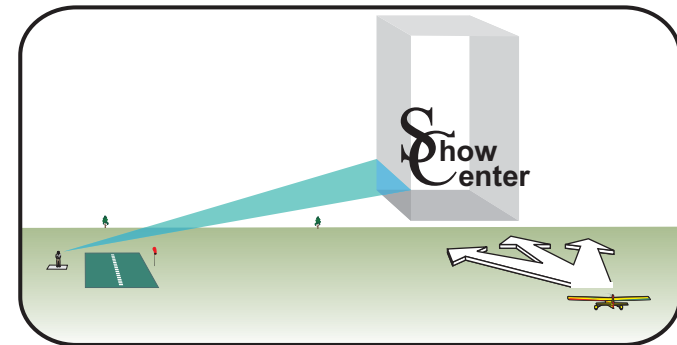
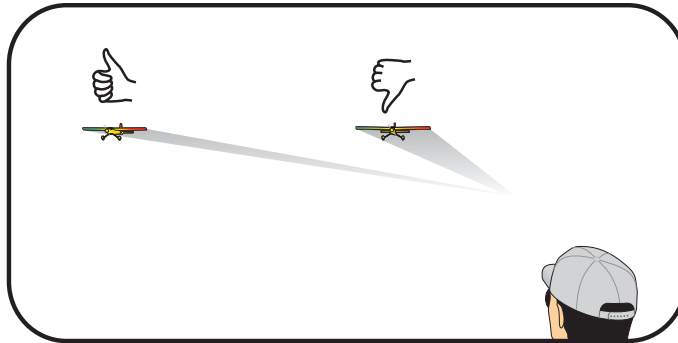


Getting Airborne

Parallel Positioning

Ground Reference Targets Projecting Flight Paths

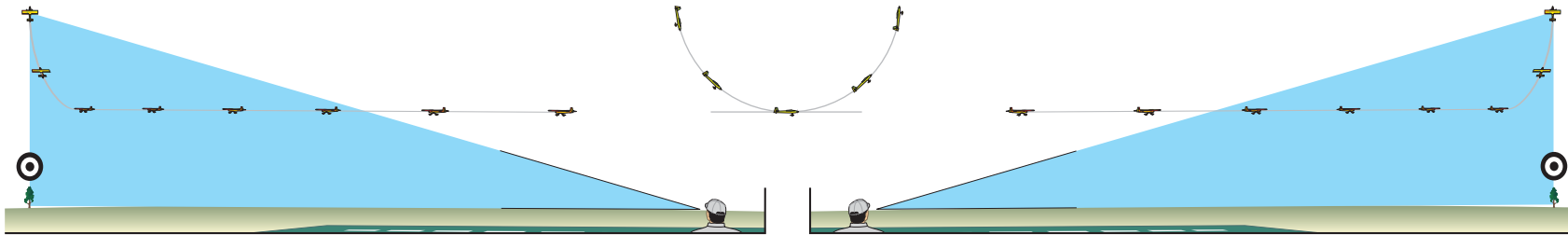


**The Foundations Constructive
Aerobatics are Built Upon**

Parallel Positioning and Effective Learning

In this section: B-16 illustrates the objective of surveying your flying environment and choosing ground reference *targets* to help structure your sequence of maneuvers consistently parallel to the runway, and the consequences of not doing so.

Note: Most flyers respond to a deviation common to any given maneuver by trying to improve how well they react to it, when the real solution is to find out why the airplane deviated in the first place and correct the situation. Maintaining consistent parallel lines is essential to flying a continuous aerobatic sequence, as well as being able to identify *when* a deviation in a maneuver occurred, and *what* control(s) should be used to correct it. Without consistent positioning, even the same deviation in the same maneuver can look quite different from different perspectives. Identifying the deviations common to any given maneuver can therefore become very difficult. (Poor positioning is a major reason why so many people in the sport plateau short of being able to perform precision aerobatics, and instead go the route of *stunt* flying or looking to their radios to improve their flying.) By performing your center and turnaround maneuvers along the same parallel line, like watching the same scene over and over, the nuances common to each will become so familiar to you that in no time you'll be refining your maneuvers with the consistency and skill that few in our sport could hope to achieve!

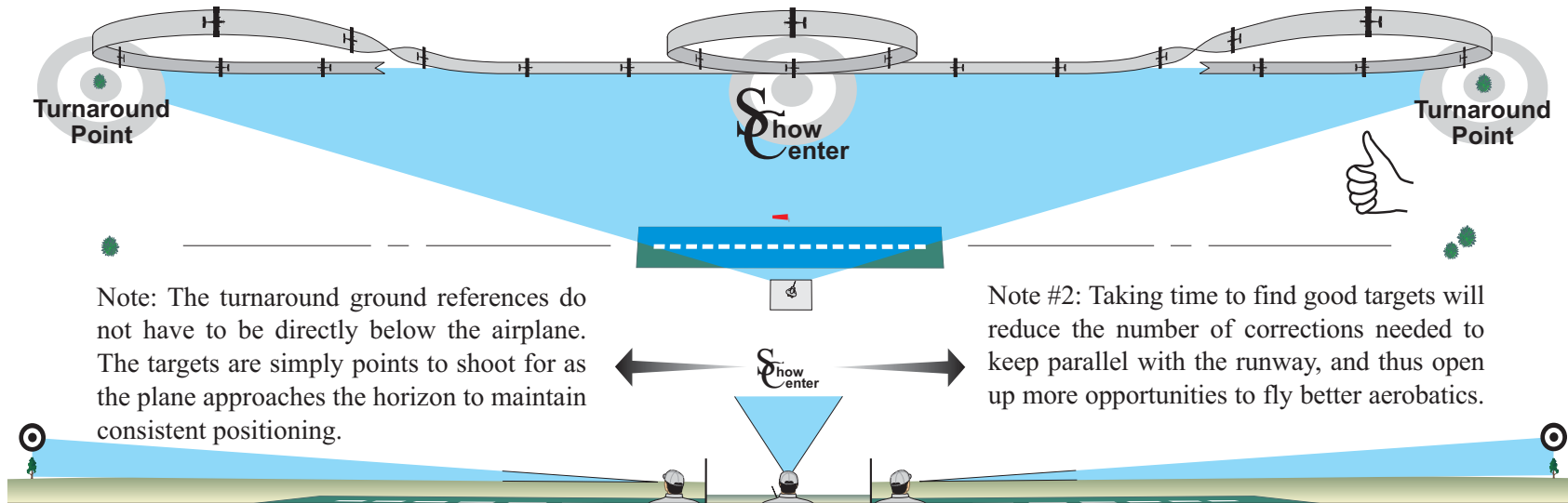


B-17 illustrates the technique of *projecting* where the airplane is heading, and making course corrections based on where you want it to end up: Likened to driving a car, the earlier a deviation is corrected, the smaller and easier the correction is to make—accomplished not by looking at the car, but looking where the car is heading. Projecting ahead helps a person catch deviations earlier, therefore need fewer corrections, which allows more time and attention for other things.

KPTR: Ground references will help you keep the plane parallel with the runway and cause the maneuvers to appear more familiar.

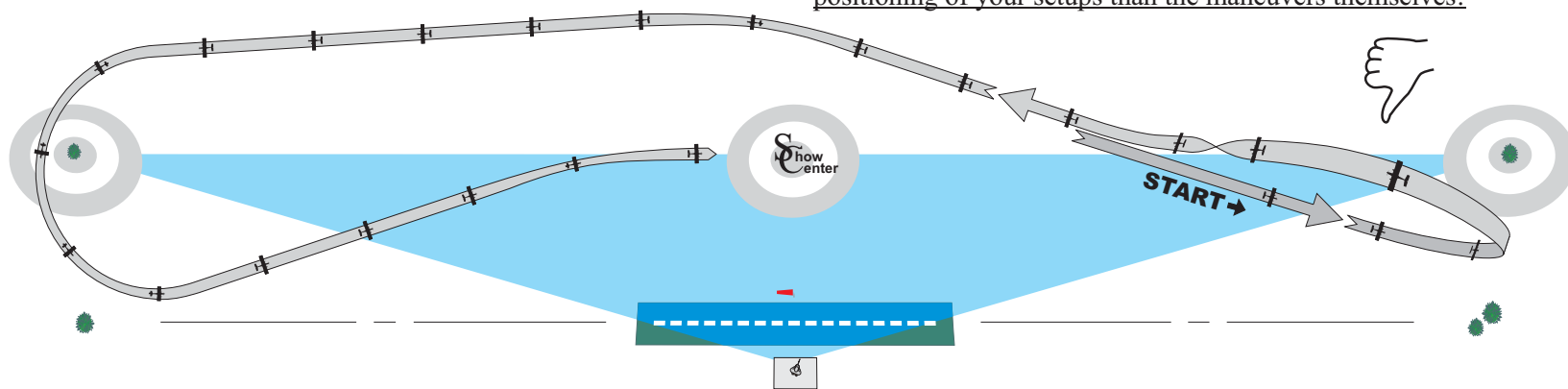
Surveying Your Flying Environment and Choosing Targets

To save time later on, take the time to picture the comfortable distance out in front of you that you would prefer to perform aerobatics near (*show center*). Project that distance out to your left and right parallel to the runway centerline, and pick some ground reference “targets” to use as parallel turnaround points.



Starting a maneuver from a parallel line is the most influential factor in finishing it parallel (and ready for another). Forcing a maneuver from an improper line can cause you to spend

considerable time realigning before another maneuver can be attempted. Consequently, fighting to realign the airplane after maneuvers is more likely to do with needing to improve the positioning of your setups than the maneuvers themselves!

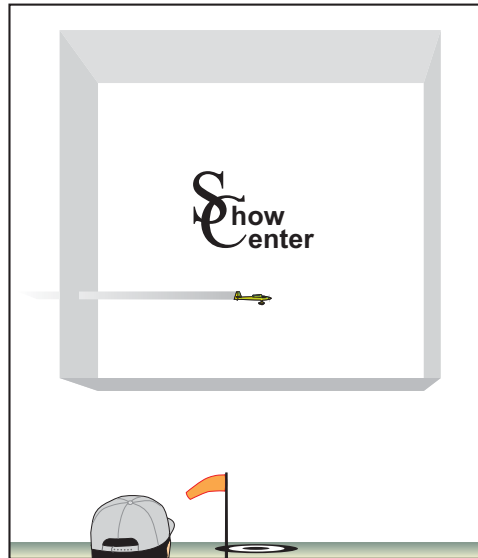
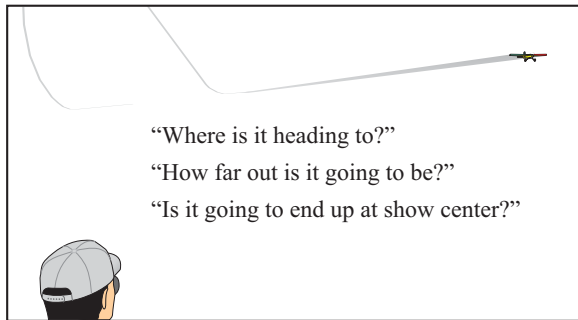


KPTR: Ground references will help you position parallel to the runway so that more maneuvers can be more easily attempted.

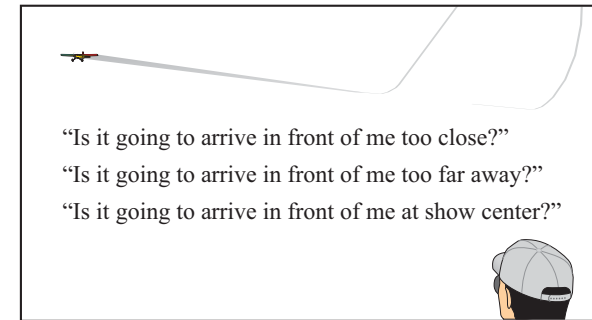
Arriving at Show Center Parallel

After performing a turnaround, immediately begin asking, “Where is the airplane heading?” *Projecting* where the plane will be a few seconds later is the quickest way to detect deviations approaching show center before they become otherwise obvious.

You will need to do more than establish straight and level flight after each turnaround to consistently arrive at show center parallel. You will need to question where each line is ultimately heading:



Your choice of show center was based on a comfortable viewing distance out in front of you. That should be your center target: Guide the plane to arrive at the same point or distance out in front of you every time.



Deviating from parallel show center, i.e., flying too close or too far away, will cause you to have to take an angle to the turnaround target. Since the line the plane is on when a turnaround is started is likely to be the line it returns on, the consequence of entering a turnaround from an improper line will be having to take an angle to the next turnaround target as well, further compounding the need for corrections.

Not until one ceases from attempting maneuvers and starts over parallel will constructive practice begin again. Maintaining parallel lines through show center will not only permit center maneuvers, but the energy you save by not having to make significant course changes will allow you the opportunity to start thinking about the new steps you can take to become a better flyer!

