



Putting it all Together

Planning your next Cross-Country Flight

BY JAMES WILLIAMS

Fall is a good time to travel. The daily worry of summer thunderstorms has faded; winter weather is still in the future for much of the country. You may have children who are back in school and work has yet to pick up. With newfound freedom, where do you want to go?

Like any proficient pilot, you know you can't just hop in the airplane and take off. The amount of preparation varies depending on where you're going and how familiar you are with the trip. It's not unlike getting into your car for a run to the grocery store. You probably don't get on Google™ or MapQuest® for directions.

It can be similar in an airplane when you are traversing a familiar route. I used to make a Florida "milk run" flight between Melbourne and Lakeland, which are about 80 miles apart. Because it was not far, but even more because it was familiar, the planning was not much more

elaborate than calling Flight Service for a briefing and filing a VFR flight plan.

While you don't need a lot of planning to do a few touch-and-go landings or to hop over to a nearby airport for the fabled "\$100 hamburger," you do need to invest more time in planning for a real cross-country flight. If you have never made a long-distance flight, or if your flight-planning skills for such an endeavor are a bit rusty, this article is for you.

Break the Flight into Bites

Where do you start? There is no single correct answer, but some pilots start with a large-scale planning chart. Others might find a mapping program, such as Google maps, more helpful. I've always liked using the freely available DUATS programs (www.duat.com or www.duats.com) to plot a great circle line between my proposed departure and arrival points. If you're an AOPA member, you can use its flight planning tools online at: www.aopa.org/flight_planner/. The point is to start with the big- picture view, just as you do when getting weather information.

The "direct-to" line gives you a great starting point, but now comes the task of making adjustments. First, break the direct-to line into bits and bites that you and your airplane can



Photo by Tom Hoffmann

comfortably “chew.” The size of each “flight bite” depends on your airplane’s range and the physiological range of its occupants, but a good rule of thumb for many light GA airplanes is 200-300 miles. Use a plotter or an online measurement tool to measure and mark the segments.

The next step is to analyze each segment. The great-circle route a flight-planning program draws for you will rarely be practical across its entire length. Here are some of the factors to consider in your evaluation of each individual flight bite.

Plane and Pilot Performance

For those in the Southeast and Mid Atlantic where the ground is flatter and the mountains more benign than their western cousins, airplane performance isn’t usually a factor. But, if you venture into unfamiliar terrain, you’ll need to make it a factor from the start. For example:

Are there flight segments that include high terrain? If yes, does your airplane have the performance capability to fly over them, even with a high density altitude? Is the terrain high enough to require supplemental oxygen for the pilot and/or passengers? What are your options in case of weather or mechanical difficulties? Is there another way that might work better? Are there airspace constraints or temporary flight restrictions? The

answers to these questions may suggest some modifications to each individual flight bite.

How about fuel? What is your airplane’s range, using the most conservative estimate of its fuel consumption? Remember, legal reserves are just a starting point, so factor in a comfortable margin. Also, be sure to check your flight segments for fuel availability along the way and adjust the route accordingly.

How about pilot and passenger comfort? We all have physiological needs, but there is also a fatigue factor. Consider adjusting the segments to fly longer legs when you are most rested and shorter legs as the flying day progresses.

Food and Shelter

Another factor to consider in adjusting the length and direction of your individual route segments is availability of services.

Fuel is important for the airplane’s health, but food is important for the well-being of its pilot and passengers. Adjust the “flight bites” as necessary to allow options other than grabbing a bite from the airport vending machine.

Adjust the day’s final segment to ensure that shelter is available in the form of hotels or other lodging. Don’t forget that you will need a way to get there: Is there a courtesy car or a car-rental facility? What about FBO business hours?

Maintenance availability might also be a consideration in adjusting the direction and length of your flight segments. If you are flying with supplemental oxygen, you’ll also want to plan stops at facilities that can service the tanks appropriately.

The Internet provides a nearly infinite range of ways to get this kind of long-distance planning information. A good place to start is AOPA’s airport directory at: <http://www.aopa.org/airports/> (open to the public) or www.airnav.com. These sites are good places to evaluate your potential stops. They include information on surrounding businesses, hotels, car rentals, and other services. Also, they generally contain information from the FAA’s *Airport/Facility Directory*, but, remember, they aren’t a substitute for its information about aeronautical infrastructure.

Once you’ve reviewed all this information, you can rank the factors most important to you and adjust your route accordingly. For example, airport A may have a slightly shorter runway, but be open longer or have better services than airport B.



The Best Laid Plans ...

Survival kits are generally not necessary for everyday flying, but as you venture farther away from home base consider bringing some kind of survival kit, along with knowledge on how to use its contents. The FAA offers survival videos online at www.faa.gov/library/online_libraries/aerospace_medicine/aircrew/aircrewsurvivalvideos/. In addition, FAA offers a free one-day basic post-crash survival class through its Civil Aerospace Medical Institute (CAMI) in Oklahoma City (http://www.faa.gov/pilots/training/airman_education/survival_training/). The bottom line is that you'd rather have it and not need it, than need it and not have it.

Phone a Friend

One of the best—but often overlooked—resources for long-distance flight information and advice is the pilot community. Aviation is a small world. Tell your fellow pilots what you're up to (so to speak), and chances are good that someone will have just the kind of advice and experience you need. Fellow pilots can provide useful information and bring up points you might not have considered. For example, when I flew out west with my father a few years ago, other pilots gave us some important and useful advice on leaning the engine at higher altitudes to get the best performance. A fellow pilot also served as our consultant for safely crossing some of the

mountains. He was able to provide insight and guidance that made a big difference in our trip.

Remember, you can also serve as a resource. When I learned that a friend was planning a trip to an airport unfamiliar to him, I realized I knew a pilot who had flown that exact trip many times. Through the magic of connections, my friend was able to get some key information that made his trip a little easier.

If you can't think of anyone in your aviation circle that might be of assistance, remember the FAA Safety Team, or FAASTeam. In addition to online courses, resources, and WINGS offerings, your local FAASTeam manager and FAASTeam representatives can provide advice. Check the FAASTeam Directory at www.FAASafety.gov to find the folks in your home area as well as in the places you're going. It's not just a corny joke: The FAASTeam folks are from the government and they are here to help you.

Stretch Your Wings!

Flying is fun, and using your flying skills to go places is even more fun. Using these tips, you can safely stretch your wings, broaden your skills, and increase your proficiency as a pilot. ✈️

James Williams is FAA Safety Briefing assistant editor and photo editor. He is also a pilot and ground instructor.