

# **Pilot Proficiency Program**

# Level II

Level II is an intermediate level of proficiency and completion of this level takes the pilot to the level of a well-rounded pilot capable of performing Basic Flight skills. Intrinsic to this level is successfully completing all components of Level I, then advancing to the ability to FLY the Helicopter in circuits.

## **Maneuver Description**

## A. Complete Level I

#### B. Taxi Out

- 1. Take-off from the landing area to an eye-level hover; hold momentarily.
- 2. Hover forward slowly for no less than ten (10) meters.
- 3. Turn into the prevailing wind direction and continue straight and level for no less than ten (10) meters.
- 4. Either proceed to Climb-Out or Land within the landing area circle.

#### C. Climb-Out

- 1. After Taxi Out, begin ascent by gradually increasing power/collective.
- 2. Continue to climb until an altitude of approximately fifty (50) feet.
- 3. Climb out should be parallel to flight path and at a moderate speed.

## D. 90 Degree Turns

1. After climb out, turn 90 degrees in a direction away from pilot and spectators.

## E. Flying Box

- 1. After completing the Climb out and first 90 degree turn continue to fly straight and level.
- 2. Execute another 90 degree turn, same direction as before.
- 3. Continue as before until a box or rectangle has been formed.

## F. 180 Degree Turns

- 1. While flying straight and level, execute a turn hold this turn until the helicopter has come around back to the same direction it has just come from, straighten out and continue in straight and level flight.
- 2. Turns should be made turning away from the pilot to the right and left.
- 3. Turns should be made turning toward the pilot to the right and left.

## **Maneuver Description**

- G. Straight and Level Flight
  - 1. Fly from the Left to the Right.
  - 2. Fly from the Right to the Left.
- H. Figure of Eight Constant Heading, Hovering
  - 1. Take-off to eye-level, hold momentarily.
  - 2. While maintaining constant altitude, speed and heading begin a forward hovering circle to either the right or the left.
  - 3. As the helicopter reaches the take off point continue hovering forward and complete a circle in the opposite direction from before.
  - 4. Stop over take off point, descend vertically and land completely within the landing circle.
- I. Figure of Eight "Lazy 8"
  - 1. With the helicopter flying straight and level after it passes the pilot make a turn that is greater than 180 degrees away from the pilot.
  - 2. After the helicopter passes in front of the pilot, execute another turn that is greater than 180 degrees, away from the pilot.
  - 3. This maneuver must be done flying from both left to right (first turn to the left, counter-clockwise) and right to left (first turn to the right, clockwise).
- J. Figure of Eight Flying
  - 1. With the helicopter flying straight and level after it passes the pilot make a 270 degree turn away from the pilot; the helicopter will now be pointed directly at the pilot.
  - 2. After the helicopter is pointing at the pilot, execute a 360 degree turn in the opposite direction. The helicopter will again be pointing directly at the pilot.
  - 3. After the helicopter is pointing at the pilot again, execute a 90 degree turn, in the same direction as the first 270 degree turn.
  - 4. This maneuver must be done starting from both left to right (first 270 degree turn to the left, counter-clockwise) and right to left (first 270 degree turn to the right, clockwise).
- K. Traffic Pattern Approach to Landing
  - 1. From straight and level flight, after the helicopter passes the pilot execute a 180 degree turn away from the pilot.
  - 2. Start to reduce speed and power.
  - 3. After the helicopter passes the pilot execute a 180 degree turn towards; continue to reduce power/collective so as to descend at a gradual angle to the landing zone.
  - 4. This must be done starting from both the right and the left.

### **Maneuver Description**

#### L. Translational Descent

- 1. This is similar to the Traffic Pattern Approach, but the descent angle should be much greater (about 45 degrees) and the descent continues all the way to the landing.
- 2. This must be done starting from both the right and the left.

### M. Landing

- 1. This landing is to be completed as part of a Translational Descent, but this has the added requirement that both the take off and landing must be within a one (1) meter circle. The skids must be completely within the landing circle.
- 2. This must be done starting from both the right and the left.

#### N. Beginning Aerobatics

- 1. Stall Turn
  - a. Starting from straight and level flight after the helicopter passes the pilot the helicopter is smoothly pulled vertical (Aft Cyclic).
  - b. When the vertical climb stops, the helicopter is rotated 180 degrees about the yaw axis.
  - c. The helicopter is allowed to fall the same distance that it climbed at the beginning of the maneuver before pulling the helicopter back to straight and level flight.
  - d. This maneuver must be done both to the right and the left of the pilot.

#### 2. Inside Loop

- a. Starting from straight and level flight after the helicopter passes the pilot the helicopter is smoothly pulled through a loop (Aft Cyclic).
- b. As the helicopter is "on its back" the pilot should reduce collective so as to keep the loop as round as possible.
- c. This maneuver must be done starting from both the right and the left of the pilot.

## 3. Pirouette

- a. From a stationary hover, execute a tail rotor only turn of 360 degrees to either the right or the left.
- b. This maneuver must be done in both directions, to the right (clockwise) and the left (counter-clockwise).

Level II		Witness #1	Witness #2
A.	Completed Level I		
В.	Taxi Out		
C.	Climb-Out		
D.	90 Degree Turns		
E.	Flying Box		
F.	180 Degree Turns		
G.	Straight & Level Flight		
Н.	Figure of Eight - Constant Heading		
I.	Figure of Eight - "Lazy 8"		
J.	Figure of Eight - Flying		
K.	Traffic Pattern Approach		

L.	Translational Descent			=				
M.	Landing							
				-				
N.	Beginning Aerobatics							
	1. Stall Turn			-				
	2. Inside Loop			-				
	3. Pirouette			-				
Name	:	_ IRCHA	A #:	Date: _				
Helicopter(s), Engine & radio used for this Level:								
	:							
Witne	ss #1:	_ IRCHA	A #:	PPP Le	evel:			
Witne	ss #2:	_IRCHA	A #:	PPP Le	evel:			
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