

DATE 8/22/61

SHEET 1 OF 3

TMC SPECIFICATION NO. S-602

WE
COMPILEDC.G.
CHECKED

TITLE: "FLY AWAY" TRANS/RCV RELAY KIT (TMC NO. KIT-114)

APPROVED

I. EQUIPMENT AFFECTED

SY1034 "Fly Away" Packages (SYM1032)

- II. PURPOSE: The KIT-114 is designed to add transmit/receive operation to the present "Fly-Away" equipments. Its design facilitates field installation requiring no special tools.

FEATURES: The unit is compact and is mounted in the space presently occupied by a blank panel.

A time sequential relay system is provided to protect the transmitter and relay from destructive voltages. This is done when switching from receive to transmit in such a way that the antenna relay is switched a moment before the secondary relay switches on the transmitter high voltages. This sequence is reversed when switching from transmit to receive.

III. MATERIALS SUPPLIED IN KIT

<u>ITEM NO.</u>	<u>DESCRIPTION</u>
1	One each CA-639, Main Cable
2	One each CA-640, Interlock Cable
3	One each CA-480-6-16F, Cable, Rec'r.
4	One each CA-480-36-12, Cable, Transmitter
5	One roll TA103-3, Scotch Elect. Tape
6	One each TRL-5, Transmit/Receive Relay Unit

IV. TOOLS REQUIRED (To be provided by installing activity)

- A. Screwdriver
- B. Pliers
- C. Soldering iron and solder

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TMC SPECIFICATION NO. S

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V. PROCEDURE

1. Remove the 1 3/4" blank panel located in case 6. Case 6 is the unit containing the ATS-2 Monitor Control Unit. Retain panel mounting hardware.
2. Mount the TRL-5 in the blank space with the retained hardware.
3. Identify the larger multi-wire control cable, item 1, supplied in the kit. This cable has an MS3106 B 20-27S connector at one end. Screw this connector into J604 of the TRL-5.
4. Run the thicker part of the control cable along the main cable to the PS-4 terminal strip. Fan the wires in a manner similar to the main cable and connect them to the fanning strip as follows:
 - A. Solder the blue wire to terminal 3. Do not disconnect the wire already connected.
 - B. Solder the white wire to terminal 4. Do not disconnect the wire already connected.
 - C. Solder the black to 5, brown to 6, orange to 8, and red to 9.
5. Run the smaller part of the control cable to the GPR90RXD, located in case 10. Put the two prong connection into the socket marked "relay".
6. The control cable may now be taped to the existing main cable to form a single composite cable.
7. Select the small multi-wire cable, item 2, supplied with the kit, and connect one end to the INTERLOCK jack of the TRL-5. Disconnect the existing cable (marked BROWN BLACK BLUE) from the MCU-2. Connect the other end of the new cable into the MCU-2.
8. Select the RF cable (item 3) supplied with the kit, (RG59/U) with BNC connectors on each end. Connect one end to the RECEIVER jack of the TRL-5. Connect the other end to the GPR90RXD ANTENNA jack.
9. Disconnect the RF cable from the TRANSMITTER jack of the CU-2 (ATS-2.) Reconnect this cable to the XMTR jack of the TRL-5.

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PROCEDURE CONTINUED

10. Select the RF cable, item 4 (RG 8/U) with HN connectors on each end. Connect one end to the ANTENNA jack of TRL-5. Connect the other end to the TRANSMITTER jack of the CU-2(ATS-2).
11. Secure all cables with tape, item 5, to complete the installation.