## **Emergency Equipment and Survival Gear**

## **Objective**

To ensure the applicant learns the purpose of and can exhibit a clear understanding of the types of emergency equipment and survival gear that are available, including those that are installed in the airplane.

#### **Purpose**

While no pilot ever wants to be involved in an in-flight emergency or an off-airport landing, they do happen. Pilots must be prepared to deal with these emergencies, and potentially survive in open water, or other remote areas. This lesson introduces pilots to the types of emergency equipment and survival gear available for use in different types of emergencies.



Schedule	Equipment
<ul><li> Ground Lesson: 15 minutes</li><li> Student Q&amp;A: 10 minutes</li></ul>	• n/a
Student Actions	Instructor Actions
<ul> <li>Ask any questions, receive study material for the next lesson.</li> <li>Watch linked video.</li> <li>Review listed references.</li> </ul>	<ul> <li>Deliver the ground lesson (below).</li> <li>Point out the emergency equipment available in the aircraft before flight.</li> </ul>

#### **Completion Standards**

- **Ground**: Student can explain:
  - The types of emergency equipment and survival gear that are available to pilots.
  - Which types of emergency and survival gear are useful in various situations.
- **Before Flight**: Student can point out the emergency equipment installed in the airplane and explain its use.

#### References

- Aviation101 "Lonely Cross Country Flight Survival Gear & Tools to Carry"
  - YouTube <a href="https://www.youtube.com/watch?v=NvkN5-Px9SA">https://www.youtube.com/watch?v=NvkN5-Px9SA</a>
- FAA-H-8083-3B (Airplane Flying Handbook) Chapter 8, Page 11-12 [Intentional Slips], Chapter 8, Page 22-26 [Power Off Accuracy Approaches], Chapter 8, Page 27-36 [Faulty Approaches and Landings]
- FAA-H-8083-25B (Pilot's Handbook of Aeronautical Knowledge) Chapter 5, Page 5 [Lift/Drag Ratio], Chapter 5, Page 7 [Induced Drag], Chapter 5, Page 11-12 [Ground Effect]
- FAA-S-ACS-6B (Private Pilot ACS) Area IV Task B
- FAA-S-ACS-7A (Commercial Pilot ACS) Area IV Task B
- FAA-S-8081-6D (CFI PTS) Area VII Task K

#### **Ground Lesson Outline**

- Dress to Egress
  - Appropriate clothing and footwear for all flights
- Search and Rescue
  - VFR Flight Plans, Flight Following, tell someone where you're going!
- Types of Equipment
  - o Emergency Fire extinguishers, first aid kits, etc.
  - o Survival Flares, food, water, etc.
- For All Flights
  - o Fire Extinguisher
  - o Crash Knife For seatbelts, windows, etc.
  - First Aid Kits
- Over Water Especially beyond gliding distance from land
  - Personal Locator Beacon (PLB)
  - Inflatable Raft / Personal Flotation Devices
  - Signal Flares, Signal Mirror
- Over Remote Terrain
  - Personal Locator Beacon (PLB)
  - Signal Flares, Signal Mirror
  - Survival Kit Food, water, etc.
  - o Satellite Phone / Portable VHF Transceiver
- Cold vs Hot Climates
  - Sunscreen, Emergency Blankets, etc.
- Equipment Installed in the Airplane
  - Servicing, Use, and Storage

# **Ground Lesson Supplements**

• In-Cabin Fire Extinguisher





## Personal Locator Beacon



## Signal Flare



## • Inflatable Raft



## Manually-Inflatable Life Vest



# • Emergency/Crash Knife



## • First Aid/Survival Kit

