

## **PRECAUTIONS**

### **AERIAL WORK**

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#### **1. CLIMBING POLES AND WORKING ALOFT**

1.01 Climbing equipment must be maintained in good condition at all times. Do not use such equipment unless it meets standard requirements as covered in other sections of the Practices.

1.02 Before climbing a pole make certain that the pole has sufficient strength to permit the safe conduct of planned work operations. Information regarding the use of temporary supports and safeguards to be taken when climbing and working aloft is contained in another section of the Practices.

1.03 Never place full weight on pole steps before first determining if they are secure in the pole and not weakened through deterioration.

1.04 Look before climbing a pole. Take notice of power wires, equipment and any unauthorized attachments or substandard conditions such as loose wires, bent pole steps, pole checks, shell rot, ice coating, etc., that may interfere with safe climbing. Ascend and descend all poles subject to such hazards with extreme caution.

1.05 Keep the hands free of materials and tools when climbing poles, ladders, etc.

1.06 Do not drop materials and tools when working aloft. Use a hand-line for raising or lowering materials and tools. Do not place such items in insecure positions on cross-arms, pole tops, terminal tops or other places where they may fall or be knocked off.

1.07 In so far as practicable, employees should keep in the clear when others are working aloft. Use warning signs, flags, etc., to restrict public access to the vicinity beneath work operations being conducted on poles, splicing platforms, etc.

## 2. HANDLING AND STRINGING WIRE

2.01 Cut all wire with caution. Loose ends of wire may flip and result in serious eye injuries, body punctures or skin abrasions. Do not cut wire without first taking measures to prevent the ends from springing back and causing possible injury.

2.02 Exercise caution when stringing wire over highways or other thoroughfares where sagging wire may cause interference with pedestrians or vehicular traffic. If necessary, place barricades, warning signs, lanterns, or station flagmen to warn oncoming traffic.

2.03 Rubber gloves must be worn by all workmen engaged in handling wire during the stringing and tensioning operations where the wire is placed on jointly used poles or crosses over or under electric light and power circuits.

2.04 Avoid sudden changes in the rate of pulling wire. Variation in the pulling rate results in surging which in turn may cause the wire to snag on some object below the line or flip up and make contact with wires which may be above the line. Avoid sudden starts or stoppages in the wire pulling operation to prevent kinks or snags occurring at the pay-out reels.

2.05 Wire may become snagged with interfering tree branches, fences, or other obstructions during the stringing operation. Investigate sudden stoppages or sudden increases in tension. Release snags and remove kinks before resuming the wire pulling operation. Snags should be released in a manner to minimize flip-ups, thereby preventing possible contact with power wires.

2.06 When stringing or tensioning wire on jointly used lines or at spans crossing under electric light or power lines, the risk of a flip-up and possible contact must be avoided. Tie a handline over the telephone wires beneath hazardous power crossings to prevent the wires from flipping up and contacting the power conductors.

2.07 At upward changes in grade of telephone wires on jointly used pole lines or at power line crossings, the telephone wires must be tied down by rope or other means to

prevent possible contact with the power lines. Various methods of restraint are covered in the G30 division of the Practices.

2.08 Ropes and measuring tapes used in work operations where there is a possibility of electrical contact, must be dry and free from metallic strands.

2.09 As a precaution against possible shocks resulting from accidental contact with power wires on jointly used lines or against possible electric shock from induced voltages, telephone wires should, where practicable, be grounded during the stringing operation. The method of providing temporary grounds during wire stringing operations is covered in the G30 division of the Practices.

### **3. PLACING STRAND AND CABLE**

3.01 The precautions summarized in Part 2 above also apply to placing suspension strand. Because of the greater strength of strand and the greater tension to which the suspension strand is placed, it is most important to employ all possible precautions to prevent accidents and accidental contacts with electric light or power wires.

3.02 Due to the considerable difference in sag which exists between strand alone and strand with cable in place, it is important to allow for these changes in sag in connection with cable placing or removal operations, particularly removal operations in connection with joint use construction or at crossings where power wires are involved.

### **4. RIDING STRAND**

4.01 Due to the uncertainty in the holding power of masonry attachments, ladders should be used for working in cable spans attached to building walls. When possible, place the ladders so that they will tend to push the strand attachments toward rather than away from the walls.

4.02 Do not ride strand of questionable strength unless it is first tested by suspending the weight of at least two men (or about 300 pounds) from the center of the span. In no case shall 2200-pound strand be ridden by a workman.

4.03 Do not ride slack spans unless a temporary guy can be placed at the dead-end pole. Where a temporary guy cannot be placed, work from a ladder.

4.04 Since no minimum ground line circumference is specified for poles smaller than class 7, it is inadvisable to ride strand placed on class 9 or 10 poles, unless temporary supports or guys are placed on the poles supporting the span involved.