1. Individual Parts of the Field Telephone 33
   - carrying strap
   - writing plate
   - lock
   - locking plate
   - cover plate
   - hook for field handset
   - spelling chart
   - wiring diagram
   - soft rubber gasket
   - compartment for telephone cord
   - element breaker cover
   - wire clamps
   - sockets for headset
   - compartment for inductor crank
   - testing button
   - circuit diagram
   - sockets for field handset
   - leaf spring

II. Operating the Field Telephone
1. The field telephone is supposed to include an attached battery. The outside of the element shows attachment instructions. Connect element (tightly battery clamps).
2. Connecting the wire: If you have a double wire connect one wire to La, the other wire to Lb/E. One wire: connect to La, ground to Lb/E. Tighten wire clamps, cut off remaining wire ends.
3. Connection of headset is always recommended. Lead out handset, headset and wires to the left between rubber strips. Close cover of unit. Position handset on top of cover.
4. Screw inductor crank into sealing wall to the right.

III. Using the Telephone
Call participant by turning inductor crank about three times. Take off handset and press the talk button. Once answered start conversation. After end of conversation hang up and ring off.

IV. Field Telephone used as telephone exchange
   - booth A /B
   - connection
   - telephone wire
   - connection jack (any jack can be used)

V. Testing the Field Telephone
1. Checking for completeness: battery (in attached and ready to use condition), handset, inductor crank, telephone cord.
2. Shake unit and make sure that all parts are tightened; closures do not jam and unit is free of dirt (check connection jacks).

3. Checking speaker volume control:
   - Does not connect, press talk button, blow against telephone's mouthpiece (blow test).

   Result:
   - Low noise occurs in case of:
     1. short-circuit of wire clamps La and Lb/E
     2. Operating the inductor
   - Noise stops after releasing talk button.
4. Checking caller volume control:
  Short-circuit wire clamps
  La and Lb/E. Turn inductor crank
  and press testing button at the same time.

Result:
Alarm turns on.

5. Checking connection jacks and telephone cord:
  Connect telephone cord to connection jack, do blow
  test, connect clamp La to other plug and create contact
  between clamp Lb/E and tip of plug. Repeat with other
  jack.

Result:
Noise fades when making contact
between plug and clamp.

VI. Abatement of Nuisance

<table>
<thead>
<tr>
<th>Nuisance</th>
<th>Cause</th>
<th>Determination and Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No outgoing call possible</td>
<td>Inductor does not work properly</td>
<td>Press testing button. Get mechanical help.</td>
</tr>
<tr>
<td>2. No incoming call possible</td>
<td>Alarm not turned on or defective.</td>
<td>Get mechanical help</td>
</tr>
<tr>
<td></td>
<td>Alarm working, inductor of Contact</td>
<td>Inform participant and inspect</td>
</tr>
<tr>
<td></td>
<td>participant does not work properly.</td>
<td>Check outer wire with testing device</td>
</tr>
<tr>
<td>3. No conversation possible</td>
<td>Element not connected, attached or defective. Microphone missing or defective.</td>
<td>Connect, attach or replace element. Connect or replace microphone.</td>
</tr>
<tr>
<td></td>
<td>Contacts between connection wire La-Lb/E. Handset defective or damage of outer wire</td>
<td>Connect wires properly. Replace handset</td>
</tr>
<tr>
<td></td>
<td>Outer wire has leakage</td>
<td>Examine outer wire (press testing button and call)</td>
</tr>
<tr>
<td>4. Occasional interruption of</td>
<td>Battery or wire clamps loose</td>
<td>Check wire.</td>
</tr>
<tr>
<td></td>
<td>conversation</td>
<td>Insulate wire</td>
</tr>
<tr>
<td></td>
<td>Outer wire broken, slack joint</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outer wire defective</td>
<td></td>
</tr>
<tr>
<td>5. Interruption of conversation while using</td>
<td>Plugs are not completely in jack</td>
<td>Push plugs firmly into jack</td>
</tr>
<tr>
<td>the switchboard equipment</td>
<td>Cord disconnected</td>
<td>Replace cord</td>
</tr>
</tbody>
</table>

A view inside the field telephone:
From left: Inductor, bell and battery box.
Over the inductor is the audio transformer.
At the top of the telephone is the line terminal.

Battery box with the 1.5 Volt carbon/zink cell.