



INTERNATIONAL
RADIO CONTROLLED
HELICOPTER
ASSOCIATION

Level VI is an advanced level of proficiency and completion of this level takes the pilot to the level of a pilot capable of performing beyond the basics of sideways flight. Intrinsic to this level is successfully completing all components of the previous levels then advancing to the ability to control the Helicopter in these new orientations. Please use extreme caution when performing these advanced maneuvers the pilots and spectators' safety is of utmost importance.

Note: To get credit for a maneuver all required variations must be demonstrated.

Maneuver Description

A. Completed Levels I, II, III, IV, & V

B. Sideways Flight (4 required variations)

1. With the helicopter upright hovering Tail-in over the landing circle fly sideways for at least one (1) clockwise and one (1) counter clockwise circuit around your flying area. The nose of the helicopter must be pointing toward the center of the flight area.
2. With the helicopter upright hover Nose-in over the landing circle fly sideways for at least one (1) clockwise and one (1) counter clockwise circuit around your flying area. The nose of the helicopter must be pointing away from the center of the flight area.

Note: These maneuvers **must** be done a flying speed. The idea is to learn to control the helicopter as it is turning towards you and away from you.

C. Sideways Figure of Eight - Flying (4 required variations)

Note: This maneuver is similar to the Nose-In Tail-In Figure of Eight from Level III, but this is to be performed **at flying speed** not hovering speed.

1. With the helicopter hovering Nose-Out over the landing area move the helicopter sideways to the right perform a 270 degree Nose-In turn. The Helicopter should now be flying sideways directly at the pilot.
2. While maintaining constant altitude and speed execute a 360 degree Nose-Out turn, the helicopter should be flying sideways directly at the pilot again.
3. Perform a 90 degree Nose-In turn fly sideways straight and level, completing the maneuver. Fly back to the starting point above the landing area.
4. Repeat the maneuver but this time start flying sideways to the left.
5. With the helicopter hovering Nose-Right over the landing area move the helicopter sideways directly away from the pilot perform a 360 degree Nose-In turn. The Helicopter should now be flying sideways directly away from the pilot.
6. Complete the maneuver by performing a 360 degree Nose-Out turn. The Helicopter should again be flying sideways directly away from the pilot.
7. Repeat the maneuver but this time start with the helicopter hovering Nose-Left.

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Maneuver Description Continued

D. Sideways Inside Loops (4 required variations)

1. With the helicopter upright flying sideways Tail-In straight and level from left to right as the helicopter passes in front of the pilot apply collective and left cyclic to complete an inside loop.
2. Repeat with the helicopter flying sideways from right to left, and right cyclic.
3. Repeat both of the above loops, but this time the helicopter must be Nose-In to the pilot.

E. Sideways Outside Loops (4 required variations)

1. With the helicopter upright flying sideways straight and level from left to right as the helicopter passes in front of the pilot apply collective and right cyclic to complete an outside loop.
2. Repeat with the helicopter flying sideways from right to left, and left cyclic.
3. Repeat both of the above loops, but this time the helicopter must be Nose-In to the pilot.

F. Sideways Rolls

Note: A "roll" while flying sideways can be thought of in two different ways: 1) In the normal way of rolling as a helicopter would normally fly or as 2) A roll as compared to the current direction of flight. So we will do both!

1. Sideways Rolls - Helicopter is Rolling (8 required variations)

- a. With the helicopter flying sideways Nose-Out straight and level from right to left roll the helicopter to the left (the same direction as the helicopter is flying), use collective to maintain altitude and speed across the ground, complete at least one roll. Exit by flying away sideways straight and level.
- b. Repeat step a, but this time make the roll to the right (opposite the direction the helicopter is flying).
- c. Repeat steps a, & b, but this with the helicopter Nose-In to the pilot.
- d. Repeat steps a, b, & c, but this time with the helicopter flying from left to right.

2. Sideways Rolls - Helicopter is Tumbling (8 required variations)

- a. With the helicopter flying sideways Nose-Out straight and level from right to left tumble the helicopter forward while traveling sideways, use collective to maintain altitude and speed across the ground, complete at least one tumble. Exit by flying away sideways straight and level.
- b. Repeat step a, but this time make the tumble backward.
- c. Repeat steps a, & b, but this with the helicopter Nose-In to the pilot.
- d. Repeat steps a, b, & c, but this time with the helicopter flying from left to right.

Maneuver Description Continued

G. Pirouetting Figure of Eight (4 required variations)

1. With the helicopter hovering over the landing area start pirouetting clockwise while the helicopter is pirouetting fly the helicopter in a Figure of Eight to the right. So at the center of the Eight the helicopter is flying toward the pilot.
2. Repeat the above step but this time start pirouetting counter-clockwise.
3. Repeat step 1 above but this time start the Figure of Eight by flying away from the pilot, pirouetting clockwise. So at the center of the Eight the helicopter is flying away from the pilot.
4. Repeat the above step but this time start pirouetting counter-clockwise.

H. Inverted Pirouetting Figure of Eight (4 required variations)

1. With the helicopter inverted hovering over the landing area start pirouetting clockwise while the helicopter is pirouetting fly the helicopter in a Figure of Eight to the right. So at the center of the Eight the helicopter is flying toward the pilot.
2. Repeat the above step but this time start pirouetting counter-clockwise.
3. Repeat step 1 above but this time start the Figure of Eight by flying away from the pilot, pirouetting clockwise. So at the center of the Eight the helicopter is flying away from the pilot.
4. Repeat the above step but this time start pirouetting counter-clockwise.

International Radio Control Helicopter Association
Pilot Proficiency Program
Level VI 15 April 1999

	<u>Witness #1</u>	<u>Witness #2</u>
A. Completed all Previous Levels	_____	_____
B. Sideways Flight (4 required variations)	_____	_____
C. Sideways Figure of Eight - Flying (4 required variations)	_____	_____
D. Sideways Inside Loops (4 required variations)	_____	_____
E. Sideways Outside Loops (4 required variations)	_____	_____
F. Sideways Rolls		
1. Sideways Rolls - Helicopter is Rolling (8 required variations)	_____	_____
2. Sideways Rolls - Helicopter is Tumbling (8 required variations)	_____	_____
G. Pirouetting Figure of Eight (4 required variations)	_____	_____
H. Inverted Pirouetting Figure of Eight (4 required variations)	_____	_____

Name: _____ IRCHA #: _____ Date: _____

Helicopter(s), Engine & radio used for this Level: _____

Email: _____

Witness #1: _____ IRCHA #: _____ PPP Level: _____

Witness #2: _____ IRCHA #: _____ PPP Level: _____

*** Please keep a copy of this for your records ***

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