

RCHN PPP Level 5: Basic 3D (36 Maneuvers/125 Cumulative)

Maneuver ID	Title	Description	Variations
5.0	Level 4	Complete Levels 1-4.	N/A
5.1	Sustained Backward Flight	With the model upright, fly at least 1 clockwise and 1 counter-clockwise circuit around the flying field in the backward direction.	Left, Right
5.2	Backward Figure 8	From level upright and backward flight parallel to the flight line from right to left, 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. Repeat in opposite (reverse start) direction.	Forward (Tail-In), Reverse (Nose-In)
5.3	Backward Inside Loop	From straight and level backward flight from right to left (left-side loop), 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. Repeat from left to right (right-side loop).	Left, Right
5.4	Traveling Backward Rolls	From straight and level backward flight from right to left (left-side roll), execute a 360-degree roll to the left. Ensure that the model rolls on its long axis rather than in a corkscrew (barrel roll). Repeat with other three variations.	Left-Side/Left-Roll, Left-Side/Right-Roll, Right-Side/Left-Roll, Right-Side/Right-Roll
5.5	Sustained Backward Inverted Flight	With the model inverted, fly at least 1 clockwise and 1 counter-clockwise circuit around the flying field in the backward direction.	Left, Right
5.6	Backward Inverted Figure 8	From level inverted and backward flight parallel to the flight line from right to left, 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. Repeat in opposite (reverse start) direction.	Forward (Tail-In), Reverse (Nose-In)
5.7	Inverted Autorotation	Starting from an altitude of no less than 60 feet (20 meters) and on a heading parallel to the flight line and inverted, start the autorotation. During the autorotation, roll the model left or right to upright. 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
5.8	Knife Edge Pirouette	With the model flying straight and level from right to left, roll to the left (toward the pilot), reduce collective to zero (center stick) and execute at least 1 full pirouette to the right. Exit by rolling to the right, adding collective and fly away upright straight and level. Repeat from left to right, with both piro directions, and both roll directions.	Left-Side/Left-Roll/Left-Piro, Left-Side/Right-Roll/Right-Piro, Right-Side/Left-Roll/Left-Piro, Right-Side/Right-Roll/Right-Piro
5.9	Death Spiral	Starting from an altitude of no less than 60 feet (20 meters), roll left to knife edge add forward elevator. The model must complete at least 3 complete tumbles before rolling back to the right to exit the maneuver into an upright hover. Repeat with a right roll entry and backward elevator.	Left-Roll/Forward, Left-Roll/Backward, Right-Roll/Forward, Right-Roll/Backward
5.10	Tic Tocs (Skids Out)	With the model in a tail-in hover, execute at least 5 elevator tic-tocs with the tail down while maintaining altitude and minimizing lateral drift. Repeat with nose-in tail-up elevator and left and right side-in left and right aileron. These are all skids out maneuvers.	Nose-Up Elevator, Nose-Down Elevator, Nose-Left Aileron, Nose-Right Aileron
5.11	Vertical 8	From straight and level upright forward flight from right to left (left-side vertical 8), pull the model vertically through a smooth inside 1/2 loop until the model reaches inverted and then give forward elevator and negative collective to push the model up through a smooth outside full loop. When the model reaches its original inverted point, complete the remaining portion of the inside 1/2 loop. Exit into straight and level flight. Repeat from left to right (right-side vertical 8). Repeat from backward upright flight.	Left-Side/Forward, Left-Side/Backward, Right-Side/Forward, Right-Side/Backward

5.12	Tumbles	From straight and level upright flight from right to left, complete at least 3 consecutive backward flips while maintaining altitude and forward motion. Repeat with backward flight and forward flips and from left to right.	Left-Side/Forward, Left-Side/Backward, Right-Side/Forward, Right-Side/Backward
------	---------	--	--