUEL RESERVES (hours : minutes)

DAY ____ : ____ NIGHT ____ : ____

► ASI recommends landing with at least one hour of fuel remaining.

NIGHT FLIGHT IN A SINGLE-ENGINE AIRCRAFT Y / N

IF YES, LIST LIMITATIONS (e.g., no mountainous terrain, no over-water flights, will reach cruise altitude before sunset)

I WILL

- ☐ Only fly when I am proficient with the aircraft limitations, performance, normal and emergency procedures, systems, and avionics.
- ☐ Use precautions when transitioning to different aircraft/avionics/systems.
- ☐ Consider the risks of flying over mountainous terrain.
- ☐ Fly with a current GPS database, charts (or EFB), and a backup (as required).
- ☐ Consider increasing my personal minimums if friends and family are on board.
- ☐ Always get a recorded FAA weather briefing and file/activate a flight plan for flights away from home base.
- ☐ Request flight following if services are available.
- ☐ Fly with a qualified pilot or CFI (or postpone the flight) if my personal minimums are not met.

Pilot signature _____

CFI/witness _____

Last updated ____/____/____

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Review Topic II

AIRWORTHINESS



Aircraft Documentation

Supplements

Placards

Airworthiness

Registration

Radio license (for international flights)

Operating limits (POH)

Weight and Balance (for the exact airplane)

**Airworthiness certificate
must be readily visible in the
cockpit at all times**

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION STANDARD AIRWORTHINESS CERTIFICATE			
1 NATIONALITY AND REGISTRATION MARKS N2631A	2 MANUFACTURER AND MODEL PIPER PA-22-135	3 AIRCRAFT SERIAL NUMBER 22-903	4 CATEGORY NORMAL
5. AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex B to the Convention on International Civil Aviation, except as noted herein. Exceptions: NONE			
6 TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE 08-10-95	FAA REPRESENTATIVE <i>Marion W. Williams</i> MARION W. WILLIAMS	DESIGNATION NUMBER SW-FSDO-OKC	
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			
FAA Form 8100-2 (8-82)		GPO 692-804	

Aircraft - Required VFR Day Equipment 91.205

Airspeed Indicator
Tachometer
Oil pressure gauge
Manifold pressure gauge
Altimeter
Temperature gauge
Oil temperature gauge
Fuel indicator
Landing gear position light
Anti-collision light
Magnetic compass
ELT
Safety Belts



Aircraft - Required VFR Night Equipment 91.205

Fuses (we have circuit breakers)

Landing light

Anti-collision light

Position light (red is not right, so red is left and green is right)

Source of electricity

Aircraft - Required Inspections

Airworthiness Directives

VOR Check (every 30 days)

I00 Hour Inspection (for hire or flight instruction)

Annual (every 12 calendar months)

Transponder (every 24 calendar months)

Emergency Locator Transmitter (every 12 calendar months)
121.5 (1 hour of cumulative use or half its battery life)

Static System (every 24 calendar months)

Aircraft - Special Flight Permits/Prev. Maintenance

Previously called ferry permits

Contact FSDO (Flight Standards District Office) to be issued a Special Flight Permit

Must go directly to destination

Only essential crew allowed onboard

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE			
A	CATEGORY/DESIGNATION Special Flight Permit		
	PURPOSE Production Flight Testing or Customer Demonstration		
B	MANU-FACTURER	NAME The Boeing Company	
		ADDRESS P.O. Box 767, Renton WA 13567	
C	FLIGHT	FROM N/A	
		TO N/A	
D	N- N/A		SERIAL NO. N/A
	BUILDER N/A		MODEL N/A
E	DATE OF ISSUANCE 01/31/2001		EXPIRY 01/31/2001
	OPERATING LIMITATIONS DATED 01/31/2001 ARE PART OF THIS CERTIFICATE		
	SIGNATURE OF FAA REPRESENTATIVE Sam T. Smith <i>Sam T. Smith</i>		DESIGNATION OR OFFICE NO. NM-XX
Any alteration, reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE TITLE 14, CODE OF FEDERAL REGULATIONS (CFR).			
FAA Form 8130-7 (07/04)			SEE REVERSE SIDE

Review Topic III

NON-TOWERED AIRPORT PROCEDURES



Non-Towered Airport Recommended Comms

When INBOUND:

10 miles out

Report altitude

Aircraft type

Aircraft identification

Location relative to airport

State landing or overflying



“Fremont Traffic, Warrior 601EA is 10 miles southwest at 3,000, inbound for left downwind”

(5 miles out)

Entering Downwind

Entering Base

Entering Final

Leaving the Runway

Pilots stating, “*Traffic in the area, please advise*” is not a recognized Self–Announce Position and/or Intention phrase and should not be used under any condition.

Ref. AIM 4-1-9 (g) (1)

Preferred Pattern Entry

Figure 1. Preferred and Alternate Entry When Crossing Midfield (From the PHAK)

Preferred Entry When Crossing Over Midfield



Alternate Midfield Entry



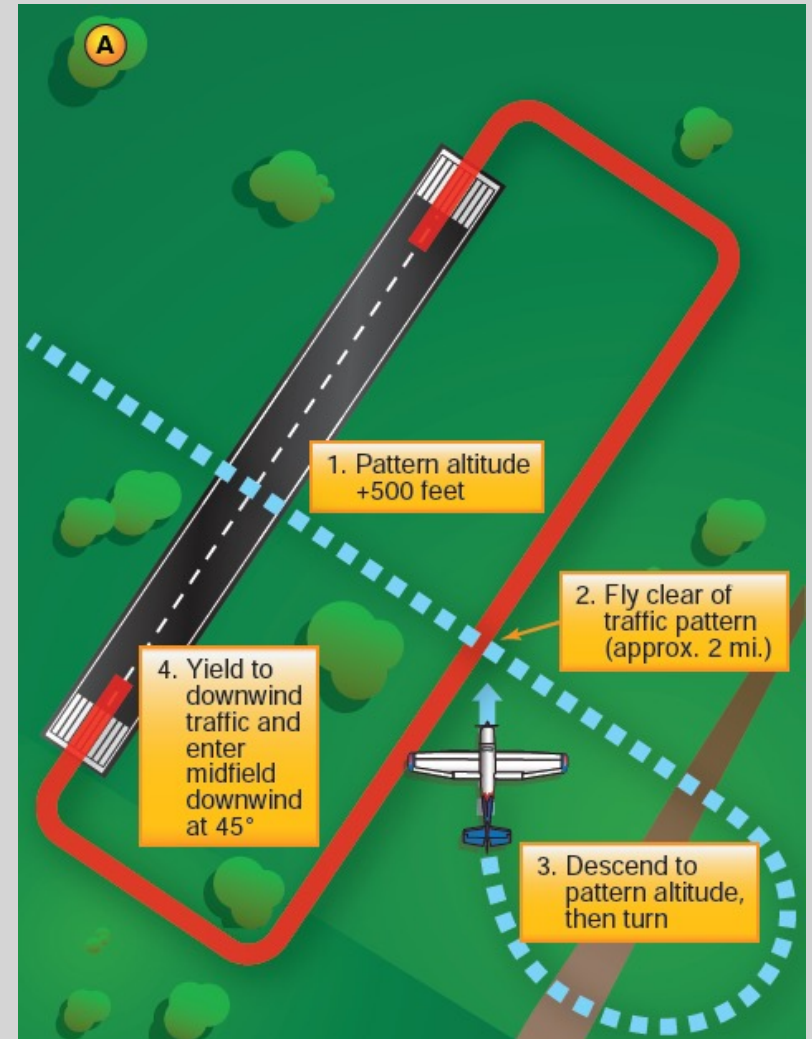
Pattern Entry

Cross airport 500 ft above pattern altitude

Fly clear of pattern and descend to pattern altitude

Join midfield at 45° angle and yield to established traffic in the pattern

OR....



Preferred Pattern Entry

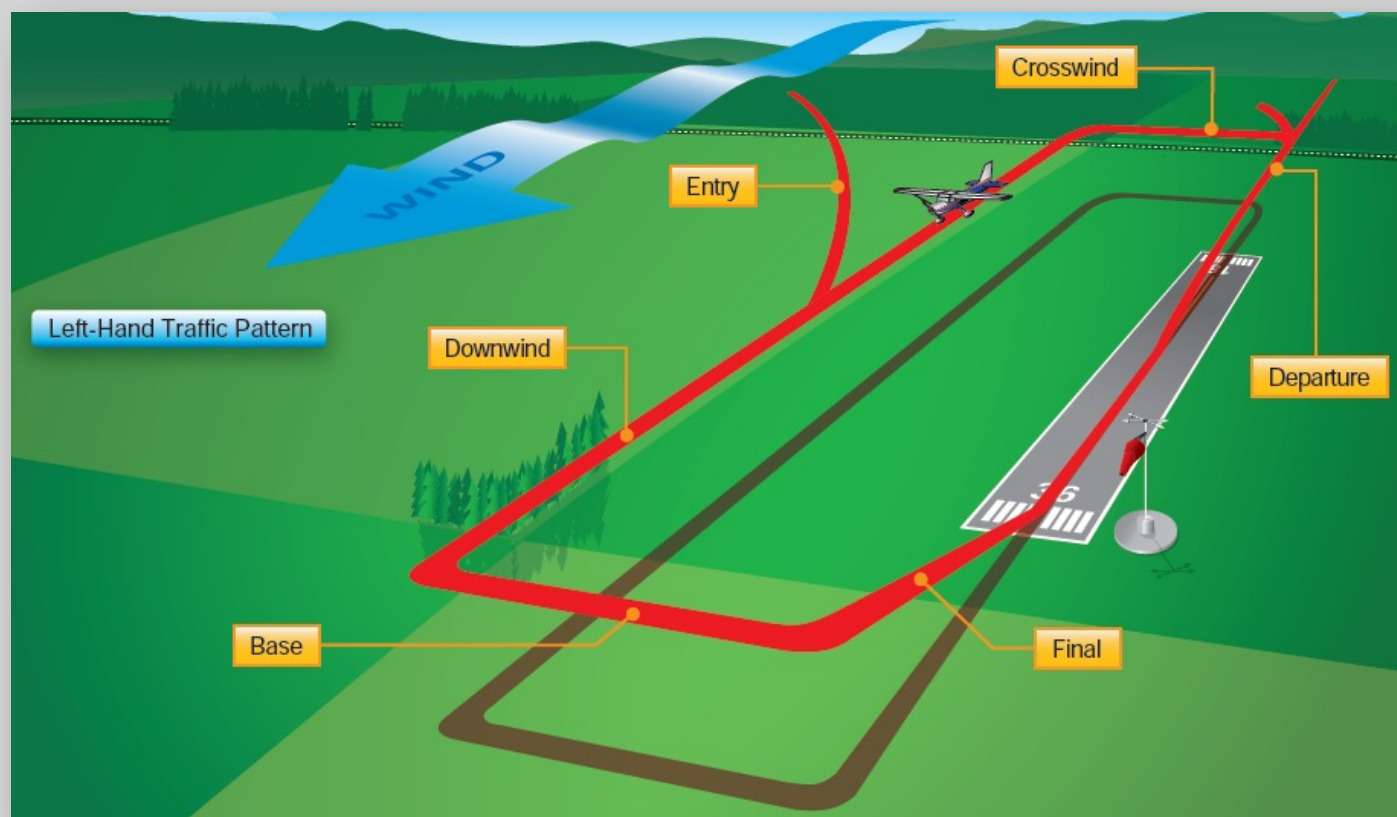
Cross airport at pattern altitude

Yield to traffic established in the pattern and join downwind



Downwind Pattern Entry

Join the downwind leg at pattern altitude and 45 Deg. angle.



Straight in Landings

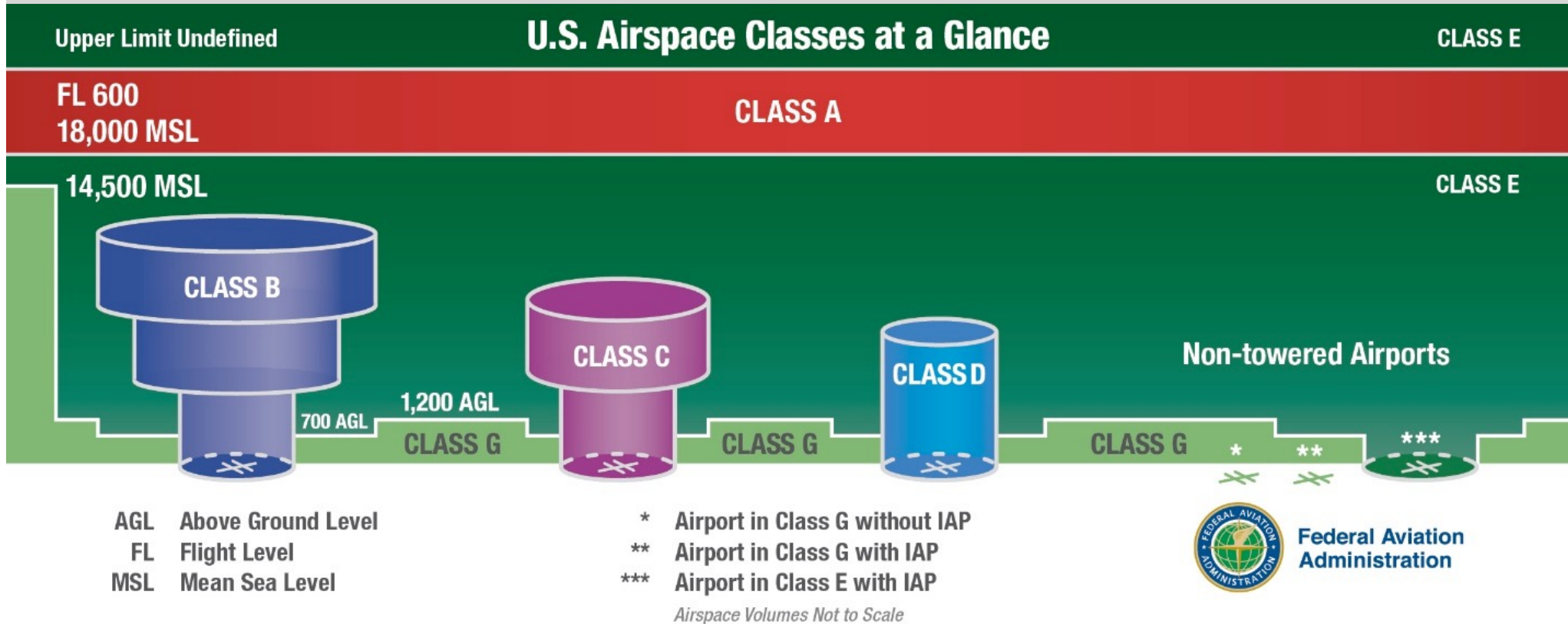
9.5 Straight-In Landings. The FAA encourages pilots to use the standard traffic pattern when arriving or departing a non-towered airport or a part-time-towered airport when the control tower is not operating, **particularly when other traffic is observed** or when operating from an unfamiliar airport. However, there are occasions where a pilot can choose to execute a straight-in approach for landing when not intending to enter the traffic pattern, such as a visual approach executed as part of the termination of an instrument approach. Pilots should clearly communicate on the CTAF and coordinate maneuvering for and execution of the landing with other traffic so as not to disrupt the flow of other aircraft. Therefore, pilots operating in the traffic pattern should be alert at all times to aircraft executing straight-in landings, particularly when flying a base leg prior to turning final.

Departing the Traffic Pattern

1.9 Departing the Pattern. When departing the traffic pattern, airplanes should continue straight out or exit with a 45-degree left turn (right turn for right traffic pattern) beyond the departure end of the runway after reaching pattern altitude. Pilots need to be aware of any traffic entering the traffic pattern prior to commencing a turn.

Review Topic IV

AIRSPACE



Strange Airspace...



14 CFR § 91.126 - Operating on or in the vicinity of an airport in Class G airspace.

[CFR](#)

[prev](#) | [next](#)

§ 91.126 Operating on or in the vicinity of an airport in Class G airspace.

- (a) **General.** Unless otherwise authorized or required, each person operating an aircraft on or in the vicinity of an airport in a Class G airspace area must comply with the requirements of this section.
- (b) **Direction of turns.** When approaching to land at an airport without an operating control tower in Class G airspace -
- (1) Each pilot of an airplane must make all turns of that airplane to the left unless the airport displays approved light signals or visual markings indicating that turns should be made to the right, in which case the pilot must make all turns to the right; and
 - (2) Each pilot of a helicopter or a powered parachute must avoid the flow of fixed-wing aircraft.
- (c) **Flap settings.** Except when necessary for training or certification, the pilot in command of a civil turbojet-powered aircraft must use, as a final flap setting, the minimum certificated landing flap setting set forth in the approved performance information in the Airplane Flight Manual for the applicable conditions. However, each pilot in command has the final authority and responsibility for the safe operation of the pilot's airplane, and may use a different flap setting for that airplane if the pilot determines that it is necessary in the interest of safety.
- (d) **Communications with control towers.** Unless otherwise authorized or required by ATC, no person may operate an aircraft to, from, through, or on an airport having an operational control tower unless two-way radio communications are maintained between that aircraft and the control tower. Communications must be established prior to 4 nautical miles from the airport, up to and including 2,500 feet AGL. However, if the aircraft radio fails in flight, the pilot in command may operate that aircraft and land if weather conditions are at or above basic VFR weather minimums, visual contact with the tower is maintained, and a clearance to land is received. If the aircraft radio fails while in flight under IFR, the pilot must comply with § 91.185.

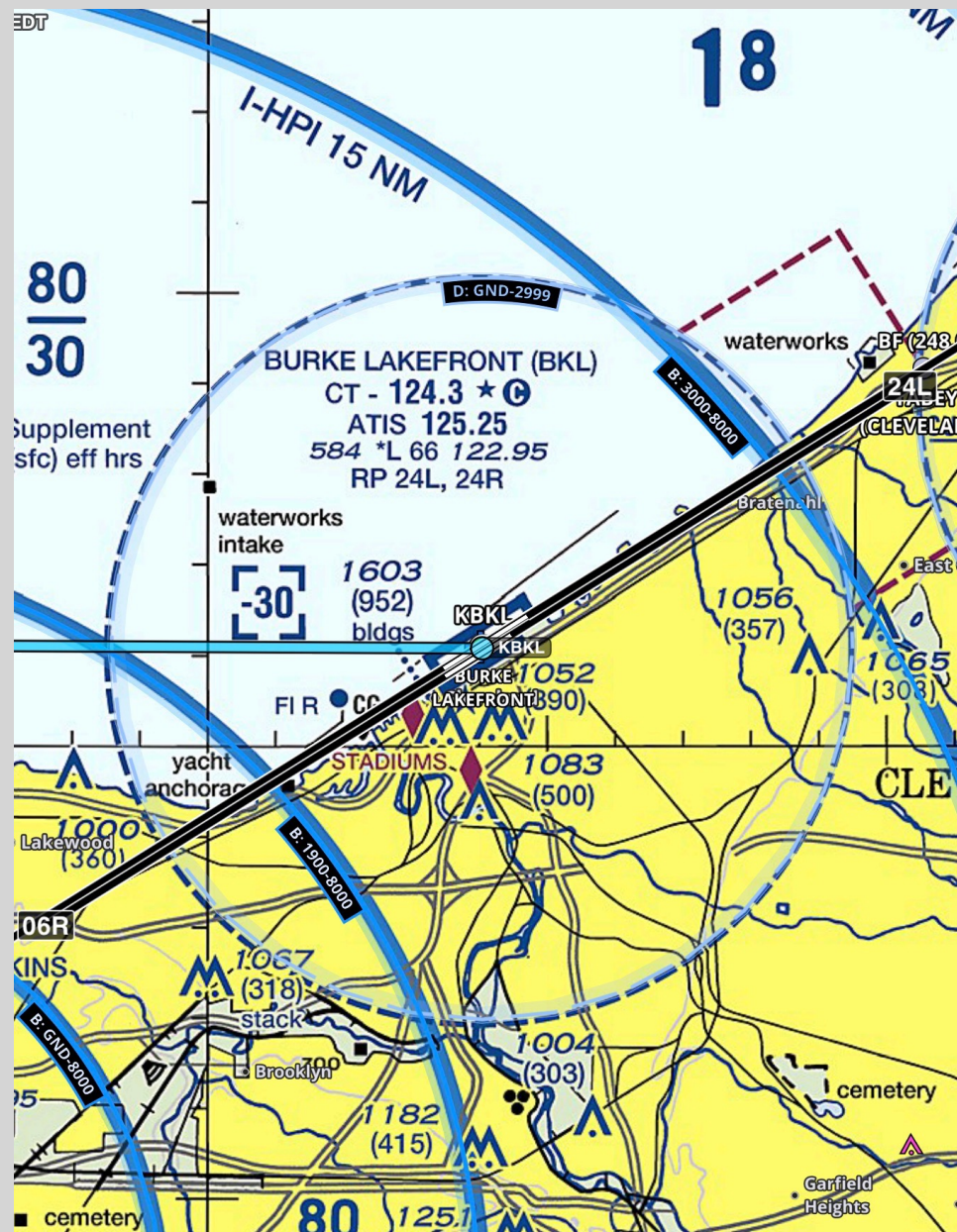
[Doc. No. 24458, 56 FR 65658, Dec. 17, 1991, as amended by Amdt. 91-239, 59 FR 11693, Mar. 11, 1994; Amdt. 91-282, 69 FR 44880, July 27, 2004]

Strange Airspace...

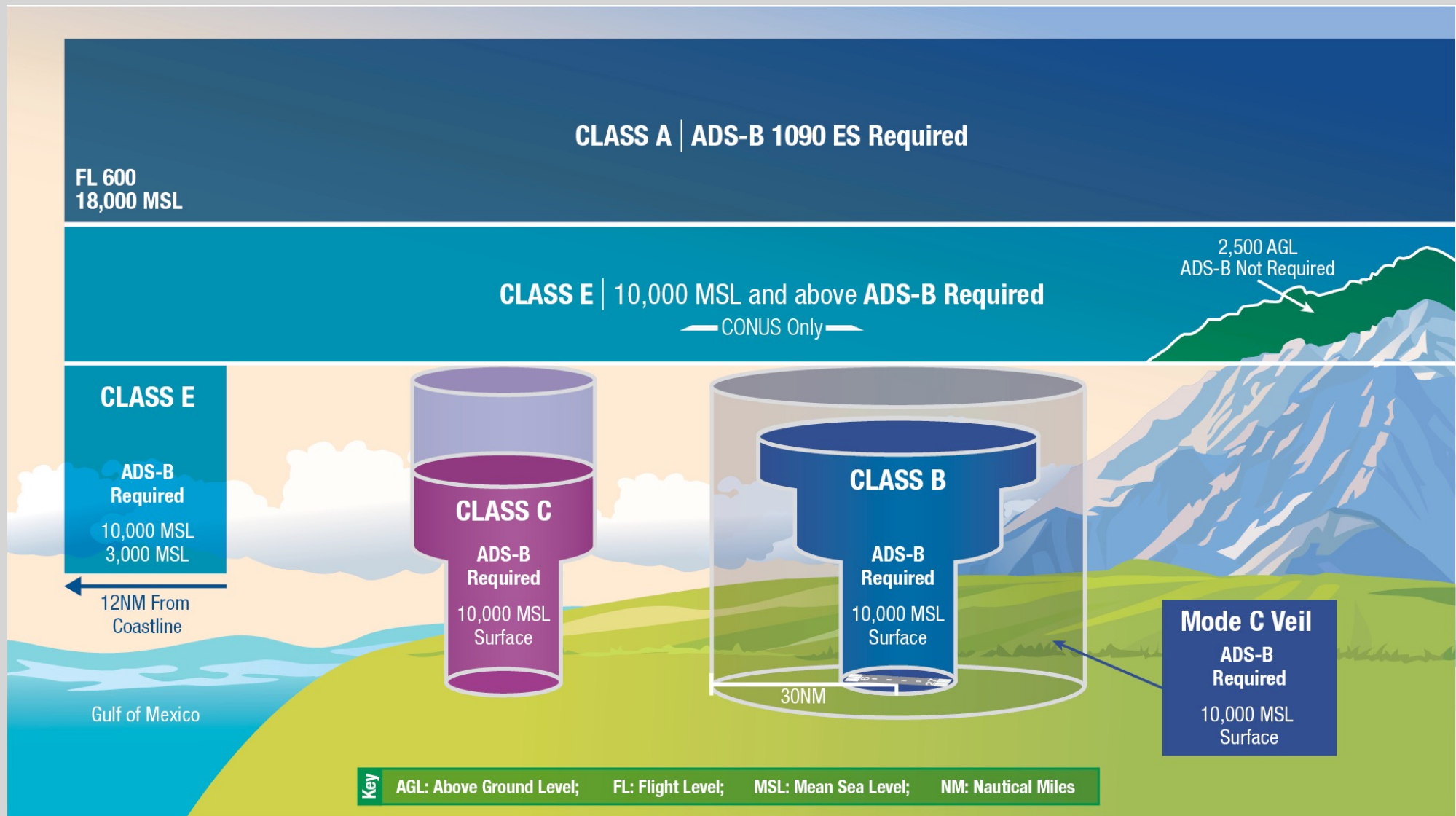
(d) Communications with control towers. Unless otherwise authorized or required by ATC, no person may operate an aircraft to, from, through, or on an airport having an operational control tower unless two-way radio communications are maintained between that aircraft and the control tower. Communications must be established prior to 4 nautical miles from the airport, up to and including 2,500 feet AGL. However, if the aircraft radio fails in flight, the pilot in command may operate that aircraft and land if weather conditions are at or above basic VFR weather minimums, visual contact with the tower is maintained, and a clearance to land is received. If the aircraft radio fails while in flight under IFR, the pilot must comply with § 91.185.



RP at our destination...



When is ADS-B Required?



FAA.gov

Airspace Requirements

Airspace Class	Entry Requirement	Pilot Certificate or Rating	Two-Way Communication	Altitude Decoding Transponder	VFR Min. Visibility Below 10,000 MSL	VFR Min. Visibility 10,000 MSL and Above	VFR Cloud Clearance Below 10,000 MSL	VFR Cloud Clearance 10,000 MSL and Above
A	ATC Clearance	Instrument	Yes	Yes	N/A	N/A	N/A	N/A
B	ATC Clearance	Private Certificate or student with endorsement	Yes	Yes within 30 NM of the class B primary airport ¹	3 Miles	3 Miles	Clear of Clouds	Clear of Clouds
C	VFR: Radio Contact IFR: Clearance	Student Certificate	Yes	Yes within C space and above lateral limits of C space ¹	3 Miles	3 Miles	500 below 1,000 above 2,000 horizontal	500 below 1,000 above 2,000 horizontal
D	VFR: Radio Contact IFR: Clearance	Student Certificate	Yes	No unless required by other airspace	3 Miles	3 Miles	500 below 1,000 above 2,000 horizontal	500 below 1,000 above 2,000 horizontal
E	VFR: None IFR: Clearance	Student Certificate	IFR Only	No unless required by other airspace	3 Miles	5 Miles	500 below 1,000 above 2,000 horizontal	1,000 below 1,000 above 1 statute mile horizontal
G	None	Student Certificate	No	No unless required by other airspace	Day: 1 mile Night: 3 Miles	5 Miles ²	500 below ² 1,000 above ² 2,000 horizontal ²	1,000 below ² 1,000 above ² 1 statute mile horizontal ²

¹An altitude decoding transponder is required above 10,000 MSL. ²When flying 1,200 AGL or below: DAY: 1 mile visibility clear of clouds; NIGHT: 3 miles visibility, 500 below, 1,000 above, 2,000 horizontal

October 2022

Our route: Class B, C, D, E, G!

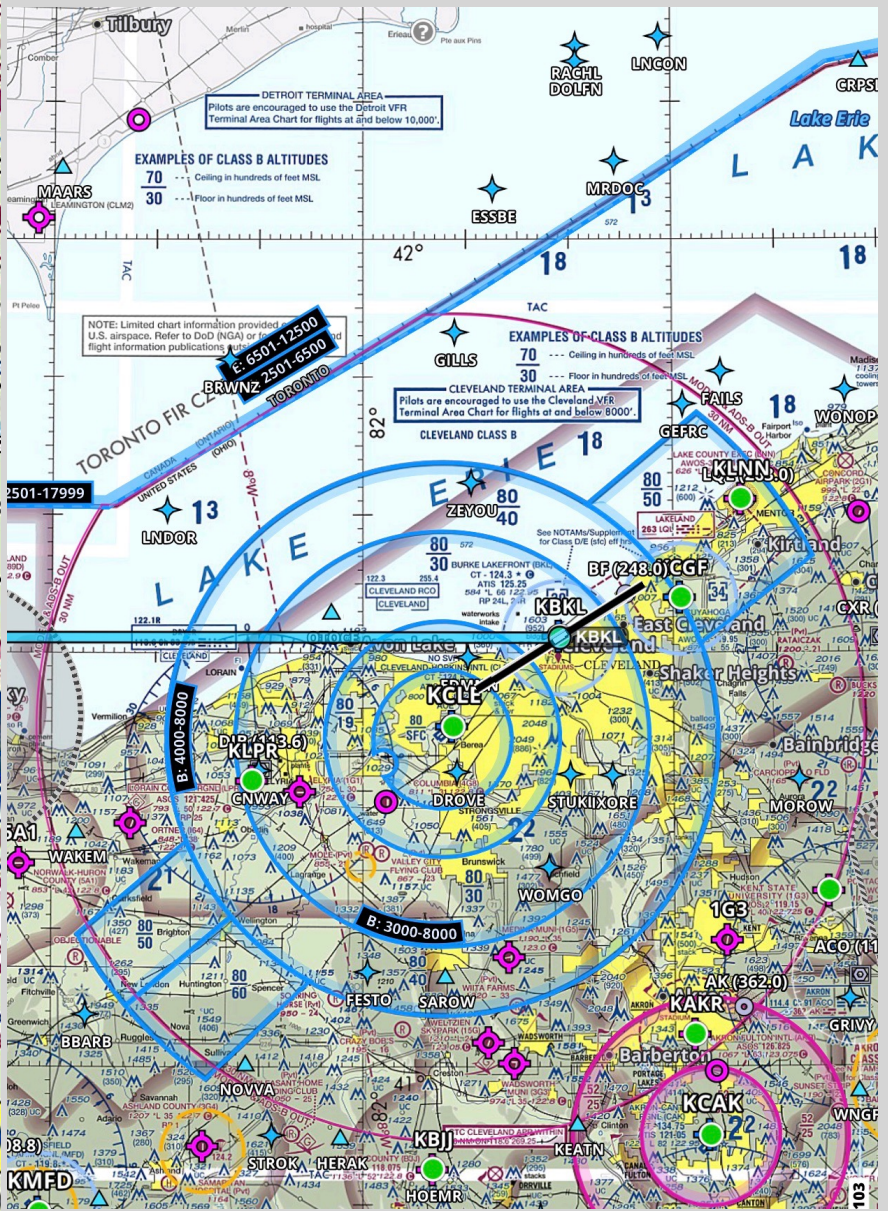
Airspace - ADS-B

If you fly in this airspace you must be equipped with ADS-B

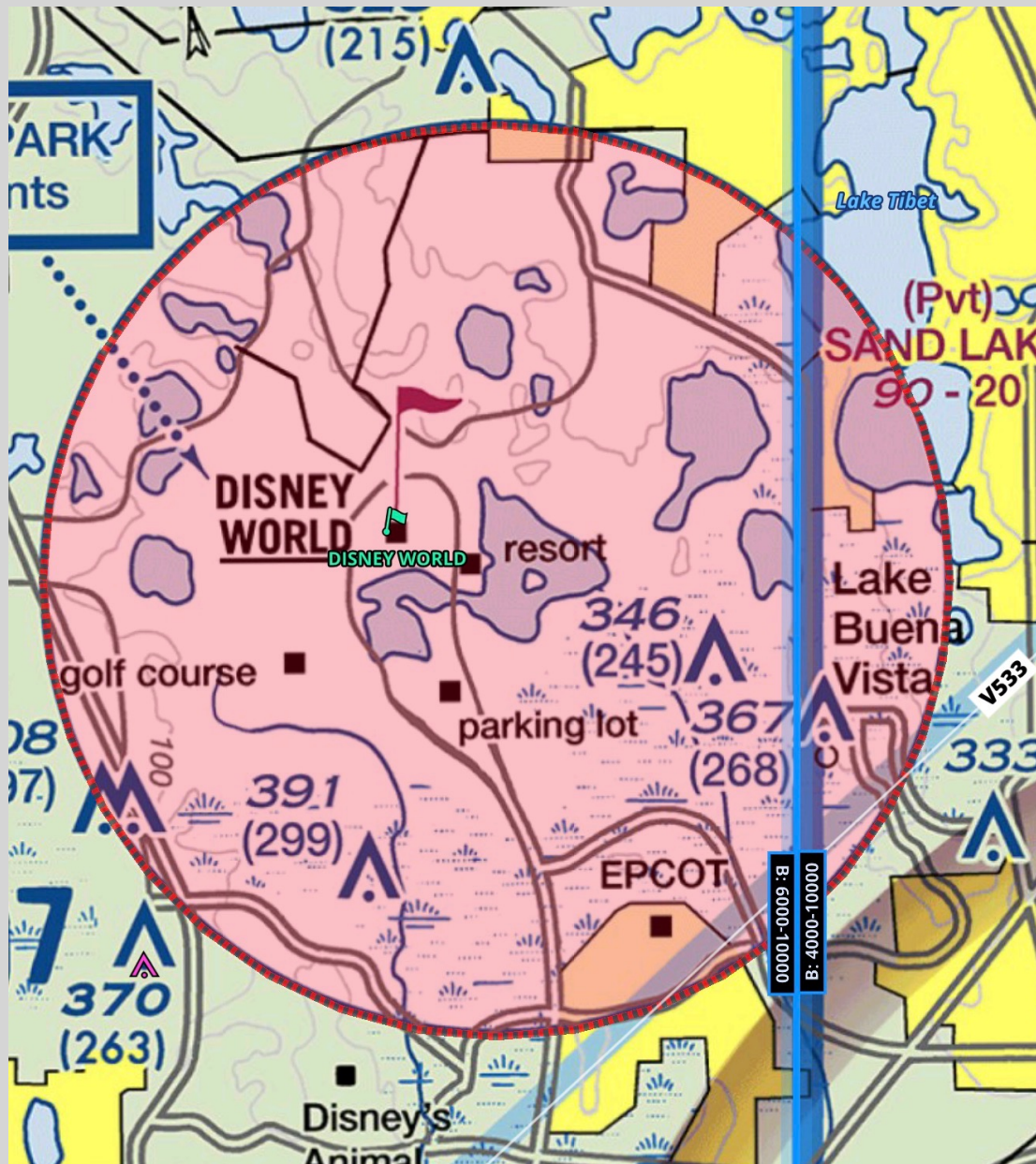
Airspace	Altitude
Class A	All
Class B	Generally, from surface to 10,000 feet mean sea level (MSL) including the airspace from portions of Class Bravo that extend beyond the Mode C Veil up to 10,000 feet MSL (e.g. LAX, LAS, PHX)
Class C	Generally, from surface up to 4,000 feet MSL including the airspace above the horizontal boundary up to 10,000 feet MSL
Class E	At and above 10,000 feet MSL over the 48 states and DC, excluding airspace at and below 2,500 feet AGL Over the Gulf of Mexico at and above 3,000 feet MSL within 12 nautical miles of the coastline of the United States
Mode C Veil	Airspace within a 30 NM radius of any airport listed in Appendix D, Section 1 of Part 91 (e.g. SEA, CLE, PHX) from the surface up to 10,000 feet MSL

[FAA.gov](https://www.faa.gov)

ADS-B on our planned Cross Country



Temporary Flight Restrictions



Natural disasters such as wildfires
and hurricanes

Certain major sporting events

Emergency or national security
situations

Presidential visit

Stadiums

Space Operations (reentry)

Rockets (SpaceX, etc.)

Model Rockets

NASCAR, Indy 500, etc.

Airshows

Law Enforcement

Fires (can be wide areas)

Explosives (mining etc.)

Gas releases

Salvage operations

<https://jasonblair.net/?p=3409>

Google "Jason Blair TFR"

Review Topic V

AVIATION WEATHER

Atmospheric Conditions

	Stable Atmosphere	Non-stable Atmosphere
Turbulence	No	Yes
Clouds	Stratus	Cumulous
Visibility	Poor	Good
Precipitation	Steady	Showery

METARS and TAFS

METAR

Aviation routine weather report - observation of current surface weather reported in a standard international format

issued every hour

Special weather report (SPECI) can be issued at any time to give update for rapidly changing weather, etc.

**METAR KMKG 121355Z 13005KT 10SM
SCT095 OVC140 22/09 A3007 RMK AO2
SLP182 T02220094**

TAF

Terminal Aerodrome
Forecast

Report established for the
5SM radius around an
airport

Valid for a 24-hour period
(sometimes a 30 hour period
depending on the airport),
and updated four times a
day (0000Z, 0600Z, 1200Z,
1800Z)

KMKG TAF

3h 0m ago

**121132Z 1212/1312 VRB04KT P6SM VCSH
SCT100 BKN200
FM121400 12005KT P6SM OVC100
FM121900 25007KT P6SM VCSH BKN080
FM130200 06006KT P6SM VCSH BKN070
FM130600 07005KT P6SM BKN040**

AIRMETS, SIGMETS, Convective SIGMETS

AIRMET

Issued every 6 hours

Weather phenomena considered potentially hazardous to light aircraft.

Moderate icing, moderate turbulence, sustained surface winds of 30 knots or greater, widespread areas of ceilings less than 1,000 feet and/or visibility less than 3 miles, and extensive mountain obscurement

Sierra: IFR and mountain obscurement

Tango: turbulence, strong surface winds, low level wind shear

Zulu: icing and freezing levels

SIGMET

Valid for 4 hours

Severe weather not associated with thunderstorms

Severe icing, severe or extreme turbulence, dust storms or inflight visibilities to less than 3 SM, volcanic ash

Convective SIGMET

Valid for 2 hours

Severe thunderstorms with surface winds greater than 50 knots, hail at the surface greater than 3/4 inch diameter, tornados

Also issued for embedded thunderstorms, squall lines, or thunderstorms with heavy or greater precipitation that affect 40% or more of a 3,000 square mile or greater region

Review Topic VI

PUTTING OUR CROSS COUNTRY FLIGHT TOGETHER

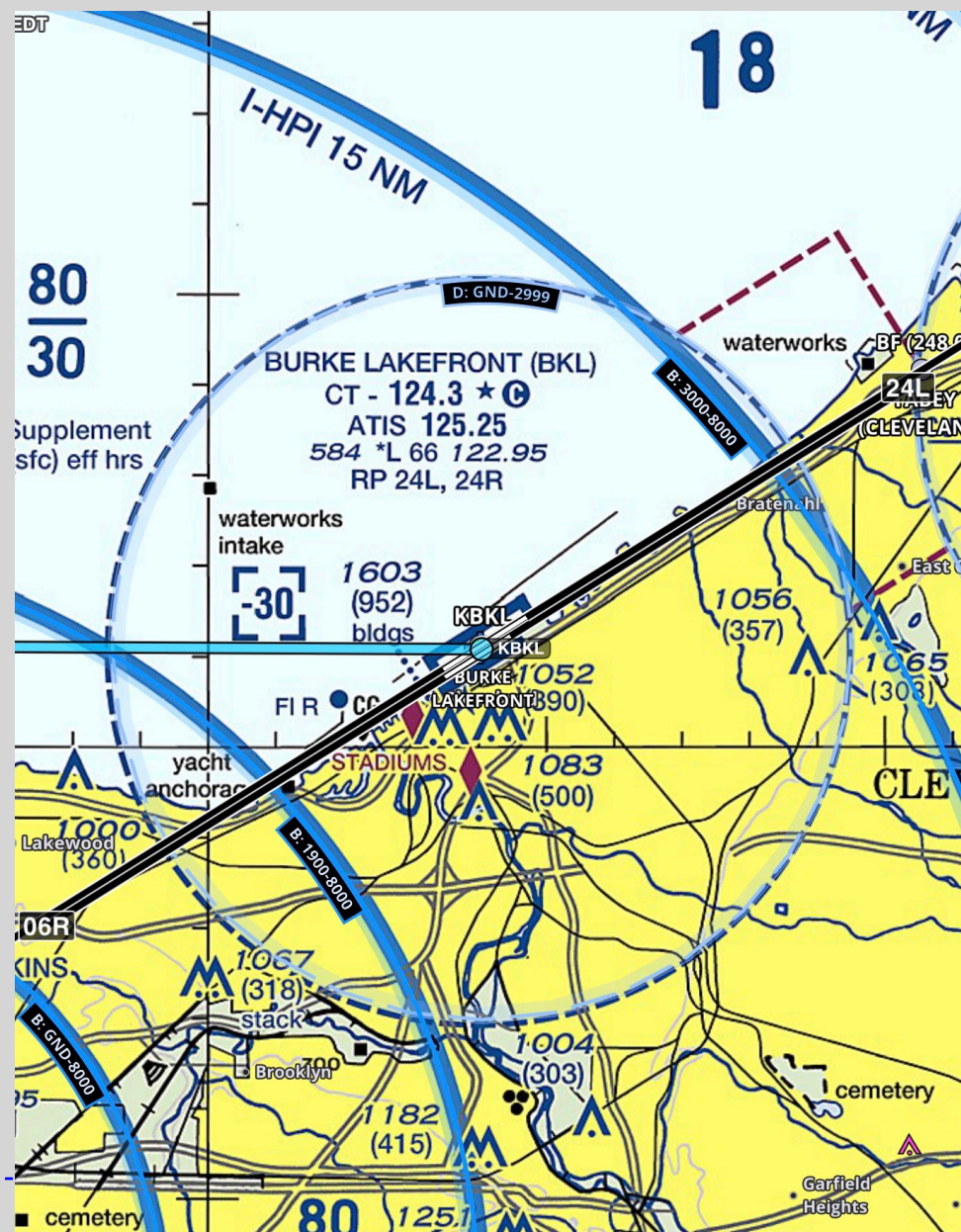


For all flights we must know:

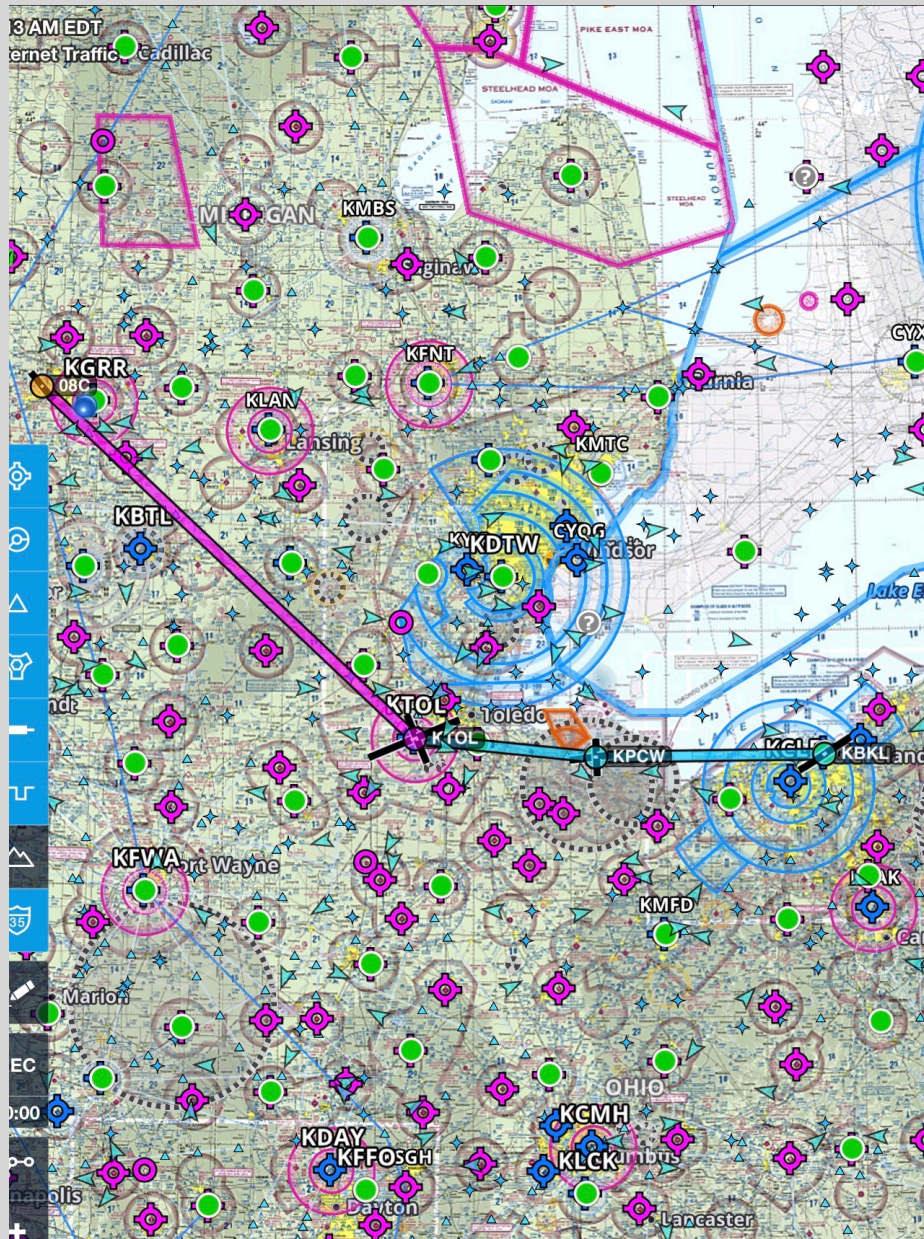
Notams
Weather
Known ATC delays
Runway lengths
Alternates
Fuel
Takeoff and landing data



Our airports



Routing



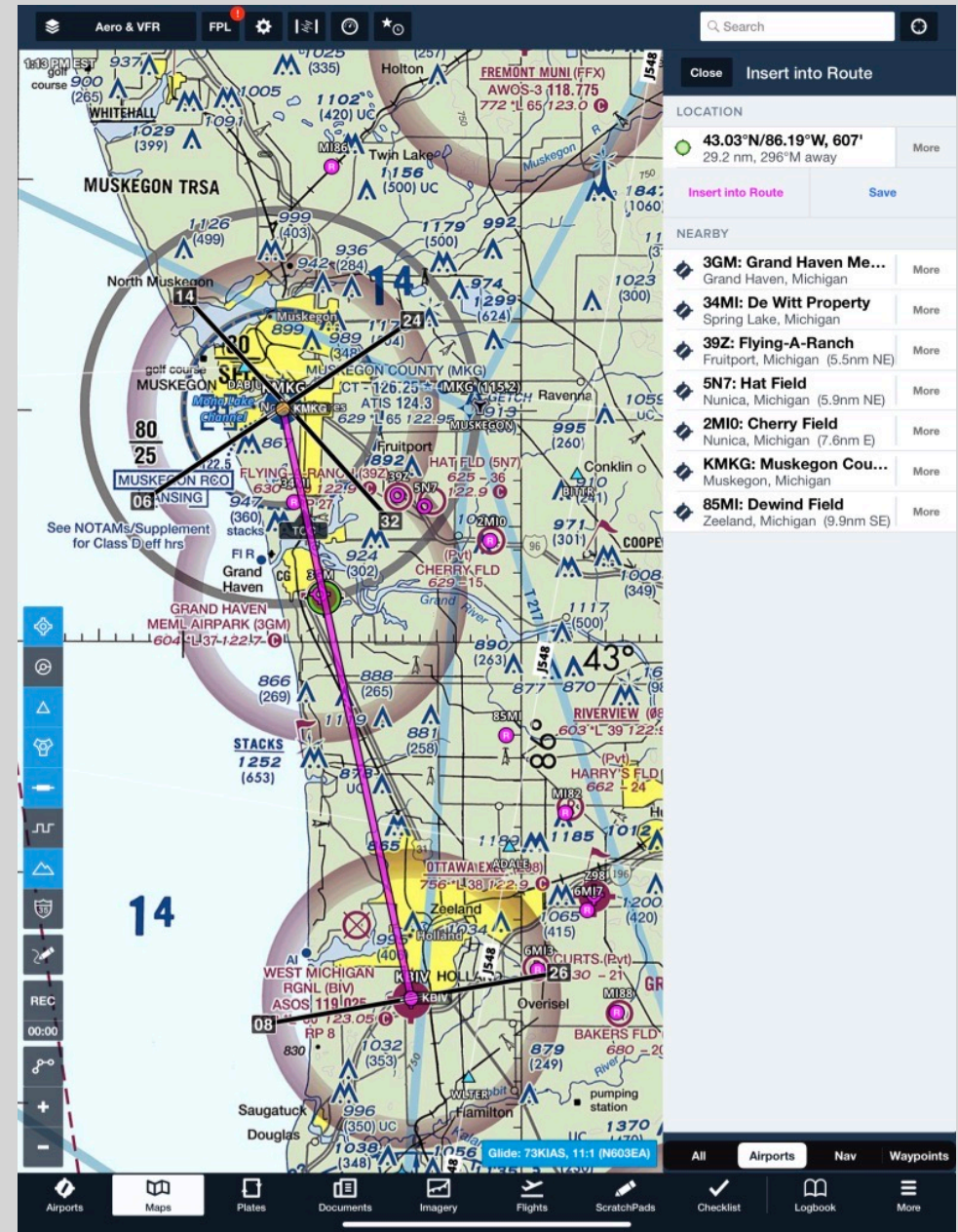
**Why this route of flight
and not direct?**

Inserting Waypoints into ForeFlight

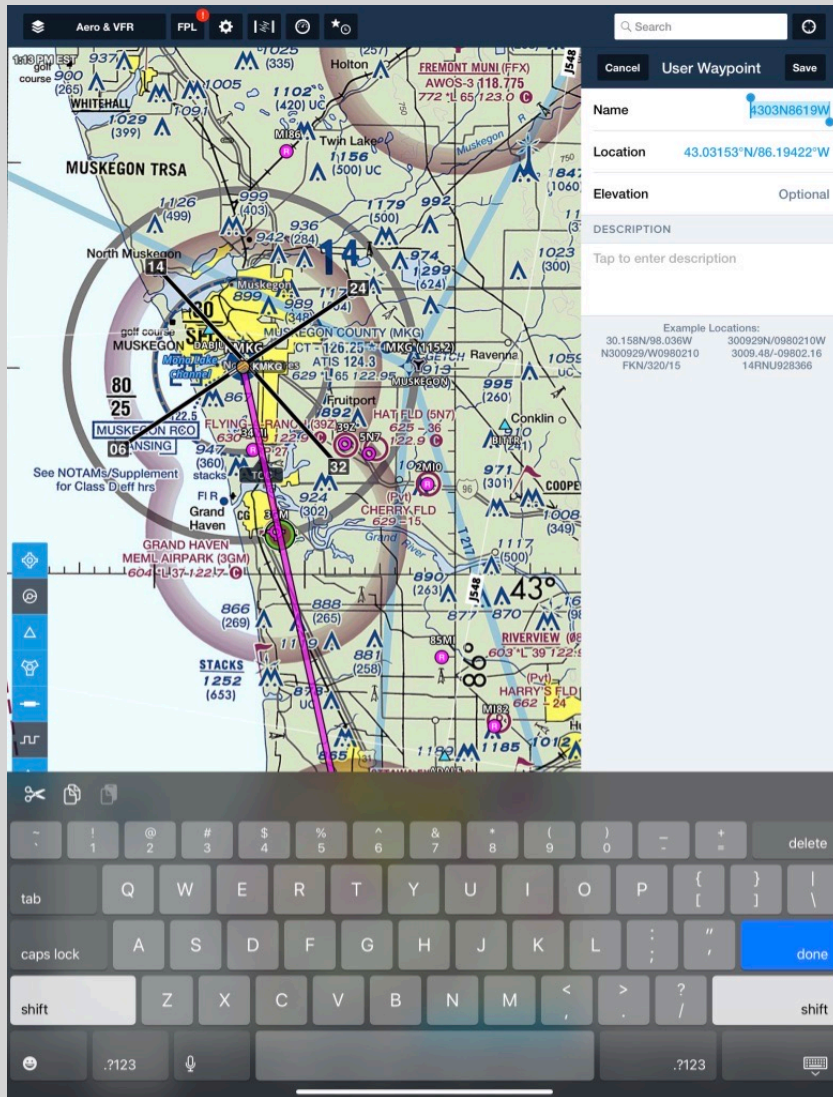
Push and hold on the
waypoint you wish to insert

Click “more” in top right hand corner

Click “Save”



Inserting Waypoints into ForeFlight



46%

Search

Cancel User Waypoint Save

Name 3GM

Location 43.03153°N/86.19422°W

Elevation Optional

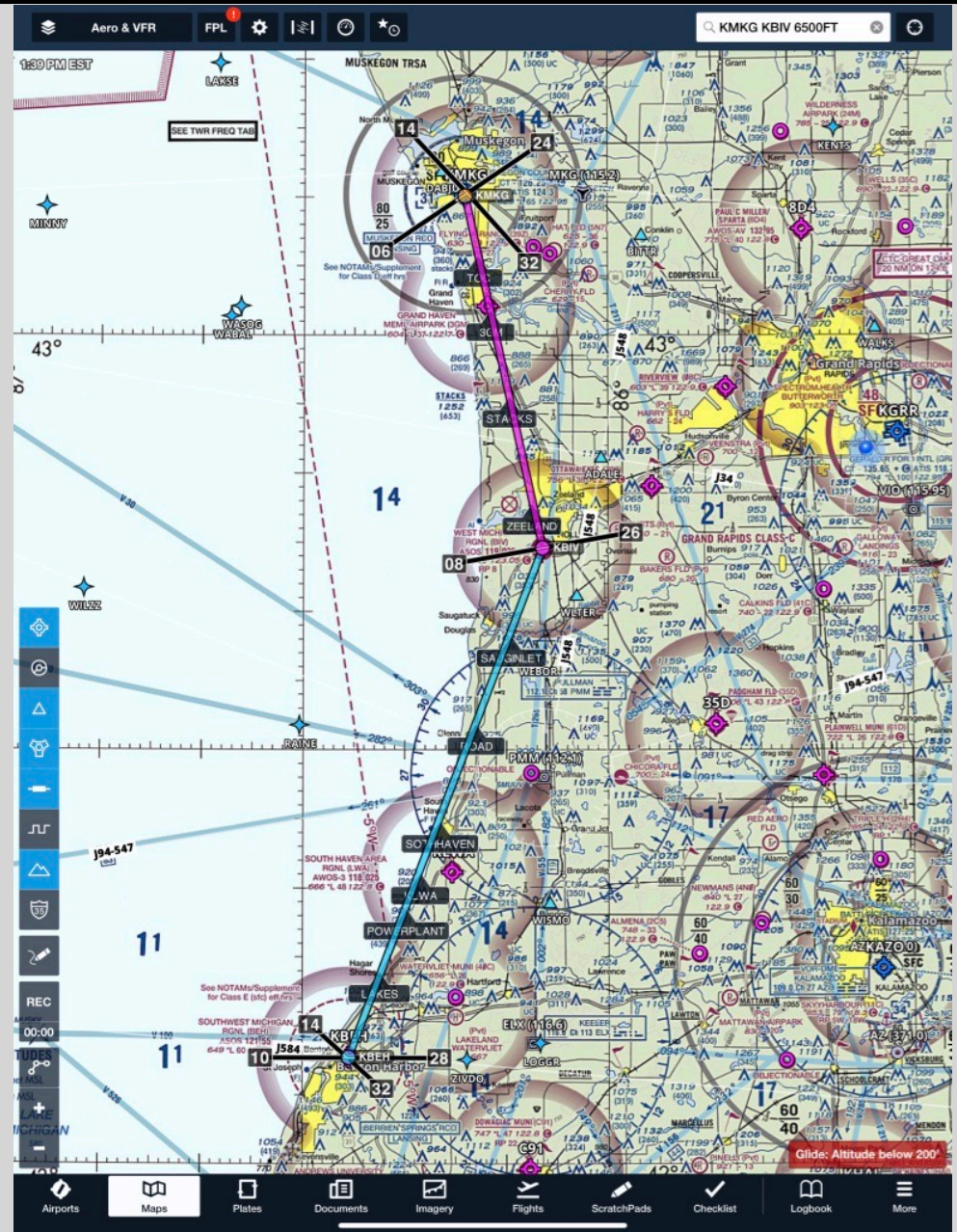
DESCRIPTION

Tap to enter description

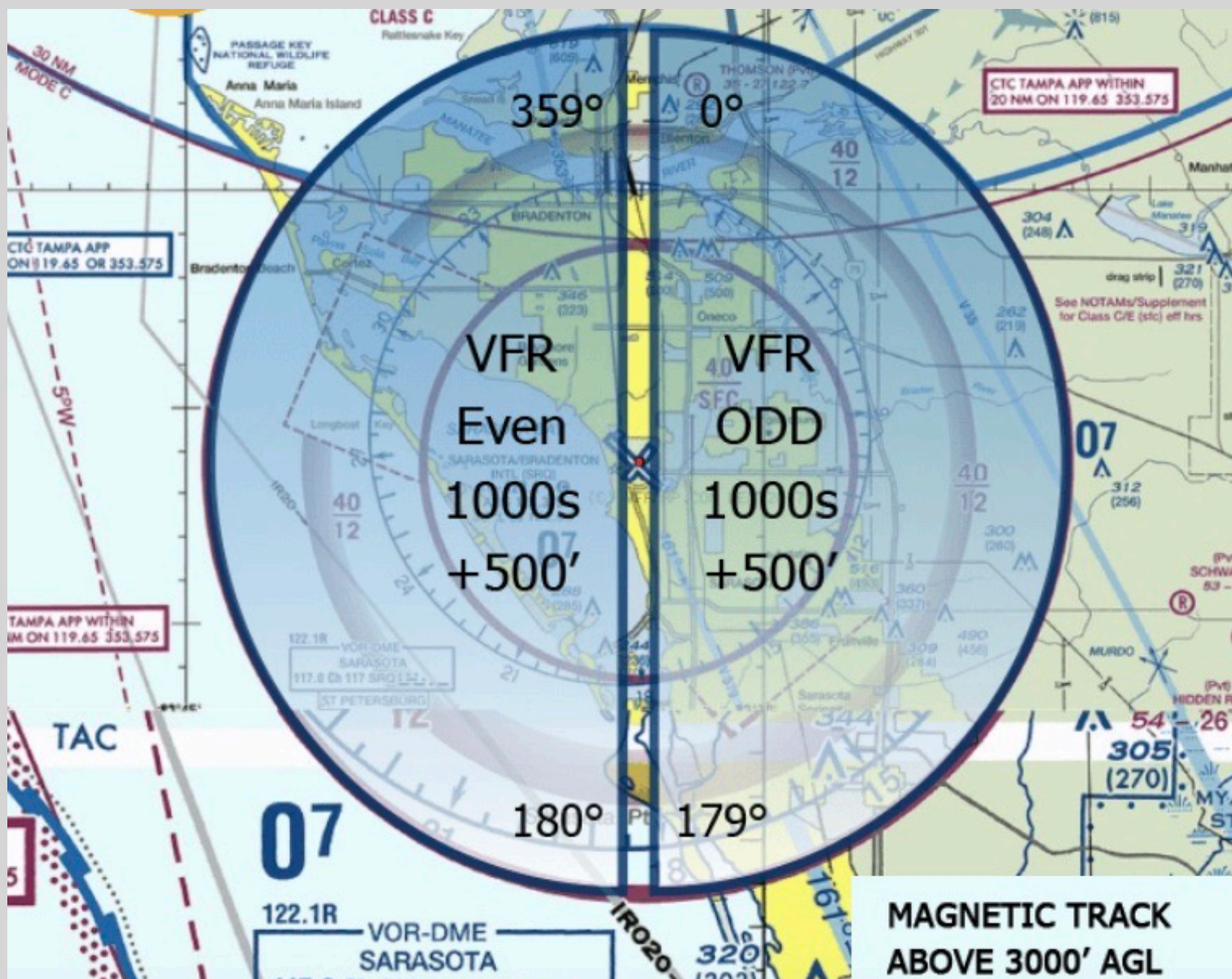
Choose label name (no spaces)

ForeFlight VFR Waypoints

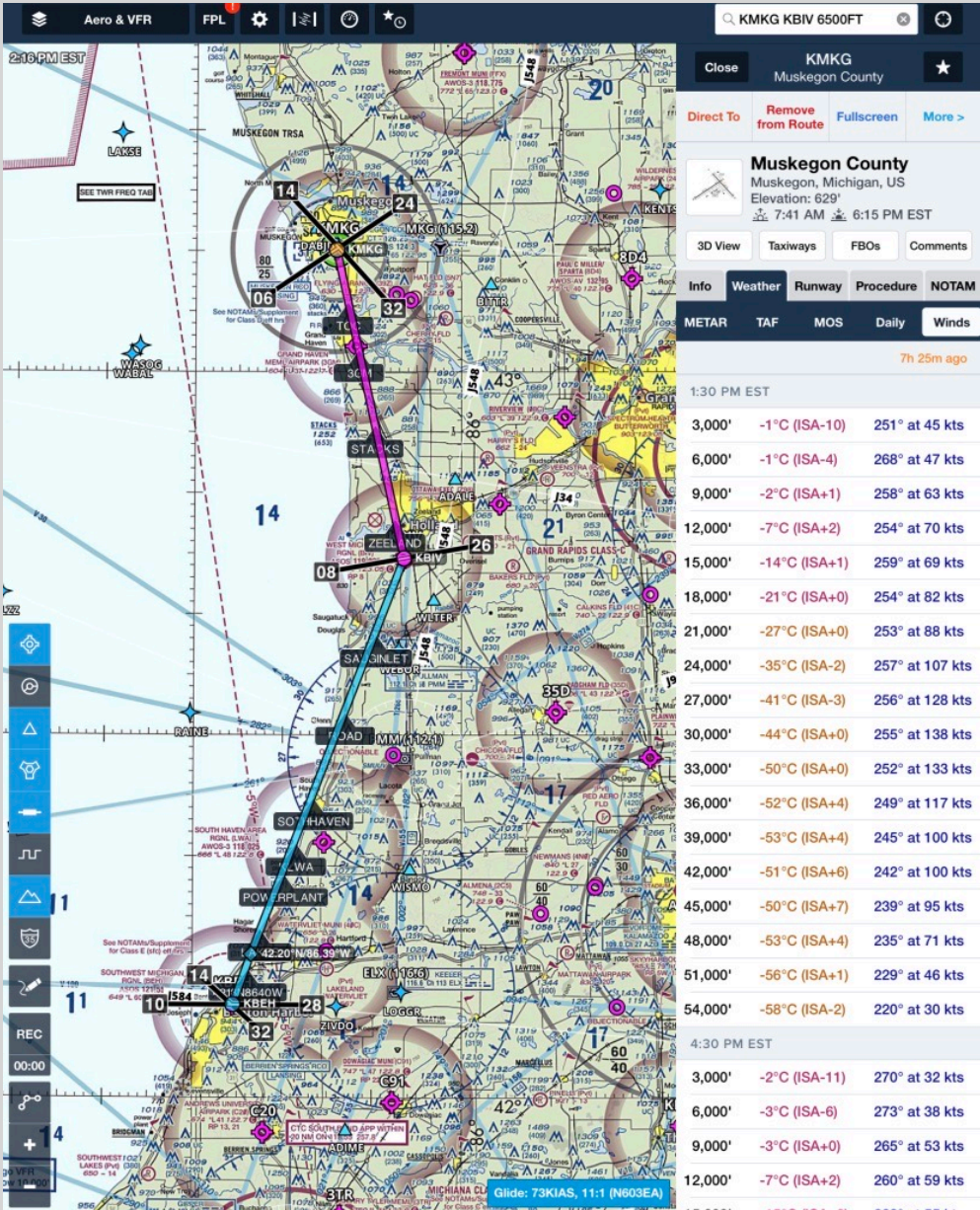
TOC
3GM airport
Prominent Stacks
City of Zeeland
KBIV airport
Saugatuck Inlet
Crossing main highway
City of Southhaven
KLWA airport to the left
Powerplant
Prominent Lake shape to the left
KBEH airport



VFR Cruising Altitudes



Winds Aloft



Arthur Felt

Double Check...

Notams

Weather

Known ATC delays

Runway lengths

Alternates

Fuel

Takeoff and landing data

Am I legal?

Am I proficient?

Is my airplane legal?

Airspace/minimums/equipment?

TFR's? Restricted?

Airport procedures/entry?

Routing?

Altitudes?

Distance, time, other performance calculations?

Personal minimums?

Safe?

Questions?

