BUREAU OF SHIPS, NAVY DEPARTMENT WASHINGTON, D.C. 20360

0967-cf-067-3088 11A-AN/URC-32 8-AN/URC-32A 5-AN/URC-32B 5A-AN/WRT-2

# FIELD CHANGE KIT MK-846/WRA-3 FOR CONTROL AND DRIVE OF RADIO TRANSMITTING SET AN/WRT-2 OR RADIO SET AN/URC-32 FROM TRANSMITTER GROUP AN/WRA-3

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TYPE (I) CLASS (A)
ESTIMATED MANHOURS ( 5 for AN/URC-32)
(16 for AN/WRT-2)

OPERATIONAL CHANGE (X)

NON-OPERATIONAL CHANGE ( )

Prepared by
HOFFMAN ELECTRONICS CORPORATION
Military Products Division
El Monte, California

Contract NObsr-91345 (FSN-F5820-884-2120)

AUTHORIZATION NOTICE: Forces afloat or station personnel shall accomplish this field change at the earliest opportunity on ship- or short stalled equipment affected without reference to the Bureau of Ships.

EQUIPMENT AFFECTED: This change affects only those AN/WRT-2 and AN/URC-32 equipments using the AN/WRA-3 for external excitation.

PURPOSE: This field change kit permits operation of maio Transmitting Set AN/WRT-2 and Radio Set AN/URC-32 at an average power output of 500 watts while receiving rf drive from Transmitter Group AN/WRA-3.

PREVIOUS FIELD CHANGES: No previous field changes need be accomplished prior to the installation of this field change. Note: Do not install this field change if Field Change 11-AN/URC-32 (NAVSHIPS 981487) or Field Change 5-AN/WRT-2 (NAVSHIPS 981514) has been installed.

EFFECT ON NOMENCLATURE: None

IDENTIFICATION OF ACCOMPLISHMENT: Transmitter-Transfer Control C-6562/WRA-3 mounted on or near Radio Transmitting Set AN/WRT-2 or Radio Set AN/URC-32.

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### LIST OF MATERIAL REQUIRED:

	Ref.					
Item	Desig.	Quantity	Description			
	Supplied with field change kit for AN/WRT-2 and AN/URC-32					
1		1	Transmitter-Transfer Control C-6562/WRA-3, 8020000154-1			
2	TB1	1	Terminal board, P/N 8TB8, per MIL-T-16784			
3		1	Connector bracket, 8041001369			
4		1	Relay bracket, 8040000604			
5	K1	1	Coaxial relay, 2039900134			
6	E1	1	Coaxial (50 ohm) termination, 8030000167			
7	CP1	1	Coaxial adapter, MS35173-274B per MIL-C-3608			
8	CP2	1	Coaxial adapter, MS35368-306B per MIL-C-3608			
9		1	Cable clamp, 1139900228			
10		1	D-Washer, 2159900085			
11	C1A	1	Capacitor, fixed, glass dielectric, CY10C5R1C per MIL-C-11272/1			
12	C1B	1	Capacitor, fixed, mica dielectric, CM15C330JN3 per MIL-C-5/1			
13	P1	1	Connector, plug, 10-109618-1S per BuShips Dwg. RE49D769			
14	P2 thru P7	6	Connector, plug, MS35168-88E per MIL-C-3608			
15	W6	1	Cable, 8190000287-4			
16	W7	1	Cable, 8190000287-3			
17	w8	1	Cable, 8190000287-1			
18	W9	1	Cable, 8190000287-2			
19	W10	1	Cable, 8190000287-7			
20	W11	1	Cable, 8190000287-6			
21	W12	1	Cable, 8190000287-8			
22	W13	1	Cable, 8190000287-5			
23		11	Terminal lug, 2099900424			
24		6	Terminal lug, 2099900421			
25		1	Hardware kit, 8010000070-1			
26		2	Field change bulletin, NAVSHIPS 0285 075 5000			
27		2	Technical Manual Supplement No. 1 for AN/URC-32, NAVSHIPS 93285(B)			
28		. 2	Technical Manual Supplement No. 2 for AN/WRT-2, NAVSHIPS 93319(A)			

## LIST OF MATERIAL REQUIRED: (Continued)

Item	Ref. Desig.	Quantity	Description		
	Required and to be supplied by installing activity for AN/WRT-2				
00	P/o W2 As required Cable, RG-58C/U				
29	P/o W2	-	Cable, MSCA-7		
30	P/o W1	As required	· · · · · · · · · · · · · · · · · · ·		
31	P/o W5,	As required	Cable, TTHFWA 1-1/2		
32	W14, W15	1	Technical Manual for Transmitting Set AN/WRT-2, NAVSHIPS 93319(A)		
- 33		` 4	Screw, 1/4-20, SST (Length as required for applicable tapped hole)		
34		4	Flat washer and split lockwasher, 1/4 ID		
	Required and to be supplied by installing activity for AN/URC-32				
35	P/o W2, W3, W4	As required	Cable, RG-58C/U		
36	P/o W1	As required	Cable, MSCA-7		
37	P/o W5,	As required	Cable, TTHFWA 1-1/2		
	W14, W15				
38		1	Technical Manual for Radio Set AN/URC-32, NAVSHIPS 93285(B)		
39		4	Screws, 1/4-20, SST (Length as required for applicable tapped hole)		
40		4	Flat washer and split lockwasher, 1/4 ID		

# TOOLS AND TEST EQUIPMENT:

## Required by installing activity for AN/WRT-2\* and AN/URC-32

Soldering iron, 100 watt	Crimping tool
Solder, 60/40 rosin core	Drill, electric
Pliers, longnose, 6 inch	Drill, bit, No. 7 (0.2010 inch)
Pliers, diagonal cutters	Tap, 1/4-20
Screwdriver set	Deburring tool
Allen wrench set	Tap handle

\*Additional items required by installing activity for AN/WRT-2
Lacing cord (as required)

Drill, bit, No. 16 (0.177 inch)
Countersink, 82°

Drill, bit, No. 29 (0.1360 inch)

#### PROCEDURE:

## Required for Radio Transmitting Set AN/WRT-2

Note: Refer to page 9 for Procedure for Radio Set AN/URC-32.

- 1. Remove ship's power from Radio Transmitting Set AN/WRT-2 and Transmitter Group AN/WRA-3.
- 2. Mount Transmitter-Transfer Control C-6562/WRA-3 (item 1 of the kit) near Radio Transmitting Set AN/WRT-2. Use the Transmitter-Transfer Control's mounting plate as a template and drill and tap four 1/4-20 mounting holes. Mount the Transmitter-Transfer Control, using the screws and washers (items 33 and 34). Note that the mounting plate can be mounted on the left side, right side or rear of the Transmitter-Transfer Control, depending upon the specific installation requirements.
- 3. Fabricate cable assembly W1 by attaching the connector plug (Item 13) to the cable (Item 30). Attach the leads of the cable to the pins of the plug, as follows:

green lead to pin A red lead to pin B white lead to pin C black lead to pin D

orange lead to pin E
blue lead to pin F
cable shield to pin G
brown lead to pin H

Attach terminal lug (Item 23) to cable shielding and to each of the wire leads. The length of this cable depends on the mounting location of the Transmitter-Transfer Control. See figure 1.

- 4. Fabricate cable assembly W2 by attaching a connector plug (p/o Item 14) to each end of the cable (Item 29). The length of the cable depends on the location of Radio Transmitting Set AN/WRT-2 in respect to Transmitter Group AN/WRA-3. See figure 1.
- 5. Remove the eight mounting nuts along the flanges of the Terminal Junction Box at the bottom rear of Electrical Equipment Cabinet CY-2558/WRT-2 of Radio Transmitting Set AN/WRT-2. Refer to Technical Manual NAVSHIPS 93319(A) (Item 32), paragraph 2-4, step 11 and figure 2-2 for details. Tip the Terminal Junction Box and expose the terminal blocks inside.
- 6. Remove the mounting screws along the rear surface of the cable duct and remove the cover plate from the vertical cable duct on the rear of Electrical Equipment Cabinet CY-2558/WRT-2 of Radio Transmitting Set AN/WRT-2.

#### NOTE

Do not remove the mounting screws which hold the flanges of the cable duct to the cabinet. The junction box terminal boards, cabinet trunk cable, and the flexible traveling cables to each of the unit drawers of Radio Transmitting Set AN/WRT-2 will be exposed.

7. Block the Terminal Junction Box of Electrical Equipment Cabinet CY-2558/WRT-2 of Radio Transmitting Set AN/WRT-2 for drilling. See figure 2 for dimensions and locations of holes. Drill one hole in each mounting-hole pattern and use terminal board TB1 (Item 2) and connector bracket (Item 3) as templates for drilling the other holes. Deburr the drilled holes. Mount the terminal board and connector bracket using hardware kit (Item 25) as required. Mount connector J5 of W8 (Item 17) on receptacle bracket. See figure 3.

#### NOTE

Prevent drilling chips from falling into the cable and wiring harness.

- 8. Assemble items 4, 5, 6, 7, and 8 as shown in figure 4, using hardware kit (Item 25) as required.
- 9. Release the captive screws on the front panel of Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2. Withdraw and lock the drawer in the open position. Using the relay bracket (Item 4) as a template, mark, drill, countersink and deburr mounting holes, as indicated in figure 5. Attach the relay bracket and associated items (assembled in step 8) to the frame, using hardware kit (Item 25) as required.
- 10. Connect terminal lug end of wire W10 (Item 19) to terminal 5 of terminal board TB1 on Terminal Junction Box. See figure 3. Route both wire W10 and coaxial cable W8 along the existing cable from TB101A on Terminal Junction Box, up the cabinet trunk cable and along the flexible traveling cable to coaxial relay K1, installed in step 9, in Radio Frequency Amplifier AM-2121/WRT-2. See figure 2-8 of Technical Manual NAVSHIPS 93319(A) (Item 32). Tie wire W10 and cable W8 to existing cables at appropriate intervals with lacing cord. Coaxial cable W8 is routed across the back of the unit. See figure 3.
- 11. Plug connector P8, of cable assembly W8, into coaxial adapter CP1. See figure 4. Solder the free end of wire W10 to one of the relay coil terminals of relay K1. See figure 5.
- 12. Connect terminal lug end of wire W11 (Item 20) to terminal 8 of TB803 on the bottom of Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2. Thread the wire through the marker sleeve of the existing wire on TB803-8, through the large grommet, into the back section of Radio Frequency Amplifier AM-2121/WRT-2, and solder the free end to the remaining unused relay coil terminal of relay K1. Clamp wires W8, W10 and W11 to the relay bracket with cable clamp, D washer, and hardware as required (Items 9, 10 and 25).

- 13. Remove the attaching screws of the cover on the left side, upper front of Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2. This exposes electron tube V801 and socket wiring of electron tube V802. See figure 3-8 of Technical Manual NAVSHIPS 93319(A) (Item 32). Remove electron tube V801.
- 14. See figures 6-25 and 6-31 of Technical Manual NAVSHIPS 93319(A). Remove capacitor C834.

#### NOTE

Do not remove C813 which is the same style capacitor and connected between the same standoff insulator as C834 and L817.

Replace capacitor C834 with capacitor C1A or C1B (Item 11 or 12) in the same position and lead dress as was C834. Replace with C1A (Item 11) if capacitor C834 value is 27 uuf. Replace with capacitor C1B (Item 12) if capacitor C834 value is 56 uuf. If capacitor C834 is neither 56 nor 27 uuf, obtain a capacitor, of suitable type, whose standard value is closest to the required value. This required value is determined by deducting 22 uuf from the value of C834 which is in Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2.

- 15. Insert the unterminated end of wire W9 (Item 18) into the ventilation hole second from the top in the right row. See figure 6. Direct the cable downward between the double walls of the partition and through the large cable grommet near the center bottom of Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2. Adjust the location of the short piece of teflon tubing found on wire W9 near the terminated end so that the tubing acts as a grommet in the ventilation hole. The purpose of the teflon sleeve is to protect the cable insulation after the wire has been installed in the ventilation hole.
- 16. Prepare coaxial cable in accordance with the instructions in figure 7. Attach connector P9 supplied with cable assembly W9 (Item 18) to the cable and plug connector P9 into coaxial relay output receptacle. See figures 1 and 4.
- 17. Solder the wire end of cable W9 to the standoff insulator where R806 and C813 of Radio Frequency Amplifier AM-2121/WRT-2 are connected. Solder the sheath grounding lead of cable W9 to the ground lug near the reference designation C834 at the base of the standoff insulator. See figure 6-31 of Technical Manual NAVSHIPS 93319(A) (Item 32).
- 18. Replace electron tube, removed in step 13, secure the tube clamp, and replace the plate cap and connector on electron tube V801.
- 19. Replace left side, upper front cover, removed in step 13, of Radio Frequency Amplifier AM-2121/WRT-2. Close drawer and secure the captive screws of Radio Frequency Amplifier AM-2121/WRT-2 of Radio Transmitting Set AN/WRT-2.

- 20. Replace the vertical cable duct cover, removed in step 6, to the rear of Electrical Equipment Cabinet CY-2558/WRT-2 of Radio Transmitting Set AN/WRT-2.
- 21. Remove any existing remote keyline for the AN/WRT-2 connected to TB101A terminal 6 of Terminal Junction Box of Electrical Equipment Cabinet CY-2558/WRT-2, and transfer to terminal 2 of TB1. Connect wire W12 (Item 21) between terminals TB101A-6 and TB1-1. See figure 3.
- 22. Connect wire W7 (Item 16) across terminals 4 and 7 of TB1. Connect wire W13 (Item 22) between TB101A-5 and terminal 4 of TB1. See figures 1 and 3.
- 23. Plug connector P1, of cable W1, fabricated in step 3, into 6J1 of the Transmitter Transfer Control (Item 1). See figure 8. Route cable W1 (terminal-lugs end) into Terminal Junction Box of Electrical Equipment Cabinet CY-2558/WRT-2 and attach the cable leads as follows:

green lead to TB1-1 red lead to TB1-2 white lead to TB1-3 black lead to TB1-4

orange lead to TB1-5 blue lead to TB1-6 shield to TB1-7 brown lead to TB1-8

The blue and brown leads are spares and have no electrical significance. See figure 1.

- 24. Fabricate cable assembly W5 from bulk cable (Item 31) by attaching three terminal lugs (Item 23) to one end of cable (WRT-2 end). Attach a lug to the black wire, white wire, and cable shielding. Attach three terminal lugs (Item 24) to the other end of the cable assembly W5 (WRA-3 end). Attach a lug to the black wire, white wire, and cable shielding. The length of this cable depends upon mounting location of Transmitter Group AN/WRA-3 and Radio Transmitting Set AN/WRT-2. Route cable W5 into the Terminal Junction Box of Electrical Equipment Cabinet CY-2558/WRT-2 and attach the white lead to TB1-3. Attach the black lead and the cable shield to TB1-7. See figure 1.
- 25. Remove the 10 attaching screws from the rear base cover of the junction box at the lower rear of Electrical Equipment Cabinet CY-3022/WRA-3 of Transmitter Group AN/WRA-3. Connect wire W6 (Item 15) between terminals 8 and 9 of 3TB4 inside the junction box. See figure 9.
- 26. Bring the free end of cable W5, attached to Radio Transmitting Set AN/WRT-2 in step 24, through one of the packing glands on the bottom of the junction box of Electrical Equipment Cabinet CY-3022/WRA-3 of Transmitter Group AN/WRA-3. Attach the white lead to 3TB4-7, black lead to 3TB4-8, and cable shield to 3TB4-9. See figure 9.
  - 27. Replace the rear base cover of junction box, using the screws removed in step 25
- 28. Plug connector P5 of cable W2, fabricated in step 4, into connector 3J1 at the lower rear of Electrical Equipment Cabinet CY-3022/WRA-3 of Transmitter Group AN/WRA-3. See figure 9.

- 29. Plug P2, the unattached end of cable W2, to J5 of cable W8. Cable W8 was installed in step 7. See figures 1 and 3.
- 30. Slide the Terminal Junction Box of Electrical Equipment Cabinet CY-2558/WRT-2 of Radio Transmitting Set AN/WRT-2 into mounting studs. Replace the mounting nuts removed in step 5.
- 31. Handmark "WRT-2" in the white blocked area, located <u>above</u> the front panel control and immediately below "INT." on the Transmitter-Transfer Control Box.
- 32. Reconnect the ship's power to both Radio Transmitting Set AN/WRT-2 and Transmitter Group AN/WRA-3.
- 33. Operate the equipments in accordance with the instructions contained in NAV-SHIPS 93319(A), and in accordance with NAVSHIPS 0967 031 9010.

#### ROUTINE INSTRUCTIONS:

- 1. This field change does not affect any other publication, plans, or charts, except for those transmitters specifically modified for excitation as herein described.
- 2. Record of accomplishment: Personnel making this field change shall record the completion date of the change on the Electronic Equipment History card NAVSHIPS 536, and on the Record of Field Changes card NAVSHIPS 537.
- 3. <u>Disposition of replaced material</u>: The capacitors described below and all other unused material shall be turned in to the nearest supply activity for processing in accordance with current Bureau of Ships instructions.

Ref. Desig.	Quantity	Name of Part	Stock Number
C834	1	Capacitor, Fixed, Mica Dielectric	(Depends on value)
C1A	1	Either Capacitor, Fixed, Glass Dielectric or	(Depends on value)
C1B	1	Capacitor, Fixed, Mica Dielectric	(Depends on value)

- 4. <u>Disposition of field change bulletin</u>: Maintenance support activities shall maintain a library copy of this field change bulletin. Holders of equipment shall not destroy the instruction portion of this field change bulletin until the field change has been accomplished and the equipments tested.
- 5. <u>Disposition of Supplement No. 2</u>: Installing personnel shall file Supplement No. 2 to NAVSHIPS 93319(A) (Item 28) in front of Technical Manual for Radio Transmitting Set AN/WRT-2, NAVSHIPS 93319(A) (Item 32).

#### PROCEDURE:

## Required for Radio Set AN/URC-32

Note: Refer to page 4 for Radio Transmitting Set AN/WRT-2.

- 1. Remove ship's power from both Radio Set AN/URC-32 and Transmitter Group AN/WRA-3.
- 2. Mount Transmitter-Transfer Control C-6562/WRA-3 (Item 1 of the kit) on the U-channel frame of Radio Set AN/URC-32 using Items 39 and 40. If this is inconvenient for the operator, drill and tap mounting holes on any convenient bulkhead, and mount with Items 39 and 40. The mounting plate may be attached to the Transmitter-Transfer Control on the left, right, or rear, depending upon installation requirements.
- 3. Fabricate cable assembly W1 by attaching the plug (Item 13) to cable (Item 36). To fabricate W1, attach the leads to the following pins on P1:

green lead to A
red lead to B
white lead to C
black lead to D

orange lead to E blue lead to F brown lead to H cable shield to G

The length of this cable depends on the mounting location of the Transmitter-Transfer Control. See figure 10.

- 4. Fabricate coaxial cable assemblies W2, W3, and W4 by attaching a plug (Item 14) to each end of Item 35. Three of these cable assemblies are required. They will all be of different lengths depending on the location of the Transmitter-Transfer Control. See figure 10.
- 5. Loosen the screws and remove the metal dust cover from Interconnecting Box J-1007/U to expose the terminal board connections of Radio Set AN/URC-32. See figure 5-96 of NAVSHIPS 93285(B) (Item 38) for applicable terminal diagram and chart. See figure 1-1 of NAVSHIPS 93285(B) for location of Interconnecting Box J-1007/U.
- 6. Disconnect and tape exposed end of the existing wire on TBG-8 of Interconnecting Box J-1007/U.

- 7. Disconnect and transfer any external remote key lines from TBF-8 to TBG-8 of Interconnecting Box J-1007/U.
- 8. Plug P1 of cable assembly W1, fabricated in step 3, to 6J1 of the Transmitter-Transfer Control. See figures 8 and 10.
  - 9. Strip the outer insulation of the free end of W1 and expose the wire leads.
- 10. Connect the green lead to TBF-8, the red lead to TBG-8, and the white lead to TBR-11 of Interconnecting Box J-1007/U. Connect the cable shielding to TBF-16 of Interconnecting Box J-1007/U. The black, orange, blue, and brown leads are spares and not used.
- 11. Remove the rear base cover from the lower back of the AN/WRA-3 Electrical Equipment Cabinet by removing the 10 attaching screws. See figure 9. Connect jumper wire W6 (Item 15) between 3TB4-8 and 3TB4-9 of Transmitter Group AN/WRA-3.
- 12. Crimp one terminal lug (Item 24) to each lead, including the shield, on one end only, of cable (Item 37). Length of cable W5 depends on the location of Radio Set AN/URC-32 with respect to Transmitter Group AN/WRA-3.
- 13. Connect the white lead (terminal lug end) to 3TB4-7 and the black lead (terminal lug end) to 3TB4-8 of Transmitter Group AN/WRA-3. Connect cable shielding (terminal lug end) to 3TB4-9.
- 14. Strip the outer insulation from the free end of cable W5. Connect the white lead to TBR-11, and the black lead and the cable shielding to TBR-16 of Radio Set AN/URC-32, figure 10.
- 15. Replace the dust cover (removed in step 5) on Interconnecting Box J-1007/U of Radio Set AN/URC-32 and secure the screws.
- 16. Replace the rear base cover (removed in step 11) on the AN/WRA-3 cabinet and secure the screws.
- 17. Swing out Radio Frequency Amplifier AM-2061/URT and Converter-Oscillator CV-731/URC units from the transmitter frame of Radio Set AN/URC-32. Disconnect P1 of the existing coaxial cable assembly (W2) from J1 of Radio Frequency Amplifier AM-2061/URT. Disconnect P2 of W2 from J10 of Converter-Oscillator CV-731/URC. See figure 5-23, NAVSHIPS 93285(B) (Item 38) for location of J1 and figure 5-26 for location of J10. See figure 5-88, NAVSHIPS 93285(B) for inter-unit coaxial connections diagram.
- 18. See figure 10. Connect one end of coaxial cable assembly W3, fabricated in step 4, to J10 of Converter-Oscillator CV-731/URC and plug the other end to 6J4 of the Transmitter-Transfer Control. Connect one end of coaxial cable assembly W4, fabricated

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in step 4, to J1 of Radio Frequency Amplifier AM-2061/URT, and plug the other end to 6J3 of the Transmitter-Transfer Control. The routing of these cables shall permit Radio Frequency Amplifier AM-2061/URT and Converter-Oscillator CV-731/URC of Radio Set AN/URC-32 to pivot out of the transmitter frame in a normal manner.

- 19. Secure Radio Frequency Amplifier AM-2061/URT and Converter-Oscillator CV-731/URC into their normal positions on Radio Set AN/URC-32.
- 20. Connect one end of coaxial cable assembly W2, fabricated in step 4, to 6J2 of the Transmitter-Transfer Control and plug the other end to the rf output jack (3J1) at the lower rear of Transmitter Group AN/WRA-3. See figures 8, 9, and 10.
- 21. Open Radio Frequency Amplifier AM-2819/WRA-3 drawer of Transmitter Group AN/WRA-3 by releasing the four captive screws. Verify that Transmitter Group AN/WRA-3 is adjusted to operate in accordance with the instructions contained in NAVSHIPS 0967 031 9010 for operation of AN/WRA-3 when used to drive Radio Set AN/URC-32. Close the Radio Frequency Amplifier drawer and secure the captive screws. Turn the RF DRIVE control on the front panel of Radio Frequency Amplifier AM-2819/WRA-3 fully counterclockwise.
- 22. Handmark "URC-32" in the white blocked area located <u>above</u> the front panel control and immediately below "INT." of the Transmitter-Transfer Control.
- 23. Reconnect ship's power to both Radio Set AN/URC-32 and Transmitter Group AN/WRA-3.
- 24. Operate the equipments in accordance with the instructions contained in NAVSHIPS 93285(B), and in accordance with NAVSHIPS 0967 031 9010.

#### ROUTINE INSTRUCTIONS:

- 1. This field change does not affect any other publication, plans, or charts, except for those transmitters specifically modified for excitation as herein described.
- 2. Record of accomplishment: Personnel making this field change shall record the completion data of the change on the Electronic Equipment History card NAVSHIPS 536, and on the Record of Field Changes card NAVSHIPS 537.
- 3. <u>Disposition of replaced material</u>: The coaxial cable assembly described below and all other unused material shall be turned in to the nearest supply activity for processing in accordance with current Bureau of Ships instructions.

Ref. Desig.	Quantity	Name of Part	Stock No.
W2	1	Coaxial cable assembly	

- 4. <u>Disposition of field change bulletin</u>: Maintenance support activities shall maintain a library copy of this field change bulletin. Holders of equipment shall not destroy the instruction portion of this field change bulletin until the field change has been accomplished and the equipment tested.
- 5. <u>Disposition of supplement No. 1</u>: Installing personnel shall file Supplement No. 1 to NAVSHIPS 93285(B) (Item 27) in front of Technical Manual for Radio Set AN/URC-32 NAVSHIPS 93285(B) (Item 38).

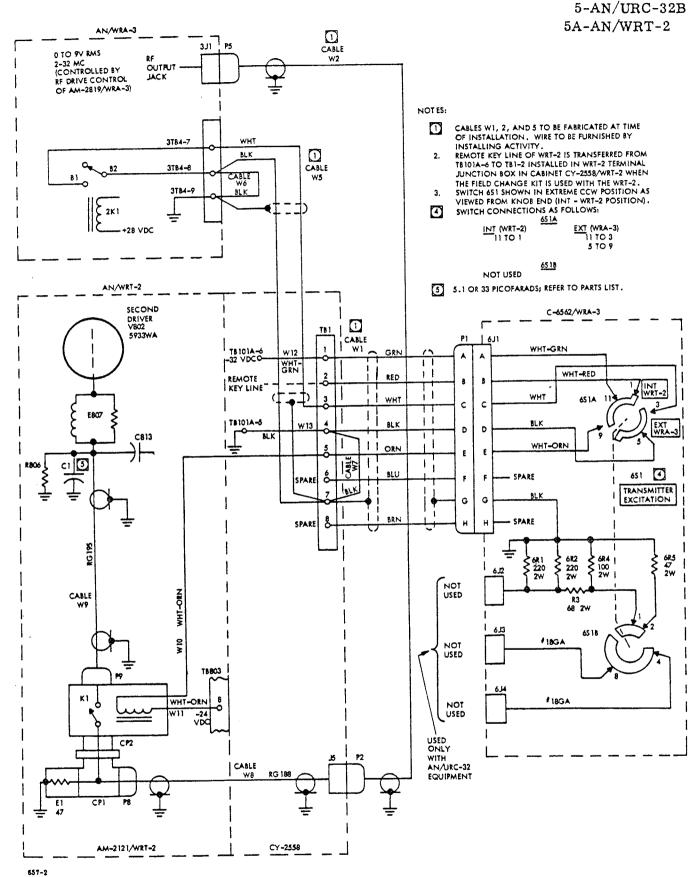


Figure 1. Schematic/Interconnecting Diagram for AN/WRT-2

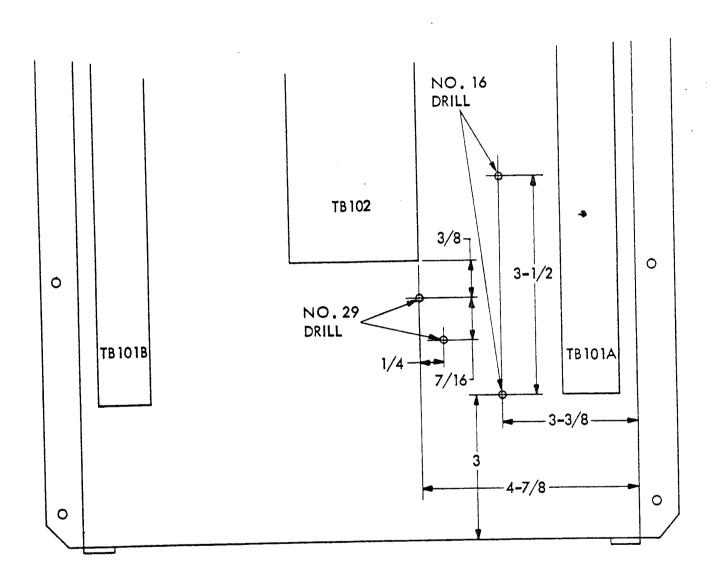


Figure 2. Connector and Terminal Board Mounting Dimensions, AN/WRT-2

5-AN/URC-32B 5A-AN/WRT-2

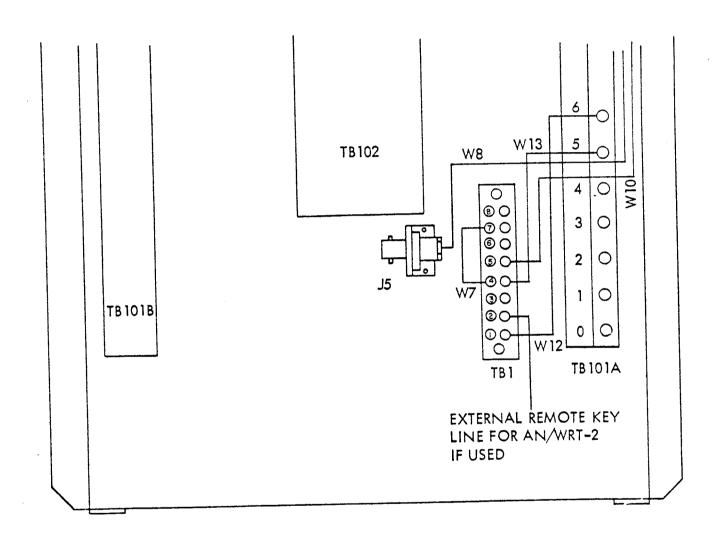


Figure 3. Connector and Terminal Board Mounted, AN/WRT-2

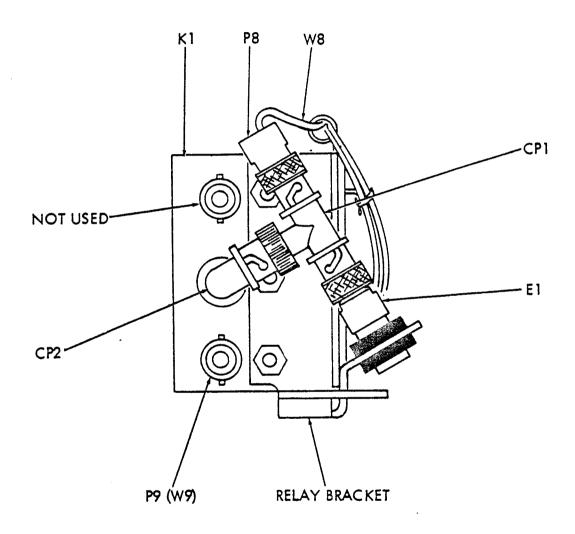


Figure 4. Relay and Connector, Assembled, AN/WRT-2

11A-AN/URC-32 8-AN/URC-32A 5-AN/URC-32B 5A-AN/WRT-2

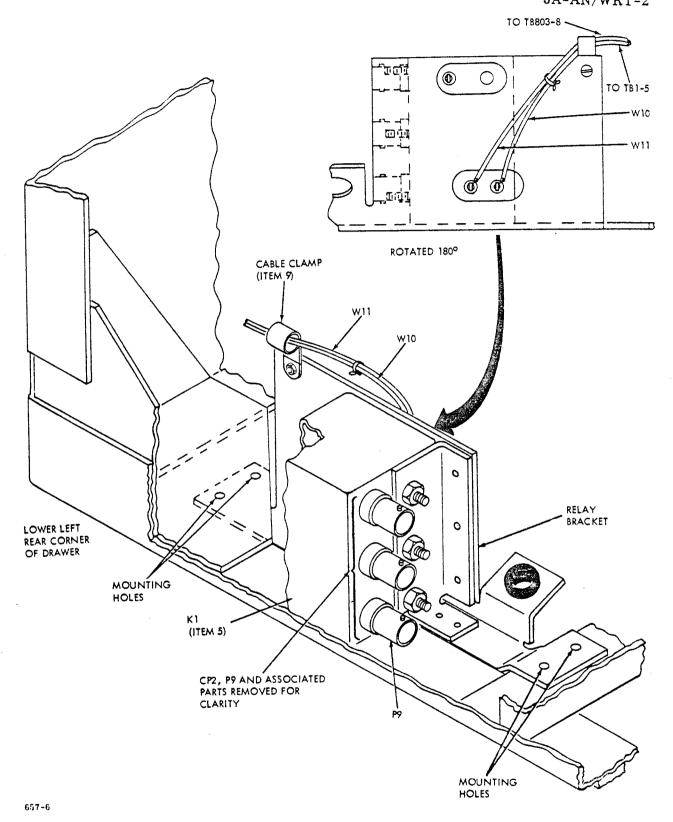
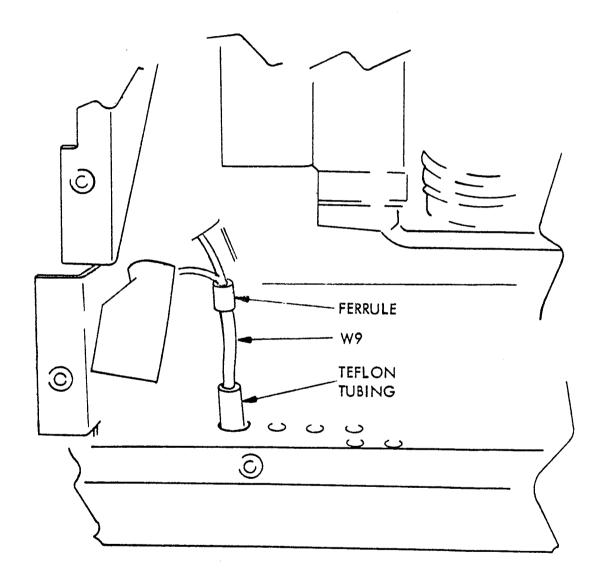
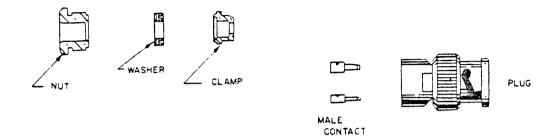


Figure 5. Relay and Connector, Mounted, AN/WRT-2



657-8

Figure 6. Cable and Tubing Installation, AN/WRT-2

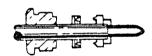




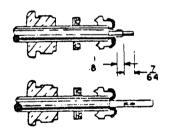
1. Cut off end of table square and remove jacket 5/16" from end. Do not nick braid.



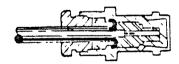
2. Comb out braid.



 Taper broid, slide nut, washer and clamp over tapered braid. Making sure inner shoulder of clamp is positioned tightly against end of jacket.



 Flore bock broid trim if necessary, cut dielectric ½" from broid. Do not nick inner conductor. Cut off inner conductor 7/64" from dielectric.



- Solder contact on inner conductor, Remove excess solder. Do not over heat dielectric
  as it will become swallen and will not enter body and insulator properly.
- 6. Insert cable and hardware into connector body either jack or plug. Make sure gasket is properly seated on sharp edge of clamp. After nut is started tighten with wrench.

NOTE: Sharp edge of clamp must split gasket

Figure 7. Cable Preparation

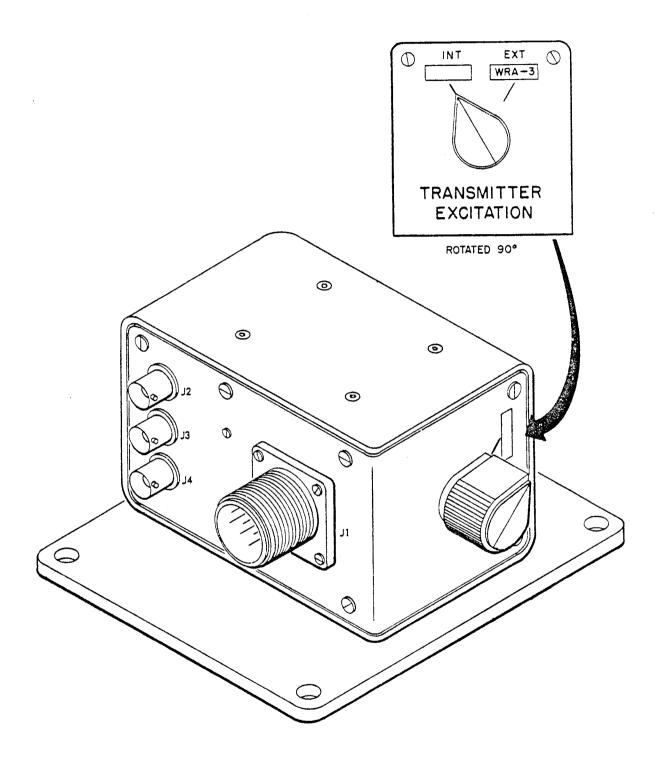


Figure 8. Transmitter-Transfer Control C-6562/WRA-3

WIRE W6 SCREWS (10) 0 0 Ø 0 0 0 0 0 0 0 0 0 0 Θ 0 Ö 0 0 RF OUTPUT PACKING 3J1 CABLE P5 GLANDS WIRE W5 **3TB4** 

Figure 9. Electrical Equipment Cabinet, Rear View, AN/WRA-3

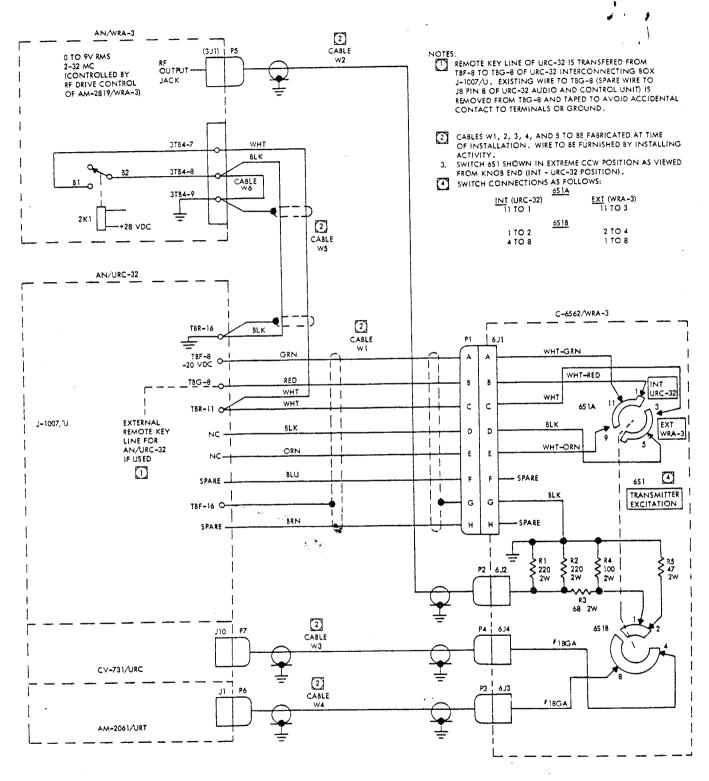


Figure 10. Schematic/Interconnecting Diagram for AN/URC-32