

PERFORMANCE BENCHMARKS

407.01C

Forming Elements of a Bowline Knot

Discipline: Ropes, Knots, & Hitches
Effective: 1/1/2001
Revised: 1/5/2012
Replaces: Firefighter Benchmark #39

Anne Huff, Fire Chief

I. Objective

The firefighter shall demonstrate tying a bowline knot with a safety on a smoke ejector in preparation for hoisting. The firefighter shall select the type and length of rope which will be adequate to meet the provisions of this skill. The firefighter shall verbally identify the working, standing, and running sections of the rope. The firefighter shall accomplish the skill in four (4) minutes or less.

II. Instructions – Procedures for Achieving the Objective

You will select the type and length of rope which will be adequate to meet this skill. You will verbalize five (5) potential elements of rope degradation. You shall demonstrate tying a bowline knot with safety on a smoke ejector. I will primarily evaluate the finished product for accuracy by comparing the knot to reference materials. You will also verbally identify the working, standing, and running sections of the rope. You will have four (4) minutes to complete this skill. You will be required to complete the mandatory steps while performing this skill. The skill will begin on my instruction to start. The time will stop when all the identified steps have been accomplished and you put your hands in the air to signal that you have completed this skill. Do you understand these instructions?

III. Examiner's Note

The firefighter will not be allowed to review the performance steps at the time of testing.

IV. Preparation & Equipment

- A. Adequate length of rope (synthetic/natural)
- B. Smoke ejector
- C. The firefighter shall accomplish the skill wearing a helmet.

V. Reference Sources

- D. TCFP, Performance Standards, Section 104-3.01, 4.01a, 5.01
- E. NFPA, National Fire Protection Association 1001, 3-1.1.2, 3-5.3
- F. IFSTA Essentials of Fire Fighting, 4th Edition, pages 151, 163.

407.01C - Forming Elements of a Bowline Knot

Discipline: Ropes, Knots, & Hitches

Name:	Officer #:
Evaluator:	Officer #:
Date:	Location:

If the firefighter:

(No partial points given)

With a rope:

- a) Inspects rope for damage and verbalizes at least 5 elements of rope degradation (elements could include: softness, crusty spots, stiffness, brittleness, nicks, cuts, dirt, mildew, heat sears or discoloration, fuzziness, mushy spots, sheath sliding, lumps and/or depressions.)..... 1.0 _____
- b) Correctly measures rope for desired size 1.0 _____
- c) **Ties bowline knot on a smoke ejector in preparation for hoisting** P/F _____
- d) Ties safety to loop 1.0 _____
- e) Completes the skill in the allotted time 1.0 _____

Allotted time for this skill: 4 minutes

Time: _____ minutes _____ seconds

- **Bolded letters denotes mandatory passage of this step**

Points Possible	Passing Score	Attempt	Performance Rating (Points)	PASS	FAIL
4	3	First			
		Second			
		Third			