

2008 XFC Helicopter Known Maneuvers

Tumbling Vertical Figure “8”

Model flies straight and level (from right or left) parallel to the flight-line for 10m. As the model crosses the centerline it begins a series of backward tumbles upwards following a path that would trace the top half of a vertical figure “8”. Upon crossing the middle of the figure again, the direction of tumbling will reverse from backward to forward and from upward to downward for the bottom and last half of the figure. Tumbling is completed when the model crosses the centerline for the third time. The model then continues 10m in the same direction as the entry.

Points will be deducted for the following reasons:

- Rate of tumbling not constant
- Figure not centered and symmetrical
- Radius of each curve not smooth while tumbling
- Top/bottom and left/right of figure not equal size
- Model drifts in or out from flight-line during maneuver

Reversing Rolling Circle

Model flies straight and level (from right or left) parallel to the flight-line. As the model crosses the centerline it immediately begins a forward rolling circle away from the pilot. As the model completes the first half of the circle the direction of roll reverses without hesitation to the opposite direction for the second half of the rolling circle.

Points will be deducted for the following reasons:

- Circle not centered on pilot’s position
- Rolling not at a constant rate and axial
- Circle halves are not symmetrical
- Models pitch and yaw attitudes fluctuate during roll reversal
- Altitude fluctuates while rolling

Reversing Rainbow “X”

Model begins pirouetting in a hover located approximately 40m to the left or right of the centerline. Model performs a rainbow arc diagonally across the centerline to an equal distance away from the flight-line while performing continuous pirouettes (right or left direction) at a constant rate, pausing inverted at the same altitude as the start. With minimal hesitation the model reverses direction of pirouetting and performs a second equal length rainbow arc parallel to the flight-line, crossing the centerline and pausing upright. The model once again reverses direction of pirouetting and performs a second diagonal rainbow arc opposite of the first, pausing inverted once again at its end. The

model again reverses direction of pirouetting and completes the final rainbow arc parallel to the flight-line ending upright back at the starting point. This figure is comprised of 4 pirouetting arcs that will follow the form of a closed figure "X" when viewed from above.

Points will be deducted for the following reasons:

- Rainbows not symmetrical and equal in length
- Rate of pirouetting not constant
- Arc starts and stops not at same altitude
- Arcs not centered over central point in front of pilot
- Entire maneuver not parallel to flight-line

Revision 1