TRAINEE'S GUIDE

for

ELECTRONICS TECHNICIANS

CLASS C

AN/SRC-20 AN/SRC-21

RADIO SETS

VOLUME 3

SCHEMATICS

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Dial moving clockwise from finger stop. K206 is being reset.

Figure 9-4. Relay Sequence for Channel Dialing (Sheet 3 of 12)
Dial moving counterclockwise from finger stop. Impulse contacts open. K206 is being reset.

Figure 9-4. Relay Sequence for Channel Dialing (Sheet 4 of 12)
Figure 9-4. Relay Sequence for Channel Dialing (Sheet 5 of 12)
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Figure 9-4. Relay Sequence for Channel Dialing (Sheet 7 of 12)
"A" is dialed at rest.
Dial remainder contacts closed.
Off-normal contacts open.
K206 remains energized indefinitely (until second digit is dialed). Wipers at position 10.

Figure 9-4. Relay Sequence for Channel Dialing (Sheet 8 of 12)
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Figure 9-4. Relay Sequence for Channel Dialing (Sheet 9 of 12)

Figure 9-4. Relay Sequence for Channel Dialing (Sheet 10 of 12)
Dial at rest. Impulse contacts closed. Off-normal contacts open. K206 energized. K203 will remain energized for 0.2 seconds.
Dial at rest. 0.2 seconds elapsed, K206 de-energized and advances for last time.

Figure 9-4. Relay Sequence for Channel Dialing (Sheet 12 of 12)
Figure 9-5. Channel Dialing Sequence Diagram, Dial "A" (First Digit) (Sheet 1 of 2)
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| DECK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |
|      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

*The Same Code is Used For Decks 6, 7, 8, 9, 10*

Figure 9-6. Five-Wire Autopositioner Code
Generated by K206
E = -28V
R₁ = 80 OHMS
ER₁ = 10V
R₂ = 22 OHMS
ER₂ = 1.5V

SYNCHRO INDICATOR
(C-3868)

Figure 9-7. Synchro Transmitter, Simplified Diagram
Figure 9-8. Synchro System, Simplified Diagram
Figure 10-1. Radio-Frequency Amplifier AM-1565/URC, A-C Distribution, Simplified Diagram
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Figure 10-5. Radio-Frequency Amplifier AM-1565/URC, Metering Circuits, Simplified Schematic
Figure 10-6. Radio-Frequency Amplifier AM-1565/URC, Drive Control Regulator, Simplified Schematic Diagram
NOTES:

1. UNLESS OTHERWISE INDICATED; ALL RESISTANCE VALUES ARE IN OHMS, ALL CAPACITANCE VALUES ARE IN MICRO-MICROFARADS, AND ALL INDUCTANCE VALUES ARE IN MICROHENRYS.

2. DC RESISTANCE OF COILS AND TRANSFORMERS LESS THAN ONE OHM HAS BEEN OMITTED.

3. ALL VOLTAGE AND RESISTANCE MEASUREMENTS TAKEN TO GROUND WITH VTVVM. ALL RESISTANCE MEASUREMENTS TAKEN WITH SUBASSEMBLY REMOVED AND POSITIVE LEAD TO GROUND. ALL VOLTAGE MEASUREMENTS TAKEN WITH SUBASSEMBLY PLUGGED IN, POWER APPLIED, NO SIGNAL INPUT AND NEGATIVE LEAD TO GROUND.

Figure 10-7. Radio-Frequency Amplifier AM-1565/URC, Servo Amplifier Subassembly, Schematic Diagram
Figure 10-9. Radio-Frequency Amplifier AM-1565/URC, Autopositioner, Schematic Diagram
Figure 11-1. Receive Function Trouble-Shooting Block Diagram for Radio Set AN/URC-9
NOTES:
1. HEAVY SOLID LINES INDICATE TRANSMIT SIGNAL PATH; HEAVY BROKEN LINES INDICATE RECEIVE SIGNAL PATH. LIGHT LINES INDICATE AUXILIARY OR SECONDARY SIGNAL PATHS, AND LIGHT BROKEN LINES INDICATE MECHANICAL LIMACED.
2. LETTERS AND NUMBERS OUTSIDE CIRCUIT BLOCKS INDICATE ELEMENT AND PIN NUMBERS. NUMBERS ON BLOCKS OTHER THAN CIRCUIT BLOCKS INDICATE TERMINAL NUMBERS.
3. RELAYS ARE SHOWN IN DE-ENERGIZED POSITION.

Figure 11-4. Power Amplifier Subassembly of Radio-Frequency Amplifier AM-1565/URC, Servicing Block Diagram
Figure 11-5. Servo Amplifier Subassembly of Radio-Frequency Amplifier AM-1565/URC, Servicing Block Diagram
Figure 11-7. Frequency Multiplier Oscillator of Radio Set AN/URC-9. Serving Block Diagram

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Figure 11-8. First I-F Amplifier (20.0 to 29.9 Mc) of Radio Set AN/URC-9, Servicing Block Diagram
Figure 11-10. Third 1-F Amplifier (500 Ke) of Radio Set AN/URC-9, Servicing Block Diagram

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Figure 11-11. Audio-Frequency Amplifier and Modulator Assembly of Radio Set AN/URC-9, Servicing Block Diagram

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