

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

**SECTION G52.442.1**  
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**AT&T Co Standard**

## **CABLE REPAIRING—AERIAL**

### **ALPETH SHEATH CABLE**

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#### **1. GENERAL**

1.01 This section covers the method of repairing alpeth sheath aerial cable using B Aluminum Tape and B Tape.

#### **2. MATERIALS**

2.01 The following materials are required in repairing the sheath.

**Cement, C:** Supplied in 4-ounce bottle with dauber.

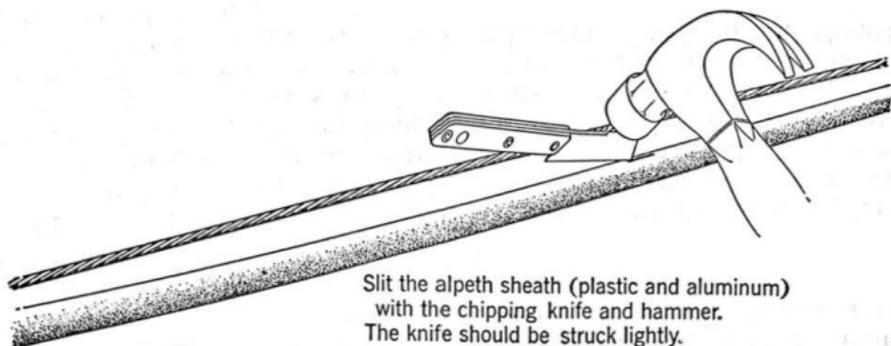
**Tape, B:** Neoprene tape with tacky surface. Supplied in rolls 2 inches wide containing 15 linear feet.

**Tape, Aluminum, B:** Supplied in rolls containing 20 linear feet. The tape is .003 inch thick and 4 inches wide.

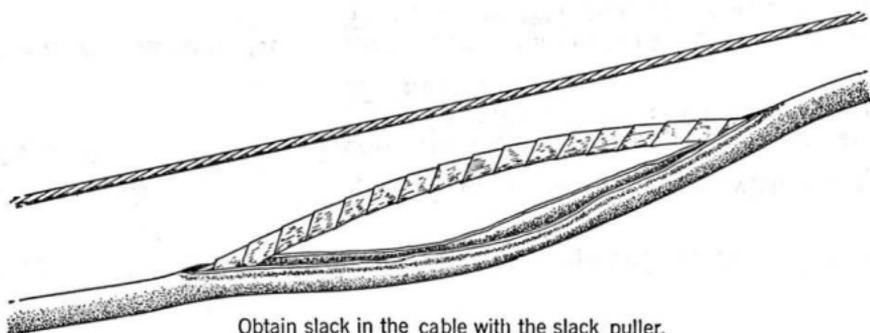
**Tape, Friction, Black:** Supplied in rolls 3/4 inch and 2 inches wide containing 36 or 75 linear feet.

#### **3. PROCEDURE**

3.01 If it is necessary to open the cable, cut the polyethylene and aluminum carefully along the top of the cable. The cut should be made with the point of a well sharpened chipping knife, as shown below, tapping the knife lightly with the hammer. The core should be exposed, using the slack puller if required. The conductors should then be repaired, the insulation dried and the core wrapped and placed back in the sheath in the usual manner.

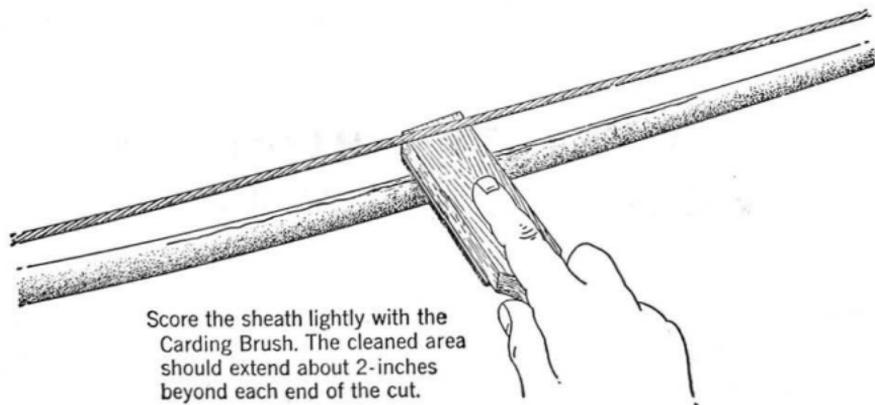


Slit the alpeh sheath (plastic and aluminum) with the chipping knife and hammer. The knife should be struck lightly.

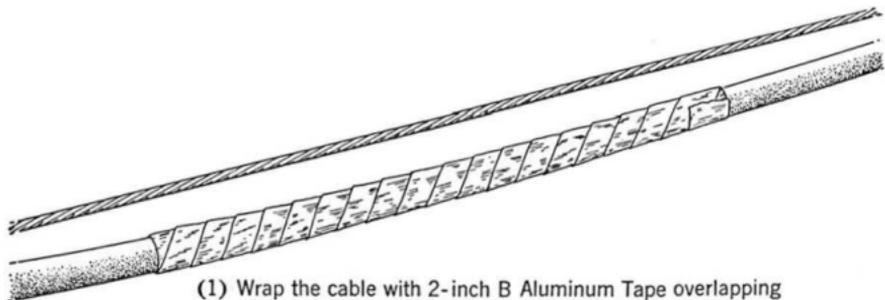


Obtain slack in the cable with the slack puller, if required, and remove the core from the sheath.

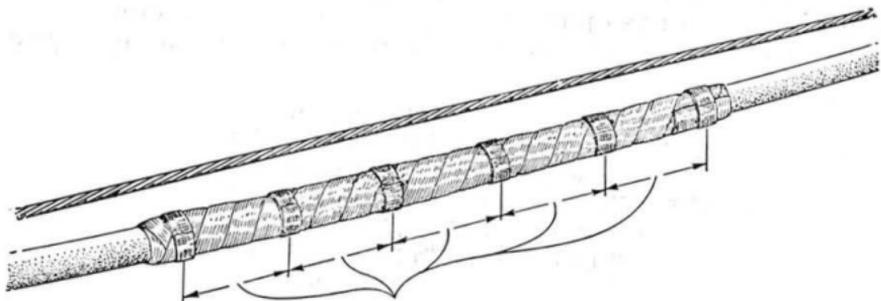
3.02 Cuts, holes, cracks and slits in the sheath are repaired as described in following sketches. The numbers in parenthesis indicate the sequence in which the operations should be done.



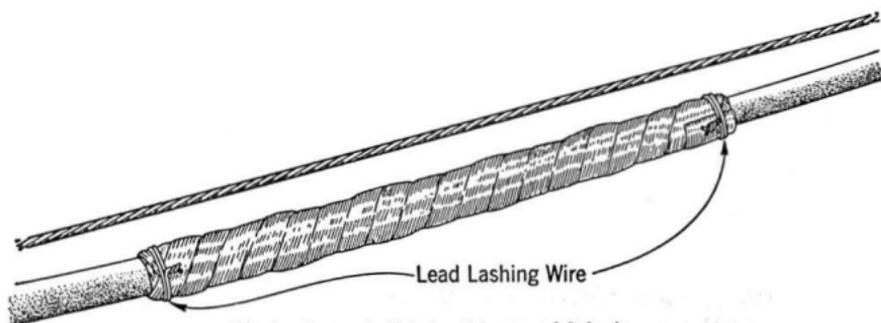
Score the sheath lightly with the Carding Brush. The cleaned area should extend about 2-inches beyond each end of the cut.



- (1) Wrap the cable with 2-inch B Aluminum Tape overlapping it one-half its width. The aluminum should extend about one-inch beyond the slit on each side of the opening. The 2-inch tape should be obtained by cutting standard tape in half lengthwise.
- (2) Coat the aluminum tape and one inch of the sheath on each side of the tape with C Cement. Allow the cement to dry for about 5 minutes.
- (3) Apply two half-lapped layers of B Tape over the cemented area.



Place friction tape collars on 4-inch centers, each collar consisting of 3 turns of  $\frac{3}{4}$ -inch Friction Tape.



- (1) Apply two half-lapped layers of 2-inch Friction Tape.
- (2) Apply two half-lapped layers of B Tape, overlapping the tape one-half its width.
- (3) Wrap with B Aluminum Tape cut 2 inches wide, overlapping the tape one-half its width.
- (4) Place 2 turns of Lead Lashing Wire at each end of the repair.

3.03 On cable lashed to the strand, place a lashed cable support on the cable 1 inch beyond each end of the tape wrapping. Support the wrapping at one or more places, depending on its length. The distance between supports should be uniform and should not exceed 20 inches. Place two turns of lead serving tape under each lashed cable support located on the wrapping.

3.04 On cable supported in rings, place a cable ring on the cable 1 inch beyond each end of the tape wrapping. Support the joint at one or more places with aerial cable supports, depending on the length of the opening. The distance between supports should be uniform and should not exceed 20 inches. Place two layers of lead serving tape under each of the supports located on the wrapping.