Chapter 9

PARACHUTE RETRIEVAL



LESSON PLAN OUTLINE

PROGRAM: SMOKEJUMPER

LESSON: PARACHUTE RETRIEVAL

OBJECTIVES: Upon completion of this lesson, the trainees will be able to safely retrieve cargo and personnel parachutes in the field while minimizing parachute damage.

INTRODUCTION: Care must be taken when retrieving parachutes from jump spots and trees. The cost of parachutes and parachute repair is far greater than the labor required to retrieve parachutes properly. Extra time and care during retrieval saves money. Each step in parachute retrieval must be thought out before proceeding. Classroom and field demonstrations are very important for this lesson plan.

I. PARACHUTE RETRIEVAL

A. Open field retrieval.

- 1. Grasp the apex of the canopy. Use a partner to grab the risers and pull taut.
- 2. Shake out all foreign material from the canopy and lines. Foreign matter may puncture the nylon canopy when placed in a seamless bag or a packout bag.
- 3. Chain the parachute lines.
- 4. Place the parachute (apex first) into the seamless sack or packout bag.
- 5. For ram air canopies, gather canopy by the packing tabs located on the upper surface. Put this end into the bag first.

B. Standard timber retrieval.

- 1. One jumper will climb the tree and the other will stay on the ground to assist and help pull the parachute out of the tree.
- 2. Using a pruning saw, undercut the trunk 1/3 of its diameter on the side the canopy is to fall. Take into account the wind direction and velocity and any natural lean.
- 3. The assistant should hold slight tension on the letdown tape toward the undercut side of the tree. Good communication between the climber and assistant is essential.
- 4. The climber should saw the limbs below the undercut to allow the canopy to fall free and clear of the tree.
- 5. The climber should make a back-cut (approximately 1/3 the diameter). This leaves approximately 1/3 of the trunk as holding wood.
- 6. The climber should move down the tree on the side of the back-cut at least 8 feet below the lowest suspension line or parachute material and secure the flip line around the bole of the tree. Stress the importance of suspension line management to prevent entanglements with the climber.
- 7. When told to, the assistant will pull the top of the tree over and to the ground. Stress safety and the importance of **NEVER** pulling on the rope until instructed to do so by the climber.
- 8. When the top is on the ground, cut the trunk in pieces, and remove them from the lines and canopy. Remove as many branches as possible. Use care to avoid cutting suspension lines or canopy materials.
- 9. After the foreign matter is removed, pull the apex and risers of the parachute taut and chain the lines.

C. Tree felling retrieval

- 1. Fell all trees that are unsafe to climb (snags, rotten green trees, etc).
- 2. Clear small trees, brush, stumps (if possible), logs, and other debris which could damage the canopy.
- 3. Attempt to fell the tree so the canopy will land on the top side of the tree.
- 4. Clear the letdown rope to avoid fouling under the felled tree by pulling the rope to one side.
- 5. Fell the tree.
- 6. Use care in extricating the tree out from the canopy and suspension lines. Do not cut the lines or canopy material.
- 7. Remove foreign material from the canopy and lines. Chain the lines and stow in a seamless bag or a packout bag.

II. PARACHUTE RETRIEVAL EVALUATION PARAMETERS

- A. To successfully complete this unit, the student must:
 - 1. Show correct procedures in simple jump spot retrieval.
 - a. Layout of parachute and clear debris.
 - b. Clear and chain lines.
 - c. Stow parachute in bag.
 - 2. Demonstrate correct procedures in timber retrieval of cargo or personnel parachutes.
 - a. Safely climb the tree using accepted tree climbing practices.
 - b. Remove the parachute and/or cargo using the techniques in this lesson plan.
 - c. Minimize damage to canopy and lines.

- d. Layout of parachute and clear debris.
- e. Clear and chain lines.
- f. Stow parachute in bag.

III. PARACHUTE RETRIEVAL NARRATIVE.

The techniques of parachute retrieval are important because of the potential that exists for injury to the jumper, damage to the parachute system and additional costs for repair. An important part of smokejumping is the retrieval of gear and the ability to safely and efficiently return the components to the jumper unit to be quickly repaired, repacked, and reissued; keeping valuable firefighters out of the loft and back on the firelines.