

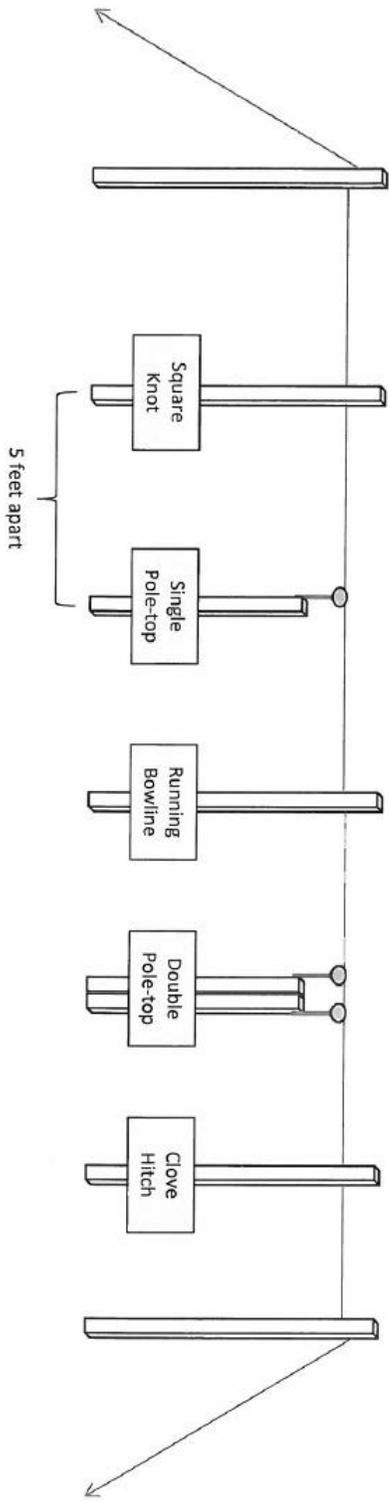
2017 Rodeo Event

Apprentice and Journeyman Knot and Phase tie

Event Time: 1:30 minutes

Drop Dead Time: 2:00 minutes

Each Apprentice and team member will tie three knots (square knot, running bowline, and clove hitch). They will also perform two types of wire tie-ins using tie wire (single pole top and double pole top). Stations will be set at 5 foot spacing. Armor rods will not be utilized in this event. Each station will be labeled with the appropriate knot and tie requirements.



Knot / Wire Tying Layout

Square knot

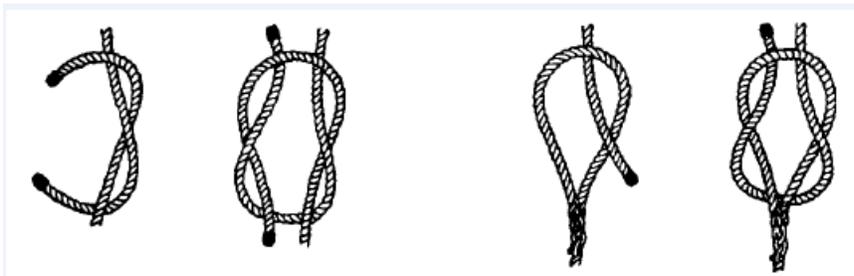


Figure 11.8 The *square knot* is used to tie two ropes together of approximately the same size. It will not slip and can usually be untied even after a heavy strain has been put on it. Linemen use the square knot to bind light leads, lash poles together on changeovers, on slings to raise transformers, and for attaching blocks to poles and crossarms.

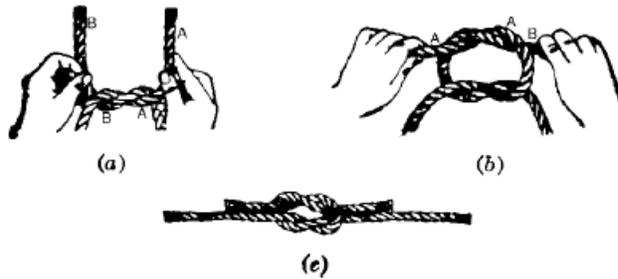
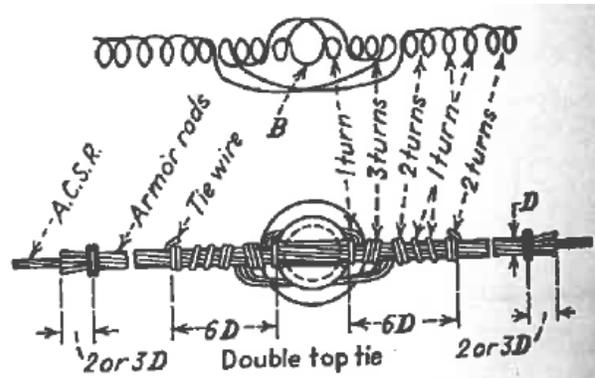


Figure 11.9 The method of making a *square knot*. (a) Passing left end A over right end B and under. (b) Passing right end B over left end A and under. (c) The completed knot drawn up. (Courtesy of Plymouth Cordage Co.)

Single tie-in

FIGURE 22.31 Single-pin-type insulator tie for ACSR and aluminum cables equipped with armor rods. (Courtesy Aluminum Company of America.)



Running Bowline

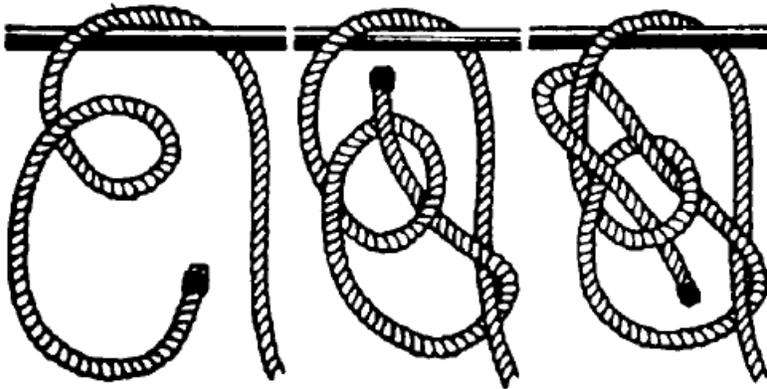


Figure 11.15 A running bowline knot is used when a hand line or bull rope is to be tied around an object at a point that cannot be safely reached, such as the end of a limb.

Double tie-in

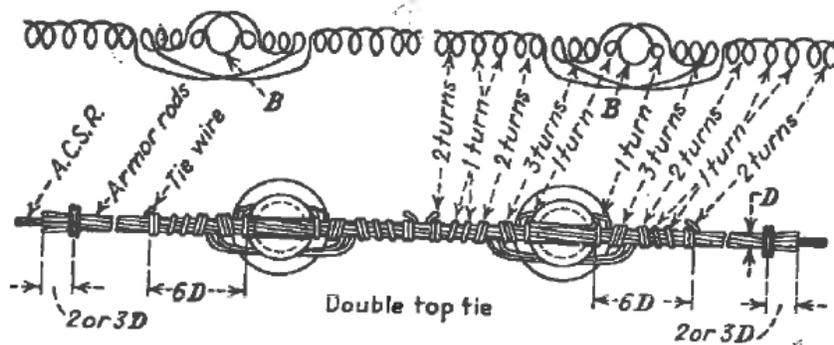


FIGURE 22.32 Double-pin-type insulator tie for ACSR aluminum cables equipped with armor rods. (Courtesy Aluminum Company of America.)

Clove Hitch

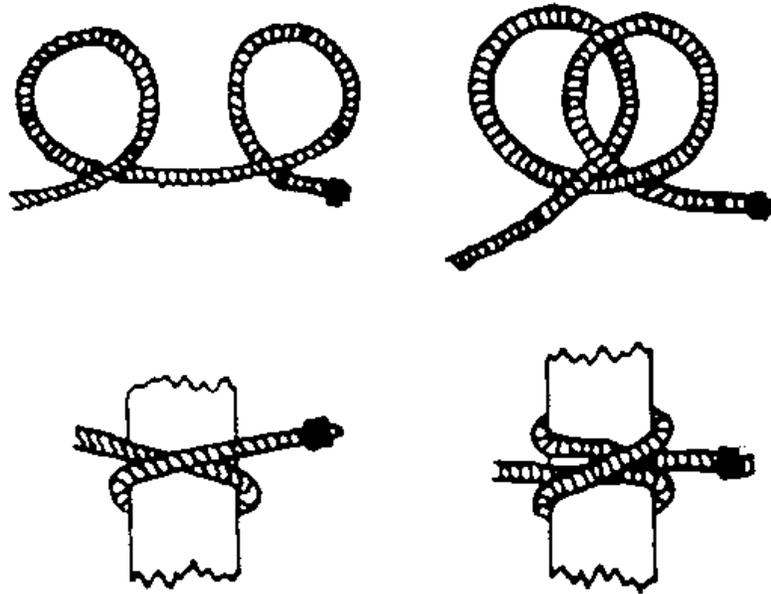


Figure 11.19 The *clove hitch* is used to attach a rope to an object such as a crossarm or pole where a knot that will not slip along the object is desired. Linemen use the clove hitch for side lines, temporary guys, and hoisting steel.

To make this hitch, pass the end of the rope around the spar or timber, then over itself, over and around the spar, and pass the end under itself and between the rope and spar as shown.