RCHN PPP Level 7: Advanced 3D (28 Maneuvers/179 Cumulative)			
Maneuver ID	**Title**	**Description**	**Variations**
7.0	Level 6	Complete Levels 1-6.	N/A
7.1	Pirouetting Inside Loop	From straight and level upright flight from right to left (left-side loop), begin pirouetting to the left and pull the model vertically through a smooth loop, keeping the loop as round as possible with appropriate collective inputs until the model resumes straight and level flight where the maneuver began. During the loop, the model must pirouette continuously and complete at least 2 pirouettes. Repeat from with a right pirouette and from left to right (right-side loop).	Left-Side/Left-Piro, Left-Side/Right-Piro, Right-Side/Left-Piro, Right-Side/Right-Piro
7.2	Pirouetting Outside Loop	From straight and level inverted flight from right to left (left-side loop), begin pirouetting to the left and pull the model vertically through a smooth loop, keeping the loop as round as possible with appropriate collective inputs until the model resumes straight and level flight where the maneuver began. During the loop, the model must pirouette continuously and complete at least 2 pirouettes. Repeat from with a right pirouette and from left to right (right-side loop).	Left-Side/Left-Piro, Left-Side/Right-Piro, Right-Side/Left-Piro, Right-Side/Right-Piro
7.3	Pirouetting Figure 8	From level upright flight parallel to the flight line from right to left, begin pirouetting to the left and execute a 225-degree right turn to enter the Figure 8. This will cause the model to cross in front of the pilot at a 45-degree right-side nose-in orientation at which point the model should be turned 270 degrees left to complete the right side of the Figure 8 and end up back in the center. During the Figure 8, the model must pirouette continuously. Repeat in opposite (reverse start) direction and with a right pirouette.	Forward/Left-Piro, Forward/Right-Piro, Reverse/Left-Piro, Reverse/Right-Piro
7.4	Inverted Pirouetting Figure 8	From level inverted flight parallel to the flight line from right to left, begin pirouetting to the left and execute a 225-degree right turn to enter the Figure 8. This will cause the model to cross in front of the pilot at a 45-degree right-side nose-in orientation at which point the model should be turned 270 degrees left to complete the right side of the Figure 8 and end up back in the center. During the Figure 8, the model must pirouette continuously. Repeat in opposite (reverse start) direction and with a right pirouette.	Forward/Left-Piro, Forward/Right-Piro, Reverse/Left-Piro, Reverse/Right-Piro
7.5	Double-Pirouetting Flips	With the model in a tail-in hover, execute at least 3 consecutive full forward flips while simultaneously pirouetting to the left. The model must complete 4 full pirouettes for every full forward flip completed. Repeat with right pirouettes. A left-pirouetting maneuver requires a clockwise cyclic stir, whereas a right-pirouetting maneuver requires a counter-clockwise stir.	Left, Right
7.6	4-Point Tic Tocs (Skids In)	With the model in a nose-in hover, execute 1 elevator tic-toc with the tail down while maintaining altitude and minimizing lateral drift. During the second half of this elevator tic-toc, smoothly pirouette 90 degrees to the left and perform 1 left aileron tic-toc. Repeat the 90-degree pirouetting after each half-cycle until the model reaches the original tail-down elevator tic-toc orientation. The pilot must perform at least 3 consecutive 360-degree rotations. The tail of the model should appear to tic-tock at each of the four directions of a clock starting at 6 'o clock. Repeat with a right pirouette. These are all skids out maneuvers.	CW, CCW
7.7	Traveling Double-Pirouetting Flips	With the model in a tail-in hover, execute continuous left double-pirouetting flips while moving the model to the left 30 feet (10 meters), up 30 feet (10 meters), to the right 60 feet (20 meters), down 30 feet (10 meters), and finally back to the left 30 feet (10 meters). Repeat with right pirouettes and in opposite direction. A left-pirouetting maneuver requires a clockwise cyclic stir, whereas a right-pirouetting maneuver requires a counter-clockwise stir.	Left-Piro/CW, Left-Piro/CCW, Right-Piro/CW, Right-Piro/CCW

7.8	Pirouetting Autorotation	Starting from an altitude of no less than 60 feet (20 meters) and on a heading parallel to the flight line and upright, start the autorotation. During the autorotation, fully pirouette the model left or right for at least 3 consecutive 360-degree rotations. Maintain a smooth and constant rate of descent directly to a 6-foot (2-meter) landing circle located 20 feet (6 meters) in front of you. The skids of the model must be entirely within the landing circle. The maneuver must be done starting from the right and from the left of the pilot.	Left, Right
7.9	Pirouetting Tic-Tocs (Skids Out)	With the model in a tail-in hover, begin the maneuver by executing elevator tic-tocs with the tail down and then transition into continuously left pirouetting tic-toc. The model must complete 1 full pirouette per tic-toc cycle while maintaining altitude and minimizing lateral drift. The pilot must perform at least 5 consecutive pirouetting tic-tocs. Repeat with a right pirouette. This is a skids out maneuver.	Left, Right