

Blue Ridge Mtn. Rescue Group

Rappelling and Ascending Techniques

October 1987

"Expert climbers hate rappelling."

"It is the most dangerous thing climbers do."

"Most of the climbers killed on El Capitan in Yosemite have been killed while descending."

Outline for Tuesday evening Training Session

I. What is rappelling?

II. When do we rappel?

III. Overview of equipment used

- A. ropes
- B. carabiners
- C. slings
- D. seat harnesses
- E. specialized rappelling devices

IV. Why is rappelling "dangerous" and how do we ~~safely~~ practice it safely

- A. Completely dependent upon equipment
- B. Top ten ways to get "chopped"
- C. Use of independent belay for safety

IV. Guidelines for setting up a rappel

- A. Anchors
- B. Avoid sharp edges
- C. Route selection

V. Rappelling techniques

- A. Body rappel
- B. Figure - 8
- C. munter hitch
- D. rappel sack

VI. While rappelling

- A. Stay perpendicular to rock!
- B. Keep feet spread apart!
- C. ~~Keep~~ Keep hair and loose clothing tucked in.
- D. Never let go of your brake hand

VII. Rappelling signals

IX. SAFETY

- A. Always wear a helmet while rappelling and while near "landing zone."
- B. Use independent belay when learning to rappel.
- C. Always have a trained ASRC member inspect your set-up before descending ~~or going~~

X. Ascending

The Mountain - Rock Climbing Program

Climbing Calls and Signals

Brian Wheeler - July 1987

Climbing:

Climber - "On Belay?"

Belayer - "Belay On" (safety contract has been initiated)

Climber - "Off belay"

Belayer - "Belay Off" (safety contract has been terminated)

Notes: The climber or rappeller should be placed "On Belay" and taken "Off Belay" from a secure location (i.e. the safety zone).

Rappelling:

Rappeller - "On Rappel?"

Belayer - "Rappel On"

Rappeller - "Off Rappel?"

Instructor - "Rappel On" (located at bottom)

Rappeller - "Rappelling"

Rappeller - "Off Belay"

Rappeller - removes descending device from rope

Belayer - "Belay Off"

Rappeller - "Off Rappel"

Belayer - "Rappel Off"

Rappeller - "All Clear" and "Up rope"

Many rock climbers use the following calls without an independent belay

Rappeller - "On Rappel?"

Partner #1 - "Rappel On"

Rappeller - "Rappelling"

Rappeller - "Off Rappel"

Partner #2 - "Rappel Off"

Other Signals:

"Rock!"

"Falling!" or "&%#@*\$"

"Up rope" Belayer echoes "Thank You"

"Slack" Belayer echoes "Thank You"

"Tension" Belayer echoes "Thank You"

"That's Me" Belayer echoes "Thank You"

"Stand-By" - signal to person who has repeated a call that the individual saying "Stand-By" is not ready yet.

(SOME) MOUNTAIN KNOTS

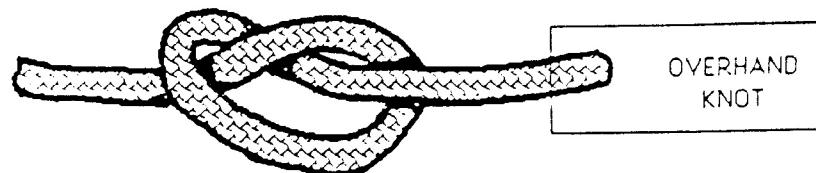
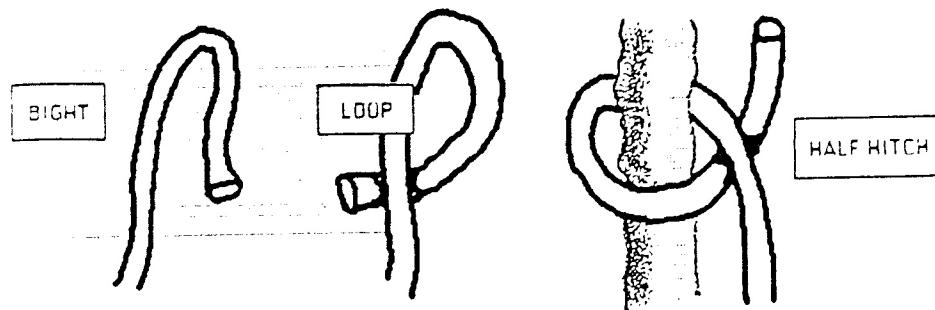
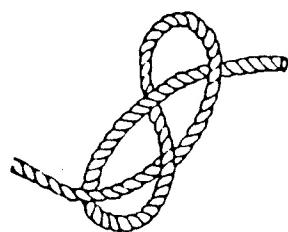
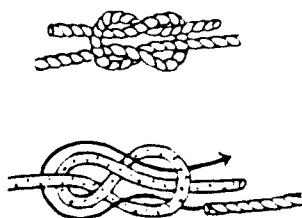


FIGURE-EIGHT



SQUARE KNOT



BUTTERFLY KNOT

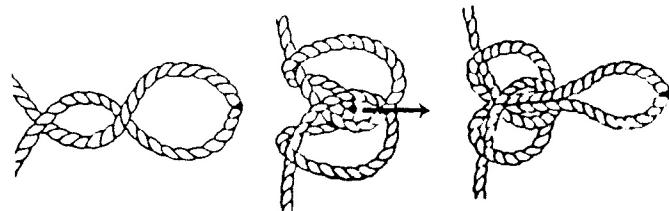


Figure-Eight Follow-through

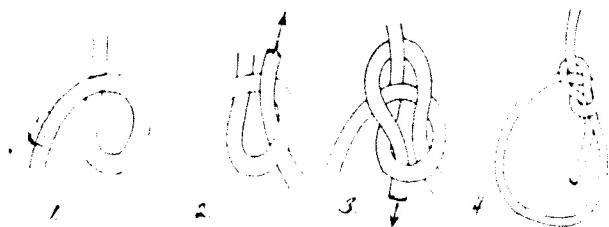
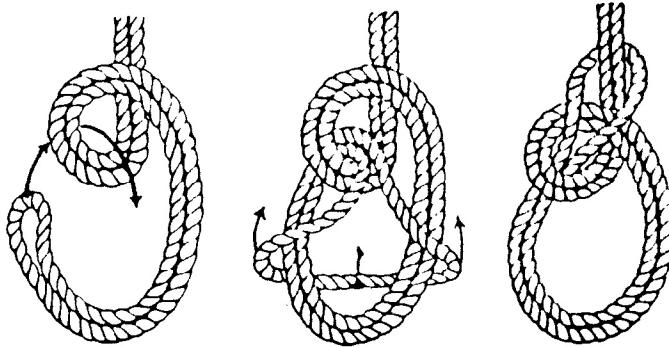


Fig. 11.7 Simple bowline



P - INE-ON-A-BIGHT

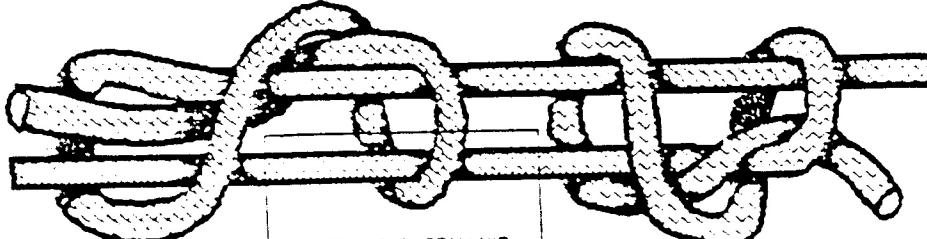
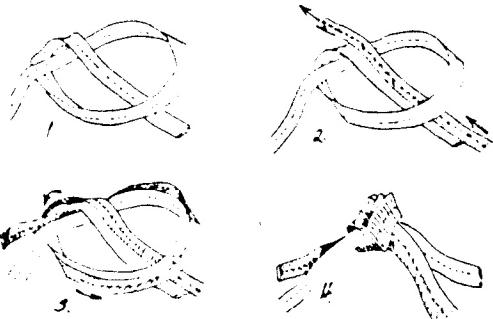
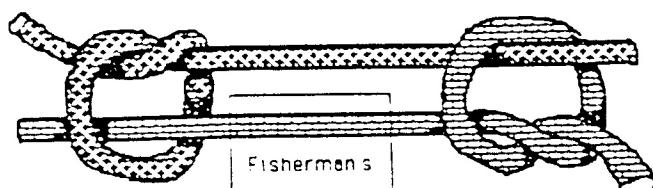
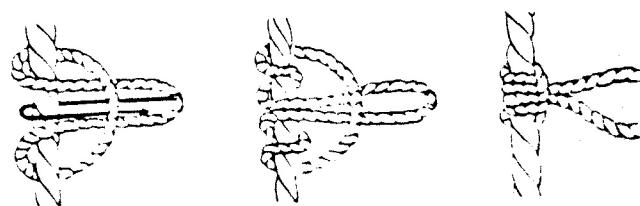
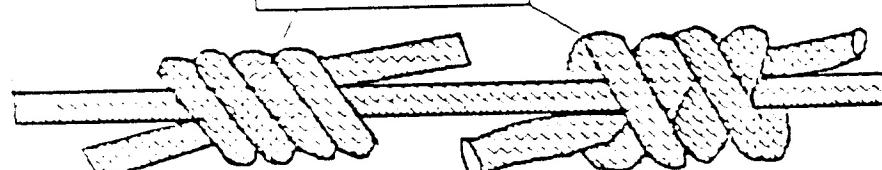


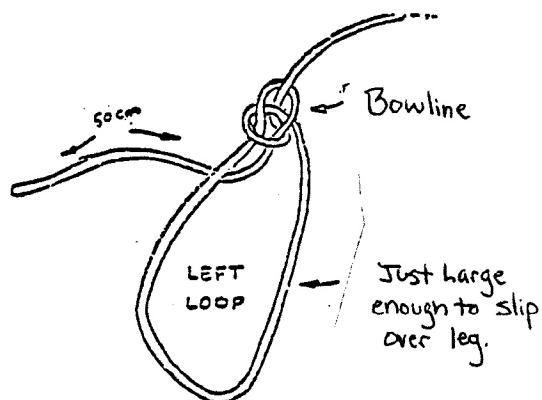
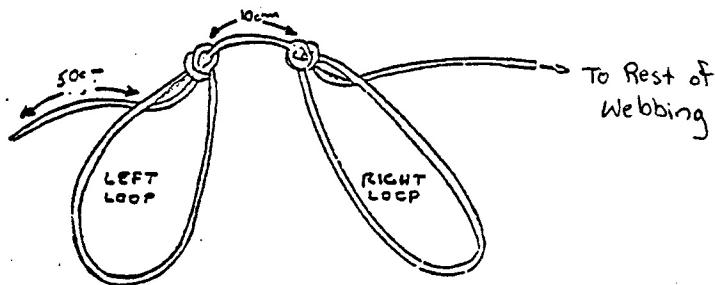
Fig. 11.1 Overhand follow-through.



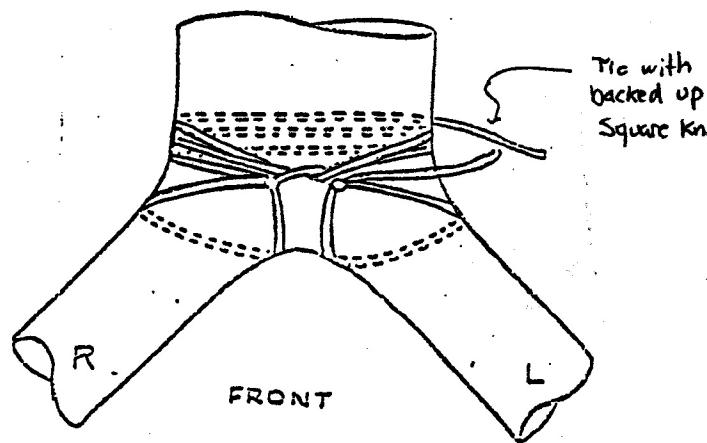
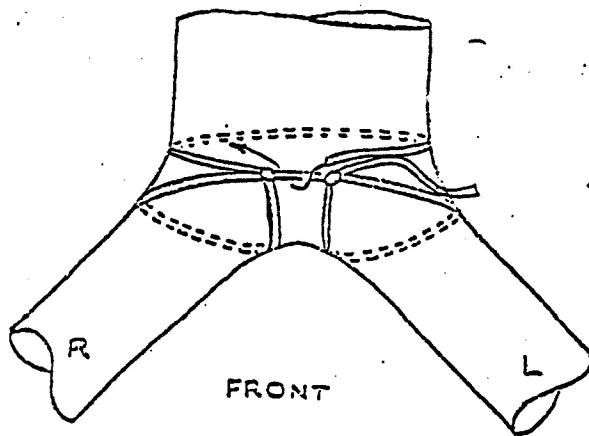
PRUSIK KNOTS

The ASRC Seat Harness.

The ASRC seat is a tied webbing harness with the virtue that it may be cut in any two places without failing completely. The seat is made from about 5 meters (more or less, depending on the size of the user and the number of waist wraps desired) of one inch tubular webbing. The seat is prepared as shown



Wear As Shown:



Information taken from:

- Blue Ridge Mtn. Rescue Group "Training Packet" Fall 1984
- NASAR '85 Conference Papers - Nashville, TN
- Ropes Knots and Slings for Climbers, Walt Wheelock, La Siesta Press 1967
- Wilderness Search and Rescue, Tim J. Setnicka, Appalachian Mtn. Club: Boston 19