

T.O. 31R2-2GRR-116WC-1

WORKCARDS

SCHEDULED PERIODIC INSPECTION WORKCARDS
RECEIVER RADIO AN/GRR-23(V) AND AN/GRR-24(V)
P/N 8004203G-1 THRU 20

(ATOS)

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BASIC AND ALL CHANGES HAVE BEEN MERGED
TO MAKE THIS A COMPLETE PUBLICATION

1 JUNE 1982
CHANGE 15 - 3 JANUARY 2000

TO 31R2-2GRR-116WC-1
LIST OF EFFECTIVE CARDS

INSERT LATEST CHANGE CARD. DESTROY SUPERSEDED CARDS.

NOTE: THE PORTIONS OF THE TEXT AFFECTED BY THE CHANGES ARE INDICATED BY A VERTICAL LINE IN THE OUTER MARGIN OF THE CARD.

Dates of issue for original and changed cards are:

Original.....	0	1 Jun 82	Change.....	8	7 Nov 85
Change.....	1	10 Aug 82	Change.....	9	15 Jul 89
Change.....	2	3 Jan 83	Change.....	10	28 Jun 90
Change.....	3	1 Jul 83	Change.....	11	25 Sep 91
Change.....	4	15 Dec 83	Change.....	12	3 Aug 92
Change.....	5	12 Jun 84	Change.....	13	19 Nov 92
Change.....	6	15 Jan 85	Change.....	14	5 May 93
Change.....	7	24 Jun 85	Change.....	15	3 Jan 00

The total number of cards in this publication is 13, consisting of the following:

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1-01	10	1-004	13	1-008 Deleted	8
1-02 - 1-03	0	1-005	14		
1-001	0	1-005A Deleted	10		
1-001A Added	10	1-005B	8		

A Change 15

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SPECIAL INSPECTIONS				N/A
TIME REPLACEMENT ITEMS				N/A
REPAIR RESTRICTIONS				N/A

MAN MIN	WORK AREA	WORK UNIT		INTRODUCTION	INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO	
		SYS	SUB-SYS						1-02	
				GENERAL INTRODUCTION						
				<p>1. THESE WORKCARDS CONTAIN ALL REQUIREMENTS FOR ACCOMPLISHING SCHEDULED MAINTENANCE ON GROUND ELECTRONIC (C-E) EQUIPMENT DURING ITS ENTIRE SERVICE LIFE. IT ESTABLISHES INSPECTION, ACCESSORY REPLACEMENT, DEPOT LEVEL, AND BASE LEVEL REPAIR REQUIREMENT/RESTRICTIONS. THESE REQUIREMENTS ARE PRIMARILY TECHNICAL IN NATURE AND THE CONDITIONS LISTED ARE INTENDED TO DIRECT ATTENTION TO KNOWN PROBLEM AREAS. THESE REQUIREMENTS ARE DEVELOPED FOR NEW C-E EQUIPMENT THROUGH MAINTENANCE ENGINEERING AND COMPARISON OF SIMILAR INSTALLATIONS, OR IN-SERVICE C-E EQUIPMENT. THE INTERVAL BETWEEN THE ACCOMPLISHMENT OF A REQUIREMENT IS INTENDED TO BE THE LONGEST PERIOD OF TIME THAT AN ITEM OR COMPONENT CAN SAFELY OPERATE WITHOUT AN INSPECTION OR OBSERVATION. WHEN THE C-E EQUIPMENT IS OPERATED IN OTHER THAN THE PRIMARY PURPOSE, OR MAJOR USE CLASS. THE NECESSARY REQUIREMENTS HAVE BEEN ADJUSTED ACCORDINGLY, AND THE REQUIREMENTS IDENTIFIED AS TO CLASS OF OPERATION. THESE REQUIREMENTS AND INSPECTION INTERVALS ARE THE MAXIMUM AND SHOULD NEVER BE EXCEEDED. LOCAL CONDITIONS, (TYPE OF MISSION, SPECIAL UTILIZATION, GEOGRAPHICAL LOCATION, ETC.) MAY DICTATE MORE FREQUENT INSPECTIONS, REPLACEMENT OR MORE THOROUGH INSPECTIONS, THEREFORE, COMMANDS, LOCAL COMMANDERS, AND THEIR MAINTENANCE OFFICERS HAVE THE PREROGATIVE TO INCREASE THE FREQUENCY OR SCOPE OF ANY REQUIREMENT, AND ARE EXPECTED TO EXERCISE THIS PREROGATIVE.</p> <p>2. THE INSPECTIONS PRESCRIBED BY THESE WORKCARDS WILL BE ACCOMPLISHED AT SPECIFIED PERIODS BY AIR FORCE ORGANIZATIONAL ACTIVITIES WITH ASSISTANCE PROVIDED BY AIR FORCE INTERMEDIATE MAINTENANCE ACTIVITIES AND SPECIALIZED REPAIR ACTIVITIES, WHEN REQUIRED. COMPLIANCE WITH THE PROVISIONS</p> <p style="text-align: center;">(CONTINUED ON BACK)</p>						
CARD NO.		WORK AREA(S)		TYPE MECH RQR	MECH NO.	CARD TIME	PUBLICATION NUMBER AND DATE		CHANGE NO.	
1-02						:	31R2-2GRR-116WC-1 01 JUN 82			

MAN MIN	WORK AREA	WORK UNIT		INTRODUCTION	INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO. 1-02
		SYS	SUB-SYS						
				<p>OF THESE WORKCARDS IS REQUIRED TO ASSURE THAT LATENT DEFECTS ARE DISCOVERED AND CORRECTED BEFORE MALFUNCTIONING OR SERIOUS TROUBLE RESULTS.</p> <p>3. THE INSPECTION REQUIREMENTS ARE STATED IN SUCH A MANNER AS TO ESTABLISH WHAT EQUIPMENT IS TO BE INSPECTED, WHEN IT IS TO BE INSPECTED, AND WHAT CONDITIONS ARE TO BE SOUGHT. IN SCOPE, THE REQUIREMENTS ARE DESIGNED TO DIRECT THE ATTENTION OF MAINTENANCE PERSONNEL TO COMPONENTS AND AREAS WHERE DEFECTS MAY EXIST AS A RESULT OF USAGE UNDER NORMAL OPERATING CONDITIONS. THEY ARE NOT INTENDED TO PROVIDE COVERAGE FOR ROUTINE CLEANING, WASHING, ETC., NOR ARE THEY DESIGNED TO LEAD TO THE DETECTION OF ISOLATED DISCREPANCIES THAT MAY OCCUR ON A ONE-TIME BASIS, OR DISCREPANCIES THAT ARE THE RESULT OF CARELESSNESS, ABUSE OR POOR MAINTENANCE PRACTICES. DURING ACCOMPLISHMENT OF THE SPECIFIC REQUIREMENTS DIRECTED BY THESE WORKCARDS, MAINTENANCE PERSONNEL SHOULD OBSERVE BOTH THE EQUIPMENT BEING INSPECTED AND THE COMPONENTS IN THE SURROUNDING AREA FOR DEFECTS OR IRREGULARITIES NOT WITHIN THE SCOPE OF THE REQUIREMENTS. REQUIREMENTS REQUIRING THE USE OF ELECTRICAL POWER FOR ACCOMPLISHMENT ARE IDENTIFIED BY A COMMERCIAL "@" SYMBOL PRECEDING THE PARAGRAPH NUMBER FOR THE REQUIREMENTS.</p> <p>4. THE REPLACEMENT SCHEDULE DIRECTS REPLACEMENT OF ITEMS AT A SPECIFIC TIME WHEN A FAILURE WOULD COMPROMISE SAFETY OR OPERATION BEYOND REASONABLE LIMITS OR DEFINITELY CAUSE A MISSION FAILURE. ALSO CONSIDERED ARE ANY HIGH COST ITEMS WHOSE FAILURE WOULD RESULT IN CONDEMNATION AND ANY SHORT LIFE ITEMS WHICH WOULD REQUIRE FREQUENT UNSCHEDULED MAINTENANCE. ITEMS NOT LISTED WILL BE KNOWN AS "CONDITION ITEMS" AND WILL BE REPLACED ONLY WHEN NECESSARY.</p>					

MAN MIN	WORK AREA	WORK UNIT		INTRODUCTION	INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO. 1-03
		SYS	SUB-SYS						
				<p align="center">(CONTINUED FROM PREVIOUS CARD)</p> <p>5. BASE LEVEL REPAIR RESTRICTIONS, LISTS ITEMS (BY WORK UNIT CODE, NOMENCLATURE, FSC, AND PART NUMBER) FOR WHICH BASE LEVEL REPAIR RESTRICTIONS HAVE BEEN ESTABLISHED, AND DESCRIBES THE REPAIRS WHICH ARE NOT AUTHORIZED.</p> <p>6. THE TIME IN MAN-MINUTES FOR ACCOMPLISHMENT OF REQUIREMENTS REFLECTS ONLY THE TIME REQUIRED FOR INSPECTION OR REPLACEMENT. THIS TIME DOES NOT INCLUDE TIME REQUIRED TO GAIN ACCESS TO THE EQUIPMENT TO FACILITATE ACCOMPLISHMENT. THOSE FACTORS (PERSONNEL AND EQUIPMENT SHORTAGES, LACK OF PARTS, ADVERSE WORKING CONDITIONS, AND QUALIFICATIONS OF PERSONNEL) WHICH WILL DIRECTLY AFFECT THE LENGTH OF TIME OF ANY SCHEDULED MAINTENANCE ARE NOT INCLUDED BECAUSE THEY CANNOT BE ACCURATELY PREDICTED.</p> <p>7. THESE WORKCARDS DO NOT CONTAIN DETAILED INSTRUCTIONS FOR TROUBLESHOOTING TO FIND CAUSES FOR MALFUNCTIONING, NOR DO THEY CONTAIN INSTRUCTIONS FOR REPAIR, ADJUSTMENT, OR OTHER MEANS OF RECTIFYING DEFECTIVE CONDITIONS. PROPER INSTALLATION OF A PIECE OF EQUIPMENT OR ACCESSORY IS NOT NECESSARILY WITHIN THE SCOPE OF THESE WORKCARDS AS ADEQUACY AND COMPLETENESS OF INSTALLATION WILL HAVE BEEN DETERMINED AT THE TIME OF INSTALLATION. APPLICABLE PORTIONS OF THE APPROPRIATE MAINTENANCE MANUAL SHOULD BE CONSULTED TO OBTAIN "HOW TO" MAINTENANCE INSTRUCTIONS AS THEY ARE BEYOND THE SCOPE OF THESE WORKCARDS.</p> <p>8. FOR THE PURPOSE OF CLARIFICATION OF TERMS USED IN THESE WORKCARDS, THE FOLLOWING DEFINITIONS ARE GIVEN: (CONTINUED ON BACK)</p>					
CARD NO. 1-03	WORK AREA(S)		TYPE MECH RQR	MECH NO.	CARD TIME :	PUBLICATION NUMBER AND DATE 31R2-2GRR-116WC-1 01 JUN 82			CHANGE NO.

MAN MIN	WORK AREA	WORK UNIT		INTRODUCTION	INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO. 1-03
		SYS	SUB-SYS						
				<p>SPECIFIED- REFERS TO A DEFINITE AMOUNT, OPERATION, OR LIMITATION WHICH HAS BEEN ESTABLISHED AND IS CONTAINED IN APPLICABLE DIRECTIVES.</p> <p>EVIDENCE- IS PROOF OF A SUSPECTED OR EXISTING UNSATISFACTORY CONDITION.</p> <p>SECURE- MEANS THE COMPONENT IS PROPERLY MOUNTED OR ATTACHED TO RELATED EQUIPMENT, INCLUDING APPLICABLE SAFETYING.</p> <p>ACCESSIBLE- IS THE TERM APPLIED TO EQUIPMENT THAT MAY BE INSPECTED WITHOUT FURTHER DISASSEMBLY OR REMOVAL OF COVERS, CLOSURES, PANELS, ETC., OTHER THAN THOSE REQUIRED TO ACCOMPLISH THE MORE SPECIFIC REQUIREMENTS APPLICABLE TO THE PARTICULAR INSPECTIONS.</p> <p>9. CHANGES AND REVISIONS TO THESE WORKCARDS WILL BE PUBLISHED WHEN NECESSARY TO ADD, DELETE, OR CHANGE FREQUENCY OR SCOPE OF REQUIREMENTS. SUCH CHANGES WILL BE BASED ON FACTUAL DATA ACCUMULATED AS A RESULT OF MAINTENANCE EXPERIENCE WITH THE EQUIPMENT. RECOMMENDATIONS PROPOSING CHANGES TO THESE WORKCARDS SHOULD BE SUBMITTED ON AFTO FORM 22 IN ACCORDANCE WITH TO 00-5-1 TO THE USING COMMAND HEADQUARTERS.</p> <p style="text-align: center;">NOTE</p> <p>ALL CORROSION WILL BE TREATED IN ACCORDANCE WITH TO 1-1-689.</p>					

MAN MIN	WORK AREA	WORK UNIT		INTRODUCTION	INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO. 1-001
		SYS	SUB-SYS						
				INSPECTION REQUIREMENTS					
				<ol style="list-style-type: none"> 1. THESE INSPECTION WORKCARDS PROVIDE THE REQUIREMENTS FOR INSPECTION AND WILL BE USED AS A GUIDE IN PERFORMING THE INSPECTION TO INSURE THAT NO ITEM IS OVERLOOKED. THE CARD SIZE AFFORDS CONVENIENT HANDLING BY MAINTENANCE PERSONNEL WHILE PERFORMING AN INSPECTION. WORK ASSIGNMENT INFORMATION IS PROVIDED AT THE BOTTOM OF EACH CARD TO PERMIT ESTABLISHMENT OF A CONVENIENT FILING SYSTEM FOR THE SET OF CARDS AND IN MAKING WORK ASSIGNMENTS TO MAINTENANCE PERSONNEL. 2. DETAILED INSTRUCTIONS FOR THE USE OF THESE CARDS AND THE DESCRIPTION AND APPLICATION OF OTHER FORMS AND CHARTS TO BE USED IN CONJUNCTION WITH THESE CARDS ARE CONTAINED IN 00-20 SERIES TECHNICAL ORDERS. 					
CARD NO. 1-001	WORK AREA(S)			TYPE MECH RQR	MECH NO.	CARD TIME :	PUBLICATION NUMBER AND DATE 31R2-2GRR-116WC-1 01 JUN 82		CHANGE NO.

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER OFF	SERVICE OUT	FIGURE	CARD NO. 1-001A
		SYS	SUB						
				RECEIVER RADIO AN/GRR-23(V) AND AN/GRR-24(V). 1. INSPECT FACILITY GROUND AND EQUIPMENT GROUNDING CONNECTIONS TO ENSURE EQUIPMENT IS PROPERLY CONNECTED TO THE FACILITY GROUND. ENSURE THAT ALL CONNECTIONS ARE TIGHT AND FREE OF CORROSION PRIOR TO EVALUATING EQUIPMENT PARAMETERS FOR PROPER OPERATION. REFERENCE T.O. 31-10-24, CHAPTERS 3, 4 AND 10 AS APPLICABLE.					
CARD NO. 1-001A	WORK AREA(S)		TYPE MECH RQR	MECH NO	CARD TIME :10	PUBLICATION NUMBER TO 31R2-2GRR-116WC-1			CHANGE NO. 10

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-002
		SYS	SUB						
				RECEIVER RADIO AN/GRR-23(V) AND AN/GRR -24(V) MINIMUM PERFORMANCE. 1. TEST EQUIPMENT REQUIRED (OR EQUIVALENT): A. HEWLETT-PACKARD 608C/D SIGNAL GENERATOR. B. HEWLETT-PACKARD 427A VOLTMETER. C. FLUKE 8300A DIGITAL VOLTMETER. D. 600 OHM HEADPHONE. E. HEWLETT-PACKARD 333A DISTORTION ANALYZER 2. TURN SIGNAL GENERATOR ON AND SET THE FREQUENCY TO SAME FREQUENCY AS RECEIVER OPERATING FREQUENCY. ALLOW 30 MINUTES FOR SIGNAL GENERATOR TO STABILIZE 3. TURN RECEIVER ON. VERIFY THE RECEIVER B+ IS NORMAL. CHECK UNREGULATED B+ (27 VDC TO 40 VDC) AND REGULATED B+(18+/-4VDC) TEST POINTS. (CONTINUED ON BACK)					
CARD NO. 1-002	WORK AREA(S)			TYPE MECH RQR	MECH NO	CARD TIME :45	PUBLICATION NUMBER TO 31R2-2GRR-116WC-1		CHANGE NO. 15

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-002
		SYS	SUB						
				<p style="text-align: center;">NOTE</p> <p style="text-align: center;">IF THE REGULATED B+ IS ADJUSTED, TOTAL REALIGNMENT OF THE RECEIVER IS REQUIRED.</p> <p>4. REMOVE COAXIAL JUMPER BETWEEN ANTENNA AND RECEIVER INPUT CONNECTORS ON RECEIVER FRONT PANEL.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">IF THE RECEIVER IS USED IN A SYSTEM ENVIRONMENT, REMOVE FROM THE SYSTEM FOR THE DURATION OF THE PERFORMANCE CHECK.</p> <p>5. DELETED</p> <p>6. CONNECT SIGNAL GENERATOR TO RECEIVER INPUT CONNECTOR.</p> <p>7. PLACE RECEIVER SQUELCH ON-OFF SWITCH TO OFF.</p> <p>8. SET SIGNAL GENERATOR TO -97.5 (3.0 MICROVOLTS) +/- 0.5 DBM, 30% +/- 1% MODULATION AT 1 KHZ +/- 10%.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">IF YOU ARE USING THE 608 C/D TYPE GENERATOR, THEN CAREFULLY ADJUST SIGNAL GENERATOR FREQUENCY USING BOTH COARSE AND FINE CONTROLS TO OBTAIN MAXIMUM AGC VOLTAGE AS OBSERVED ON MULTIMETER. IF SIGNAL GENERATOR HAS NOT STABILIZED AND CONTINUES TO DRIFT IN FREQUENCY, THEN REPEAT THE COARSE AND FINE CONTROL ADJUSTMENT FOR MAXIMUM AGC VOLTAGE AT INTERVALS TO ENSURE SIGNAL GENERATOR IS ON FREQUENCY.</p> <p>9. CONNECT VOLTMETER, SET ON 300 MV AC SCALE, BETWEEN IF AND GROUND TEST POINTS ON RECEIVER.</p>					

MAN MIN	WORK AREA	WORK UNIT		INSPECTION REQUIREMENTS	ELECTRICAL POWER	SERVICE	FIGURE	CARD NO.	
		SYS	SUB-SYS						
				336-DAY	ON	OUT		1-003	
				<p align="center">(CONTINUED FROM PREVIOUS CARD)</p> <p>10. OBSERVE READING OF 120-180 MV ON THE METER.</p> <p>11. SET THE VOLTMETER ON THE 10 VDC SCALE AND CONNECT VOLTMETER BETWEEN AGC AND GROUND TEST POINTS. REDUCE THE SIGNAL GENERATOR LEVEL TO -120 DBM (0.224 MICROVOLTS) +/- 1 DBM.</p> <p>12. OBSERVE THAT THE AGC VOLTAGE, AS READ ON VOLTMETER, DROPS TO ITS QUIESCENT VALUE OF FROM +2.6 VDC TO +3.2 VDC. IF VOLTAGE DOES NOT DROP ADJUST THROUGH TOP COVER UNTIL AGC VOLTAGE JUST DROPS TO +2.6 VDC TO +3.2 VDC.</p> <p>13. SET SIGNAL GENERATOR TO -102 (1.78 MICROVOLTS) +/- 0.5 DBM.</p> <p>14. OBSERVE AGC VOLTAGE, AS READ ON VOLTMETER, TO BE 5.0 VDC OR GREATER.</p> <p>15. SET SIGNAL GENERATOR TO -97.5 (3.0 MICROVOLTS) +/- 0.5 DBM, 30 +/- 1% MODULATION AT 1 KHZ +/- 10%.</p> <p align="center">(CONTINUED ON BACK)</p>					
CARD NO. 1-003	WORK AREA(S)	TYPE MECH RQR	MECH NO.	CARD TIME :	PUBLICATION NUMBER AND DATE 31R2-2GRR-116WC-1 15 JUL 89			CHANGE NO. 9	

MAN MIN	WORK AREA	WORK UNIT		INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-003
		SYS	SUB-SYS					
				336-DAY				
				16. CONNECT VOLTMETER SET TO MEASURE 300 MV AC FULL SCALE, BETWEEN IF AND GROUND TEST POINTS ON RECEIVER.				
				17. THE READING OBTAINED IN STEP 10 SHOULD REMAIN BETWEEN 120-180 MV.				
				18. SET VOLTMETER TO 3 VAC SCALE, BETWEEN MAIN AF AND GROUND TEST POINTS.				
				19. ADJUST AUDIO MAIN ADJ CONTROL ON RECEIVER FRONT PANEL MAXIMUM CLOCKWISE.				

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-004
		SYS	SUB						
				(CONTINUED FROM PREVIOUS CARD)					
				<p>20. REMOVE RECEIVER TOP COVER. ADJUST COMPRESSION LEVEL (R41) ON AGC/SQUELCH MODULE MAX CLOCKWISE.</p> <p>21. OBSERVE VOLTMETER READING OF 2.0 VAC +/- 25 MILLIVOLTS. IF STANDARD IS NOT MET, ADJUST AF PREAMP ADJ (R32) ON AGC/SQUELCH MODULE.</p> <p>22. ADJUST AUDIO MAIN ADJ LEVEL CONTROL ON FRONT PANEL OF RECEIVER TO 1.6 VAC +/- 25 MILLIVOLTS.</p> <p>23. READJUST AF PREAMP ADJ (R32) TO 2.0 VAC +/- 25 MILLIVOLTS.</p> <p>24. ADJUST COMPRESSION LEVEL CONTROL (R41) ON AGC MODULE TO 1.95 VAC +/- 10 MILLIVOLTS.</p> <p>25. INCREASE SIGNAL GENERATOR PERCENT MODULATION FROM 30% TO 90%. VOLTAGE AT MAIN AF TEST POINT SHALL REMAIN WITHIN 1.75 TO 2.45 VOLTS.</p> <p>26. RESET SIGNAL GENERATOR TO -97.5 DBM (3.0 MICROVOLTS) +/- 0.5 DBM; 30% +/- 1% MODULATION AT 1 KHZ +/- 10%. ADJUST RECEIVER AUDIO MAIN ADJ CONTROL FOR 1.0 VAC AT THE MAIN AF TEST POINT.</p> <p>27. SET VOLTMETER 427A TO 1 VAC SCALE.</p> <p>28. SWITCH SIGNAL GENERATOR TO CW MODE -97.5 DBM (3.0 MICROVOLTS) +/- 0.5 DBM. OBSERVE THAT VOLTMETER READING DROPS TO 0.316 VAC OR LESS (-10 DBM, HP 427A).</p> <p>29. SET VOLTMETER TO 3 VAC SCALE.</p> <p>30. SET SIGNAL GENERATOR TO -97.5 DBM (3.0 MICROVOLTS) +/- 0.5 DBM, 30 +/-1% MODULATION AT 1 KHZ +/- 10%.</p>					
GARD NO. 1-004	WORK AREA(S)			TYPE MECH RQR	MECH NO	CARD TIME	PUBLICATION NUMBER T.O. 31R2-2GRR-116WC-1 19 NOV 92		CHANGE NO. 13

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-004
		SYS	SUB						
				<p>31. VERIFY MAIN AF IS STILL 1.0 VAC +/- 0.5 VAC.</p> <p>32. CONNECT HEADPHONES TO AUDIO OUTPUT JACK ON RECEIVER FRONT PANEL. CONNECT DISTORTION ANALYZER TO MAIN AF TEST POINT (J15).</p> <p>33. ADJUST AUDIO PHONE ADJ CONTROL ON FRONT PANEL OF RECEIVER FOR COMFORTABLE LISTENING LEVEL.</p> <p>34. WHILE MAINTAINING MODULATION LEVEL AT 30%, SLOWLY ADJUST POWER LEVEL OF SIGNAL GENERATOR FROM -97.5 DBM (3.0 MICROVOLTS) +/- 0.5 DBM TO +13 DBM (999 MV) +/- 10 MV.</p> <p>35. AGC TEST: WHILE CHANGING POWER OBSERVE THAT HIGHEST AND LOWEST EXCURSION OF VOLTAGE ON DB SCALE OF METER DOES NOT DIFFER MORE THAN 3 DB (IN TERMS OF VOLTAGE V MIN/V MAX SHOULD BE 0.7 OR GREATER).</p> <p>36. DISTORTION TEST: WHILE MAINTAINING A +13 dBm LEVEL OUT OF THE SIGNAL GENERATOR, MODULATED 1000 HZ AT 30%, OBSERVE THAT THE TONE IN THE HEADPHONES DOES NOT EXHIBIT DISTORTION; 10% OR LESS AS MEASURED ON THE DISTORTION ANALYZER.</p> <p>37. SET SIGNAL GENERATOR TO -97.5 DBM (3.0 MICROVOLTS) +/- 0.5 DBM MODULATED 30% +/- 10% AT 1 KHZ +/- 10%.</p> <p>38. SET RECEIVER AUDIO SQUELCH ADJ CONTROL ON RECEIVER FRONT PANEL MAXIMUM COUNTER CLOCKWISE, PLACE RECEIVER SQUELCH ON-OFF SWITCH TO ON.</p> <p>39. OBSERVE AUDIO SHOULD REMAIN FULLY AUDIBLE AND UNCHANGED IN HEADPHONES (RECEIVER SHOULD NOT BE SQUELCHED).</p> <p>40. SET RECEIVER AUDIO SQUELCH ADJ CONTROL ON RECEIVER FRONT PANEL MAXIMUM CW. RECEIVER SHOULD BE SQUELCHED (QUIETED).</p> <p>41. RAISE SIGNAL GENERATOR POWER LEVEL TO -73 DBM (50.1 MICROVOLTS) +/- 0.5 DBM. OBSERVE RECEIVER REMAINS SQUELCHED.</p>					

MAN MIN	WORK AREA	WORK UNIT CODE		336-DAY	INSPECTION REQUIREMENTS	ELECTRICAL POWER ON	SERVICE OUT	FIGURE	CARD NO. 1-005
		SYS	SUB						
				<p>(CONTINUED FROM PREVIOUS CARD)</p> <p>42. SET SIGNAL GENERATOR AT DESIRED SQUELCH LEVEL (MUST BE LESS THAN -73 DBM).</p> <p>43. PLACE VOLTMETER RANGE SELECTOR SWITCH TO 30 VDC SCALE, PLACE VOLTMETER DC PROBE IN RECEIVER SQUELCH TEST POINT.</p> <p>44. SLOWLY TURN AUDIO SQUELCH ADJUST CONTROL CCW; VOLTMETER SHOULD SUDDENLY INCREASE TO APPROXIMATELY 15 VDC (SQUELCH VOLTAGE) FOR THE EARLY CONFIGURATION AGC MODULE, OR TO APPROXIMATELY 8 VDC FOR THE LATER CONFIGURATION AGC MODULE.</p> <p>45. DECREASE SIGNAL GENERATOR LEVEL UNTIL THE RECEIVER IS SQUELCHED. SLOWLY INCREASE SIGNAL GENERATOR RF OUTPUT LEVEL UNTIL A SQUELCH VOLTAGE LEVEL OF APPROXIMATELY 8 VDC IS OBTAINED. SIGNAL GENERATOR OUTPUT SHOULD BE AT DESIRED LEVEL. IF NOT RETURN TO STEPS 41 AND 43.</p> <p>46. SET SIGNAL GENERATOR TO OFF AND DISCONNECT FROM RECEIVER. REPLACE COAXIAL JUMPER BETWEEN ANTENNA AND RECEIVER INPUT CONNECTORS ON FRONT PANEL OF RECEIVER.</p> <p>47. RETURN EQUIPMENT TO NORMAL OPERATING CONFIGURATION.</p>					
CARD NO. 1-005	WORK AREA(S)		TYPE MECH RQR	MECH NO	CARD TIME	PUBLICATION NUMBER T.O. 31R2-2GRR-118WC-1		5 MAY 93	CHANGE NO. 14

MAN MIN	WORK AREA	WORK UNIT		INSPECTION REQUIREMENTS	ELECTRICAL POWER ON OFF	SERVICE OUT	FIGURE	CARD NO. 1-005B	
		SYS	SUB-SYS						
030				336-DAY					
<p>RECEIVER RADIO AN/GRR-23(V) AND AN/GRR-24(V) SYNTHESIZER, ELECTRICAL FREQUENCY 0-1701/GR) FREQUENCY CHECK.</p> <ol style="list-style-type: none"> 1. TEST EQUIPMENT REQUIRED: <ol style="list-style-type: none"> A. HEWLETT-PACKARD 5245L AND 5253B FREQUENCY COUNTER OR EQUIVALENT. B. SUB-MINIATURE RF CONNECTOR ADAPTER PART NO 50-075-6801. 2. TURN RECEIVER POWER OFF. 3. REMOVE THE TOP COVER AND DISCONNECT COAXIAL CABLE FROM J1 OF THE MIXER MULTIPLIER. 4. CONNECT THE FREQUENCY COUNTER TO P2 UTILIZING SUBMINIATURE RF CONNECTOR ADAPTER P/N 50-075-6801. @ 5. TURN RECEIVER POWER ON, WAIT AT LEAST 10 MINUTES BEFORE MEASURING THE FREQUENCY. @ 6. FREQUENCY SHOULD BE WITHIN +/- 0.0005% FOR THE ELECTRICAL SYNTHESIZER. 7. TURN RECEIVER POWER OFF. 8. DISCONNECT THE FREQUENCY COUNTER AND REPLACE SYNTHESIZER OUTPUT CABLE P2 TO J1 OF THE MIXER/MULTIPLIER. (CONTINUED ON BACK) 									
CARD NO. 1-005B	WORK AREA(S)			TYPE MECH PQR	MECH NO.	CARD TIME :30	PUBLICATION NUMBER AND DATE 31R2-2GRR-116WC-1 7 NOV 85		CHANGE NO. 8

MAN MIN	WORK AREA	WORK UNIT		INSPECTION REQUIREMENTS	ELECTRICAL POWER ON OFF	SERVICE OUT	FIGURE	CARD NO. 1-005B
		SYS	SUB-SYS					
				336-DAY				
				9. REPLACE THE TOP COVER.				
				10. RETURN RECEIVER TO NORMAL OPERATING CONFIGURATION.				
				NOTE				
				REF TO 31R2-2GRR-112 TABLE 3-2A FOR SYNTHESIZER DIAL DETERMINATION AND PARA 5-32 FOR ALIGNMENT PROCEDURES, IF NEEDED.				

MAN MIN	WORK AREA	WORK UNIT		INSPECTION REQUIREMENTS	ELECTRICAL POWER OFF	SERVICE OUT	FIGURE	CARD NO. 1-006
		SYS	SUB-SYS					
				336-DAY				
NOTE								
CORRECTIVE ACTION WILL BE INITIATED IMMEDIATELY WHEN CORROSION IS FOUND TO PREVENT FURTHER DETERIORATION OF THE EQUIPMENT.								
<p>C. CORROSION IS THE DETERIORATION OF A MATERIAL BY CHEMICAL OR ELECTRO-CHEMICAL REACTION WITH ITS ENVIRONMENT. INSPECT THE COMPLETE SYSTEM FOR EVIDENCE OF CORROSION. PROCEDURES FOR IDENTIFICATION, ISOLATION AND CONTROL OF CORROSION ARE IDENTIFIED IN THE FOLLOWING</p> <p>TECHNICAL ORDERS:</p> <p>TO 1-1-1 CLEANING OF AEROSPACE EQUIPMENT TO 1-1-2 CORROSION PREVENTION AND CONTROL OF AEROSPACE EQUIPMENT TO 1-1-8 APPLICATION OF ORGANIC COATINGS, AEROSPACE EQUIPMENT TO 1-1-689 PREVENTION AND CONTROL OF CORROSION AND FUNGUS IN COMMUNICATIONS, ELECTRONIC, METEOROLOGICAL, AND AVIONIC EQUIPMENT.</p>								
<p>D. TIGHTNESS OF CONNECTORS AND LEADS.</p> <p style="text-align: right;">TO 31R2-2GRR-116WC-1 Change 11</p>								