

TOOLS

POLE SCALE

Contents	Page
PURPOSE OF SCALE	1
DESCRIPTION	1
USE OF SCALE	3

1. PURPOSE OF SCALE

1.01 The Pole Scale is intended for use in determining the lengths of standing poles for Inspection, Record, Inventory, and Appraisal purposes and in other work where it is desired to determine the lengths of poles in place.

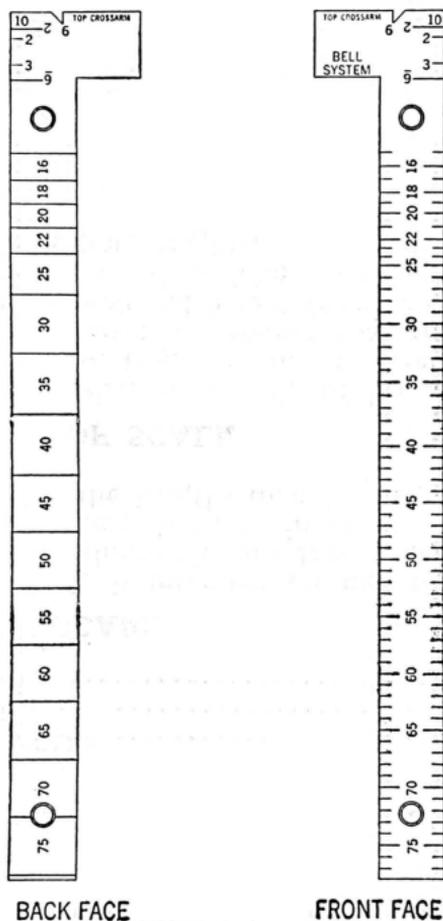
2. DESCRIPTION OF SCALE

2.01 The scale consists of a strip of bronze, 13-1/2 inches long, marked so that the top crossarm on a pole, the distance between crossarms on 24-inch spacing, or the distance between marks at 2 feet and 6 feet from the ground line can be used for reference sighting. The scale is graduated in such a way as to indicate pole heights.

POLE SCALE

2.02 The following illustration shows the two faces of the scale:

POLE SCALE



2.03 The 2-inch offset at one end of the scale is for use when the top crossarm is taken as the reference distance. The front scale is arranged so that the length of poles between 15 and 78 feet can be read directly in one-foot multiples for pole replacement work, special measurements, etc. The back scale is arranged so that the length of poles between 16 and 22 feet can be read in 2-foot multiples and between 22 and 75 feet can be read in 5-foot multiples. The use of the back scale tends to facilitate the work of inventory and appraisal forces.

2.04 The scale markings take account of the normal depth of setting poles in earth, and the 8 inches of pole above the crossarm in the top gain.

3. USE OF SCALE

For Poles Carrying Cable or Other Types of Plant.

3.01 The following method is considered the most accurate and can be used under all conditions, and particularly for poles that carry cable only, or crossarms that are other than 6 feet or 10 feet in length, or crossarms that are spaced at intervals other than 24 inches. Proceed as follows:

- (1) Make two chalk marks on the pole, one at a distance of 2 feet and the other at 6 feet from the ground line.
- (2) Standing about 100 feet from the pole, hold the scale vertically, suspended by two fingers at the hole between the 70 and 75 mark and at such a distance from the eye that the "2" and "6" marks on the scale coincide with the 2-foot and 6-foot marks on the pole.
- (3) Then, without moving the head or the scale, but moving the eye only, sight the top of the pole and read its length as indicated on the scale.

For Poles Carrying 6-Foot or 10-Foot Crossarm at Top of Pole.

3.02 The following method may be used where the pole carries a 6-foot or 10-foot crossarm at the top of the pole.

- (1) Stand directly in the line of poles, that is, on a line passing through the pole and at right angles to the face of the crossarms, and at a distance of about 100 feet from the pole. Hold the pole scale vertically, suspended by two fingers at the hole between the 6 and 16 mark and at such a distance from the eye that the edge of the offset (for the 10-foot crossarm) on the scale coincides with the top crossarm on the pole. If the top crossarm is 6 feet in length, use the edge of the offset marked "Top Crossarm" and the notch marked "6."
- (2) Then, without moving the head or scale, but moving the eye only, sight the ground line of the pole and read the length as indicated on the scale.

POLE SCALE

For Poles Carrying Any Length Crossarms on 24 Inch Spacing.

3.03 The following method may be used where the pole carries crossarms that are bent or twisted, that are neither 6 nor 10 feet in length and that are on 24-inch spacing. Proceed as follows:

- (1) Stand about 100 feet from the pole as described in Paragraph 3.02 (1) above. Hold the pole scale vertically, suspended by two fingers at the hole between the 6 and 16 mark and at such a distance from the eye that the top edge of the scale coincides with the top edge of the first crossarm, the mark 2 with the top edge of the second crossarm, and the mark 3 with the top edge of the third crossarm (if any).
- (2) Then, without moving the head or scale, but moving the eye only, sight the ground line of the pole and read the length as indicated on the scale.