ONTARGET

BY PAT CANNON

Planning a Multi-Task Flight

Multiple Tasks! That is truly the phrase that strikes terror into the hearts of some competition pilots. Why? Well, lets see if we can count the reasons. Changing winds, wondering if I can get to the fly on targets, changing winds, having to plan at least two targets ahead, changing winds, the devil himself (you had to read last month's article) and, oh yes, changing winds. Lets see, did I leave anything out?

As a competitor taking part in national or international competition which uses observers, the prospect of a multiple set of tasks means that your brain is going to be in overdrive prior to the launch and every minute you are aloft. Why? Remember that in observed competition, you may be asked to pick the goals yourself. The most difficult rendition is the PDG (pilot declared goal), PDG, PDG, PDG, etc. Sometimes, just for fun the director will throw in a JDG (judge declared goal) right in the middle of the whole thing. Where PDGs are lined up like this, you are going to be asked to place the coordinates for the following PDG on the tail of the marker dropped at the previous goal. If the wind holds and the steering does not change much, this is a fairly easy task. You will probably choose your fly on task (FOT) goal before you leave the ground and simply fly to your planned goal. Easy huh? Sure.

Lets play around with a typical three part task. We will call it a JDG, with an FOT, and another FOT. Both FOTs are going to be declared by the pilot. In our case, we will assume that the pilot chooses both FOTs prior to launch. This is good practice anyway, because it also give you the time during the initial planning to place the intended goals at the appropriate distance from the previous goal. If something changes while you are aloft and causes you to re-evaluate the FOT location, at least the distances are charted on you map. It will help when you are forced to locate and grid new goals while you are in flight.

At this point, during your planning, you are going to recall what you have learned about the habit patterns of the wind during the first two hours of the day. Will the winds stay aligned for at least the first hour? Will the winds aloft cause a shift in the surface wind in the first hour, and which way? Will the velocity change much? If you are good at anticipating wind changes, you are going to have a leg up on your fellow competitors here. If the winds are relatively slow for this flight, change should be anticipated and you need to be ready to fly for at least an hour, maybe more, with the change taken into consideration.

All right, we have chosen a launch site and are launching toward the JDG. We have a nice thirty degree steering window and have launched on the left side of a right turn aloft (diagam A). Lots of leeway here for the first target. We have chosen our first FOT goal, twenty degrees into the turn as seen from the JDG, (diagram B) and we have chosen our second FOT goal the same twenty degrees into the turn. (same as diagram B), which also assumes that we will make the first FOT. We are anticipating a shift to the right as the morning flight progresses. If looked at as a whole flight, the three goals form an arc (diagram C). Remember that, neither FOT is set in concrete until you mark it on the tail of the marker and drop it. Once that is done, your goal is considered frozen.

So, if the winds stay constant throughout the morning, not changing as you have anticipated, you are going to have to fly the high road to all of your goals, with a last minute descent to the surface to drop your marker. If the winds changes as anticipated, you will not have to fly too high, but will fly the middle altitude to acquire the goal, but still considered to be the high road. The real problem you may face here, is under anticipating the wind change. If the wind changes more than anticipated, you may be stuck on the trees, fighting for a left that may no longer be there. The place to find out that the wind is changing more than anticipated, will be before dropping on the JDG, if possible. The next best place to recognize this change is while enroute to the first FOT. You will still have a chance to change your last FOT to a position further to the right to compensate for the more aggressive change in the wind.

Now here is a little twist you might be faced with. This is one that gets us all and if you



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are not ready for it, it will cost you big points. After dropping on the JDG you realize that the winds have changed more than anticipated and you may not be able to get enough left to drop on your chosen goal. (This is one of the notes, like you see in a "Gardening for Dummies" book) NOTE: ALWAYS DROP A MARKER SOMEWHERE. If you don't drop a marker with the coordinates of the next goal, you have no goal. You don't score on either the goal you missed or the next intended goal. Thus, you are "scr-". This would be considered a bad mistake and will probably cost you the competition.

In the case of a completely fouled up flight path, you are going to have to do some fancy footwork. First, you must maneuver as close to the intended goal as you can. Know where you are on your map and choose an area as close to your goal as possible to drop your marker. Mark this on your map and choose your next FOT based on that spot and the actual or further anticipated wind change. The only chance you have to do well on your last FOT is to throw out the old plan and create a new one in flight. Oh yeah, don't forget to mark the new FOT coordinates on the tail of that marker and then drop in someplace where you can find it, or where you can guide your crew to it. DO NOT throw it in the middle of the street unless your crew is standing right there. I have thrown it on the roof of a garage to protect it from thieving little rascals. That way, the crew can concentrate on your next goal. You can retrieve the hidden marker later.

As I have been saying, the better prepared you are for the competition as a whole, the more apt you are to perform well under the stress of a multiple task flight, especially if old mother nature and the devil are up to their usual tricks.





Three views of a multi-task flight - from launch, from the first target to the second, and finally the entire flight from launch to the final target.