



CEMCA

LT AB (Aerial Bunch) Cable Erection



Learning Objectives

By the end of this session, you will be able to:

- Explain how the PCC pole is erected in the pole pit
- Explain the usage and purpose of stay wire and strut poles in overhead system
- Explain how lineman climbs on the erected PCC pole using a ladder and
- Explain how he fixes the accessories on the pole and lays the AB cable in the process of AB cable erection



Introduction – Pole Lifting



● Pit where the pole has to be erected



● Hook of the crane

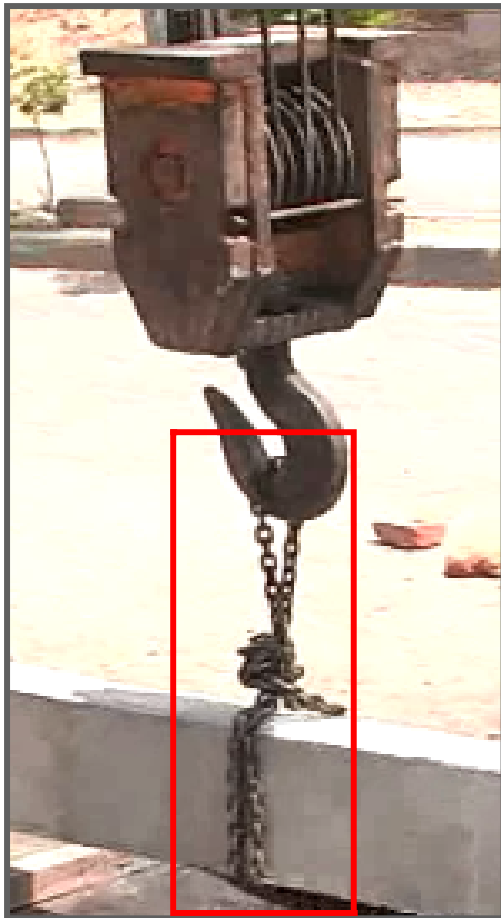


● Crane to lift the pole



● Pole tied with chain

Introduction – Pole Lifting



● Hook linked to the chain



● Pole being lifted using cantilever system

Introduction – Pole Lifting



● Lineman anchoring the base of the pole



● Pole is hooked straight and placed vertically



● Aligning the pole on both the sides

Introduction – Pole Lifting



- Crane moves slowly holding the pole



- Pole is placed inside the pit carefully



- Pole is first placed on the cemented base plate

Introduction – Pole Lifting



- Pit being refilled with soil



- Fill the pit with soft and hard soil



- Pole is firmly embedded in the ground

Line Erection



- Stay wires fitted at both ends of the pole



- Lineman climbing the pole



- Ladder tied from the upper end

Line Erection



● **Handing over the tools**



● **Tightening the cross arm**



● **Opening the safety rope to go upward**

Line Erection



● Climbing on the cross arm

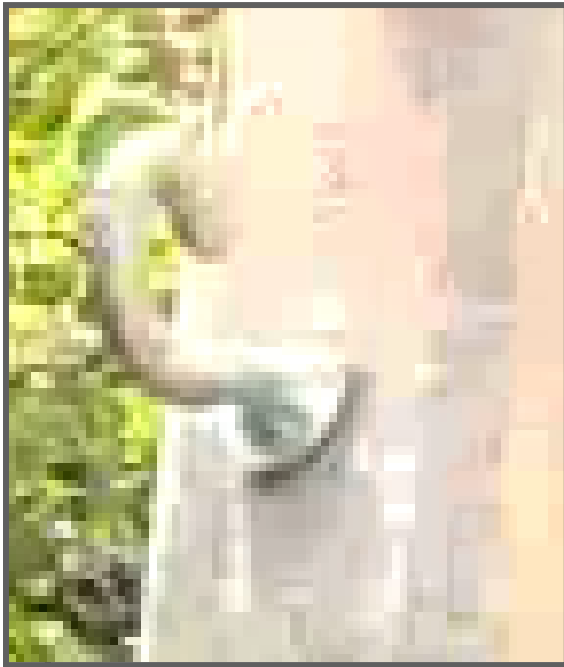


● Fixing Zola on the cross arm



● Sending tools through the rope

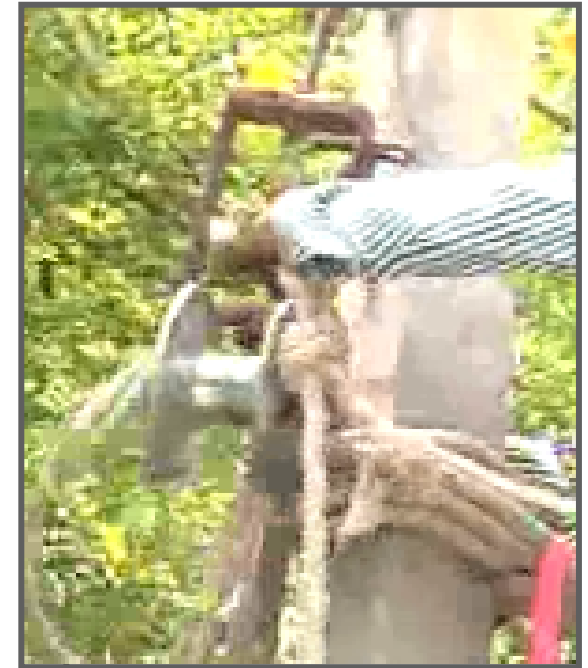
Line Erection



● Eye hook



● Placing pulley on eye hook



● Inserting rope in the pulley

Line Erection



● **Inserting cable into the pulley**

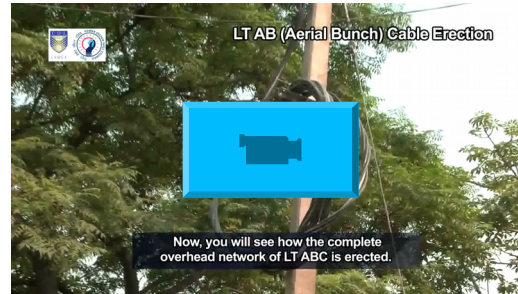


● **Ground crew pulling cable with rope**



● **Cable is pulled over the branches through pulley**

Line Erection



● Stay wire fitted at the end of the pole

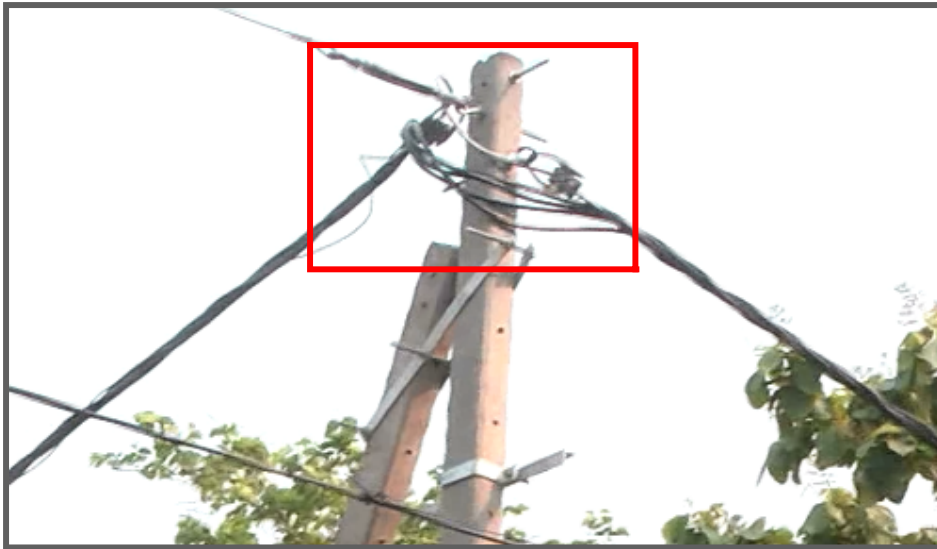


● End clamp

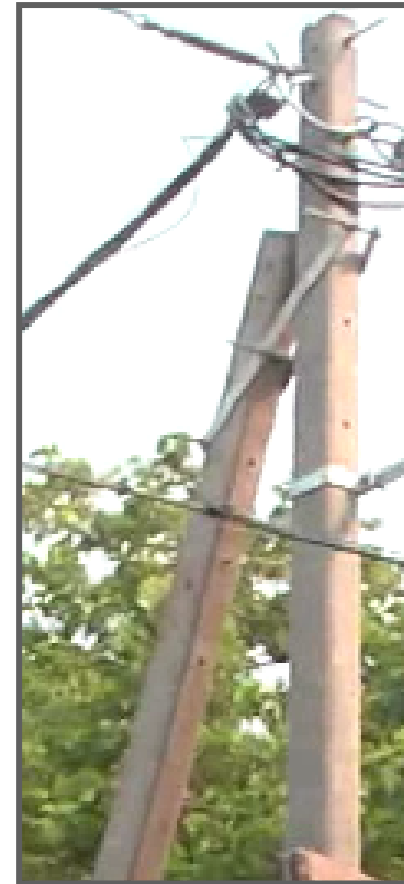


● Cross arm fixed on the pole

Strut Pole

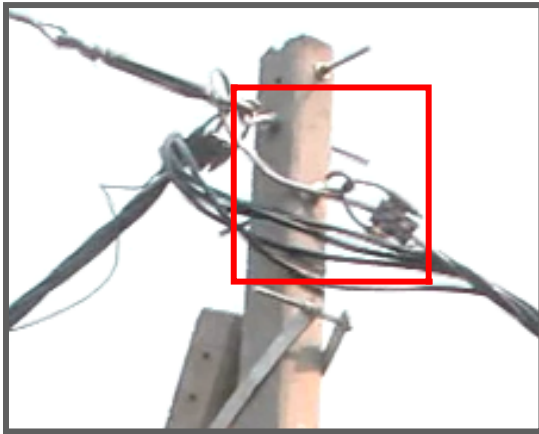


- Cable is turned after the third pole

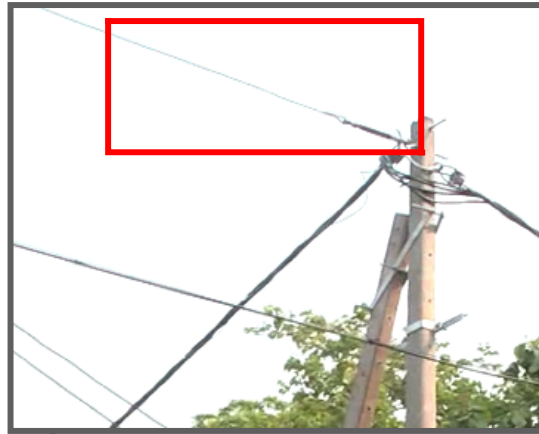


- Strut pole giving vertical and horizontal support

Strut Pole



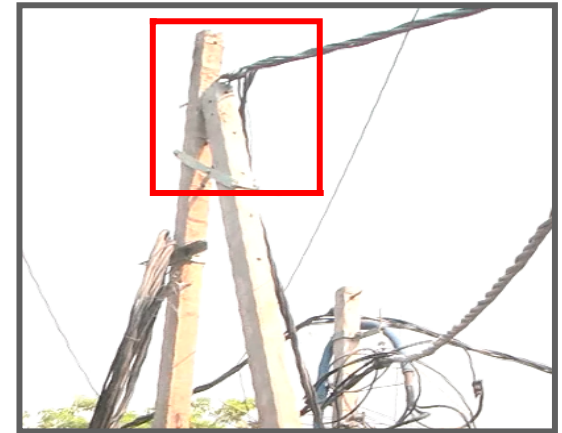
● End connectors



● Stay wire

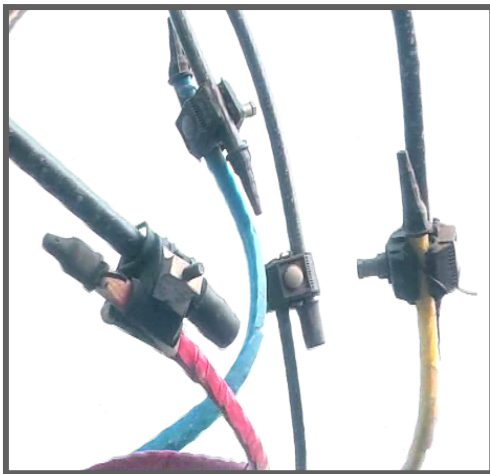
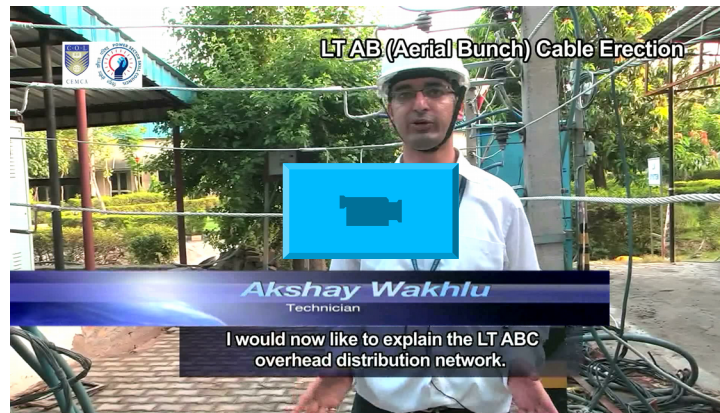


● AB cable going through the trees

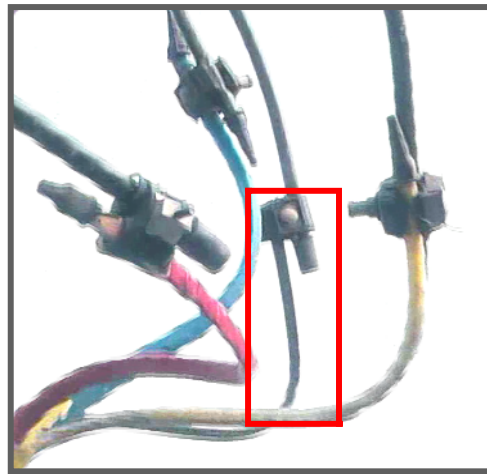


● Cable left for onward connection

LT ABC Overhead System



● Three cables red, yellow and blue



● Neutral cable



● Messenger cable, the bare one

Key Learning Outcomes

- It is very important to balance the pole before erecting it to avoid damage
- The stay wires are fitted at both ends
- The lineman climbs on the erected pole using a ladder if he has to work on the pole
- Cross arms are fixed on each pole so that lineman can stand on it while working
- A strut pole is added to give vertical and horizontal support to the turned cable
- ABC, which stands for Aerial Bunch Cable, has a bunch of six cables

