Cross Country Flight

Pilots Handbook of Aeronautical Knowledge Chapter 16

CROSS COUNTRY FLIGHT: Now it the time to take your first trip!!!! You are actually going to go somewhere now.

Map Reading

MAP READING: The Aviation maps that you should already have are extremely accurate and you will want to use them. Now, from the section on what airplanes to use, you should know that I am totally against using all this high tech stuff. If the plane you are in has a nice new Garmin 530 it is time to turn it off. Your instructor should focus on your map reading skills here and not how to operate a GPS. Remember people have been flying without this stuff for at least 80 years and they are fine.

You just want to use simple time and distance. In the next story I have a very simple system that will help you thru this. Remember you want to keep everything as simple as possible in an airplane. Also **"WHEN IN DOUBT RELAX"** So I will I get into some of the things you want to do.

Cross Country Planning

CROSS COUNTRY PLANNING: Your flight instructor should spend about two hours on the ground with you going over everything but I will outline what you want to do. Remember the easier you make it on the ground, the easier it is going to be once you get into the air. I will go step by step here starting from scratch.

Airport Facilities Directory

AIRPORT FACILITIES DIRECTORY: The airport facilities directory will tell you all of the information you need to know about any airport within the area the directory covers. This book is great especially if you have never flown to the airport. You will want a current one for your flight test.

The first thing we want to do is find out where the airport you are flying to is located. You will find the Longitude and the latitude in the ADF. Once you have found the coordinates, you want to locate the airport on you map. Now you want to find your home airport and then draw a line between the two. You don't have to make the line very dark right now.

After you have done this, you want to check your route of flight for any hazards that you many find. If there is a 13,000 foot mountain on your line you will want to adjust your flight path. The other thing you want to think about is checkpoints. You want to make sure you can see your checkpoints from the air. Things like power lines sometimes are hard to see depending on how high you are. Railroad tracks, highways, airports, lakes and canals are good references.

Make sure you can have a few emergency landing spots on the flight path in case you ever have an engine failure. Once you have found a safe path. Then draw your final line.

Once you have chosen your course, you want to mark off ten-mile segments with your potter. Make sure you use the nautical mile scale and not the statue mile scale. Now find good checkpoints that you could identify from the air. You want to make sure these checkpoints are between 15-25 miles apart. Circle these points.

On your Flight planning sheets you will want to mark all of these points down. You will start with your departure airport and then put your checkpoints in the boxes on the left. Then mark off the distance between checkpoints in the leg boxes. I have a link to the flight plans I use.
LINK

Now you will need to find your true course with your plotter. Then mark this course down in the true course box (TC)

About Plotters

ABOUT PLOTTERS: I have found that some plotters can be confusing to use on the ground and especially in the aircraft. I suggest to all my students that they use the ASA Rotating plotter. This plotter is very easy to use in the airplane. All the numbers are easy to read and the rotating part will line up easily with the longitude / latitude lines and you can easily read your true heading.

ASA Rotating Plotter

Flight Service Station

FLIGHT SERVICE STATION: Once you have your basic flight planning done you will want to call the flight service station for your weather. Predicting weather is still not exact. In a lot of cases they will be right on but once you get into a storm season you will want to remember my rule.

"DON'T TRUST THE WEATHER MAN" In most cases they are going to be right but when you get into a storm season expect the worst.

The weather information we need is obtained from the flight service station; all you have to do is call up and request a briefing. There are three types of briefing: standard, abbreviated, and outlook. For your purposes, you will obtain the standard briefing since the flights you are taking should only about an hour or two long. The abbreviated briefing is for updates. If you are on a long cross-country, you will want to check the weather sometime during your flight. The outlook briefing is used if you are planning a cross-country a day or two ahead of time.

When you want to obtain weather, you will call the flight service station. The telephone number is 1 800 WX BRIEF. The briefer will come on the telephone after a few recordings and ask what you want. Your instructor should walk you thru all of this.

TALKING TO THE BRIEFERS: You will find out that you have a lot of trouble understanding them at first and they are going along pretty fast. There are some tapes and videos out there but the easiest thing to do is go to Radio Shack and get one of those phone microphones you can plug into a tape recorder, then tape the call and listen to it. Another thing you may want to do is come up with your own shorthand for different things. Pretty much every student I have comes up with his / her own system.

WAYS TO CONTACT THE FLIGHT SERVICE STATION: There are many different ways to contact the flight service station to obtain weather information or to file and close flight plans. The first way is described above, on the telephone and the next way to contact the flight service station is over the radio. Your instructor will go over all of this with you. You can also look in the airport facilities directory. If you ever can't get in touch with them for some reason, you can always contact FLIGHT WATCH on 122.0

FLIGHT FOLLOWING: Flight following is a great thing and you should use it. If you are at a controlled airport you just tell ground that you want flight following and they will give you a frequency. It is always nice to have someone on the ground following you.

Weather Services

I have listed the links to the FAA Weather Services Available to pilots

Flight Delays

Aviation Digital Data Center

Aviation Weather Center

Current Weather

Closing Flight Plans

CLOSING FLIGHT PLANS: This is a little subject you should know about. I have never seen this personally but I have heard plenty of Horror Stories. Let's say you have a long flight coming in to an uncontrolled airport, you have been away all day and your cell phone battery dies, so you just turn it off. You get home and go to bed, put your phone on the charger. The next morning you get about 10

messages from flight service. You call them up but they have already started a search and rescue operation. About a month later you get a bill for $100,000. Yes this can happen and it has happened. I don't know of any personally but it does happen from time to time.

If you land at a controlled airport, the tower will verify you landed, but at an uncontrolled airport there may not be anyone there. So when you file your flight plan, you may want to put down the contact number of the first person you are going to call once you get on the ground: Girlfriend, boyfriend, husband, wife or family member. Try to avoid putting in your cell phone number.

Airfreddy.Com