

LACING CABLES

This E.I. describes methods for lacing cables to runways and to other cables and the lacing of vertical runs, bends and multiple runs (more than one section on a runway).

1. RESPONSIBILITY.

1.1 The Officer-in-Charge of each section of cable lacing is responsible for:-

- (i) Using the most economical number of men and seeing that each man is fully employed.
- (ii) Seeing that each man has the correct lacing tools and that the tools are in good condition.
- (iii) Examining lacing twine for correct gauge, quality and waxing.
- (iv) Examining all platforms, stages, etc., for strength, correct fixing and safety.
- (v) Checking that cables throughout the section are laced into the positions shown in the relevant drawings. Particular care must be taken on extensions of existing exchanges.
- (vi) Discussing with the Supervising Technician or the Officer-in-Charge of the installation, the frequency of lacings (every slat or alternate slat) and the number of cables per stitch. This decision will be made by the Supervising Technician and instructions given to the Officer-in-Charge of each section.
- (vii) Checking that the methods in this E.I. are used and workmanship is of high standard.

2. SPACING OF LACING.

2.1 Lacing to Runway Slat. Cables should normally be laced:-

- (i) to every second slat on horizontal runs;
- (ii) to every slat in the following cases:-
 - (a) vertical runways;
 - (b) on horizontal and vertical bends to prevent sagging and to retain the correct shape of the block;
 - (c) runways on which the slats exceed 9 in. centres;
 - (d) runs where appearance is important;
 - (e) runs where cables are likely to be handled (such as passageways);
 - (f) cables through holes in floors, etc.

2.2 Cable Sections on Runways. Where there are several cable runs on a runway, the inside runs need be laced only at sufficient points to secure the cables firmly unless appearance in these positions is essential.

3. STITCHES USED FOR LACING CABLES.

3.1 The three types of stitch used for lacing cables are:-

- (i) Lock Stitch.
- (ii) Block Stitch.

The Lock Stitch is used to lace cables to runway slats in the majority of cases (when cabling grids are not used).

The Block Stitch may be used when a rectangular block of cables requires stitching to slats (when cabling grids are used) or when a block of cables requires stitching between slats such as a drop off from one runway to another.

The uses of these stitches when lacing cables are shown in Instruction Sheets Nos. 7, 8 and 9. Each type of stitch thus has an individual instruction sheet and includes numbered pictures to show each step in the formation of the stitch.

The sheets have been printed for display at appropriate places but they can be cut for inclusion with these notes if required.

4. PRECAUTIONS.

- 4.1 Safety Precautions during Cable Lacing. Serious accidents such as a fall from a working position, an abrasion to the person, or a puncture of the face or body by the lacing needle, can occur due to the breakage of the lacing twine under tension. To avoid such accidents the operator must be safely sited at the operational position. Excessive length of lacing twine must not be used and frequent examinations of the twine made to detect fraying. If this occurs, the twine must be cut away and a new piece tied in as in Fig. 1. Care must be taken to avoid breaking the needle when drawing the string through the cable block. The needle must be pulled at right angles to the cable block and must not be used as a lever to pull the twine.

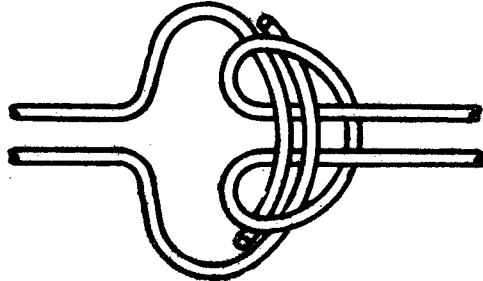


FIG. 1. JOINTING LACING TWINE.

5. INSTRUCTION SHEETS.

- 5.1 These sheets show how a job is actually done and are issued primarily for display purposes to assist men on the job. The following sheets are about cable lacing:-

Lacing Cables with Lock Stitch is Instruction Sheet Number 7; the lock stitch is mostly used to lace cables to runway slats. (When cabling grids are not required.)

Lacing Cables with Block Stitch is Instruction Sheet Number 8; the block stitch may be used for lacing a block of cables between slats such as a drop off from one runway to another.

END.