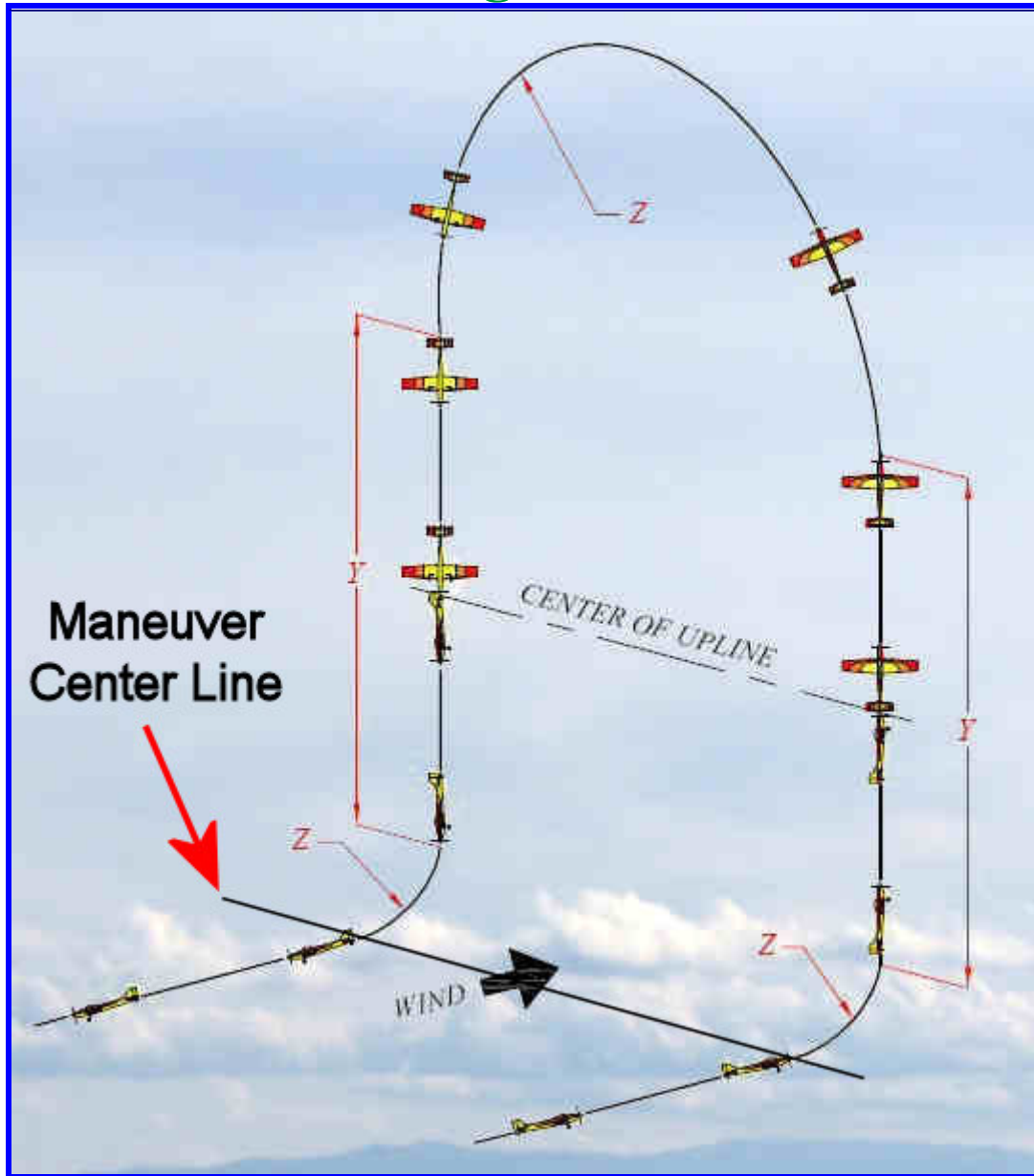




Senior Pattern
Association



180 Degree Turn



Rule Book

180 DEGREE TURN The plane starts in straight and level flight, pulls up into a vertical climb, rolls 90 degrees, performs half of an outside loop, rolls 90 degrees in the opposite direction to the first quarter roll and pulls out at the same altitude but with a 180 degree

heading change.

Downgrades:

Entry not straight and level

Pull up is not to exact vertical climb

Roll is more or less than 90 degrees

Path of roll is not straight vertical line

Half outside loop deviates left or right

Half hoop is not smooth and round

Second 90 degree roll path is not straight vertical line

Pull out to level flight is sudden or jerky

Pull out is not to same altitude and 180 degrees opposite heading

Plane fails to perform straight and level flight at end to entry of maneuver

This description was approved by the SPA Board March 23, 2009

Entry and exit lines should be on heading and level until the maneuver is called complete.

Down grades will be 1 point for each 15 degrees the line is off. If it were going up 15 degrees and 15 degrees away from being horizontal with the flight line, it would be a 2 point down grade.

The picture is not quite correct. The bottom radii shown are not the same size as the one across the top. The radius of the three areas marked (Z) should be the same. For example, if you pull up sharply the 1/2 outside loop and the exit radius should be the same.

Down grades for the radius:

You have three radii to fly, the entry, the 1/2 loop and the exit. Depending on the severity of the difference between the three, the down grades should be from 1/2 point to 2 points per incident.

If the first one is a smooth 1/4 loop taking 100 feet, the 1/2 outside loop takes 200 feet and is smooth, these two would be pretty much identical so no down grade here. if the exit 1/4 loop is squared off, and only takes say, 40 feet, the down grade would be 2 points, it were such that it took 75 feet then the down grade would be 1/2 point. This is a judgment call as you view the maneuver.

Please note **on the vertical 1/4 roll** in the two areas marked (Y), there is **NO vertical straight line**. The roll starts as soon as the plane is vertical and the 1/2 outside loop starts as soon as the 1/4 roll is complete. Likewise the down line 1/4 roll starts as soon as the plane is vertical

The center of the maneuver is located where the model starts the first 1/4 loop. See the picture.