



## Maneuvers & Flight Practice/Test Rubric

Maneuvers to be Tested:

### Basic

1. Hover: The foundational skill. The drone stays in one place, maintaining altitude and position.
2. Takeoff and Landing: Learning controlled takeoffs and landings is essential for safety.
3. Yaw: Rotating the drone on its vertical axis, turning it left or right without moving it horizontally.
4. Pitch: Tilting the drone forward or backward, causing it to move in the corresponding direction.
5. Roll: Tilting the drone to the left or right, causing lateral movement. Intermediate Maneuvers:
6. Bank Turn: Combining roll and pitch to make smoother, more natural turns.
7. Figure 8
8. Flying the drone in an "8" shape, which incorporates multiple basic maneuvers.
8. Orbit: Circling around an object while keeping the camera focused on it.
9. Waypoint Navigation: Setting predetermined points for the drone to fly to automatically.
10. Nose-In Hover: Hovering with the drone facing towards the pilot, which reverses the controls and is crucial for orientation skills. Advanced Maneuvers:
11. Spiral Climb: Ascending while flying in a circular pattern.
12. Funnel: Similar to an orbit but with a more dramatic pitch, creating a funnel shape.
13. Immelmann Turn: A half-loop followed by a half-roll, used to change direction and gain altitude simultaneously.
14. Split S: A half-roll followed by a half-loop, essentially the opposite of an Immelmann.
15. Power Loop: A looping maneuver where the drone gains speed and altitude quickly before looping back to its original position.

### Cinematic

16. Dolly Zoom: Moving the drone backward while zooming in or vice versa, creating a unique visual effect.
17. Tracking Shot: Flying the drone parallel to a subject, keeping them in frame.
18. Reveal: Starting with the camera focused on a subject and then ascending or moving backward to reveal the surrounding landscape.
19. Low-Level Flyby: Flying very close to the ground or water, often used for dramatic effect.
20. POI (Point of Interest) Lock: Locking the camera onto a subject while freely moving the drone, creating complex, dynamic shots.



## Sporting Events

**Wide-Angle Pan:** Start from a high altitude and slowly pan across the field or arena. This provides a comprehensive view of the venue and sets the stage for the viewer.

**Tracking Shot:** Follow a player or a set of players horizontally, ideally parallel to the direction they're moving in. This keeps the subject in focus and allows the viewer to follow the action closely.

**Orbit:** Circle around a significant moment like a huddle, a penalty kick, or a player preparing for a big play. This maneuver adds a dramatic flair and keeps the viewer engaged.

**Low-Level Flyby:** Skim close to the ground or just above the players to capture dynamic, adrenaline-pumping shots. Be very cautious with this maneuver to avoid any safety issues.

**Over-the-Shoulder:** Position the drone behind and above a player to capture an over-the-shoulder viewpoint of the action ahead. This viewpoint creates a sense of involvement and perspective.

**Reveal:** Start with the drone focused on a specific subject, like a player or a ball, and then ascend or move backward to reveal the entire field, thus contextualizing the moment. Static

**Hover:** Position the drone at a corner or side of the field to serve as a stationary camera, capturing a consistent angle that can be cut to when needed.

**Push-In and Pull-Out:** Begin at either a close-up or a wide-angle and then smoothly move the drone in or out. This can either build tension or provide relief in the footage.

## Real Estate

**Slow and Steady:** Use slow, controlled movements for a cinematic feel. Fast movements can be disorienting and take away from the property's features.

**Orbit:** This classic move involves circling the property to give a 360-degree view. It's especially effective for properties with large yards or unique exterior features.

**Fly-Throughs:** For larger properties, a low-altitude fly-through can create an engaging "tour" experience.

**Dolly Shots:** Moving the drone forward and backward can effectively highlight the depth and space of a property.

**Elevation Gain:** Starting at eye level and gradually rising can create a dramatic effect, revealing the home's surroundings.

**10. Interior Shots:** If the drone is small enough and the interior space allows, you can capture sweeping shots inside the property.

**11. Tracking Shots:** These can be used to follow a path or driveway, leading up to the property to create a sense of arrival.



Name: \_\_\_\_\_

Date: \_\_\_\_\_

Flight Hours on DJI App: \_\_\_\_\_

Name of Maneuver: \_\_\_\_\_

Criteria / Score descriptors	4: "Accomplished", no deficits detected in this area	3: "Satisfactory", no more than one instance of deficit in this area	2: "Developing", some deficits in this area	1: "Limited", frequent or major deficits in this area
<b>Safety</b>		<b>Subtotal =</b>		
Awareness of surroundings	4	3	2	1
Designated flight area	4	3	2	1
Appropriate distance/range	4	3	2	1
<b>Control</b>		<b>Subtotal =</b>		
Stick fluency	4	3	2	1
Path tightness	4	3	2	1
Feathering	4	3	2	1
<b>Communication</b>		<b>Subtotal =</b>		
Respectful, professional language	4	3	2	1
Technical terminology	4	3	2	1

**Total points = \_\_\_\_\_ / 24 = \_\_\_\_\_ % of satisfactory expectation**

Overall scoring guide:

- 1: Limited is 8-11 points
- 2: Developing is 12-19 points
- 3: Satisfactory is 20-27 points
- 4: Accomplished is 28-32 points

**Overall score = \_\_\_\_\_**