

BELL SYSTEM PRACTICES

Station Installation
and Maintenance

ADDENDUM C56.103

Issue B, 4-1-53-N
T. P. T. & T. Co.

CIVIL AIR RAID WARNING SYSTEM (CARW) BELL & LIGHTS STATION EQUIPMENT - INSTALLATION

1. GENERAL

1.01 This addendum, which supplements Section C56.103, issue 1, and replaces Addendum Issue A, is issued to provide additional information covering:

- (A) Installation
- (B) Connections
- (C) Tests & Inspections
- (D) Maintenance
- (E) Apparatus

This Addendum should be retained with subsequent issues of the Section until notice is given covering its cancellation or reissuance.

1.02 Paragraph 2.11 is cancelled as this service is not offered at this time.

1.03 Paragraphs 2.12, 2.13, 3.02, 3.03 and 5.03 to 5.10, Section 6, Tests and Inspections and Section 7 Maintenance are added.

2. INSTALLATIONS

2.12 The instruction card shall be mounted on the wall adjacent to the indicator or key point dial and in a location specified by the customer.

2.13 KS-14123 card frames and L-4612 backboards are to be provided for mounting the instruction cards and must be ordered separately. The card frame shall be mounted with 4 #8FW screws or equivalent.

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2.14 At some locations an emergency telephone will be specified. Use a 302A type telephone or equivalent and replace the F1A-3 handset with a F1A-20 handset (red).

2.15 When a public signal control relay is required use a KS-7340 or KS-7341 relay and install as outlined in section C56.106.

3. CONNECTIONS

3.02 When an extension ringer is specified provide a KS-13490, L1 resistance 3600^W and 531A subset. Connect the resistance between punching E and K of the 531A subset. Change the Black ringer lead from K to E. Connect as shown in Fig. 4 for extension station. If a loud ringing extension bell is specified on the service order use a 592A Subset and connect a KS-13490, L1, 3600^W resistance between the E and BK punchings of the subset. The T and R line connections should be made on punching E and R of the subset and as shown in Fig. 4 of the section.

3.03 When a loud ringing bell is specified in place of the standard ringer in the bell and lamp set use a 592B subscriber set mounted adjacent to the bell and light set and connect as follows:

Remove BlAL ringer from bell and lamp set.

Bell and Lamp Set			592B Set
Connect	L2	TO	BK
Connect	R	TO	R

This replaces the BlAL ringer with the 592B subscriber set and utilizes the resistance and condenser in the Bell and Lamp Set.

5. APPARATUS

- 5.03 A Station Signal Indicator Set should be ordered as follows:

Amt	Article
1	J99237D, L-1, Station Signal Indicator Set.
1	Frame, Card, KS-14123.
1	Backboard L-4612.

- 5.04 Key point dial equipment should be ordered as follows:

Amt.	Article
1	ED-69245-01, G-1 Assembly, dial station, desk mounting.

OR

- 1 - ED-69245-01, G-1 and G-2 Assembly, dial station, wall mounting.

AND

- 1 - KS-14123 Card Frame.
1 - L-4612 Backboard.

- 5.05 Extension or Loud Ringing Bells

Resistance KS-13490, L1, 3600-ohm (one per Extension Bell)
Set, Sub. 531A (Extension Bell)
Set, Sub. 592B (Loud Ringing Bell in Lieu of Station Ringer)
Set, Sub. 592A (Loud Ringing Extension Bell.)

5.06 Public Signal Control Equipment

Resistance, KS-8512, List 6A, 6200 ohms
equipped with No. 241 terminals. Used with
KS-7340 or KS-7341 relay when "Continuous
Line Test" is provided.

Set, Relay, KS-7340 for control of public au-
dible signal. Used at indoor location.

Set, Relay, KS-7341 for control of public au-
dible signal. At outdoor location.

5.07 Handset for Emergency Telephone

F1A-20 Handset

5.08 Instruction Cards will be supplied by the line
assignment force and forwarded with the serv-
ice order to the installation foreman. Instruction cards
may be ordered from the Plant Practice Group on
Form P-3056 as follows:

Control Point Sending Station GP-263

Bell and Lamp Receiving Station
 Coded ringing GP-261
 Non-coded ringing GP-262

5.09 A sticker has been developed for use at Bell
and Lamp receiving stations that are not yet in
service. This sticker will be supplied to the Division
Plant cut-over supervisor's office. It should be placed
over the lamp indicator in such a manner that the in-
dicator is completely covered. The sticker is readily
removable and should not be removed until just prior
to the cut-over of a regional system and after all pre-
cut-over tests have been completed.

5.10 DRAWINGS

The following drawings are associated with the
"Bell and Light" Civil Air Raid Warning System:

Circuit Drawings:

SD-69211-01 Station Signal Indicator and Dial
(Fig. 4)

Equipment Drawings:

ED-69231-01 Station Signal Indicator
ED-69245-01 Dial and Dial Housing
L-4612 Backboard

6. TESTS & INSPECTIONS

6.01 The installer shall check the equipment for any loose or rosin connections before installation.

6.02 Each Bell and Light receiving station or Extension shall have the ringer biasing spring in the low position.

6.03 The station installer or repairman will require the assistance of the deskman and a switchman in making the following tests of the station equipment:

(A) Control Dial Station Test

The station installer or repairman will arrange with the Network Control Office for a switchman to observe on a portable test signal indicator at the central office civil air raid warning equipment the results of the dial pulses sent over the control circuit from the station dial.

To prevent a false alert to the system it is very important that NO DIAL PULSES SHALL BE SENT FROM THE STATION DIAL until the Network Control Office has obtained clearance and has arranged the equipment so that no false alerts or circuit alarms will be caused at any location.

CAUTION: The Operation of the station dial will start an alarm at the central office.

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(B) Signal Indicator Test

The test deskman will test the station signal indicator as specified in Section F23.922 to light the YELLOW, BLUE, RED, and WHITE lights and ring the bell in the station signal indicator. The station installer or repairman will coordinate these tests with the test deskman to insure that the correct light functions with the proper poling of the superimposed battery, and that the ringer operates satisfactorily.

(C) Siren Station Circuit Test

The station installer or repairman shall check the siren station circuit relay to insure that it responds to spurts of 20-cycle ringing current sent over the Public Signal circuit by the test deskman.

CAUTION: If the customer-owner equipment is connected to the relay, care should be taken that the 20-cycle current is sent in fractional second spurts only at intervals of not less than 15 seconds, in order that the Public Signal is not activated.

7. MAINTENANCE

7.01 When an installer or repairman finds the station equipment to be defective and it cannot be easily repaired the defective equipment will be replaced entirely.