

BY PAT CANNON

## The Flight



Pat Cannon is a past US National Champion

When I began this series of articles, I intended for the first six parts, of which this is the last, to cover competition flying in the broad sense. After this article, we will continue the series, but in a little more detail in some areas. In this part, we will wrap up the overall view by looking at the conduct of the competition flight itself.

All the planning, training, and intention in the world, will not automatically get the balloon close enough to the target or goal on it's own. Even the best crew chief in the universe cannot steer the balloon from the ground. It will ultimately be the responsibility of the pilot to bring all of the elements we have talked about this year together by using his or her flying skills and perceptions to get to the target and score well. As I mentioned in an earlier article, no amount of skill or ability will prevent Mother Nature from throwing you a curve ball, but your ability to perceive Mother Nature, as she is in the wind-up, could save you from being completely fooled. What we will focus on this month will be some of the helpful hints that will help you develop the perception and skill elements that make a good competition pilot.

Let's start with an area that is my worst nightmare. Getting in the air too late. I have been guilty of standing around kicking dirt when changing weather conditions made it very difficult to predict the constant wind line to the target. My crew chief lets me know about it and on more than one occasion has had to give the old "I told you so" after a late launch, and less than desirable result, because I simply waited too long to get in the air. In many cases, this is going to manifest itself in a loss of steer due to a mixing of the upper winds with the lower ones and the introduction of thermal activities. These nasty little items will task your skill to the maximum and will usually lead to less than desirable results. Pilots that get up early usually get the better early morning steer
and stable winds.
There are a few times when waiting may be better. One of them might be during afternoon flights. Generally steer may improve as mixing reverses itself and the low altitude turn comes back into play. Timing will be critical, because waiting too long will have you flirting with sunset and the returning low altitude turn can leave you becalmed and short of the target.

Lately, I like to be in the air early. I would prefer not to be one of the first, but somewhere in the first twenty-five percent of the pack. That will bring us to the next area, that of perceptions. Perception, by definition, is the basis for all things learned, brought to the brain through the five senses. Here we focus on the sense of sight.

Your sight, both focused and peripheral, should take in everything that is happening around you without having to concentrate on each one individually. It gets put into the supercomputer behind your eyeballs and comes out with a kind of three-dimensional playing field. In this field, the balloons around you, their altitude and direction, the low altitude wind indicated by trees, smoke, water and flags, and your position, are all perceptions. This provides us with insight, or grouping the information received into a meaningful whole. This insight provides the means by which to make timely decisions relating to your position and what changes, if any, are necessary to improve it. It should be almost as if you punched the "solution" button and the information is sent directly to your muscles to provide action.

A good example of this might be during a flight to a target where the target is out of sight. Other balloons are around you, both below and above. You have your GPS tuned in to the coordinates. Your distance to the target is one mile, your speed is 10 miles per hour and your altitude is 500 feet agl. Your current
flight path is directly toward the target and you have a twenty-degree turn to the left within 200 feet of the surface. In this scenario, you have six minutes to the target, with a need to correct to the right. If you have perceived the other balloons and elements around you, even without focusing on them, you already know where that right turn is, or if it exists at all.

If the wind speed increases with altitude, it further shortens your reaction time to make the correction necessary to move to the right and to then visually acquire the target and be prepared to descend back to the surface for the approach. For this scenario, you are now going to rely on your skill and your knowledge of the performance you can expect from your balloon during climbs and descents. If you are not processing infor-
mation quickly and converting them to reactions and have to think about what you are going to do, you are over the target at 500 feet with no option but to drop from that altitude.

The last area is going to relate to the knowledge of your equipment and it's full working envelope of operation. Given the scenario above, you have put yourself in a corner of operation that leaves you little option than to use the high performance of your equipment to make a correction. It leaves you with one option and that is to dive on the target from over 500 feet of altitude. This is, in most cases, the least accurate way to get there accurately, especially from altitudes of more than a few hundred feet.

It might have been better to test the winds, both at higher and lower altitudes,
earlier in the flight. If you are using a GPS and don't have the target in visual contact, make sure that the high and low winds will take you both right and left of the track line to the target. Without GPS, make sure that you still have turn available to you, both higher and lower, to insure your ability to make corrections. Try to make your corrections early enough so as not to back you into a tight corner of operation. Fact is, you are less likely to achieve a close, controlled approach to the target while recovering from a death dive from 1000 feet.

Remember my comment in an earlier article regarding three-dimensional thinking. This is where it comes into play. The flight path that you use to get to the target, while changing based on your perception of the conditions and balloons around you, is laid
like a transparency, over your eyeball. You fly the line. The result is a much more controlled approach. It provides you with time to make small adjustments and time to prepare your marker drop. The satisfaction you receive from this kind of operation is better than the kind of approach that leaves you sweaty and looking up to see if you have burned any fabric away.

This is what it's all about. If you put all of the elements that we have discussed in the six articles together, you are on your way to some serious competition. In the next article, I will begin to discuss the strategy for multiple task flights, from the viewpoint of both the competition director and the competitor.

