

PROPRIETARY



YOU CAN FLY
AOPA FOUNDATION
HIGH SCHOOLS

UNIT 1 | SECTION B | LESSON 1 | PRESENTATION

SCAVENGER HUNT

LEARNING OBJECTIVES

At the end of this lesson, you will be able to:

- ***Formulate*** a plan of action in order to accomplish an sUAS mission.
- ***Assess*** actions that the crew took to accomplish the mission.



WARM-UP

Divide into your flight crews.

- **Each crew should include:**
 - 1 pilot in command (PIC)
 - 1 operator of the drone's controls
 - 1-2 visual observers
 - 1-2 safety representatives
- **Additionally, each crew should include at least one member from each of the four PAVE groups:**
 - **P**ilot, **A**ircraft, **e**nvironment, **E**xternal pressures



WARM-UP

Review the Student Activity.

- **During the scavenger hunt, your crew will use its drone to**
 - photograph specific targets.
 - perform specific maneuvers.
- **Each target or maneuver has a point value.**
- **Your goal is to safely accumulate as many points as possible during the time allotted.**



ROLES AND RESPONSIBILITIES

- The PIC is in charge of the mission and has the final say on decisions.
- The operator manipulates the drone's controls in a manner consistent with FAR Part 107.
- Visual observers maintain visual contact with the drone at all times and record it as directed.
- Safety representatives take the lead in identifying and mitigating risks.



YOUR PLAN OF ACTION

How will your crew complete today's mission?

- **Identify the specific tasks you will complete.**
- **Determine the order in which you will complete them.**
- **Ask:**
 - How will we get our drone to each location?
 - About how long will it take to complete the task?
 - What are the potential risks?
 - What are each crew member's responsibilities?



PREFLIGHT PAVE REVIEW

Conduct a thorough preflight PAVE review.

- **Pilot**
 - How is everyone feeling today?
- **Aircraft**
 - Is your drone fully charged and in good working order?
- **enVironment**
 - What is the weather?
 - Where will other students be?
- **External pressures**
 - What risks might we be overlooking?



FINAL REMINDERS

This is your last chance to ask questions before the mission!

Remember to prioritize safety and maintain a demeanor of professionalism throughout.



CLEARED FOR TAKEOFF

Your crew should complete its plan of action for the scavenger hunt.

- **To earn points for photographing targets, use your drone's camera.**
- **To earn points for performing maneuvers, use a phone camera to record a video.**
- **Obey all pertinent regulations, rules, laws and ordinances.**
- **Be safe!**



WHEN YOU'RE FINISHED...

- Return all equipment to the appropriate storage locations.
- Submit your crew's photos and videos for review.



REFLECTION

Respond in writing to the following questions.

- 1. What was your role in your crew? Why did you choose it, what were your responsibilities, and how do you think you did?*
- 2. If you could redo this activity, would you choose the same role again? Why or why not?*
- 3. Which parts of the mission did your crew perform effectively? Why do you think you were successful?*
- 4. Which parts did your crew perform ineffectively? Why do you think so, and how could you change to be successful next time?*
- 5. Do you have any suggestions for how to improve this activity for future classes?*



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