

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G52.123.5**  
**Issue 1, January, 1952**  
**AT&T Co Standard**

**PRELASHING**  
**TERMINATING STRAND**

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**1. GENERAL**

1.01 This section covers strand terminations and includes dead-ending the strand as well as joining at the pole or in the span.

1.02 The operations described herein require that the opposite end of the strand or strands being worked be maintained under tension by the prelashing equipment, the pulling vehicle, or appropriate temporary or permanent terminations.

**2. PRECAUTIONS**

2.01 **All precautions contained in the Strand Puller Practices must be observed. The strand and the pullers must be cleaned to insure adequate gripping action.**

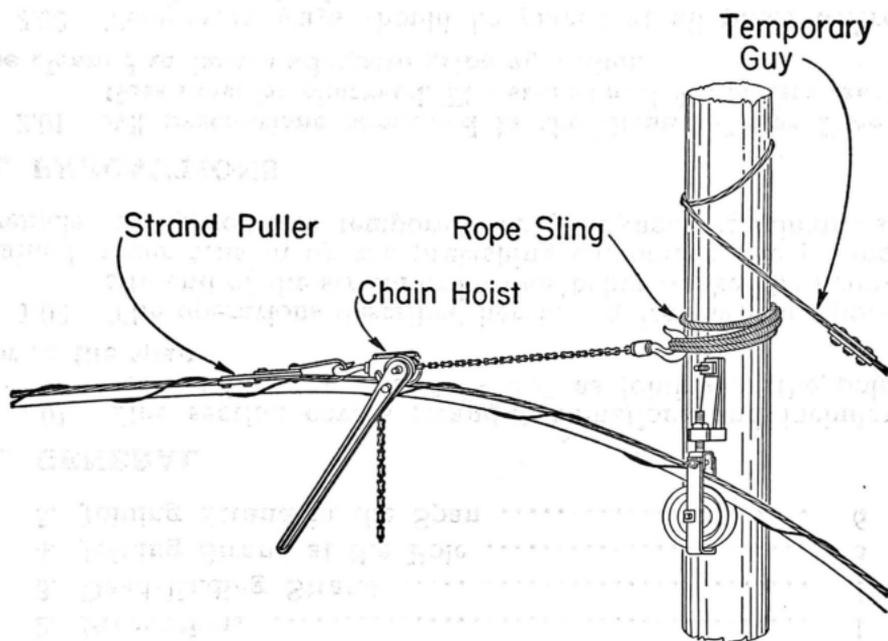
2.02 Temporary guys should be placed at all poles where unbalanced loads occur as a result of prelashing operations. These occur mainly at poles where one section is dead-ended temporarily. Place pole-to-pole or other temporary guys using 6000-pound strand.

**3. DEAD-ENDING STRAND**

3.01 Place any temporary guying necessary to support unbalanced loads occasioned by the dead-ending operations.

3.02 Place a rope sling, chain hoist and strand puller at the dead-end pole either above or below the temporary roller depending on the desired permanent attachment level. If necessary, the permanent attachment level may be varied as much as two feet to either side of the level at which the strand and cable are supported in the roller.

3.03 Operate the chain hoist until the sling, hoist and strand puller are carrying the strand tension.



3.04 Remove the temporary roller and its associated hardware.

3.05 Grip the lashing wire to the strand about three feet from the pole. Allow sufficient lashing wire for termination on a cable lashing clamp, cut the lashing wire and remove the excess.

3.06 Attach a handline to the cable leader or to the strand beyond the dead-end pole. Remove the cable from the cable grip or cut the cable as required. Allow sufficient strand to make up the dead-end and cut the strand. **Before cutting, make sure that all of the tension has been released from the strand and line in the section beyond the dead-end pole.**

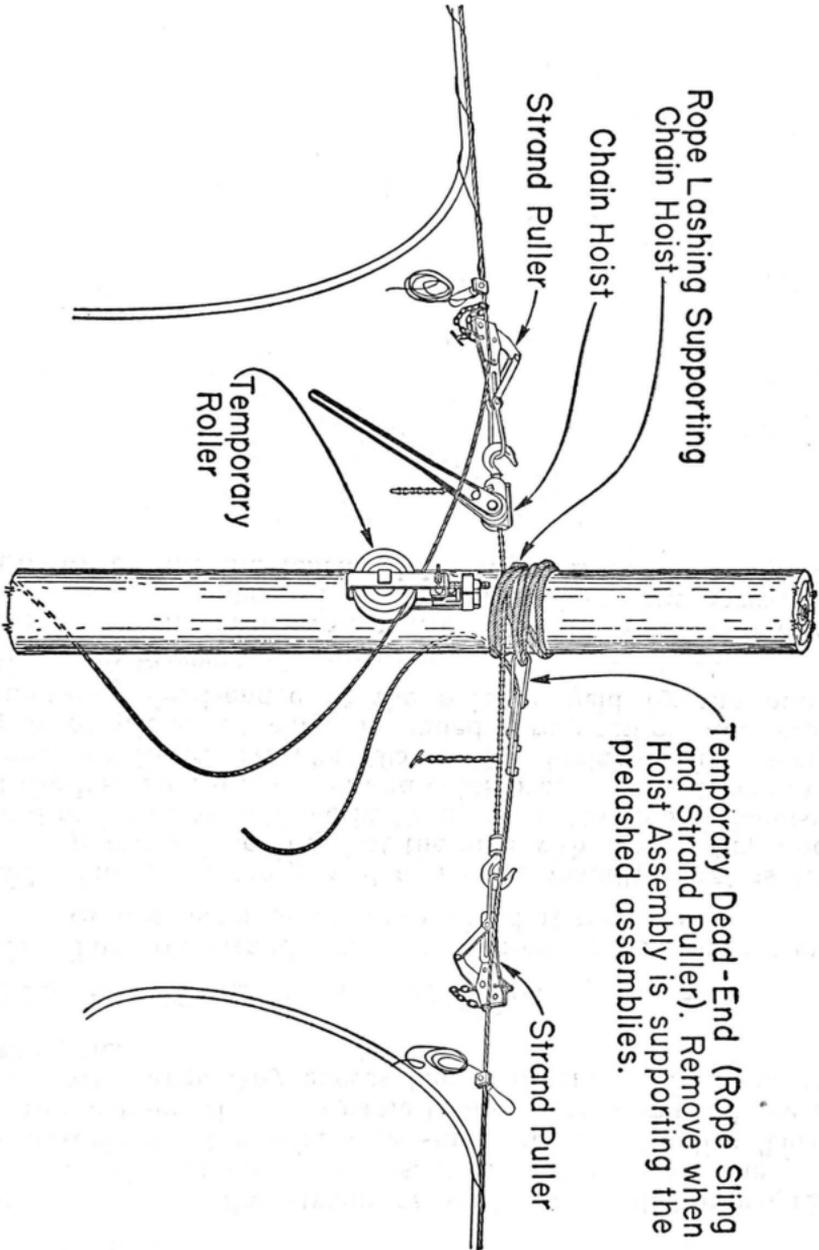
- 3.07 Lower the leader or the free strand and cable to the ground.
- 3.08 Dead-end the strand as outlined in the appropriate Section of the Practices, then slowly release the chain hoist and remove the hoist, rope sling and strand puller. Terminate the lashing wire on a cable lashing clamp and remove the lashing wire grip. Any excess length of cable should be tied to the pole.

#### 4. JOINING STRAND AT THE POLE

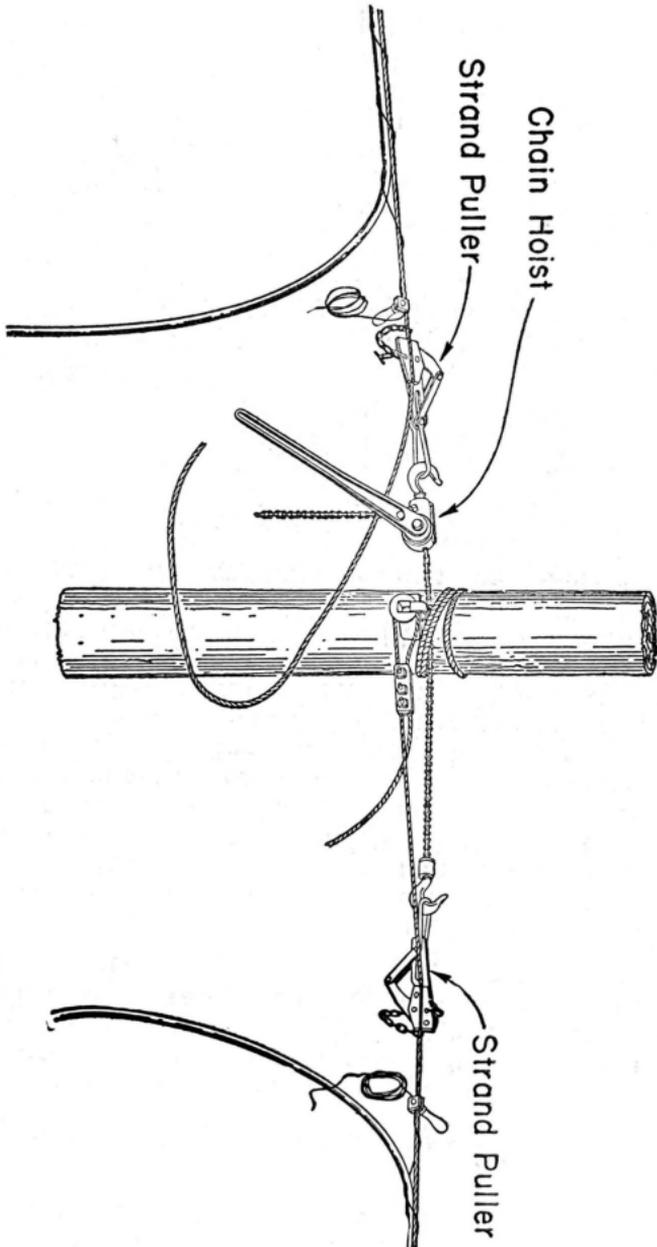
- 4.01 The pole strand connector is used where adjacent ends of suspension strands are joined at the pole.
- 4.02 The prelashed strand and cable installed first is temporarily dead-ended at the pole with a rope sling and a strand puller or as outlined in Paragraphs 3.01 to 3.03, inclusive, and the lashing wire, strand and cable prepared for termination as outlined in Paragraphs 3.05 to 3.07, inclusive. The second length of prelashed cable is pulled into position and either temporarily dead-ended at the pole or held by the pulling vehicle and prelasher.
- 4.03 Join the two strands with a chain hoist and strand pullers as shown in the following figure and operate the chain hoist until the tension is removed from the temporary



terminations at the pole. It may be necessary to hold the chain hoist in position with a rope lashing.



- 4.04 Prepare the second prelash assembly for termination as outlined in Paragraphs 3.05 to 3.07, inclusive.
- 4.05 Remove the temporary roller and dead ends and place a pole strand connector.

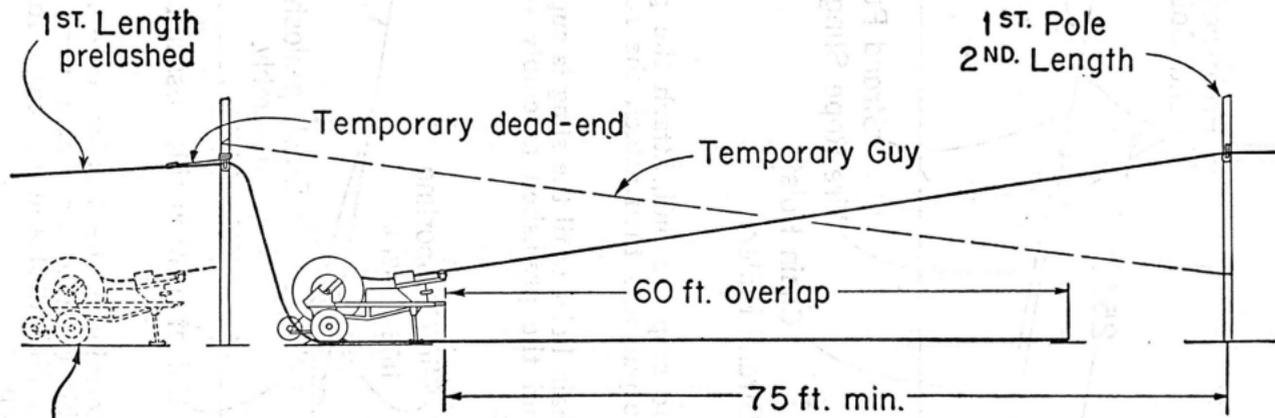


4.06 Complete the strand splice and terminate the lashing wire as outlined in the appropriate Sections of the Practices.

## 5. JOINING STRAND IN THE SPAN

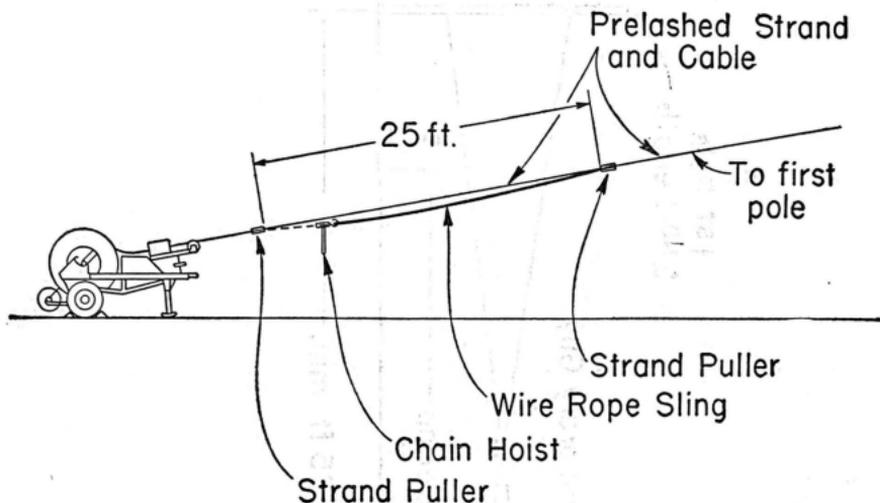
5.01 Where the strands are to be joined in the span, the prelash assembly installed first is temporarily dead-ended at the pole as outlined in Paragraphs 3.01 to 3.03, inclusive. With this arrangement a partial span length is free of tension.

5.02 The pulling arrangement for the second prelash pull requires that the trailer be set up at the end of the pull in which the strands are to be joined. The 75 feet minimum distance between the trailer and the first pole of the section to be pulled must be maintained and **the trailer must be positioned to allow a minimum overlap of 60 feet of slack prelash strand and cable from the first section prelash, exclusive of the strand required for splicing.** This may necessitate placing the trailer more than a span length from the first pole of the section to be pulled. Position the trailer and locate the strand splice so that the strand puller of the sling placed in subsequent operations will not contact the temporary roller on the first pole. The puller will not pass through the roller.



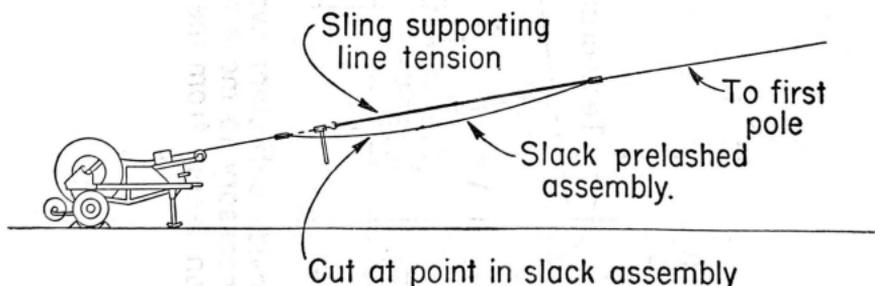
To provide sufficient overlap it may be necessary to move trailer more than a span length from the first pole.

5.03 After the second prelash assembly has been pulled in, attach a strand or wire rope sling about 25 feet long to the suspension strand with a strand puller at the pole end and a strand puller and chain hoist at the trailer end.



It may be necessary to stop the pull, attach the pole end of the sling, complete the pull and then attach the remainder of the sling.

5.04 Operate the chain hoist until the sling is supporting the line tension and the prelash assembly between the strand pullers is slack.

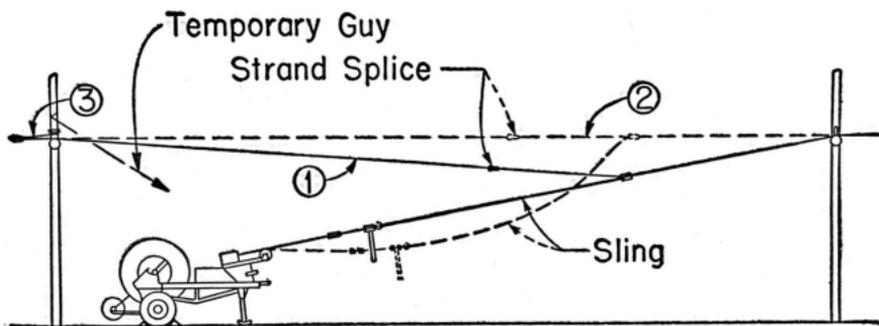


5.05 Temporarily terminate the lashing wire and cut the strand and cable (if necessary) at a point in the slack loop which will allow sufficient strand and cable for the strand splice and cable overlap.

5.06 When the strand and cable have been cut, the ends of the two prelash assemblies are free of tension. Place a strand connector and complete the splice as shown in the appropriate Sections of the Practices. In this operation, be sure there are no twists in either cable and secure the cables to the strand.

5.07 After completing the strand splice, the second prelash section is brought to the final tension as follows:

- (1) Rewind any free cable and secure lashing wire in the C cable lasher so that only strand will be pulled out in subsequent operations. **Do not release the tension in the line.**
- (2) Pull **slowly** with the winch.
- (3) Stop the pull as the slack portion of the first prelash length begins to tighten.



- ① As slack section tightens; stop the pull.
- ② Slowly release line tension to allow line to raise to normal position.
- ③ Resume pull until temporary dead-end becomes slack.

(4) Slowly release the line tension at the E lasher, allowing the line to raise to its normal position and the sling and strand to the prelasher to become slack.

(5) Resume the pull slowly until the temporary dead end holding the first prelash section becomes slack. This indicates that the entire line is at the final tension.

(6) Working from an extension ladder **after** the attachments have been made at the poles adjacent to the spliced span, remove the strand puller and sling from the suspension strand. Complete the temporary lashing wire terminations and support the cable overlap.