
TECHNICAL MANUAL

Plastic Laminated Diagrams for Direct
and General Support Maintenance
RECEIVER-TRANSMITTER, RADIO
RT-841/PRC-77
(NSN 5820-00-930-3725)
(Part of Radio Set AN/PRC-77)

NOTICE TO USERS

This package contains a questionnaire on the Usability of Plastic laminated Diagrams for maintenance operations. To help us determine the value of these diagrams, please fill out the questionnaire, fold it where shown, and drop it in the mail.

If the questionnaire has been used, you can forward comments using DA Form 2028 (Recommended Changes to Publications and Blank Forms). Send to Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703.

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By Order of the Secretary of the Army:

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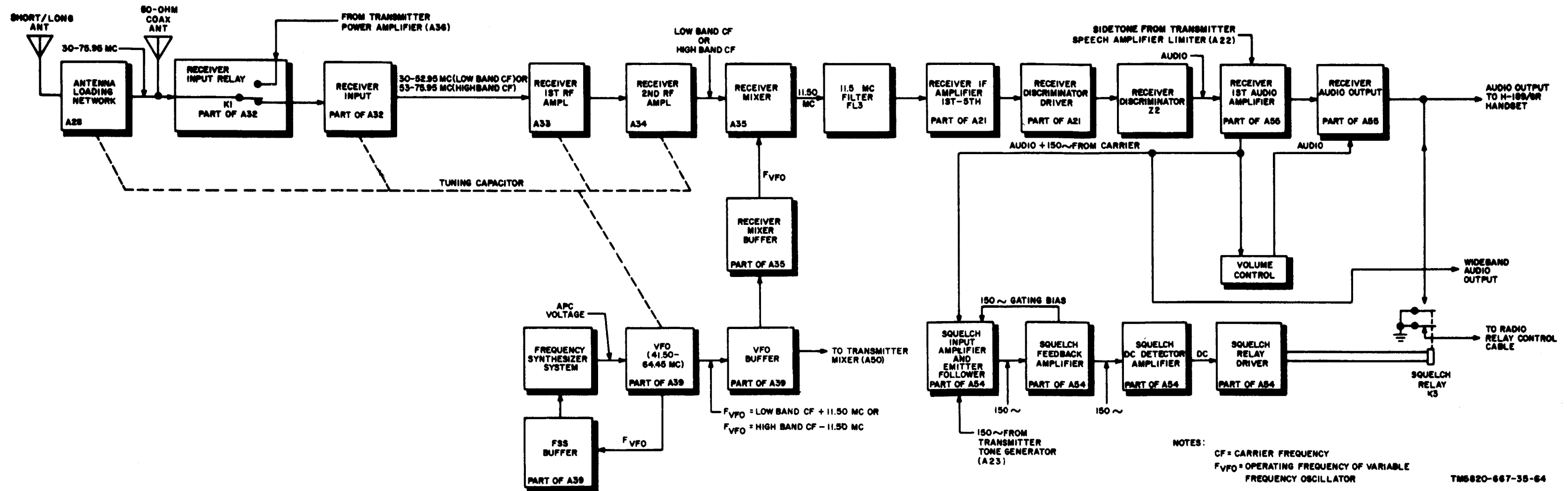


FIGURE 7-15. RECEIVER-TRANSMITTER, RECEIVE MODE SIGNAL PATH, BLOCK DIAGRAM.

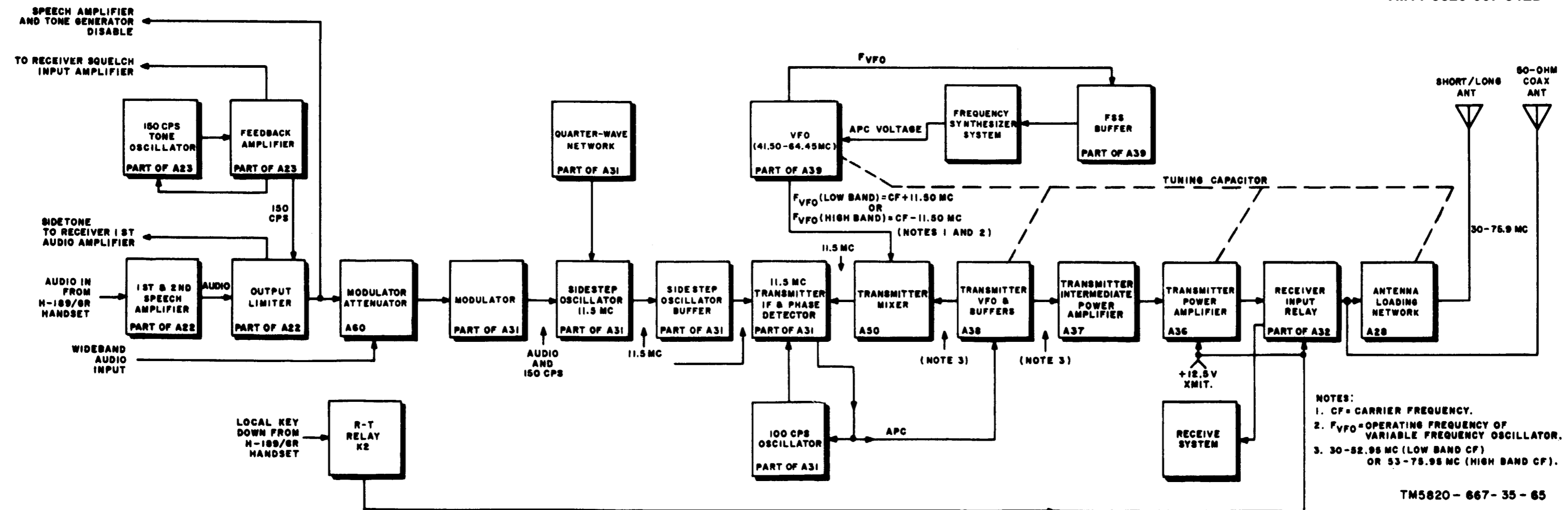
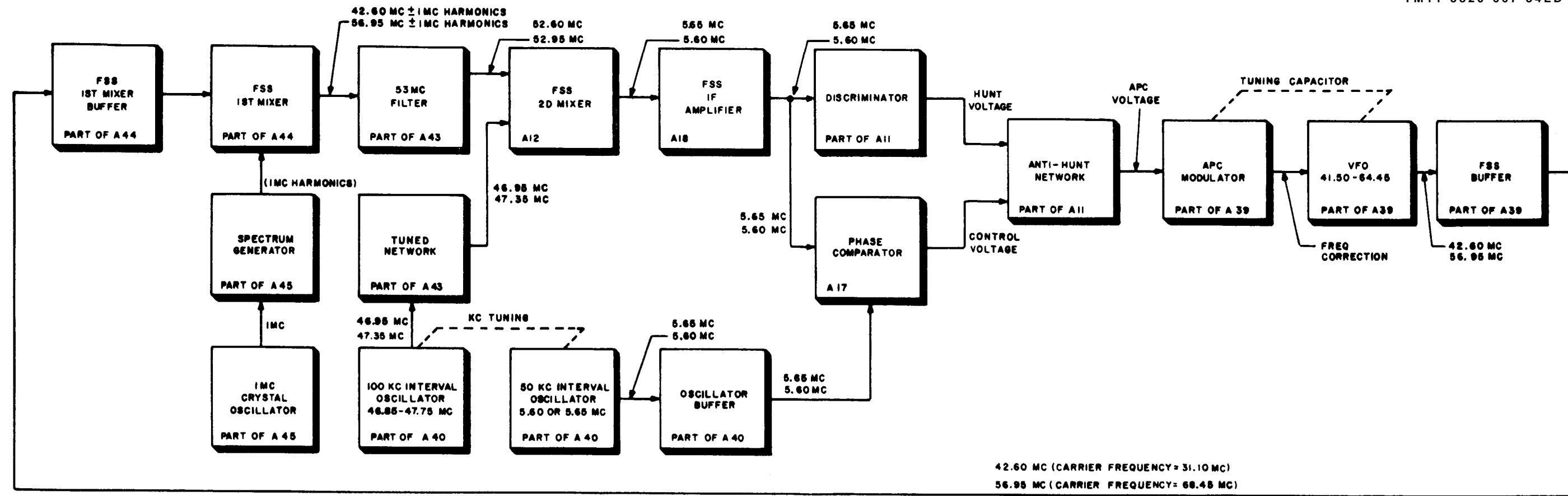


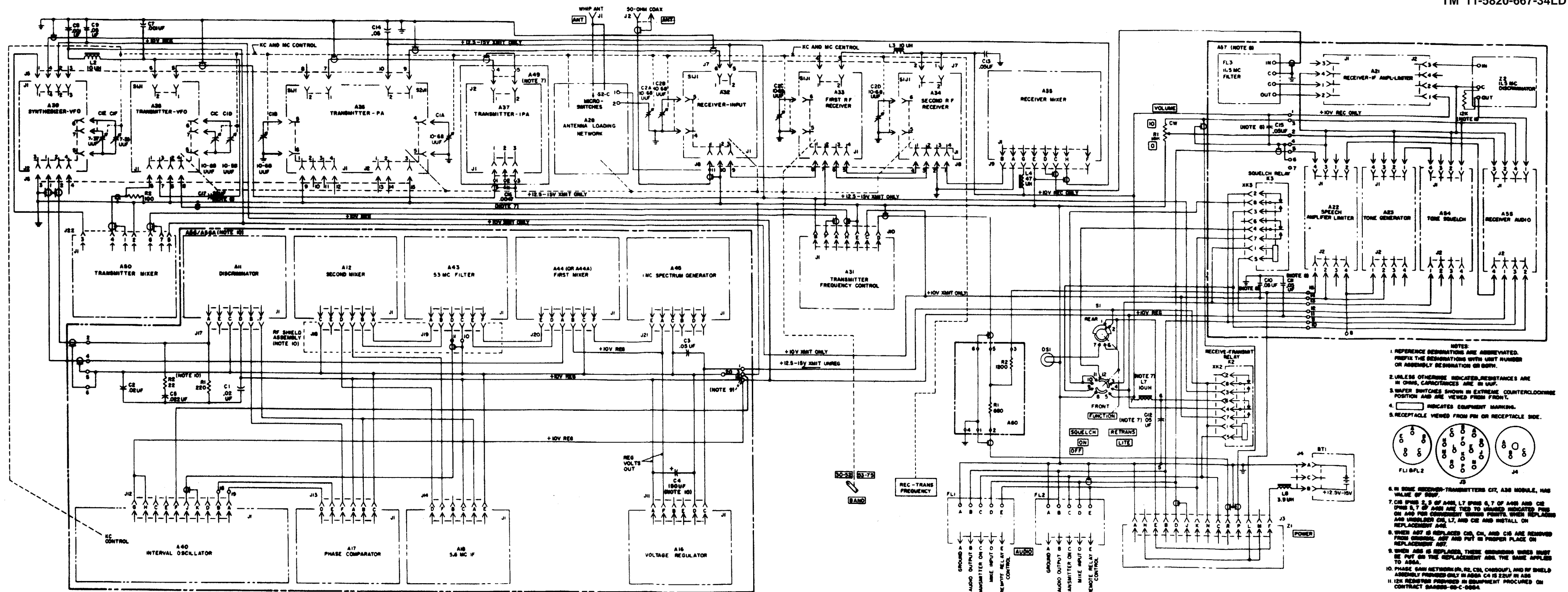
FIGURE 7-16. RECEIVER- TRANSMITTER, TRANSMIT MODE SIGNAL PATH, BLOCK DIAGRAM.



NOTES :

1. TWO RT-841/PRC-77 CARRIER FREQUENCIES ARE USED TO ILLUSTRATE THE FREQUENCY RELATIONSHIPS OF THE FSS 31.10 MC (LOW BAND), AND 68.45 MC (HIGH BAND). FREQUENCIES ASSOCIATED WITH THE LOW BAND CARRIER ARE INDICATED ABOVE THE FREQUENCIES ASSOCIATE WITH THE HIGH BAND CARRIER.
2. FSS DENOTES FREQUENCY SYNTHESIZER SYSTEM.

FIGURE 7-17. FREQUENCY SYNTHESIZER SYSTEM, BLOCK DIAGRAM.



- NOTES:
1. REFERENCE DESIGNATIONS ARE ABBREVIATED. PREFIX THE DESIGNATIONS WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
 2. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UUF.
 3. WAFER SWITCHES SHOWN IN EXTREME COUNTERCLOCKWISE POSITION AND ARE VIEWED FROM FRONT.
 4. □ INDICATES EQUIPMENT MARKING.
 5. RECEPTACLE VIEWED FROM PIN OR RECEPTACLE SIDE.
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6. IN SOME RECEIVER-TRANSMITTERS CIR. A38 MODULE, HAS VALUE OF 500UF.
 7. C18 SPIN 2, 5 OF A40, L7 SPIN 6, 7 OF A44 AND C2 SPIN 5, 7 OF A45 ARE TIED TO UNMARKED POINTS ON A40 FOR CONVENIENT WIRING POINTS. WHEN REPLACING AND UNMARKED C18, L7, AND C2 AND INSTALL ON REPLACEMENT A40.
 8. WHEN A47 IS REPLACED C18, C19, AND C16 ARE REMOVED FROM GROUND, A47 AND P47 IS PROPER PLACE ON REPLACEMENT A47.
 9. WHEN A45 IS REPLACED, THESE CONNECTIONS WIRE MUST BE PUT ON THE REPLACEMENT AND THE SAME APPLIED TO A45A.
 10. PHASE GAIN NETWORK (R2, C24, C25, C26) AND RF SHIELD ASSEMBLY PROVIDED ONLY IN A50A C4 IS 22UF IN A50.
 11. I2X RESISTOR PROVIDED IN EQUIPMENT PROCURED ON CONTRACT NUMBER 69-C-088A.
- EL8880-667-36-C1-TS-67

FIGURE 7-18. OVERALL CHASSIS INTERCONNECTION DIAGRAM, RT-841/PRC-77