



# Fire Protection Training

Procedures Handbook 4300

ROPES & KNOTS

**TOPIC:** How To Tie Off An Axe, Pulaski, or Sledge Hammer for Hoisting

**TIME FRAME:** 30 Minutes

**LEVEL OF INSTRUCTION:**

**BEHAVIORAL OBJECTIVE:**

*Condition:* A length of rope and an axe, pulaski or sledge hammer

*Behavior:* The student will secure a rope to the tool to hoist it under simulated fire conditions.

*Standard:* With a minimum of 100% accuracy

**MATERIALS NEEDED:**

- One length of rope
- Stop watch
- Axe, Pulaski, or sledge hammer
- Performance examination

**REFERENCES:**

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 3

**PREPARATION:**

The ability to effectively use ropes, knots, and hitches is a basic skill which every firefighter should possess. It is critical that every firefighter perform these skills in a professional manner. Failure to do so can result in serious injury to personnel and/or damage to equipment.



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HOW TO TIE OFFR AN AXE,  
PULASKI OR SLEDGE HAMMER  
FOR HOISTING

## OPERATIONS

## KEY POINTS

- | OPERATIONS               | KEY POINTS   |
|--------------------------|--|
| 1. Form a bight          | 1a. Running part end in working hand<br>b. 3' off the ground<br>c. Standing part in free hand<br>d. With bight touching ground             |
| 2. Pass running part end | 2a. To free hand   |
| 3. Position tool         | 3a. Tool head down<br>b. Perpendicular to ground<br>c. At point where bight touches ground<br>d. Tool head perpendicular to the rope bight |
| 4. Pass running part end | 4a. With working hand<br>b. Over tool head<br>c. Behind both the standing part and the handle<br>d. Adjacent to the tool head              |
| 5. Pass running part end | 5a. Back over opposite end of tool head<br>b. Then down between running part of rope and the tool head                                     |
| 6. Pull running part end | 6a. Until tight  |
| 7. Tie half hitch        | 7a. With standing part<br>b. Around handle<br>c. 6 - 10" from butt of handle   |
| 8. Hoist the tool        | 8a. Off the ground   |



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***APPLICATION:***

Student to practice until proficient.

***EVALUATION:***

A performance examination.

***ASSIGNMENT:***

To be determined by instructor(s).

# Performance Examination

HOW TO TIE OFF AN AXE,  
PULASKI, OR SLEDGE HAMMER  
FOR HOISTING

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## POINTS

### TIME START

- |    |  |           |
|----|--|-----------|
| 1. | Form a bight with the running part end extending three feet up from the ground and the bight laying on the ground                        | <u>10</u> |
| 2. | Grasp the running part end and the standing part in the non-working hand   | <u>10</u> |
| 3. | Position the tool with the tool head down perpendicular to the ground  | <u>10</u> |
| 4. | The tool head should cross perpendicular to rope where it contacts the ground and half the tool head should be on each side of the rope  | <u>10</u> |
| 5. | Pass the working part end over and adjacent to either end of the tool head, then behind and around the tool handle and the standing part | <u>10</u> |
| 6. | Pass the working part end over and adjacent to the other end of the tool head, then down between the running part and the tool head      | <u>20</u> |
| 7. | Pull the running part end outward from tool head parallel to the long axis of the handle until tight                                     | <u>10</u> |
| 8. | Tie a half hitch with the standing part of the rope around the tool handle 6 - 10" from the handle butt                                  | <u>10</u> |
| 9. | Hoist the tool off the ground  | <u>10</u> |

### TIME STOP

**ENTER TOTAL TIME:** \_\_\_\_\_:

**POINTS POSSIBLE:** 100

**POINTS DEDUCTED:**

**FINAL SCORE:**

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4319.20

**EVALUATOR'S SIGNATURE:**

**DATE:**

**COMMENTS:**

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