

## Exercise 7

Exercise: Drone Flight Planning and Risk Assessment

Objective: To plan a safe and efficient drone flight mission while identifying and mitigating potential hazards.

Instructions:

1. Choose a scenario: Select a real-world scenario for your drone flight mission, such as aerial photography, surveying, or inspection.
2. Define the mission objectives: Determine the specific goals and requirements of your mission.
3. Assess the environment: Identify potential hazards in the flight area, such as obstacles, weather conditions, and airspace restrictions.
4. Plan the flight: Use flight planning software or tools to create a flight plan, including the route, altitude, and speed.
5. Identify potential risks: Consider factors like equipment failure, battery life, and pilot error.
6. Develop a risk mitigation plan: Outline strategies to minimize or overcome identified risks.
7. Execute the mission: Simulate the flight mission, using a drone simulator or actual drone equipment.
8. Debrief and review: Analyze the mission's success, identify lessons learned, and refine your planning and risk assessment skills.

Deliverables:

- A written flight plan and mission objectives
- A hazard assessment and risk mitigation plan
- A simulation or actual flight mission execution
- A debriefing report and lessons learned