

Flight Planning - Ground Lesson

Attention

I want to fly to Huntsville to see the NASA stuff. Should I just go direct or what? What altitude?

Objective

To cover everything so you will have a safe flight.

Schedule

Ground instruction – 30 minutes

Air instruction – 60 minutes

Reference Material

None

Material

<https://www.aopa.org/flightplanner/index.cfm>

Set up a direct plan from departure airport to arrival airport. Direct is always the fastest. In some cases you might be able to fly direct, but usually there will be some reason you can't. Use the IFR base chart. Then modify using airports, GPS waypoints, and/or VORs.

Open <https://skyvector.com/> in another tab

In SkyVector you can go back and forth between the sectional and the low enroute chart. It will also overlay important things like TFRs and severe weather.

Airspaces

Do you go under, above, around, or through?

Class B airspace you typically will want to find a way under. It will be too tall to go above. You are able to go through the class B airspace of Atlanta north to south on V97.

Class C airspace best to plan to go over or if you are going to hit an outer edge to contact their approach control.

Class D airspace is not that tall you can easily go over it.

MOAs you can typically plan to go through but be prepared to be sent around it if it happens to be active that day.

TWT

While you plan and while you fly you always need to consider what I call TWT.

Terrain

Weather

Traffic

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Keep your eyes/electronics out in that priority since terrain is what kills many people. Keep in mind when you mix terrain and weather that is the cause of many accidents VFR -> IFR weather unprepared.

Airways

Are there any airways that are established that you could use? If you fly them correctly you will not have to worry about terrain or communications but there might be more traffic to be cautious of. Stay above the MEA whenever possible...at least above the MOCA.

There are now more GPS airways being established but most airways were made using VORs. By using VORs adds another layer of safety in case there is a GPS issue.

Approaches

Review all the approaches for the airport you are going to especially if you have never been there before. The approaches safely lead you from the enroute environment to the airport. You can incorporate one of the initial fixes into your route plan. I strongly suggest printing the approach in case something happens to your tablet in flight.

Remember that the approaches have all the necessary info for that airport that you will need including, runway numbers, runway lengths, elevation for touchdown zones, coordinates, and frequencies.

But what if the approach I choose does not make sense because the winds do not favor it? You can either come up with a plan to approach from the other side or do a circle to land.

Fuel

Most important you need to make sure you have enough fuel to fly plus the required extra. Second fuel prices are all over the place. If you can save \$2/gallon plan to stop some place to buy gas. If you plan to stop remember it takes gas to go out of the way and to climb back up. Don't bother if it is not worth it.

Weather

Your route of flights you could plan right now for any place you might go within 2 years. Weather you better start checking forecasts 2 days from your flight. Weather will determine if you need to alter your route of flight, change your altitude, determine VFR vs IFR, or drive instead.

Check METARs and TAFs

Check all airports you plan to land or pass through

http://aviationweather.gov/adds/metars/?station_ids=kryy%2Ckpuj%2Ckpdk%2Ckrmq%2Ckatl%2Ckgad%2Ckcha%2Ckdn%2Ckahn%2Cklzu&std_trans=standard&chk_metars=on&hoursStr=most+recent+only&chk_tafs=on&submitmet=Submit

AOPA Weather site

<https://www.aopa.org/wx/#>

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National Weather Service

<http://www.weather.gov/ztl/>

A good site for analysis

<http://www.usairnet.com/cgi-bin/launch/code.cgi?Submit=Go&sta=KRYY&state=GA>

Get an outlook briefing 24 hours before with
1800wxbrief.com or AOPA Planner

Check NOTAMs

Check any airport you plan to land...you never know when the runway or ramp will be under construction especially at night.

<https://notams.aim.faa.gov/notamSearch/nsapp.html#/>

TFRs

This is the official site

http://tfr.faa.gov/tfr_map_ims/

Also check SkyVector.com which will show baseball games, football games, etc.

ForeFlight and Garmin Pilot

Manually take what you planned on the computer and put the plan into your tablet. You can save an .fpl file from Skyvector and import it to ForeFlight and G1000.

File

You can electronically file the plan before you leave for the airport or at the airport during pre-flight. You do not have to call 800WXBRIEF anymore.

Batteries

Remember to charge everything you would need. Tablets, Stratus, etc.

Flight to Gadsden

Which qualifies as cross country

First I go to SkyVector.com and put in KRYY to KGAD. Then you can look at the sectional to see there is not many reasons you can't go direct. If it is actual VFR conditions you would have to consider getting that close to 4A4 which has jumpers. If it is true IMC that would not be an issue.

You can see the V325 airway is near the direct line so using that will not take up extra time and will give assurances for navigation, radios, and terrain. I am going to add DALAS FELTO MAYES as waypoints.

Now looking at the airport I try to figure which would be the best runway to use. You want to consider length and winds. For KGAD runway 24 makes the most sense if the winds agree. Looking at the approaches there is an ILS approach and a GPS approach for runway 24. The initial fix for either approach is HUBJU.

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So now the planned route is KRYY DALAS FELTO MAYES HUBJU KGAD. Going through HUBJU will take you out of the way but you might also get vectored to save a couple minutes.

So now what altitude to plan? Looking at the low enroute chart I see the MEA for V325 is 5000 but 5000 is an odd number so I would plan for 6000. At MAYES I would start descending to 3600. If I am too high at HUBJU I would do the hold till I get to 3600.

Flying to Huntsville

Now let's talk about options...