

#### UNIT 5: OPERATIONS

Discussion topics:	Radio Communications Procedures
Objective:	To determine that the applicant is knowledgeable in radio communication procedures.
Introduce:	The applicant demonstrates understanding of:Airport operations with and without and operating control tower.Common Traffic Advisory Frequency (CTAF)Traffic Advisory ProceduresAeronautical advisory communication station (UNICOM)Automatic Terminal Information Service (ATIS)Aircraft call signs and registration numbersThe phonetic alphabetPhraseology: altitudes, directions, speed, and time.
Completion standards:	Demonstrates understanding of Radio Communication Procedures Minimum of 80% on the post test.
References:	AC 107-2; AIM; FAA-H-8083-25; FAA-G-8082-22
Suggested homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Operations</li> <li>Review questions assigned</li> </ul>
Discussion topics:	Airport Operations
Objective:	To determine that the applicant is knowledgeable in airport operations.
Introduce:	<ul> <li>Types of airports</li> <li>ATC Towers</li> <li>Runway markings and signage.</li> <li>Traffic patterns</li> <li>Security Identification Display Areas (SIDA)</li> <li>Sources of airport data</li> <li>Aeronautical charts</li> <li>Chart supplements</li> <li>Avoiding bird and wildlife hazards and reporting collisions</li> <li>Airport and seaplane base lighting</li> </ul>
Review:	Radio Communication Procedures
Completion standards:	<ul> <li>Demonstrates understanding of Airport Operations</li> <li>Minimum of 80% on the post test.</li> </ul>



References:	AC 107-2; 150/5200-32; AIM; FAA-H-8083-5; FAA-G-8082-22
Suggest homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Operations</li> <li>Review questions assigned</li> </ul>
Discussion topics:	Emergency Procedures
Objective:	To determine that the applicant is knowledgeable in emergency procedures
Introduce:	<ul> <li>Emergency planning and communication</li> <li>Characteristics and potential hazards of lithium batteries         <ul> <li>a. Safe transportation such as proper inspection and handling</li> <li>b. Safe charging</li> <li>c. Safe usage</li> <li>d. Risks of fires involving lithium batteries</li> </ul> </li> <li>Loss of aircraft control ink and fly-aways</li> <li>Loss of Global Positioning System (GPS) signal during flight and potential consequences</li> <li>Frequency for operations over people</li> <li>Procedures for operation at night</li> </ul>
Review:	Airport Operations
Completion standards:	<ul><li>Demonstrates understanding of emergency procedures</li><li>Minimum of 80% on the post test.</li></ul>
References:	AC 107-2; FAA-H-8083-25; FAA-G-8082-22; SAFOs 09013, 10017, 15010
Suggest homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Airport Operations</li> <li>Review questions assigned</li> </ul>
Discussion topics:	Aeronautical Decision-Making
Objective:	To determine that the applicant is knowledgeable in aeronautical decision-making
Introduce:	<ul> <li>Aeronautical decision-making (ADM)</li> <li>a. Effective team communication</li> </ul>



	<ul> <li>b. Task management</li> <li>Crew Resource Management (CRM)</li> <li>Situational awareness</li> </ul>
	<ul> <li>Hazardous attitudes</li> </ul>
	<ul> <li>Hazard identification and risk assessment</li> </ul>
Review:	Emergency Procedures
Completion standards:	Demonstrates understanding of aeronautical decision-making (ADM) Minimum of 80% on the post test.
References:	AC 107-2; FAA-H-8083-2; FAA-H-8083-25; FAA-G-8082-22
Suggest homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Operations</li> <li>Review questions giving</li> </ul>
Discussion topics:	Physiology
Objective:	To determine that the applicant is knowledgeable in Physiology
Introduce:	<ul> <li>Physiological considerations and their effects on safety such as dehydration and heatstroke.</li> <li>Drug and alcohol use</li> <li>Prescription and over-the-counter medication</li> <li>Hyperventilation</li> <li>Stress and fatigue</li> <li>Factors affecting vision</li> <li>Fitness for flight</li> <li>Physiological aspects of night operation</li> <li>Night illusions</li> </ul>
Review:	Aeronautical Decision-Making
Completion standards:	Demonstrates understanding of physiology. Minimum of 80% on the post test.
References:	AC 107-2; FAA-H-8083-2; FAA-H-8083-25; FAA-G-8082-22
Suggest homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Operations</li> <li>Review questions giving</li> </ul>
Discussion topics:	Maintenance and Inspection Procedures



Objective:	To determine that the applicant is knowledgeable in sUAS maintenance and inspection procedures.
Introduce:	<ul> <li>Basic maintenance.</li> <li>Preflight inspection.</li> <li>Techniques to mitigate mechanical failures of all elements used in sUAS operations such as the battery and any device(s) used to operate the sUAS.</li> <li>Appropriate record keeping.</li> <li>Persons that may perform maintenance on an sUAS.</li> <li>Preflight inspection for night operations.</li> <li>Manufacturer's Declaration of Compliance for Category 2 and 3 operations.</li> </ul>
Review: Completion standards:	<ul> <li>Operations Over People Demonstrates understanding of regulations. Minimum of 80% on the post test.</li> </ul>
References:	AC 107-2; FAA-H-8083-2; FAA-H-8083-25; FAA-G-8082-22
Suggest homework assignments:	<ul> <li>Review online video</li> <li>Review Remote Pilot Book Chapter 5, Operations</li> <li>Review questions assigned</li> </ul>