#### TECHNICAL MANUAL

# SCHEDULED PERIODIC INSPECTION WORKCARDS

## DIGITAL IONOSPHERIC SOUNDING SYSTEM AN/FMQ-12

#### PART NUMBER 50400001

UNIVERSITY OF MASSACHUSETTS, LOWELL CENTER FOR ATMOSPHERIC RESEARCH FO4606-85-C-0810

MANUAL PREPARED BY SM-ALC/LHPB 98749

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**15 DECEMBER 1998** 

#### LIST OF EFFECTIVE CARDS

# INSERT LATEST CHANGED CARDS. DESTROY SUPERSEDED CARDS.

Note: The portions of the text affected by the change is indicated by a vertical line in the outer margins of the page. Change to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas or by minature pointing hands.

Dates of issue for original and changed pages are:

Original .... 0 .... 15 DEC 98

# TOTAL NUMBER OF CARDS IN THIS PUBLICATION IS 37 CONSISTING OF THE FOLLOWING:

\*Change Card No. 2-001 thru 2-08.....0 \*Change NO.

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#### INTRODUCTION

PREROGATIVE TO INCREASE THE FREQUENCY OR SCOPE OF ANY REQUIREMENT, AND ARE EXPECTED TO EXERCISE THIS PREROGATIVE. THOROUGH INSPECTION. THEREFORE, COMMANDS, LOCAL COMMANDERS, AND THEIR MAINTENANCE OFFICERS HAVE THE UTILIZATION, GEOGRAPHICAL LOCATION, ETC.) MAY DICTATE MORE FREQUENT INSPECTION, REPLACEMENT OR MORE INSPECTION INTERVALS ARE THE MAXIMUM AND SHOULD NEVER BE EXCEEDED. LOCAL CONDITIONS (TYPE OF MISSION, SPECIAL ADJUSTED ACCORDINGLY, AND THE REQUIREMENTS IDENTIFIED AS TO CLASS OF OPERATION. THESE REQUIREMENTS AND OPERATED IN OTHER THAN THE PRIMARY PURPOSE, OR MAJOR USE CLASS, THE NECESSARY REQUIREMENTS HAVE BEEN ARE INTENDED TO DIRECT ATTENTION TO KNOWN PROBLEM AREAS. THESE REQUIREMENTS ARE DEVELOPED FOR NEW EQUIP-PAIR REQUIREMENT/RESTRICTIONS. THESE REQUIREMENTS ARE PRIMARILY TECHNICAL IN NATURE AND THE CONDITIONS LISTED DURING ITS ENTIRE SERVICE LIFE. IT ESTABLISHES INSPECTION, ACCESSORY REPLACEMENT, DEPOT LEVEL, AND BASE LEVEL RE-INTERVAL BETWEEN THE ACCOMPLISHMENT OF A REQUIREMENT IS INTENDED TO BE THE LONGEST PERIOD OF TIME THAT AN MENT THROUGH MAINTENANCE ENGINEERING AND COMPARISON OF SIMILAR INSTALLATIONS, OR IN-SERVICE EQUIPMENT. THE TEM OR COMPONENT CAN SAFELY OPERATE WITHOUT AN INSPECTION OR OBSERVATION. WHEN THE EQUIPMENT IS THESE WORK CARDS CONTAIN ALL REQUIREMENTS FOR ACCOMPLISHING SCHEDULED MAINTENANCE ON GROUND EQUIPMENT

ORGANIZATIONAL ACTIVITIES WITH ASSISTANCE PROVIDED BY AIR FORCE SPECIALIZED REPAIR ACTIVITIES, WHEN REQUIRED THE INSPECTIONS PRESCRIBED BY THESE WORKCARDS WILL BE ACCOMPLISHED AT SPECIFIED PERIODS BY AIR FORCE COMPLIANCE WITH THE PROVISIONS OF THESE WORKCARDS IS REQUIRED TO ASSURE THAT LATENT DEFECTS ARE DISCOVERED

ELECTRICAL POWER FOR ACCOMPLISHMENT ARE IDENTIFIED BY A COMMERCIAL AT (@) SYMBOL PRECEDING THE PARAGRAPH FOR DEFECTS OR IRREGULARITIES NOT WITHIN THE SCOPE OF THE REQUIREMENTS. REQUIREMENTS REQUIRING THE USE OF PERSONNEL SHOULD OBSERVE BOTH THE EQUIPMENT BEING INSPECTED AND THE COMPONENTS IN THE SURROUNDING AREA PRACTICES. DURING ACCOMPLISHMENT OF THE SPECIFIC REQUIREMENTS DIRECTED BY THESE WORKCARDS, MAINTENANCE OCCUR ON A ONETIME BASIS, OR DISCREPANCIES THAT ARE THE RESULT OF CARELESSNESS, ABUSE OR POOR MAINTENANCE CLEANING, WASHING, ETC., NOR ARE THEY DESIGNED TO LEAD TO THE DETECTION OF ISOLATED DISCREPANCIES THAT MAY OF USAGE UNDER NORMAL OPERATING CONDITIONS. THEY ARE NOT INTENDED TO PROVIDE COVERAGE FOR ROUTINE DIRECT THE ATTENTION OF MAINTENANCE PERSONNEL TO COMPONENTS AND AREAS WHERE DEFECTS MAY EXIST AS A RESULT WHEN IT IS TO BE INSPECTED, AND WHAT CONDITIONS ARE TO BE SOUGHT. IN SCOPE, THE REQUIREMENTS ARE DESIGNED TO THE INSPECTION REQUIREMENTS ARE STATED IN SUCH A MANNER AS TO ESTABLISH WHAT EQUIPMENT IS TO BE INSPECTED, AND CORRECTED BEFORE MALFUNCTIONING OR SERIOUS TROUBLE RESULTS.

NUMBER FOR THE REQUIREMENTS.

ONLY WHEN NECESSARY 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 THE REPLACEMENT SCHEDULE DIRECTS REPLACEMENT OF ITEMS AT A SPECIFIC TIME WHEN A FAILURE WOULD COMPROMISE FREQUENT UNSCHEDULED MAINTENANCE. ITEMS NOT LISTED WILL BE KNOWN AS CONDITION ITEMS AND WILL BE REPLACED

BASE LEVEL REPAIR RESTRICTION, 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.

CONDITIONS, AND QUALIFICATIONS OF PERSONNEL) WHICH WILL DIRECTLY AFFECT THE LENGTH OF TIME OF ANY SCHEDULED ACCOMPLISHMENT THOSE FACTORS (PERSONNEL AND EQUIPMENT SHORTAGES, LACK OF PARTS, ADVERSE WORKING REPLACEMENT. THIS TIME DOES NOT INCLUDE TIME REQUIRED TO GAIN ACCESS TO THE EQUIPMENT TO FACILITATE MAINTENANCE ARE NOT INCLUDED BECAUSE THEY CANNOT BE ACCURATELY PREDICTED. THE TIME IN MAN-MINUTES FOR ACCOMPLISHMENT OF REQUIREMENTS REFLECTS ONLY THE TIME REQUIRED FOR INSPECTION OR

BOTTOM OF EACH CARD TO PERMIT ESTABLISHMENT OF A CONVENIENT FILING SYSTEM FOR THE SET OF CARDS AND IN MAKING MAINTENANCE PERSONNEL WHILE PERFORMING AN INSPECTION. WORK ASSIGNMENT INFORMATION IS PROVIDED AT THE PERFORMING THE INSPECTION TO INSURE THAT NO ITEM IS OVERLOOKED. THE CARD SIZE AFFORDS CONVENIENT HANDLING BY WORK ASSIGNMENTS TO MAINTENANCE PERSONNEL THESE INSPECTION WORKCARDS PROVIDE THE REQUIREMENTS FOR INSPECTION AND WILL BE USED AS A GUIDE IN

OBTAIN (HOW TO) MAINTENANCE INSTRUCTIONS AS THEY ARE BEYOND THE SCOPE OF THESE WORKCARDS OF INSTALLATION. APPLICABLE PORTIONS OF THE APPROPRIATE MAINTENANCE MANUAL SHOULD BE CONSULTED TO SCOPE OF THESE WORKCARDS AS ADEQUACY AND COMPLETENESS OF INSTALLATION WILL HAVE BEEN DETERMINED AT THE TIME DEFECTIVE CONDITIONS. PROPER INSTALLATION OF A PIECE OF EQUIPMENT OR ACCESSORY IS NOT NECESSARILY WITHIN THE MALFUNCTIONING, NOR DO THEY CONTAIN INSTRUCTIONS FOR REPAIR, ADJUSTMENT, OR OTHER MEANS OF RECTIFYING THESE WORKCARDS DO NOT CONTAIN DETAILED INSTRUCTIONS FOR TROUBLESHOOTING TO FIND CAUSES FOR

FOR THE PURPOSE OF CLARIFICATION OF TERMS USED IN THESE WORKCARDS, THE FOLLOWING DEFINITIONS ARE GIVEN:

SPECIFIED - REFERS TO A DEFINITE AMOUNT, OPERATION, OR LIMITATION WHICH HAS BEEN ESTABLISHED AND IS CONTAINED IN APPLICABLE DIRECTIVES

EVIDENCE - IS PROOF OF A SUSPECTED OR EXISTING UNSATISFACTORY CONDITION

APPLICABLE SAFETYING SECURE - MEANS THE COMPONENT IS PROPERLY MOUNTED OR ATTACHED TO RELATED EQUIPMENT, INCLUDING

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 INSPECTION

BE SUBMITTED ON AFTO FORM 22 IN ACCORDANCE WITH TO 00-5-1 TO THE USING COMMAND HEADQUARTERS MAINTENANCE EXPERIENCE WITH THE EQUIPMENT. RECOMMENDATIONS PROPOSING CHANGES TO THESE WORKCARDS SHOULD FREQUENCY OR SCOPE OF REQUIREMENTS. SUCH CHANGES WILL BE BASED ON FACTUAL DATA ACCUMULATED AS A RESULT OF CHANGES AND REVISIONS TO THESE WORKCARDS WILL BE PUBLISHED WHEN NECESSARY TO ADD, DELETE, OR CHANGE

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.

## **INTRODUCTION** - Continued

NOTE

ALL CORROSION WILL BE TREATED IN ACCORDANCE WITH TO 1-1-689.

#### SAFETY SUMMARY

SAFEGUARDED. PERSONNEL MUST PERFORM THESE FUNCTIONS WITH CAUTION. ALL SAFETY REGULATIONS. SOME EQUIPMENT AND CHEMICALS HAVE INHERENT HAZARDS THAT CANNOT BE MECHANICALLY THE FOLLOWING ARE GENERAL SAFETY PRECAUTIONS THAT ARE NOT RELATED TO ANY SPECIFIC PROCEDURES AND THEREFORE DO NOT APPEAR ELSEWHERE IN THIS PUBLICATION. THESE ARE RECOMMENDED PRECAUTIONS THAT PERSONNEL MUST UNDERSTAND AND APPLY DURING MANY PHASES OF OPERATIONS AND MAINTENANCE. PERSONNEL MUST AT ALL TIMES OBSERVE

#### GENERAL SAFETY PRACTICE

ALL PRECAUTIONS REQUIRED TO ENSURE THE SAFETY OF PERSONNEL AND EQUIPMENT SHALL BE OBSERVED, SUCH AS THE PROHIBITION OF RINGS. WATCHES, PENDANT JEWELRY, SMOKING, EATING, AND CONTAINERS OF LIQUIDS AT THE EQUIPMENT RACKS, IN ACCORDANCE WITH TO 00-25-234, GENERAL SHOP PROCEDURES.

#### SOLDERING

AVOID BREATHING FUMES GENERATED BY SOLDERING. EYE PROTECTION IS REQUIRED. GOOD GENERAL VENTILATION IS NORMALLYADEQUATE.

## SAFETY SUMMARY - Continued

#### KEEP AWAY FROM LIVE CIRCUITS

EQUIPMENT RACK IS ON. ELECTRICAL POWER IS APPLIED TO THE UNIT UNDER TEST. DO NOT ATTEMPT TO INSTALL OR REMOVE CIRCUIT CARDS WHEN THE OPERATING PERSONNEL MUST AT ALL TIMES OBSERVE ALL SAFETY REGULATIONS. DO NOT REPLACE COMPONENTS WHEN

#### DO NOT SERVICE ALONE

UNDER NO CIRCUMSTANCES SHOULD ANY PERSON REACH INTO THE EQUIPMENT FOR THE PURPOSE OF SERVICING THE EQUIPMENT EXCEPT IN THE PRESENCE OF SOMEONE WHO IS CAPABLE OF RENDERING AID.

#### RESUSCITATION

PERSONNEL WORKING WITH OR NEAR HIGHLY TOXIC CHEMICALS SHOULD BE FAMILIAR WITH MODERN METHODS OF RESUSCITATION. SUCH INFORMATION MAY BE OBTAINED FROM BASE MEDICAL SERVICES

## SAFETY SUMMARY - Continued

## **ELECTROSTATIC DISCHARGE DEVICES**

IF AN ITEM CONTAINS A PART IDENTIFIED AS AN ELECTROSTATICALLY SENSITIVE DEVICE (ESD), APPLICABLE PRECAUTIONS WILL APPEAR IN THIS PUBLICATION. ALL ELECTROSTATICALLY SENSITIVE DEVICES WILL BE MARKED WITH THE SYMBOL WITH AN THE STEP NUMBER AND TITLE. OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE ITEMS. ENTIRE PARAGRAPH, INCLUDING ALL SUBPARAGRAPHS, IS CONSIDERED ESD CRITICAL, THE SYMBOL WILL BE PLACED BETWEEN

THE FOLLOWING WARNINGS AND CAUTIONS APPEAR IN THE TEXT OF THIS VOLUME AND ARE STATED HERE FOR EMPHASIS

#### WARNING

LETHALVOLTAGES MAY EXIST IN THE DELAY LINE CHASSIS. DISCHARGE THE CAPACITORS WITH A GROUNDED SHEPHERDS STICK BEFORE DOING ANY WORK INSIDE THE DLC.

RF RADIATION HAZARD WHEN TRANSMITTER IS IN USE. DO NOT START THIS INSPECTION THROUGHOUT THE ENTIRE INSPECTION. UNTIL TRANSMITTER IS OFF AND ARRANGEMENTS ARE MADE TO ENSURE IT REMAINS OFF

## **SAFETY SUMMARY - Continued**

#### CAUTION

DO NOT PERFORM STEP 4 WITH THE FANS EXTENDED. OVERHEATING CAN OCCUR.

- WHEN WORKING IN AND AROUND THE FPA, **DO NOT** MOVE WIRES/COMPONENT LEADS. SERIOUS ARCING CAN OCCUR.
- DO NOT APPLY SEALANT/PAIN/GREASE/ETC. OF ANY KIND TO GUY WIRES, ANCHOR RODS OR INSULATORS. MAY CAUSE PREMATURE EQUIPMENT FAILURE.

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CARD NO. 1-001	-	N N	MAN	
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WORK AREA(S)	-	SVS- BUS	WORK UNIT	,
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MECH NO.	WORKCARD PERFORMI PERFORMI PERFORMI SPECTION. IONS FOR T ND CHARTS CHNICAL OF ONSIST OF JILT – IN MOI ED IS SPEC S. UNLESS H ALL UNITS			
CARD TIME	INSPECTION  S PROVIDE THE INSPENDENT HAND  THE USE OF THE USED TO BE USED TO BE USED TO BE USED TO HECKING THE NITORING EQUIPMENT HE FORMUSE SON LINE AND			
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	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.  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.  THE INSPECTIONS CONSIST OF CHECKING THE EQUIPMENT BY PERFORMING VISUAL EXAMINATIONS AND USING BOTH BUILT—IN MONITORING EQUIPMENT AND EXTERNAL TEST EQUIPMENT. THE TEST EQUIPMENT REQUIRED IN SPECIFIED IN THE PROCEDURES REFERENCED IN THE APPLICABLE TECHNICAL MANUALS. UNLESS OTHERWISE SPECIFIED, ALL REFERENCED INSPECTIONS WILL BE ACCOMPLISHED WITH ALL UNITS ON LINE AND OPERATIONAL.	REQUIREMENTS	INSPECTION	1. 1
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WORK AREA(S)	020	C	)		(	B					SVS- BUS	WORK UNIT
						@ 2.	@ 1			OPER/		
TYPE MECH RQR	(3) COMMANI	(2) RECORD T	(1) COMMAND: DIS	B. ESTABLISH A F	A. PUT THE EQUIPMENT IN THE ALT-1 (DGS) MODE.	FINAL POWER AMPLIFIER CATHODE CURRENT CHECK.	TURN ON THE PRINTER AND COMPUTER MONITOR.	THE FMC OPERATI INDICATI		OPERATIONAL CHECK	28 DAY INSPECTION	•
MECH NO.	COMMAND: O=0 (ZERO)	RECORD THE NUMBER UNDER THE	D: DIS	IXED FREQUI	MENT IN TH	IFIER CATHO	TER AND CO	THE FMQ-12 SHOULD BE IN CONTI OPERATE ANY SWITCHES OR CONT INDICATED IN THE CHECKS BELOW.			NO	
CARD IIME	9	UNDER TH		ENCY OPER	EALT-1 (DO	DE CURRE	MPUTER MO	D BE IN CO HES OR CO				
31M1-2FMQ12-6WC-1		E LETTER O		ESTABLISH A FIXED FREQUENCY OPERATION BY ENTERING AT THE COMPUTER KEYBOARD:			ONITOR.	THE FMQ-12 SHOULD BE IN CONTINUOUS OPERATION. DO NOT OPERATE ANY SWITCHES OR CONTROLS OTHER THAN THOSE INDICATED IN THE CHECKS BELOW.	NOTE		REQUIREMENTS	INSPECTION
		*		AT THE COMPL	em LT KK			ON. <b>DO NOT</b> AN THOSE	v		ON	ELECTRICAL POWER
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	OLANO POR PORTO PO			DARD:	Š		\$		p		1-002	CARD NO.

_ MARK	NAN	אַמכואי	WOR	WORK UNIT	INSPECTION	ELECTRICAL POWER	SERVICE	CARD NO.
	MIN	AREA	SYS	SVS-BUS	28 DAY INSPECTION REQUIREMENTS	NO	OUT	1-002
		, A			(4) COMMAND: PRO F3			
	+				(5) COMMAND: SET 3			
mly area			. ^	v	(6) COMMAND: F=4.5 (OR NEAREST FREQUENCY IF 4.5 IS RESTRICTED)	RESTRICTED)		
20 200				11, 1	(7) COMMAND: R=2			
***					(8) COMMAND: RUN F3		*	
- the					C. PLACE THE TUBE NUMBER SWITCH 1A2A1S1 TO POSITION 1.			
		M1 4			D. RECORD THE INDICATION ON THE DISS PERFORMANCE LOG. (A READING OF LESS THEN 0.1MA OR MORE THAN 0.6MA INDICATES A PROBLEM MAY EXIST. SEE TO 31M1-2FMQ12-2).	G. (A READING OF SEE TO 31M1-2FN	"LESS THI (Q12-2).	EN 0.1M
'				,	E. REPEAT STEPS C, AND D FOR POSITIONS 2 THRU 14 OF THE TUBE NUMBER SWITCH.	THE TUBE NUMBER	R SWITCH.	* 0
				A. B. (B. (1) A. (B. (1)	A VARIATION OF MORE THAN 35% BETWEEN THE TUBE READINGS OR FROM PREVIOUS INSPECTION VALUES INDICATES A PROBLEM MAY	BE READINGS OR PROBLEM MAY		
					F. , PLACE THE TUBE NUMBER SWITCH IN POSITION 15. RECORD THE PLATE VOLTAGE ON THE DISS	AD THE PLATE VOL	TAGE ON	THE DIS
					PERFORMANCE LOG. NORMAL INDICATION IS 0.5 ± 0.1 DC MA.	MA.		

Resume SET

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70.05 mA is O.K.

OVEMENT ABOVE ZERO IS CONSIDERED GOOD. ORMANCE LOG.  ON THE EXCITER CHASSIS.  SED, RECORD THE INDICATION ON THE DISS (W ± 1 KW).  ED, RECORD THE VSWR ON THE DISS PERFORMANCE  CTED TO JMO ON THE BACK OF THE PROCESSOR/ ON/OFF SWITCH, 1A2A4S3, IN THE OFF POSITION.	CARD TIME PUBLICATION NUMBER AND DATE	MECH NO.	TYPE MECH ROR	WORK AREA(S)	)W	NO.	CARD NO.
OVEMENT ABOVE ZERO IS CONSIDERED GOOD. ORMANCE LOG.  ON THE EXCITER CHASSIS. SED, RECORD THE INDICATION ON THE DISS (W ± 1 KW).  ED, RECORD THE VSWR ON THE DISS PERFORMANCE CTED TO JMO ON THE BACK OF THE PROCESSOR/	SUPPLY POWER ON/OFF SWITC	JLSE POWER S	B. PLACE THE P				je
MOVEMENT ABOVE ZERO IS CONSIDERED GOOD. RFORMANCE LOG.  ON THE EXCITER CHASSIS.  SSED, RECORD THE INDICATION ON THE DISS O KW ± 1 KW).  SSED, RECORD THE VSWR ON THE DISS PERFORMANCE	ENSURE PRINTER SERIAL PORT IS CONNECTED TO JMO C	TER SERIAL PO	A. ENSURE PRINT TRANSCEIVER.				
MANCE		N IONOGRAM.	RUN A CALIBRATION IONOGRAM.	@ 3.			
MANCE		AND: STO	I. ENTER COMMAND: STO	d Wiscon			
1003	TTON DEPRESSED, RECORD TO THAN 0.5).	WITH THE RFL PEP BUTTON DEPRI LOG (SHOULD BE LESS THAN 0.5).	(2) WITH THI LOG (SH				
MOVEMENT ABOVE ZERO IS CONSIDERED GOOD. REPORMANCE LOG.  ON THE EXCITER CHASSIS.	WITH THE FWD PEP BUTTON DEPRESSED, RECORD T	ANCE LOG (S	(1) WITH THI PERFORI			Y	
MOVEMENT ABOVE ZERO IS CONSIDERED GOOD.  RFORMANCE LOG.	OBSERVE THE POWER OUTPUT WINDOW ON THE EXCITER CHASSIS.	POWER OUT	H. OBSERVE THI	'		,	
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2	0202100 01110 COMMAND: RUN A3	dddddd	ENSURE THE PARAMETERS IN THE WINDOW ARE AS FOLLOWS:	COMMAND: SET 3	COMMAND: PRO A3	MOVE S16 ON	EXTEND THE I	EXTENI CONTIN MAY CA	28 DAY INSPECTION	
	01110 16	SSQUU	PARAMETE	ET 3	RO A3	CARD A33	ROCESSO	CAUTION  EXTEND THE FAN DRAWER WHEN THE P/T DRAW CONTINUE SUPPLYING COOLING AIR TO PCB'S. MAY CAUSE PREMATURE COMPONENT FAILURE	NOIT	
	125	CAB	AL NI SE			OF THE	R/TRAN	DRAWER		
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	0106	HEIG	FOLLOW			SCEIVER	VER AND	AWER IS 'S. LACK		m
			ç			MOVE S16 ON CARD A33 OF THE PROCESSOR/TRANSCEIVER FORWARD TO THE CAL POSITION.	EXTEND THE PROCESSOR/TRANSCEIVER (P/T) DRAWER AND ITS COOLING FAN DRAWER.	CAUTION  CAUTION  EXTEND THE FAN DRAWER WHEN THE P/T DRAWER IS EXTENDED TO CONTINUE SUPPLYING COOLING AIR TO PCB'S. LACK OF COOLING MAY CAUSE PREMATURE COMPONENT FAILURE.	02	ELECTRICAL POWER
,			an a			HE CAL PO	IN DRAWE		OLT.	SERVICE
	Y x					OSITION.	;H		1-003	CARD NO.

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STATE SEMONS - SWO
PUBLICATION NUMBER AND DATE
RUN AN A1 IONOGRAM. AT THE COMPUTER KEYBOARD:
FAN DRAWER BACK INTO THE RACK.
ESSOR/TRANSCEIVER REARWARD TO THE RUN
1A2A4S3, IN THE ON POSITION.
,
OBSERVE THE NUMBERS ON THE RIGHT OF THE PRINTOUT. THEY SHOULD BE BETWEEN 5 AND 9 AND SHOULD ALL BE WITHIN ONE OF EACH OTHER. FOR INSTANCE, IF THE PREDOMINATE NUMBER IS 7, NO NUMBER SHOULD BE LOWER THAN 6 OR HIGHER THAN 8. RECORD THESE NUMBERS ON THE DISS PERFORMANCE LOG. PRESERVE THE PRINTOUT FOR LATER COMPARISON.
REQUIREMENTS
INSPECTION

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and the second s							SUB -SYS	WORK UNIT
7.	@ 6.	@ 5.						
REVIEW THE LATEST PERFORMANCE LOG ENTRIES, WITH RESPECT TO THE MOST RECENT PREVIOUS ENTRIES, TO DETERMINE IF A NEGATIVE TREND IS OCCURRING.	TURN OFF THE MONITOR AND PRINTER	RETURN THE EQUIPMENT TO THE ALT-2 (NORMAL) MODE	F. COMMAND: O= NUMBER RECORDED IN 2B(2) ABOVE.	E. COMMAND: DIS	D. AFTER THE TRANSMITTER HAS PULSED THROUGH THE FREQUENCY RANGE SET IN THE A1 PROGRAM AND A FEW SECONDS HAVE BEEN ALLOWED FOR PROCESSING, OBSERVE THE COMPUTER MONITOR PRESENTATION. IT SHOULD BE AN IONOGRAM REPRESENTATIVE OF T PRESENT CONDITIONS ABOVE THE STATION. SHORTLY THEREAFTER, THE PRINTER SHOULD SHOW THE EXACT SAME THING. RECORD, ON THE DISS PERFORMANCE LOG, AN OK IF THE PRESENTATION IS GOOD AND A CHECK MARK IF NOT.	C. COMMAND: RUN A1	28 DAY INSPECTION	
E LOG ENTRIES, WITH RESPE ATIVE TREND IS OCCURRING.	ITER.	ALT-2 (NORMAL) MODE.	ORDED IN 2B(2) ABOVE.		S PULSED THROUGH THE FREQUENCY RANGE SET IN THE A1 DS HAVE BEEN ALLOWED FOR PROCESSING, OBSERVE THE ITATION. IT SHOULD BE AN IONOGRAM REPRESENTATIVE OF THE THE STATION. SHORTLY THEREAFTER, THE PRINTER SHOULD G. RECORD, ON THE DISS PERFORMANCE LOG, AN OK IF THE A CHECK MARK IF NOT.		REQUIREMENTS	INSPECTION
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	TEST AND-: AND: I	CTIO	
MECH NO.	12 SHOUI NY SWITC IN THE CO RAND CO ST. ST. NOPER CO	Z	
CARD TIME	OGRAM TEST  THE FMQ-12 SHOULD BE IN CONTI OPERATE ANY SWITCHES OR CONTINDICATED IN THE CHECKS BELOW THE PRINTER AND COMPUTER MONITHE EQUIPMENT IN THE ALT-1 (DGS) BOARD:  COMMAND: DIS RECORD THE NUMBER UNDER THE L		
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	IONOGRAM TEST  THE FMQ—12 SHOULD BE IN CONTINUOUS OPERATION. DO NOT OPERATE ANY SWITCHES OR CONTROLS OTHER THAN THOSE INDICATED IN THE CHECKS BELOW.  NON THE PRINTER AND COMPUTER MONITOR.  CORM THE FOD TEST.  PUT THE EQUIPMENT IN THE ALT—1 (DGS) MODE.  ESTABLISH THE PROPER CONDITIONS FOR THE TEST BY ENTERING AT THE COMPUTER KEYBOARD:  (1) COMMAND: DIS  (2) RECORD THE NUMBER UNDER THE LETTER O	REQUIREMENTS	INSPECTION
<u> </u>	ION. DO NOT IAN THOSE	ON ON	ELECTRICAL POWER
15 DEC 98	COMPUTE	100	
CHANGE NO.	æ	1-005	CARD NO.

. u.) " (H/4)

,												MIN	MAN
												AREA	WORK
												SYS	WOP
							· · · · ·					SUB -SYS	WORK UNIT
TO SEE A FULL IONOGRAM DISPLAY ON THE MONITOR, SIMULTANEOUSLY DEPRESS ALT AND S.		D. COMMAND: RUN B3	FREQUENCY SPAN (SS TO UU) MUST BE AT LEAST 4 MHZ.		F0D2100 01108 32E	PPPPPPPP SSQUU CAB	C. ENSURE THE PARAMETERS DISPLAYED IN THE WINDOW ARE:	(6) COMMAND: SET 3	(5) COMMAND: PRO B3	(4) PLACE THE PPS POWER ON/OFF SWITCH, 1A2A4S3, IN THE OFF POSITION.	(3) COMMAND: $O = 0$ (ZERO)	56 DAY INSPECTION	
ISPLAY ON THE MONIT ALT AND S.	NOTE		)) MUST BE AT LEAST 4	NOTE	4151 434 1237	XLZT NRW HEIG	ED IN THE WINDOW AI			F SWITCH, 1A2A4S3, IN		REQUIREMENTS	INSPECTION
OR,		•	MHZ.	,	37	[6	RE:			THE OFF POSITION	٠	ON	ELECTRICAL POWER
			¥							Z		ОUТ	SERVICE
,		e			* 1					*		1-005	CARD NO.

1-006	·	N N	MAN	*
NO.		AREA	WORK	Ċ
_		SYS	WO	
WORK AREA(S)		SUB -SYS	WORK UNIT	Ü
				.,
TYPE MECH ROR	E. AFTER APPROXIMATELY 30 TO 45 SECONDS, SHOW THE SAME PRESENTATION AS IN FIGURES. THE LETTERS <b>OK</b> SHOULD B NUMBERED TRACES SHOULD START ON THE PLACE THE PPS POWER ON/OFF SWITCH, 1A:	56 DAY INSPECTION	Y	ا الم
MECH NO.	IMATELY 30 THE PRESENT THE LETTE ACES SHOULD POWER ON	NOI		
CARD TIME	TO 45 SECC ATION AS IN RS OK SHO LD START O			,
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	AFTER APPROXIMATELY 30 TO 45 SECONDS, THE MONITOR AND THEN THE PRINTER SHOULD SHOW THE SAME PRESENTATION AS IN FIGURE 1, MINUS ANY LOCALLY INHIBITED FREQUENCIES. THE LETTERS <b>OK</b> SHOULD BE CLEARLY DEFINED AND THE MAJORITY OF THE NUMBERED TRACES SHOULD START ON THE LEFT BETWEEN 120 AND 200 KM.  PLACE THE PPS POWER ON/OFF SWITCH, 1A2A4S3, IN THE <b>ON</b> POSITION.	REQUIREMENTS	INSPECTION	Ú
	THE MONITOR AND THEN THE PRINTER SHOULD RE 1, MINUS ANY LOCALLY INHIBITED E CLEARLY DEFINED AND THE MAJORITY OF THE LEFT BETWEEN 120 AND 200 KM.  2A4S3, IN THE ON POSITION.	ON.	ELECTRICAL POWER	
15 DEC 98	PRINTER SI BITED WAJORITY M.	OUT	70	<i>!</i> `
CHANGE NO.	HOULD OF THE	1-006	CARD NO.	

FIGURE 1. FULL IONOGRAM

31M1-2FMQ12-6WC-1

<i>.</i> .			le ,										2	s l
1-007	CARD NO.	-											Z Z	
7	Ò												AREA	WORK
													SYS	WO
	WORK AREA(S)	, 1				(	A A						SVS- BUS	WORK UNIT
	REA(S)												SYS	
							@ 4.					@ 3.		
	TYPE MECH ROR	0203100	dddddd	C. ENSURE THE	B. COMMAND: SET 3	A. COMMAND: PRO C3	PERFORM 14 IONOGRAM (ASC AND PREAMPLIFIER SWITCHING) CHECK.	D. WAIT UNTIL THE PRINTER HAS FINISHED	C. COMMAND: RUN AT	B. COMMAND: SET 1	A. COMMAND: PRO A1	PRODUCE A HARD COPY A1 IONOGRAM BY ENTERING:	· 56 DAY INSPECTION	
	MECH NO.	XXTXX	SSQUU	ENSURE THE PROGRAM PARAMETERS IN THE WINDOW ARE:	SET 3	PRO C3	OGRAM (ASC	HE PRINTER	RUN A1	SET 1	PRO A1	COPY A1 IO	CTION	
	CARD TIME	32E	CAB	ARAMETE			AND PRE	HAS FINIS				NOGRAM		7
311		41D1	XLZT	RS IN TH			<b>MPLIFIE</b>					BY ENTE	REQU	INSP
31M1-2FMQ12-6WC-1	PUBLICATION NUMBER AND DATE	424	NRW	HE WINDO			R SWITC	PRINTING.				RING:	REQUIREMENTS	NSPECTION
Q12-6	UMBER AN	1206	HEIG	DW ARE			HING) (							
	ID DATE			***	*	0-5000	CHECK.						ON N	ELECTRICAL POWER
15 DEC 98						method				×			OUT	ER SERVICE
	CHANGE NO.		1						*		•1		1-007	CARD NO.

									MIN AREA	and the last of
_							<del></del>		A SYS	
									SUB -SYS	WORK UNIT
	5	ڊ	-	王	٩	,π	Ĺπ	D.	56	
	(1) COMMAND: DIS	WHEN ALL 14 OF THE IONOGRAMS ARE COMPLETE, ENTER:	PERFORM STEPS E AND F FOR ANTENNA SELECTOR POSITIONS 2 THROUGH 7.	YOU NOW HAVE TWO SHORT IONOGRAMS. THE FIRST SHOULD SHOW ALL OF THE O TRACE AND VERY LITTLE OF THE X TRACE. THE SECOND SHOULD SHOW ALL OF THE X TRACE AND VERY LITTLE OF THE O TRACE.	AFTER THE IONOGRAM HAS PRINTED, WHILE STILL DEPRESSING THE TEST SWITCH, PRESS AND HOLD THE O/X SWITCH AND ENTER COMMAND: RUN. HOLD BOTH SWITCHES DEPRESSED UNTIL IONOGRAM IS FINISHED PRINTING,	PLACE THE ANTENNA SELECTOR ON THE ASC TO POSITION 1, PRESS AND HOLD THE TEST SWITCH ON THE ASC AND ENTER COMMAND: RUN C3. HOLD TEST SWITCH DEPRESSED UNTIL IONOGRAM IS FINISHED PRINTING.	ENSURE PRINTER SERIAL PORT IS CONNECTED TO JMO ON THE BACK OF THE PROCESSOR/TRANSCEIVER.	USING THE A1 IONOGRAM RUN IN STEP 3 ABOVE AS A REFERENCE, SET SS AT 1 MHZ BELOW FOF2 AND UU AT 1 MHZ ABOVE THE CORRESPONDING X RETURNS FOR FOF2.	56 DAY INSPECTION	
		AMS ARE COMPLETE, ENTER	ANTENNA SELECTOR POSIT	ONOGRAMS. THE FIRST SHO THE SECOND SHOULD SHO	RINTED, WHILE STILL DEPRES NTER COMMAND: RUN. HOLPRINTING,.	OR ON THE ASC TO POSITION TER COMMAND: RUN C3. HO NG.	T IS CONNECTED TO JMO ON	N IN STEP 3 ABOVE AS A REFI	REQUIREMENTS	INSPECTION
			IONS 2 THROUGH	ULD SHOW ALL OF W ALL OF THE X TI	SSING THE TEST SID BOTH SWITCHES	N 1, PRESS AND HO ILD TEST SWITCH I	N THE BACK OF TH	ERENCE, SET SS A	ON	ELECTRICAL POWER
			7.	THE OTE	WITCH, PR S DEPRES	OLD THE T DEPRESSE	m	T 1 MHZ B	OUT	SERVICE
				VERY	SED SED	EST EST		ELOW	1-007	CARD NO.

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1-008		MIN	MAN	
ARD NO.		AREA	NG NG	,
<		SYS	MOE	
WORK AREA(S)		SVS- BUS	WORK UNIT	1
3	@ 5. @ 6. 9. 10.	•		
TYPE MECH RQR	RETURN THE EQUIPMENT TO THE ALT-2 (NORMAL) MODE.  TURN OFF THE MONITOR AND PRINTER.  REVIEW THE 7 SETS OF IONOGRAMS TO INSURE A SIGNIFICANT CHANGE FROM O TO X.  COMPARE THESE IONOGRAMS WITH THOSE TAKEN 56 DAYS AGO TO DETERMINE IF SIGNIFICAN DEGRADATION IS OCCURRING.  RECORD WHETHER THE NEW IONOGRAMS ARE OK OR NOT ON THE DISS PERFORMANCE LOG.  FILE THE PRESENT 14 IONOGRAMS FOR COMPARISON NEXT MONTH.	56 DAY INSPECTION		
MECH NO.	MENT TO THI ITOR AND PE OF IONOGRA NOGRAMS W CCURRING. 14 IONOGRAN	ION		
CARD TIME	E ALT—2 (N RINTER. AMS TO INS VITH THOSE NOGRAMS. NS FOR CO			4
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	ORMAL) MODE. SURE A SIGNIFICANT CHANGE FROM O TO X. TAKEN 56 DAYS AGO TO DETERMINE IF SIGNIFICANT ARE OK OR NOT ON THE DISS PERFORMANCE LOG. MIPARISON NEXT MONTH.	REQUIREMENTS	INSPECTION	1
	RE A SIGNIFICANT CHANGE FROM O TO X. AKEN 56 DAYS AGO TO DETERMINE IF SIG RE OK OR NOT ON THE DISS PERFORMANC PARISON NEXT MONTH.	ON	ELECTRICAL POWER	
15 DEC 98	IF SIGNIFI	OUT	SERVICE	
CHANGE NO.	CANT OG.	1-008	CARD NO.	

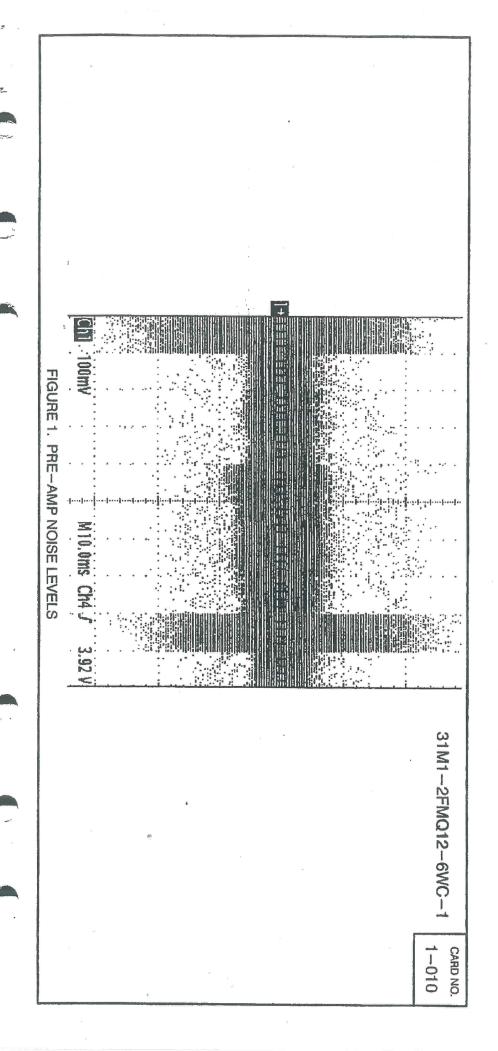
1-009	CABDIN				,					+ 1	M Z	tation.
9	5		THE STATES	-							AREA	WORK
\$	٤	- 16 10							,		SYS	WOR
WORK AREA(S)	ORK AREA(S)										SVS- BUS	WORKUNIT
		@ 3.	@ 2.						-	PRE-AN	•	
TYPE MECH ROH	A. SIMULTANEOUS	PRE-AMP GAIN TEST PROCEDURE:	TURN ON THE FREQUENCY SYNTHESIZER TO	E. 7-SECTION IF SPLITTER.	D. 2 RG58 TEST CABLES, APPROX. 10 FT AND 6 FT.	C. BNC T	<ul> <li>B. FREQUENCY SYNTHESIZER.</li> </ul>	A. OSCILLOSCOPE, INFINITE PERSISTENCE,	MATERIALS NEEDED:	PRE-AMP GAIN, PHASE, DISCRETE FOURIER TRANSF CHECK.	84 DAY INSPECTION	
MECH NO.	MECH NO	T PROCEDU	UENCY SYN	SPLITTER.	\BLES, APPR		NTHESIZER.	, INFINITE P	• •	CRETE FOU	ON	
CARD TIME	ALT AND 1	RE:	THESIZER 1		OX. 10 FT /		ř	ERSISTENC		RIER TRAN		
31M1-2FMQ12-6WC-1	SIMULTANEOUSLY DEPRESS ALT AND 1 TO ENTER THE DGS MODE.		TO ALLOW SUFFICIENT WARMUP TIME.		ND 6 FT.			Œ, PREFERABLY DIGITAL.		SFORM CALIBRATION TEST AND DIGITIZER CALIBRATION	REQUIREMENTS	INSPECTION
	S MODE.		NT WARMUP TIME					ITAL.		N TEST AND DIGIT	ON	ELECTRICAL POWER
15 DEC 98			•							TIZER CALI	OUT	SERVICE
CHANGE NO.	CHANGE NO.		÷		,	1.2	,			BRATION	1-009	CARD NO.

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		v ==	S	MAN
		,	AREA	WORK
			SYS	10AN
			SVS- BUS	WORK UNIT
CONNECT BNC T TO JLS. CONNECT PLS TO ONE SIDE OF THE T AND CONNECT THE OTHER SIDE TO CHANNEL 1 OF THE OSCILLOSCOPE.  G. CONNECT OSCILLOSCOPE EXTERNAL TRIGGER INPUT TO MONITOR C ON THE FRONT OF THE PROCESSOR/TRANSCEIVER.  H. SET OSCILLOSCOPE CHANNEL 1 AMPLITUDE TO 100 MV/DIV AND SWEEP SPEED TO 10 MS/DIV.  SET TRIGGER TO CHANNEL 4 NORM AC	E. PLACE THE PPS POWER ON/OFF SWITCH, 1A2A4S3, TO THE OFF POSITION.  NOTE  ALTHOUGH ANY OSCILLOSCOPE THAT HAS A PERSISTENCE FUNCTION CAN BE USED FOR THE FOLLOWING TEST, BEST RESULTS ARE ATTAINED WHEN THE O'SCOPE IS DIGITAL.	B. COMMAND: DIS  C. RECORD THE NUMBER UNDER THE LETTER O.  D. COMMAND: O = 0 (ZERO)	84 DAY INSPECTION REQUIREMENTS ON OUT 1-009	INSPECTION ELECTRICAL POWER SERVICE CARD NO.

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NORK   NORK UNIT   NA DAY INSPECTION   NASPECTION   NAS		15 DEC 98	15 DE	-6WC-1	31M1-2FMQ12-6WC-1	31							1-010	
NORKUNIT   NAT	HANGE NO.	0		H AND DATE	BLICATION NUMBE	$\neg$	CARD TIME	MECH NO.	TYPE MECH ROR	AREA(S)	WORK		CARD NO.	ဂ္ဂ
NORKUNIT   NATION   NASPECTION   NASPECTIO		¥	,	i.					. G=0 H=300				á	ų
NORKUNIT									F=5	<del>Uni</del>				
WORK UNIT   SUB -SYS						VING:	HE FOLLO	RI. INPUT T						
WORKUNIT   NOTE   NOT	, )		# J.S	THAT HAS A	Y FREQUENCY HEN BACK TO	AND T	DD, INPUT I	NOT A PERIO	IF Q IS N					
WORK UNIT   184 DAY INSPECTION   REQUIREMENTS   SERVICE   ON   OUT	:				Ħ	NO.						- <del>1</del> 11		
WORK UNIT  SYS  SUB -SYS  J. COMMAND: PRO G3  K. COMMAND: SET 3  L. ENSURE THE PARAMETERS IN THE WINDOW ARE:  PPPPPPPP FRQUY CAB XLZT NRW HEIG  RECTRICAL POWER SERVICE  OUT  REQUIREMENTS IN THE WINDOW ARE:	A With			000		)B20		00.00	079411E					
WORK UNIT  SYS  SUB -SYS  J. COMMAND: PRO G3  K. COMMAND: SET 3  L. ENSURE THE PARAMETERS IN THE WINDOW ARE:				EIG		(LZT		FRQUY	dddddd	i i i i i i i i i i i i i i i i i i i				
WORK UNIT  SYS  SUB -SYS  -SYS					N ARE:	/INDO/	SINTHEV	ARAMETER	L. ENSURE THE F					
WORK UNIT SYS SUB -SYS  34 DAY INSPECTION INSPECTION REQUIREMENTS  J. COMMAND: PRO G3	<b>b</b> ,							ET 3						
WORK UNIT INSPECTION INSPECTION REQUIREMENTS ON OUT								RO G3			35 T			
WORK UNIT INSPECTION ELECTRICAL POWER SERVICE	1-010	TUO	_	9	UIREMENTS	REC		TION	.84 DAY INSPEC	SYS-	-		-	MN
	CARD NO.	SERVICE	AL POWER	ELECTRICA	ECTION	NSF				7	WORK UN			MA



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CARD NO.		MIN	MAN
)11 No		AREA	WORK
		SYS	WOF
WORK AREA(S)		SAS- BUS	WORK UNIT
ASS		Ŝ	
	я о я 2 о я	œ	
TYPE MECH RQR	COMM AN OS (1) TI (2) S: (3) TI COMM DISCC DISCC	4 DAY	
CH RQR	AN OSCILLOSCOPE PRESENTATION SIMILAR TO FIGURE 1 SHOULD APPEAR.  (1) THERE SHOULD BE 8 NOISE SEGMENTS, EACH 10 MS WIDE.  (2) STARTING FROM THE LEFT SHOULD BE THE SUM SIGNAL @ 600 TO 800 THE 7 ANTENNA SIGNALS, EACH @ 100 TO 150 MV.  (3) THE SIGNAL AMPLITUDES FROM THE 7 ANTENNAS SHOULD BE WITHIN OTHER.  COMMAND: STO  DISCONNECT BNC T FROM 1A2A5 JLS AND RECONNECT PLS.  PUSCONNECT OSCILLOSCOPE TRIGGER CABLE FROM MONITOR C.	84 DAY INSPECTION	
ME	RUN G3 COPE I HOULD G FROM TO WAL AM BNC T	CTION	
MECH NO.	PRESEN M THE L M SIGNA PLITUD PLITUD		
CARD TIME	UTATIOI IOISE S IEFT SH IES FRO 1A2A5		
	N SIMII SEGME HOULD CH @ DM THI	_	
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	LAR TO FIGURE 1 SHOULD ENTS, EACH 10 MS WIDE.  BE THE SUM SIGNAL @ 60 100 TO 150 MV.  E 7 ANTENNAS SHOULD BUT AND RECONNECT PLS.  CABLE FROM MONITOR C.	REQUIREMENTS	INSPECTION
PUBLICATION NUMBER AND DATE 31M1 - 2FMQ12-6WC-	FIGUR ACH 10 E SUM 150 MV TENNAS ONNEC	MENTS	S
VIBER AN	E 1 SHO MS WI SIGNAL ( ) SHOU		
D DATE	OULD ADE.		ELECTRICAL POWER
<del>_</del>	APPEAF WITHIN	2	CAL POWI
15 DEC 98	IMAND: RUN G3  SCILLOSCOPE PRESENTATION SIMILAR TO FIGURE 1 SHOULD APPEAR.  THERE SHOULD BE 8 NOISE SEGMENTS, EACH 10 MS WIDE.  STARTING FROM THE LEFT SHOULD BE THE SUM SIGNAL @ 600 TO 800 MV, FOLLOWED BY THE 7 ANTENNA SIGNALS, EACH @ 100 TO 150 MV.  THE SIGNAL AMPLITUDES FROM THE 7 ANTENNAS SHOULD BE WITHIN 10% OF EACH OTHER.  IMAND: STO  CONNECT BNC T FROM 1A2A5 JLS AND RECONNECT PLS.  CONNECT OSCILLOSCOPE TRIGGER CABLE FROM MONITOR C.	-	
	OLLOW F EAC	2	SERVICE
CHANGE NO.	H VED BY	1-011	CARD NO.
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	Date of the Control o						<i>2</i>		1	M	M A A
	H							,		AREA	WORK
				N - 107 1						SYS	MOI
				7.4						SAS- BUS	WORK UNIT
ē									@ 4.		
	<b>.</b> 71			ĬΠ	D.	Ċ	œ	Ņ	PHA	84	
F=5 G=0 H=300	COMMAND: DRI. INPUT THE FOLLOWING	0594133	daddadd	ENSURE THE PARAMETERS IN THE WINDOW ARE:	COMMAND: SET 3	COMMAND: PRO G3	INSTALL SERIAL CABLE BET PROCESSOR/TRANSCEIVER.	PULL OUT THE OF THE CHASS CONNECT THEI	PHASE TEST PROCEDURE:	84 DAY INSPECTION	
	I. INPUT T	00.00	FRQUY	ARAMETER	T3	0 63	- CABLE E	ANTENNA IS (THE IN ITO THE	DURE:	NOI	
	HE FOLL	15E	CAB	SIN THE			ER.	SWITCH TERNAL 7-SECTI			
	OWING:	OB20	XLZT	WINDOV			THE PRII	CHASSIS ONES, NO		REQ	INSP
	,	524	NRW	V ARE:			NTER AND	DISCON		REQUIREMENTS	INSPECTION
		4000	HEIG				1A1A1 (	NECT LO			Pon
						ŵ.	INSTALL SERIAL CABLE BETWEEN THE PRINTER AND 1A1A1 JMO AT THE REAR OF THE PROCESSOR/TRANSCEIVER.	PULL OUT THE ANTENNA SWITCH CHASSIS. DISCONNECT LG1 THRU LG7 AT THE LOWER REAR OF THE CHASSIS (THE INTERNAL ONES, NOT THE CABLES COMING FROM THE ANTENNA) AND CONNECT THEM TO THE 7-SECTION IF SPLITTER.		ON	ELECTRICAL POWER
							IR OF THE	THE LOWI	3	TUO	SERVICE
	yr Xi							ER REAR VA) AND		1-011	CARD NO.

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1-012		MAN	
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<		SAS	
WORK AREA(S)		WORK UNIT	100
	رو <u>ب</u> ج	,00	
TYPE MECH RQR	SET THE FREQUENCY SYNTHESIZER TO CONNECT THE 50 OHM OUTPUT OF THE COMMAND: RUN G3  APPROXIMATELY 26 SECONDS LATER, AN THE PRINTER WILL SWEEP ACROSS 8 TIN OPERATIONAL INFORMATION ON THE LEFIGURE 2.  THE COLUMN INFORMATION AT TO ASSIST WITH STEP 4K.	84 DAY INSPECTION	
MECH NO.	HE FREQUENCY SYNTH ECT THE 50 OHM OUTP AND: RUN G3  NIMATELY 26 SECONDO TIONAL INFORMATION E 2.  THE COLUMN INFORMATE AK.  ASSIST WITH STEP 4K.	TION	
CARD TIME	HESIZER T PUT OF THE DS LATER, ACROSS 8 N ON THE I		
31M1-2FMQ12-6WC-1	SET THE FREQUENCY SYNTHESIZER TO 5.002500 MHZ AND 8.7 DB (100 MV) ATTENUATION.  CONNECT THE 50 OHM OUTPUT OF THE FREQUENCY SYNTHESIZER TO THE IF SPLITTER INPUT.  COMMAND: RUN G3  APPROXIMATELY 26 SECONDS LATER, AND APPROXIMATELY EVERY 21 SECONDS THEREAFTER, THE PRINTER WILL SWEEP ACROSS 8 TIMES, GIVING 2 COLUMNS OF SIGNALS AND SOME OPERATIONAL INFORMATION ON THE LEFT. THE PRINTOUT SHOULD BE NEARLY IDENTICAL TO FIGURE 2.  NOTE  THE COLUMN INFORMATION AT TOP LEFT OF FIGURE 2 WAS ADDED TO ASSIST WITH STEP 4K.	INSPECTION , REQUIREMENTS	
	8.7 DB (100 MV). THESIZER TO THE Y EVERY 21 SECCUMNS OF SIGNAL SHOULD BE NE/	ON ON	
15 DEC 98	ATTENUATE IF SPLITT NDS THEF SAND SCARLY IDEN	SERVICE	-
CHANGE NO.	TION. TER INPUT. TEAFTER, TICAL TO	1-012	-

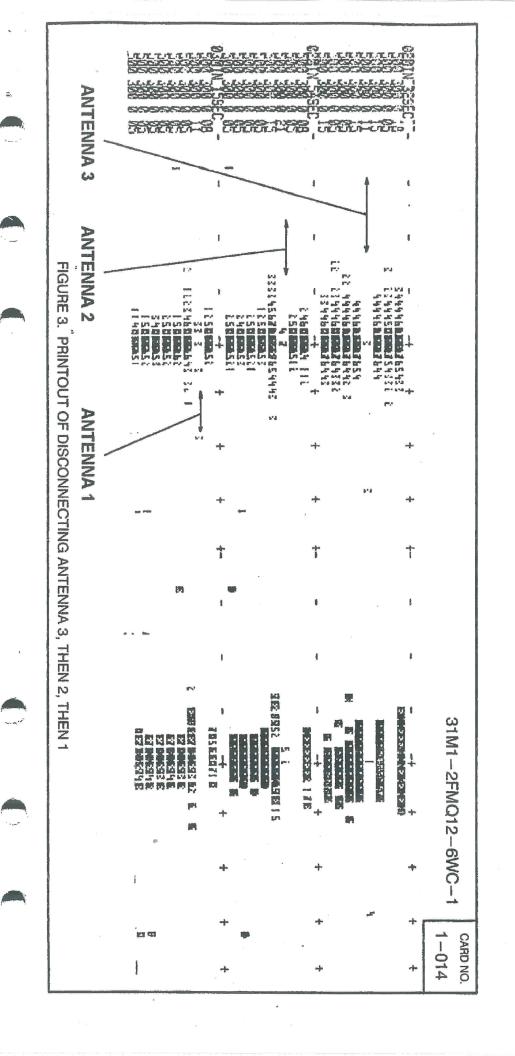
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	15 DEC 98	15 DI	6WC-1	31M1-2FMQ12-6WC-1	VI TO		×	-			1-013	1
CHANGE NO.			AND DATE	PUBLICATION NUMBER AND DATE	CARD TIME	MECH NO.	TYPE MECH ROR	TYPE	WORK AREA(S)		CARD NO.	CARI
DURING SES ONLY	PRESENT AND PASS	OF NOISE	AMOUNT C	FOR COLUMN 11, THE SOUNDER LOOKS AT THE AMOUNT OF NOISE PRESENT DURING NON-SIGNAL TIME, SETS AN ATTENUATION EQUAL TO THAT NOISE AND PASSES ONLY SIGNAL STRENGTHS ABOVE THAT POINT.	THE SOUNI ME, SETS AN THS ABOVE	FOR COLUMN 11, THE SOUNDER LOOKS NON-SIGNAL TIME, SETS AN ATTENUATI	(a) FOR NON SIGN					н
				AMPLITUDE OVERFLOW	AMPLITUDE		COLUMN 12:	(8)			i i	
*		*		NOISE THRESHOLD VALUE	NOISE THRE		COLUMN 11:	(7)		age the set		
					BLANK		COLUMN 10:	(6)		- Hude		
* 1					GAIN USED		COLUMN 9:	(5)			ii Talkiyaa	
					BLANK		COLUMN 8:	(4)	2			
				≘D	HEIGHT USED		COLUMNS 5-7:	(3)				
					BLANK		COLUMN 4:	(2)		feet en free		
				YUSED	FREQUENCY USED		COLUMNS 1-3:	(1)		ir gamadhaith d		
				STARTING FROM THE LEFT, THE INFORMATION GIVEN IS:	, THE INFOR	)M THE LEFT	ARTING FRO	K. STA			(A.C.)	,
1-013	OUT	Ή	OFF	REQUIREMENTS		TION	84 DAY INSPECTION	-84 DA	SUB -SYS	SYS	AREA	ĭ Z
CARD NO.	SERVICE	AL POWER	ELECTRICAL POWER	INSPECTION					WORK UNIT	WC	WORK	MAN

		WOR	WORK UNIT				ELECTRICAL POWER	SERVICE	CARD NO.
MIN	AREA	SYS	SUB -SYS	84 DAY IN	84 DAY INSPECTION	REQUIREMENTS	OFF	OUT	1-013
				(b)	FOR COLUMN 12, SEE T	FOR COLUMN 12, SEE TO 31M1-2FMQ12-1 FOR EXPLANATION AND CONVERSION FORMULAE.	EXPLANATION AND	CONVERS	NON
				L. THE LEF OVER TH OPTIFOL	T SIGNAL COLUMN IS AM HE MINUS TO PLUS DOPP NT 15 IN THE MIDDLE OF I	THE LEFT SIGNAL COLUMN IS AMPLITUDE. IT SHOULD BE CENTERED, WITHIN ONE CHARACTER, OVER THE MINUS TO PLUS DOPPLER CONVERGENCE POINT. THERE SHOULD BE AT LEAST ONE OPTIFONT 15 IN THE MIDDLE OF EACH SIGNAL.	CENTERED, WITHIN	ONE CHA	RACTE AST ON
				M. THE RIG DOPPLE PHASING	HT SIGNAL COLUMN IS PIER CONVERGENCE POINT	THE RIGHT SIGNAL COLUMN IS PHASE. IT SHOULD BE CENTERED OVER THE MINUS TO PLUS DOPPLER CONVERGENCE POINT AND MUST BE WITHIN ONE DIGIT OF ZERO, WHICH IS CORRECT PHASING. THEREFORE, THE NUMBERS ALLOWED ARE 1, 0 AND 15.	TERED OVER THE EDIGIT OF ZERO, V	MINUS TO WHICH IS C	PLUS ORRE
	, ,			N. IN BOTH 7. NOTIN THE OTH	IN BOTH SIGNAL COLUMNS, THE SUM SIG 7. NOTICE THAT ANTENNA 1 IN THE PHAS THE OTHER ANTENNAS ARE REFERENCE!	IN BOTH SIGNAL COLUMNS, THE SUM SIGNAL IS SHOWN FIRST, FOLLOWED BY ANTENNA 1 THRU7. NOTICE THAT ANTENNA 1 IN THE PHASE COLUMN HAS NO SIGNAL. THAT IS BECAUSE ALL OF THE OTHER ANTENNAS ARE REFERENCED TO IT.	RST, FOLLOWED BY O SIGNAL. THAT I	Y ANTENN S BECAUS	A 1 THE
			100	O. DISCON DISAPPE	DISCONNECT LG7 FROM THE IF S DISAPPEAR ON THE PRINTOUT.	DISCONNECT LG7 FROM THE IF SPLITTER AND LOOK TO SEE THE ANTENNA 7 SIGNAL DISAPPEAR ON THE PRINTOUT.	E THE ANTENNA 7	SIGNAL	
					* ^	NOTE			
					FIGURE 3 IS AN EXAMPLE OF THE PRINTOUT WHEN DISCONNECTING THE ANTENNAS. IT NORMALLY TAKES TWO PRINTOUT CYCLES TO CHECK EACH ANTENNA, SINCE, AT THE TIME OF CONNECT OR DISCONNECT. THE SIGNAL WILL BE SPREAD ACROSS THE PRINTOUT.	FIGURE 3 IS AN EXAMPLE OF THE PRINTOUT WHEN DISCONNECTING THE ANTENNAS. IT NORMALLY TAKES TWO PRINTOUT CYCLES TO CHECK EACH ANTENNA, SINCE, AT THE TIME OF CONNECT OR DISCONNECT. THE SIGNAL WILL BE SPREAD ACROSS THE PRINTOUT.	ISCONNECTING T CYCLES TO NNECT OR DIS-		

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NSPECTION  SUB —SYS  RECONNECT LG7, DISCONNECT LG6 AND LOOK FOR ANTENNA 6 SIGNAL TO DISAPPEAR.  P. RECONNECT LG7, DISCONNECT LG6 AND LOOK FOR ANTENNA 6 SIGNAL TO DISAPPEAR.  INDIVIDUALLY CHECKED. SEE FIGURE 3.  R. COMMAND: STO  S. DISCONNECT LG1 THRU LG7 FROM THE IF SPLITTER, DISCONNECT THE IF SPLITTER FROM THE FREQUENCY SYNTHESIZER AND TURN IT OFF.  T. RECONNECT LG1 THRU LG7 TO THEIR RESPECTIVE CONNECTORS AT THE BOTTOM REAR OF THE ANTENNA SWITCH CHASSIS.  U PUSH THE ANTENNA SWITCH CHASSIS BACK INTO THE RACK.  CARD TIME  NORK AREA(S)  PUBLICATION NUMBER AND DATE  NORF AREA(CONNECT LG1 THRU LG7 FROM THE IF SPLITTER, DISCONNECTORS AT THE BOTTOM REAR OF THE ANTENNA SWITCH CHASSIS BACK INTO THE RACK.  CHANGE NO.  CHANGE
JISCONNECT LG6 ANI NUIT SPILLOVER, THE LEASE TO COMPLETE WORKED SEE FIGURE 3. KED. SEE FIGURE 3. CH CHASSIS. A SWITCH CHASSIS E CHNO. CARD TIME

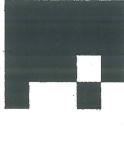


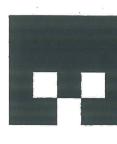
NSFORM CALIBRATION PROCEDURE: THE DISS MUST BE ABLE TO SON A 2 HZ VARIANCE IN THE RECEIVED SIGNAL.  FROM JMS AT THE REAR OF THE P/T AND CONNECT THE 50 OHM OUT YNTHESIZER TO JMS.  IAL CABLE BETWEEN THE PRINTER AND JMO AT THE REAR OF THE P.  CY SYNTHESIZER FOR AN OUTPUT OF 225,000 HZ AT 100 MV RMS (~8)  METERS ARE AS FOLLOWS:  OUY CAB XLZT NRW HEIG  3 3 2 0100 765 1204  CH NO. CARD TIME PUBLICATION NUMBER AND DATE CH	31M1-2FMQ12-6WC-1			1-015
P/T. -8.7 DBM).	CARD TIME	TYPE MECH ROR ME	WORK AREA(S)	CARD NO.
P/T. -8.7 DBM).		G. COMMAND: RUN F3		
P/T. -8.7 DBM).	32E 0100	0400100 02		19
P/T8.7 DBM).	CAB XL2T	PPPPPPPP FR		
P/T. -8.7 DBM).	METERS ARE AS FOLLOWS:	F. ENSURE THE PARAN		
P/T. -8.7 DBM).		E. COMMAND: SET 3		
P/T. -8.7 DBM).		D. COMMAND: PRO F3		
P/T.	CY SYNTHESIZER FOR AN OUTP	C. SET THE FREQUENC		
ER TRANSFORM CALIBRATION PROCEDURE: THE DISS MUST BE ABLE TO ACT UPON A 2 HZ VARIANCE IN THE RECEIVED SIGNAL.  I PMS FROM JMS AT THE REAR OF THE P/T AND CONNECT THE 50 OHM OUTPUT OF NCY SYNTHESIZER TO JMS.		B. CONNECT THE SERI		
	FROM JMS AT THE REAR OF THI YNTHESIZER TO JMS.	A. DISCONNECT PMS F		
	NSFORM CALIBRATION PROCEIN THE RI	@ 5. DISCRETE FOURIER TRAI		
	REQUIREMENT	84 DAY INSPECTION	SYS SUB -SYS	MIN AREA
INSPECTION ELECTRICAL POWER SERVICE CARD NO.	INSPECTION		WORKUNIT	



31M1-2FMQ12-6WC-1

CARD NO. 1-015





**OPTIFONT 12 AND 13** 

FIGURE 4.

1-016	CARD NO.		9									MIN	MAN
)16	NO.	4										AREA	WORK
	Ş											SYS	WOR
	WORK AREA(S)	Œ	7									SVS - BUS	WORK UNIT
		6.	inginj	_	2009	-	_			_	9		
	TYPE MECH ROR	PERFORM DIGITIZER CALIBRATION PER 31M1-	P. SIMULTANEOUSLY DEF	O. PLACE THE PPS POWER ON/OFF SWITCH,	N. ENTER THE NUI	M. COMMAND: DIS	DISCONNECT T	K. COMMAND: STO	J. THE PRINTOUT SHOULD BE A SERIES OF PAPER (SEE FIGURE 4).	. CHANGE THE FREQUENCY SYNTHESIZER	H. THE PRINTOUT SHOULD BE A SERIES OF PAPER (SEE FIGURE 4).	84 DAY INSPECTION	
	MECH NO.	CALIBRATIO	SLY DEPRESS SATION.	POWER ON	MBER, RECO	,	HE TEST CAR	0	SHOULD BE JURE 4).	REQUENCY	SHOULD BE JURE 4).	NOIT	
	CARD TIME	N PER 31M	ALT AND 2	OFF SWITC	RDED IN ST		BLE FROM J		A SERIES O	SYNTHESIZE	A SERIES O		
31M1-2FMQ12-6WC-1	PUBLICATION NUMBER AND DATE	1-2FMQ12-9.	SIMULTANEOUSLY DEPRESS ALT AND 2 TO PUT THE SYSTEM BACK INTO THE ARTIST (NORMAL) MODE OF OPERATION.	H, 1A2A453, TO THE ON POSITION	ENTER THE NUMBER, RECORDED IN STEP 3C ABOVE, UNDER THE LETTER O.		DISCONNECT THE TEST CABLE FROM JMS AND RECONNECT PMS TO JMS.		F OPTIFONT 12'S OR 13'S ON THE RIGHT HALF OF THE	ER OUTPUT TO 225, 002 HZ.	F OPTIFONT 7'S OR 8'S ON THE RIGHT HALF OF THE	REQUIREMENTS	INSPECTION
	AND DATE		M BACK INTO TH	ON POSITION.	ER THE LETTER		T PMS TO JMS.		R 13'S ON THE F	002 HZ.	8'S ON THE RIG	NO	ELECTRICAL POWER
15 DEC 98			HE ARTIST (N		0.				NGHT HALF (		HT HALF OF	TUO	ER SERVICE
	CHANGE NO.	7	ORMAL)		·		-		OF THE		THE	1-016	CARD NO.

	Z Z	MAN
	AREA	WORK
	SYS	WOI
	SUB -SYS	WORK UNIT
့ (၁၈ (၁၈		
TURN ON THE FACILITY INPUT POWER CIRCUITUPS.  OBSERVE THAT THE DISS IS AUTOMATICALLY I	168 DAY SPECTION	
ER CIRCUIT BREAKER, THE TRANSMI	REQUIREMENTS	INSPECTION
T BREAKER, THE TRANSMITTER RACK MAIN POWER AND FUNCTIONING NORMALLY	OFF	ELECTRICAL POWER
K MAIN PC	OUT	SERVICE
WER AND	1-017	CARD NO.

						***************************************									1
	1-017	CARD NO.		j.									S Z	WAN	
	17	NO.		4-2-2-2-2-2									AREA	WORK	
	1	W											SYS	WOR	
		WORK AREA(S)		t							(	3	SUB -SYS	WORK UNIT	
			.4	ω	@ 2.	1						RECE			
		TYPE MECH ROR	SEAL LEAKS WITH SILICONE SEALANT AS NECESSARY	OPEN EACH RECEIVE ANTENNA PREAMPLIFIER BOX AND INSPECT FOR WATER INTRUSION.	TURN <b>OFF</b> THE TRANSMITTER RACK MAIN POWER, THE UPS AND THE FACILITY INPUT POWER CIRCUIT BREAKER.	AND ARE	RF RADI/		B. SILICONE SEALANT	A. SCREWDRIVER, CABINET STYLE, 6 INCH	MATERIALS NEEDED:	RECEIVE ANTENNA	168 DAY INSPECTION		
		MECH NO.	ILICONE SEA	E ANTENNA	NSMITTER RA	AND ARRANGEMENTS ARE MADE THROUGHOUT THE ENTIRE INSPE	ATION HAZAF		ANT	, CABINET ST	Ÿ		TION		
,		CARD TIME	LANT AS N	PREAMPLIF	ACK MAIN P	S ARE MADI	D WHEN T	8	1	TYLE, 6 INC					
	31M1-2FMQ12-6WC-1	PUBLICATION NUMBER AND DATE	ECESSARY.	IER BOX AND INSPE	OWER, THE UPS AN	E TO ENSURE IT REMAINS OFF ECTION.		WARNING		_			REQUIREMENTS	INSPECTION	
		ND DATE		CT FOR WATER IN	D THE FACILITY IN	AAINS OFF	SE						OFF	ELECTRICAL POWER	
	15 DEC 98	TV.		TRUSION.	PUT POWI								TUO	SERVICE	
		CHANGE NO.		*	20		,	/		- Control of the Cont			1-017	CARD NO.	

			-		712 III-							hangang Artisa	í
CARD NO. 1-018	-	1.000			and the same	VIII III III				+	M	XA XA	
18 No	,										AREA	WORK	
		10								J.	SYS	OM	
WORK AREA(S)	. ,									8	SUB -SYS	WORK UNIT	
	@ 2			v						LOCA			
ТҮРЕ МЕСН ПОЯ	TURN ON THE SPECTRUM ANALYZER AND	G. 2 EA RG-58 TEST CABLES	F. FEMALE, N TYPE, INLINE CONNECTOR (BULLET)	E. 2 EA N TO BNC ADAPTORS	D. SREWDRIVER HEX TYPE, 5/16 IN	C. SCREWDRIVER, PHILLIPS, #2	B. SCREWDRIVER, COMMON, #2	A. SPECTRUM ANALYZER	EQUIPMENT REQUIRED:	LOCAL INTERFERENCE CHECK	336 DAY INSPECTION	3	
MECH NO.	CTRUM ANAL	EST CABLES	E, INLINE CO	ADAPTORS	HEX TYPE, 5/	R, PHILLIPS, #	R, COMMON,	IALYZER	RED:	ECK	CTION		
CARD TIME	YZER AND /		NNECTOR		16 IN	ĸ	#2						
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	ALLOW SUFFICIENT WARM-UP TIME.		(BULLET)								REQUIREMENTS	INSPECTION	
	WARMUP TIME.		et et								ON	ELECTRICAL POWER	
15 DEC 98					A						OUT	(0	
CHANGE NO.			*	×	*	X		*			1-018	CARD NO.	

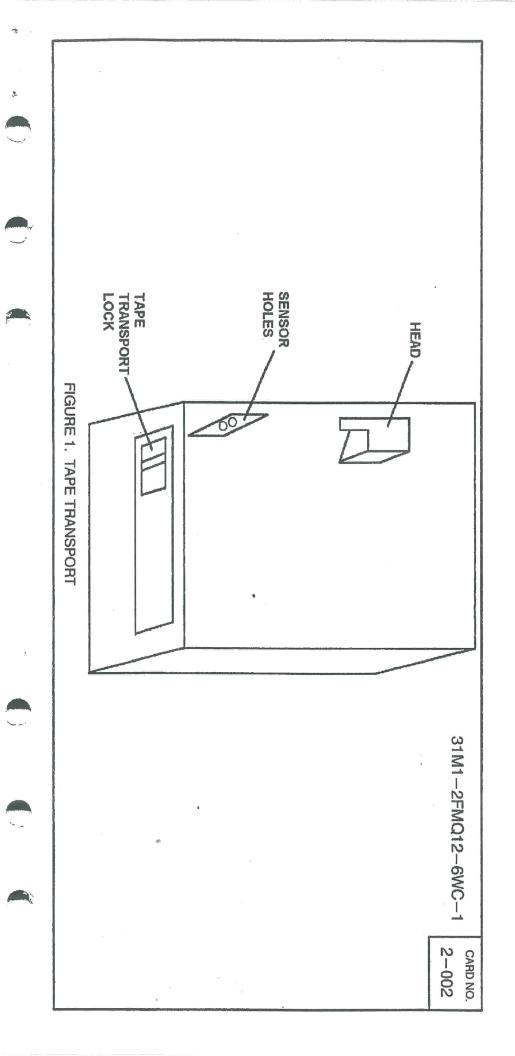
WORK UNIT  ARREA  SYS  SUB -SYS  B  336 DAY INSPECTION  336 DAY INSPECTION  B  336 DAY INSPECTION  B  336 DAY INSPECTION  B  337 TURN ON PRINTER AND RECORD PRESENT OF IONOGRAM OR DEPRESSING PRINT SCREEN. IONOGRAM AS SOON AS IT IS TURNED ON.)  B  55 DISCONNECT IT TO THE TRANSMITTER CABLE, PER1, FIR CONNECT IT TO THE SPECTRUM ANALYZER 5  CONNECT IT TO THE SPECTRUM ANALYZER TO:  A. SWEEP START: 0 HZ  B. SWEEP STOP: 2 MHZ  C. ATTENUATION: 10 DB/DIV  75 RECORD FREQUENCY AND STRENGTH OF THE	SYS SUB-SYS  ### 336 DAY INSPECTION  ### 336 DAY INSPECTION  ### 336 DAY INSPECTION  ### BOURREMENTS  ### 336 DAY INSPECTION  ### BOURREMENTS  ### 336 DAY INSPECTION  ### BOURREMENTS  ### BOURREMENT OPERATING PARAMET IONOGRAM OR DEPRESSING PRINT SCREEN. (PRINTER WILL MOST IONOGRAM AS SOON AS IT IS TURNED ON.)  ### BOURCE IT TO THE TRANSMITTER CABLE, PER1, FROM THE BACK OF THE CONNECT IT TO THE SPECTRUM ANALYZER 50 OHM SIGNAL INPUNCTION OF THE SPECTRUM ANALYZER TO:  ### A. SWEEP START: 0 HZ  ### B. SWEEP START: 0 HZ  ### B. SWEEP STOP: 2 MHZ  ### C. ATTENUATION: 10 DB/DIV  ### THE TRANSMITTER ANTENNA IS NOW BEING USED AS TRECORD FREQUENCY AND STRENGTH OF THE 2 OR 3 STRONGES  ### C. ATTENUATION: 10 DB/DIV  ### THE TRANSMITTER ANTENNA IS NOW BEING USED AS TRECORD FREQUENCY AND STRENGTH OF THE 2 OR 3 STRONGES		·		п						S	MAN
SUB ~SYS  (@ 4, 5, 6.	SUB ~SYS  @ 3.  @ 4. 5.										AREA	WORK
SYS	SYS										SYS	WOR
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·										SUB -SYS	KUNIT
TURN ON PRINTER AND RECORD PRESENT O IONOGRAM OR DEPRESSING PRINT SCREEN. IONOGRAM AS SOON AS IT IS TURNED ON.)  AT THE TRANSMITTER RACK, TURN OFF THE DISCONNECT TRANSMITTER CABLE, PER1, FI CONNECT IT TO THE SPECTRUM ANALYZER 5  THE TRANSMITTER ANTENNA IS N RECEIVE/LISTENING DEVICE.  SET THE SPECTRUM ANALYZER TO:  A. SWEEP START: 0 HZ  B. SWEEP STOP: 2 MHZ  C. ATTENUATION: 10 DB/DIV  RECORD FREQUENCY AND STRENGTH OF TH	TURN ON PRINTER AND RECORD PRESENT OPERATING PARAMETE IONOGRAM OR DEPRESSING PRINT SCREEN. (PRINTER WILL MOS' IONOGRAM AS SOON AS IT IS TURNED ON.)  AT THE TRANSMITTER RACK, TURN OFF THE MAIN POWER AND THE DISCONNECT IT TO THE SPECTRUM ANALYZER 50 OHM SIGNAL INPUT.  THE TRANSMITTER ANTENNA IS NOW BEING USED AS A RECEIVE/LISTENING DEVICE.  SET THE SPECTRUM ANALYZER TO:  A. SWEEP STOP: 2 MHZ  C. ATTENUATION: 10 DB/DIV  RECORD FREQUENCY AND STRENGTH OF THE 2 OR 3 STRONGEST	, 7.			<u>ښ</u>			Ņ	@ 4.	@ 3.		
	REQUIREMENTS  PERATING PARAMETE (PRINTER WILL MOSTON THE BACK OF THE OHM SIGNAL INPUT)  OTE  OW BEING USED AS A DATE OW BEING USED AS A DATE OWN BEING USED AS A DATE OF THE OWN BEING USED A DATE OF THE OWN BEING USED AS A DATE OF THE OWN BEING USED AS A DATE OF THE OWN BEING USED A DATE OF THE OWN BEING USED AS A DA	RECORD FREQUENCY AND STRENGTH OF TH			SET THE SPECTRUM ANALYZER TO:	THE TRANSMITTER ANTENNA IS NO RECEIVE/LISTENING DEVICE.	2	DISCONNECT TRANSMITTER CABLE, PER1, FF CONNECT IT TO THE SPECTRUM ANALYZER 50	AT THE TRANSMITTER RACK, TURN OFF THE N	TURN ON PRINTER AND RECORD PRESENT OF IONOGRAM OR DEPRESSING PRINT SCREEN. IONOGRAM AS SOON AS IT IS TURNED ON.)		
ELECTRICAL POWER ON  ERS BY EITHER R ST LIKELY PRODUCTION HE EXCITER CHAST.  A  A  T SIGNALS.								SSIS AND		CE LATES	TUO	SERVICE
RS BY EITHER RUNNING AT LIKELY PRODUCE LATES E UPS. E EXCITER CHASSIS AND IE EXCITER CHASSIS AND	SERVICE OUT CE LATES			4		, , ,				H &	1-018	CARD NO.

								nove or or
1-019	9						MIN	MAN
19					v *		AREA	WORK
5					,		SYS	WOI
WORK AREA(S)		,		1			SVS-BUS	WORK UNIT
			<del>.</del> =	10.	်	œ		
TYPE MECH ROR	IF THE R INTERFE ADJUSTI	6 A	COMPARE THESE NINPUT FILTER WAS STRONGEST LOCAL STRONGEST SIGNA	SET THE SPECTRUM ANALYZER AS IN STEP 6	REMOVE THE RF INPUT FILTER, A30, FROM TH THE FEMALE N TYPE INLINE CONNECTOR, TH CONNECT THE TRANSMIT CABLE, PER1, TO T FILTER OUTPUT SIDE TO THE 50 OHM INPUT O	COMPARE THESE READINGS WITH THOSE RECORDS	336 DAY INSPECTION	
MECH NO.	IF THE RF INPUT FILTER IS NOT ATTENI INTERFERENCE SOURCES HAVE CHAN ADJUSTMENT IN TO 31M1 -2FMQ12-9.		EW INDICATI SET TO ATTE . INTERFEREI L, NORMALLY	/ ANALYZER	PUT FILTER, / E INLINE COI NSMIT CABLI E TO THE 50	EADINGS WI	NOIT	
CARD TIME	ER IS NOT A RCES HAVE 31M1-2FM		ONS TO TH NUATE THE RS. THERE IN THE AN	AS IN STEP	A30, FROM NNECTOR, E, PER1, TC OHM INPUT	TH THOSE I		
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	IF THE RF INPUT FILTER IS NOT ATTENUATING PROPERLY OR IF THE INTERFERENCE SOURCES HAVE CHANGED, PERFORM THE RF FILTER ADJUSTMENT IN TO 31M1 -2FMQ12-9.	NOTE	COMPARE THESE NEW INDICATIONS TO THOSE TAKEN EARLIER IN STEP 7. AT INSTALLATION, THE RF INPUT FILTER WAS SET TO ATTENUATE THE 1 OR 2 (DEPENDING ON FREQUENCY SPREAD) STRONGEST LOCAL INTERFERERS. THERE SHOULD BE AT LEAST A 20 DB REDUCTION IN THE STRONGEST SIGNAL, NORMALLY IN THE AM BAND BETWEEN 600 KHZ AND 1.6 MHZ.	6 ABOVE.	REMOVE THE RF INPUT FILTER, A30, FROM THE BOTTOM OF THE PROCESSOR/TRANSCEIVER. USING THE FEMALE N TYPE INLINE CONNECTOR, THE N TO BNC ADAPTORS AND THE TEST CABLES, CONNECT THE TRANSMIT CABLE, PER1, TO THE INPUT SIDE OF THE FILTER AND CONNECT THE FILTER OUTPUT SIDE TO THE 50 OHM INPUT OF THE SPECTRUM ANALYZER.	COMPARE THESE READINGS WITH THOSE RECORDED LAST YEAR TO DETERMINE IF ANY LOCAL SIGNAL INTERFERENCE SOURCES HAVE CHANGED.	REQUIREMENTS	INSPECTION
	ERLY OR IF THE IM THE RF FILTER	*	IN STEP 7. AT INS ON FREQUENCY T A 20 DB REDUC 0 KHZ AND 1.6 MH		E PROCESSOR/TR TORS AND THE TE THE FILTER AND ( ANALYZER.	AR TO DETERMINE	ON	ELECTRICAL POWER
15 DEC 98			STALLATIC SPREAD) TION IN TI Z.		ANSCEIVE ST CABLE CONNECT	IF ANY LO	TUO	SERVICE
CHANGE NO.			)N, THE RF		ER. USING ES, THE	OCAL	1-019	CARD NO.

	SIN N	MAN
	AREA	WORK
	SYS	WO
	SUB -SYS	WORK UNIT
@ @ 12. 12. 15.		,
DISCONNECT THE RF INPUT FILTER AND REINSTALL IT IN THE PROCESSOR/TRANSCEIVER. RECONNECT PER1 TO THE EXCITER. TURN ON THE TRANSMITTER RACK MAIN POWER AND THE UPS. USING THE INFORMATION RECORDED IN STEP 3 ABOVE, RETURN THE DISS TO ITS PREVIOUS OPERATION.	336 DAY INSPECTION	
AND REINSTALL IT IN THE PAR.  MAIN POWER AND THE UPS. PED IN STEP 3 ABOVE, RETUR	REQUIREMENTS	INSPECTION
ROCESSOR/TRANS	NO	ELECTRICAL POWER
SCEIVER.	OUT	SERVICE
<b>⊗</b>	1-019	CARD NO.

2 CA		S	MAR	
CARD NO. 2-001		AREA	-	ę.
		SYS		
WORK AREA(S)	,	SVS- BUS	WORK UNIT	)
9				
TYPE MECH ROR	SERVICING AND LUBR THESE INSPECTION WORKCARDS PROVIDE TO WILL BE USED AS A GUIDE IN PERFORMING TO OVERLOOKED. THE CARD SIZE AFFORDS CO WHILE PERFORMING AN INSPECTION.  DETAILED INSTRUCTIONS FOR THE USE OF TO OF OTHER FORMS AND CHARTS TO BE USED IN 00-20 SERIES TECHNICAL ORDERS.	INTRODUCTION		
MECH NO.	SERVICI  WORKCARI GUIDE IN PI CARD SIZE G AN INSPEC TIONS FOR TONE CHARTS CHNICAL OF			
CARD TIME	NG AND LUDS PROVIDE ERFORMING AFFORDS COTION. THE USE OF TO BE USE RDERS.			
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	SERVICING AND LUBRICATION REQUIREMENTS  THESE INSPECTION WORKCARDS PROVIDE THE REQUIREMENTS FOR SERVICING/LUBRICATION 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.  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.	REQUIREMENTS	INSPECTION	, , , , , , , , , , , , , , , , , , ,
	EMENTS S FOR SERVICING D INSURE THAT N NG BY MAINTENA THE DESCRIPTIO WITH THESE CAP	,	ELECTRICAL POWER	Û
15 DEC 98	A/LUBRICA O ITEM IS INCE PERS IN AND AP IDS ARE C		SERVICE	
CHANGE NO.	TION AND SONNEL PLICATION ONTAINED	2-001	CARD NO.	

,				1
CARD NO. 2-002		S Z	MAN	
8 S		AREA	WORK	
~		SYS	WOR	
WORK AREA(S)		SAS- BINS	WORK UNIT	
<b></b>	TAPE 1. 1. 0. 2. 0. 3.			
TYPE MECH RQR	1. MATERIAL REQUIRED A. NEW DATA ARCHIVE TAPE B. 95% DENATURED ALCOHOL C. 2 COTTON SWABS D. LOW PRESSURE AIR E. FLASHLIGHT E. FLASHLIGHT AT ANY TIME OTHER THAN 8 TO 12 MINUTES TO THE LEFT AND REMOVE THE USED DATA. FIGURE 1).  @ 3. VISUALLY INSPECT THE SENSOR HOLES FOR PRESSURE AIR.	28 DAY SERVICE		
MECH NO.	HIVE TAPE D ALCOHOL BS E AIR E MOVE THE EMOVE THE			
CARD TIME	12 MINUTES A USED DATA A HOLES FOR I			
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	AFTER THE HOUR, SLIDE THE TAPE TRANSPORT LOCK ARCHIVE TAPE FROM THE ARTIST3 (REFERENCE	REQUIREMENTS	INSPECTION	
	SLIDE THE TAPE T M THE ARTIST3 (R	NO	ELECTRICAL POWER	
15 DEC 98	RANSPOF EFERENC	TUO	SERVICE	
CHANGE NO.	AITH LOW	2-002	CARD NO.	



MAN NAN CARD NO. 2-003 AREA SYS WORK UNIT WORK AREA(S) SUB -SYS @ 5. 0 @4. 7 9 SLIDE THE TAPE TRANSPORT LOCK BACK TO THE LEFT, INSERT THE NEW TAPE AND SLIDE THE TAPE TRANSPORT LOCK BACK TO THE RIGHT. USE A CLEAN DRY COTTON SWAB TO VERY LIGHTLY REMOVE ANY EXCESS ALCOHOL LEFT ON THE HEADS. SLIDE TAPE TRANSPORT LOCK TO THE RIGHT AND THE TAPE HEADS WILL SWING OUT APPROXIMATELY 4" BACK ON THE LEFT SIDE. DIP A COTTON SWAB IN ALCOHOL, VIGOROUSLY SHAKE OFF EXCESS, AND VERY LIGHTLY RUB THE TAPE HEADS. 28 DAY SERVICE TYPE MECH ROR MECH NO. CARD TIME 31M1-2FMQ12-6WC-1 REQUIREMENTS INSPECTION PUBLICATION NUMBER AND DATE ELECTRICAL POWER 9 15 DEC 98 SERVICE POOT CHANGE NO. 2-003 CARD NO.

2-004	CARD NO.	Þ								<b>.</b>	MIN AREA		
											A SYS		Ì
	WORK AREA(S)						4			8	SUB -SYS	WORK UNIT	
		@ 2. S				_	-	_		FAN SERVICE			
	TYPE MECH ROR	PULL OUT THE DES	DO NOT ESSARY TO P.T. F FAILURE		D. FLASHLIGHT	C. VACUUM CLEANER WITH NON-METALLIC WAND	B. SCREWDRIVER, PHILLIPS, #2	A. SCREWDRIVER, COMMON, #2	MATERIAL REQUIRED	NICE	28 DAY SERVICE		
	MECH NO.	K RACK FAN T MAKING E	TO ACCOMI FPA AND PP			NER WITH N	R, PHILLIPS, 5	R, COMMON,	Ö		111		
	CARD TIME	ASSEMBLY, XCESSIVE N	FAN ASSEN PLISH INSPI S CHASSIS			ON-METAL	#2	#2					
31M1-2FMQ12-6WC-1	PUBLICATION NUMBER AND DATE	PULL OUT THE DESK RACK FAN ASSEMBLY, ENSURE THAT EACH OF THE 9 FANS IS BLOWING STRONGLY AND NOT MAKING EXCESSIVE NOISE. PUSH THE FAN ASSEMBLY BACK IN.	DO NOT LEAVE THE FAN ASSEMBLIES EXTENDED LONGER THAN NECESSARY TO ACCOMPLISH INSPECTIONS 2 AND 3. LOSS OF AIRFLOW TO P/T, FPA AND PPS CHASSIS MAY CAUSE PREMATURE COMPONENT FAILURE.	CAUTION		LIC WAND					REQUIREMENTS	NOPECTION	
	ND DATE	1 OF THE 9 FANS N ASSEMBLY BA	ONGER THAN NEW OSS OF AIRFLOW URE COMPONEN								O <sub>N</sub>	ELECTRICAL POWER	*
15 DEC 98		IS BLOWIN	<b>Ξ</b> ??								OUT	SERVICE	1
	CHANGE NO.	۵									2-004	CARD NO.	

4							MIN	MAN
							AREA	WORK
					,		SYS	WOR
	,						SUB -SYS	WORK UNIT
		@ o.	@ 5.	@ 4.		@ 3.		
		CHECK TO ENSURE THE TRANSMITTER RACK VENTILATION FAN IS BLOWING STRONGLY OUT OF THE TOP OF THE RACK AND IS NOT MAKING EXCESSIVE NOISE.	PERFORM STEP 4 PROCEDURES ON THE UPPER AND LOWER TRANSMITTER RACK FAN ASSEMBLIES.	REMOVE THE SILVER, LOUVERED COVER FROM THE DESK RACK FAN FILTER ASSEMBLY, REMOVE THE FILTER AND VACUUM THE INTAKE SIDE. REPLACE THE FILTER AND THE COVER.	DO NOT PERFORM STEP 4	PERFORM STEP 2 PROCEDURES ON THE UPPER AND LOWER TRANSMITTER RACK FAN ASSEMBLIES.	28 DAY SERVICE	
		ER RACK VENTILATION FAN NG EXCESSIVE NOISE.	THE UPPER AND LOWER TR	/ER FROM THE DESK RACK /E. REPLACE THE FILTER AN	DO NOT PERFORM STEP 4 WITH THE FANS EXTENDED. OVERHEATING CAN OCCUR.	THE UPPER AND LOWER TR	REQUIREMENTS	INSPECTION
	٠	IS BLOWING STRO	ANSMITTER RACK	FAN FILTER ASSEI ND THE COVER.	D. OVERHEATING	ANSMITTER RACK	ON	ELECTRICAL POWER
		ONGLY OL	(FAN ASS	MBLY, REN		(FAN ASS	PLOO	SERVICE
	*	JT OF THE	SEMBLIES.	MOVE THE		SEMBLIES.	2-004	CARD NO.

ě				-
CARD NO. 2-005	e e	MIN	MAN	
NO.		AREA	WORK	
\$		SYS	WOF	
WORK AREA(S)		SAS- BUS	WORK UNIT	
(S)	CLEAN 1. 0. 2.	02		
TYPE MECH RQR	1. EQUIPMENT REQUIRED: A. SCREWDRIVER, COMMON, #2 B. SCREWDRIVER, PHILLIPS, #2 C. VACUUM CLEANER WITH NON-METALLIC WAND D. CLEAN, LINT FREE CLOTH E. APPROVED CLEANING FLUID OR WARM WATER F. NO-OX GREASE OR SUITABLE SUB G. SOCKET SET WITH RATCHET AND EXTENSIONS @ 2. TURN OFF THE TRANSMITTER RACK MAIN POWER, THE CLEANING FLUID OR WARM POWER, THE CORNER OF SUITABLE SUB	56 DAY SERVICE		
MECH NO.	N CONTROL RED: RED: RED: RED: REE CLOTH REE CLOTH EANING FLUI SE OR SUITAI NITH RATCHE NISMITTER R			
CARD TIME	#2 ON-METAL ON-METAL D OR WARN BLE SUB T AND EXTI			
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1	NG AND CORROSION CONTROL  EQUIPMENT REQUIRED:  A. SCREWDRIVER, COMMON, #2  B. SCREWDRIVER, PHILLIPS, #2  C. VACUUM CLEANER WITH NON-METALLIC WAND  D. CLEAN, LINT FREE CLOTH  E. APPROVED CLEANING FLUID OR WARM WATER  F. NO-OX GREASE OR SUITABLE SUB  G. SOCKET SET WITH RATCHET AND EXTENSIONS  TURN OFF THE TRANSMITTER RACK MAIN POWER, THE UPS AND THE FACILITY INPUT POWER CIRCUIT BREAKER.	REQUIREMENTS	INSPECTION	
	D THE FACILITY INF	OFF	ELECTRICAL POWER	
15 DEC 98	UT POW	OUT	SERVICE	
CHANGE NO.	<b>B</b>	2-005	CARD NO.	

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LETHAL VOLTAGES MAY EXIST IN THE DELAY LINE CHASSIS.  DISCHARGE THE CAPACITORS WITH A GROUNDED SHEPHERDS STICK BEFORE DOING ANY WORK INSIDE THE DLC.	WARNING	ONE AT A TIME, PERFORM PARA 6 ON THE EXCITER, PULSE POWER SUPPLY AND ANTENNA SWITCH, TO INCLUDE WIPING DOWN WITH A CLEAN CLOTH (DRY OR DAMP) AS NECESSARY.	PULL OUT THE FPA, REMOVE THE TOP AND BOTTOM COVERS AND VACUUM CLEAN THE TOP AND BOTTOM OF THE CHASSIS. REPLACE THE TOP AND BOTTOM COVERS AND PUSH BACK INTO THE RACK.	CAUTION  WHEN WORKING IN AND AROUND THE FPA, DO NOT MOVE WIRES/ COMPONENT LEADS. SERIOUS ARCING CAN OCCUR.	VACUUM AND/OR WIPE DOWN, AS NECESSARY, THE TOP, SIDES AND INSIDE THE BACK OF THE TRANSMITTER RACK.	PULL OUT THE PROCESSOR/TRANSCEIVER, VACUUM THE TOP AND BOTTOM, AND PUSH BACK IN.	VACUUM AND/OR WIPE-DOWN, AS NECESSARY, THE COMPUTER MONITOR, ARTIST3, KEYBOARD, PRINTER, MODEMS, DESK TOP AND DESKRACK (INCLUDING INSIDE THE BACK).	56 DAY SERVICE REQUIREMENTS	INSPECTION
ASSIS. HEPHERDS STICK		/ER SUPPLY AND A P) AS NECESSARY.	ND VACUUM CLEAN OVERS AND PUSH I	MOVE WIRES/	AND INSIDE THE B	ND BOTTOM, AND	R MONITOR, ARTIS DE THE BACK).	OFF	ELECTRICAL POWER
		NTENNA	N THE TOP BACK INTO		ACK OF T	PUSH BA	T3, KEYB	OUT	SERVICE
		SWITCH,	O THE		H	CK IN.	OARD,	2-005	CARD NO.

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MAN CARD NO 2-006 WORK SYS WORK UNIT WORK AREA(S) SUB -SYS 12 = 50 ဖ ġ Ę, INSPECT THE GROUND CONNECTIONS AT THE RECEIVE ANTENNAS, THEIR PREAMPLIFIER BOXES AND THE TRANSMIT ANTENNA. REPLACE ANY MISSING OR DETERIORATED NO-OX GREASE. ENSURE NOTHING (WEEDS, TREES, KITES, BALLOONS, ETC.) IS TOUCHING THE ANTENNAS OR THE TRANSMIT APRON. REMOVE SUCH OBJECTS IMMEDIATELY. INSPECT THE RECEIVE ANTENNAS, THE TRANSMIT ANTENNA AND THE GROUND END OF THE TRANSMIT ANTENNA APRON AND GUY WIRES FOR CORROSION. IDENTIFICATION, ISOLATION AND INSPECT THE GROUND CONNECTIONS AT THE BOTTOM REAR OF THE DESK RACK AND TRANSMITTER RACK AND REPLACE ANY MISSING OR DETERIORATED NO-OX GREASE. PERFORM CORROSION CONTROL ASAP. CONTROL OF CORROSION ARE FOUND IN TO'S 1-1-8, 1-1-689 AND 1-1-691. SCHEDULE AND/OR CAREFULLY CHECK ALL OF THE SCREWS, NUTS AND BOLTS ON THE CAPACITORS AND COILS IN THE DLC FOR TIGHTNESS. DO NOT OVER TIGHTEN. PERFORM PARA 6 AND 7 ON THE DELAY LINE CHASSIS **56 DAY SERVICE** TYPE MECH ROR MECH NO. CARD TIME INSPECTION 31M1-2FMQ12-6WC-1 REQUIREMENTS PUBLICATION NUMBER AND DATE **ELECTRICAL POWER** 유 S **DEC 98** SERVICE TUO CHANGE NO 2-006 CARD NO

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	@ 15.	@ 14.		
		TURN ON THE FACILITY INPUT POWER CIRCUIT	56 DAY SERVICE	
,	THE DISS IS AUTOMATICALLY FUNCTIONING NORMALLY.	VER CIRCUIT BREAKER, THE TRANSMITTER RACK MAIN POWER AND	REQUIREMENTS	
. 49	FUNCTIONING NO	RANSMITTER RACK	OFF	ELECTRICAL POWER
, '	RMALLY	MAIN PC	OUT	SERVICE
		)WER AND	2-006	CARD NO.

WORK LUNIT  MAN  MAREA  MORK WORK  MIN  AREA  SYS  SUB-SYS  THANISMIT ANTENNA  1. MATERIALS REQUIRED: A. CABLE TENSIOMETER B. SURVEYOR'S TRANSIT/THEODOLITE  WARNING  MORK AREA(S)  TYPE MECH ROR  MECH NO.  WORK AREA(S)  WORK SERVICE  MECH NO.  MORK AREA(S)  WORK SERVICE  MECH NO.  MISPECTION  M	WORK JUNIT  168 DAY SERVICE  TRANSMIT ANTENNA  1. MATERIALS REQUIRED:  A. CABLE TENSIOMETER  B. SURVEYOR'S TRANSIT/THEODOLITE  WARNING  RF RADIATION HAZARD WHEN TRANSMITTER IS IN USE. DO NOT START THIS INSPECTION UNTIL TRANSMITTER IS OFF AND ARRANGEMENTS ARE MADE TO ENSURE IT REMAINS OFF THROUGHOUT THE ENTIRE INSPECTION.  3. INSPECT THE FOLLOWING TRANSMIT ANTENNA ITEMS AND SERVICE AS NECE INSPECTION NUMBER AND DATE  WORK AREA(S)  TYPE MECH ROR  WORK AREA(S)  TYPE MECH ROR  MECH NO.  CARD TIME  PUBLICATION NUMBER AND DATE  31M1—2FMQ12—6WC—1	WORK AREA(S)  WORK UNIT  168 DAY SERVICE  INSPECTION REQUIREMENTS  168 DAY SERVICE  REQUIREMENTS  1. MATERIALS REQUIRED: A. CABLE TENSIOMETER B. SURVEYOR'S TRANSIT/THEODOLITE  WARNING  WARNING				2_			****				man ès	M N	MAN	-
ORK UNIT SUB -SYS TRANSI 1.  @ 2.  WORK AREA(S)	ORK UNIT  168 DAY SERVICE  TRANSMIT ANTENNA  1. MATERIALS REQUIRED: A. CABLE TENSIOMETER B. SURVEYOR'S TRANSIT/THEODOLITE  WARNING  RF RADIATION HAZARD WHEN TRANSMITTER IS IN USE. DO NOT START THIS INSPECTION UNTIL TRANSMITTER IS OFF AND ARRANGEMENTS ARE MADE TO ENSURE IT REMAINS OFF THROUGHOUT THE ENTIRE INSPECTION.  @ 2. TURN OFF THE TRANSMITTER RACK MAIN POWER, THE UPS AND THE FACILIT BREAKER.  3. INSPECT THE FOLLOWING TRANSMIT ANTENNA ITEMS AND SERVICE AS NECE IN THE OFF AND AREA MECH NO.  TYPE MECH ROR  MECH NO.  CARD TIME  PUBLICATION NUMBER AND DATE  PUBLICATION NUMBER AND DATE	ORK UNIT    SUB -5978   168 DAY SERVICE   INSPECTION   RECURRIAL POWER												AREA	WORK	, s
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@ 2. 1. 1. 3. 3.	TRANSMIT ANTENNA  1. MATERIALS REQUIRED: A. CABLE TENSIOMETER B. SURVEYOR'S TRANSIT/THEODOLITE  REF RADIATION HAZARD WHEN TRANSMITTER IS IN USE. DO NOT START THIS INSPECTION UNTIL TRANSMITTER IS OFF AND ARRANGEMENTS ARE MADE TO ENSURE IT REMAINS OFF THE TRANSMITTER RACK MAIN POWER, THE UPS AND THE FACILIT INPUT POWER CIRCUIT BREAKER.  3. INSPECT THE FOLLOWING TRANSMIT ANTENNA ITEMS AND SERVICE AS NECEDATION  MECH NO. CARD TIME PUBLICATION NUMBER AND DATE  TYPE MECH ROR MECH NO. CARD TIME PUBLICATION NUMBER AND DATE	TRANSMIT ANTENNA  1. MATERIALS REQUIRED: A. CABLE TENSIOMETER B. SURVEYOR'S TRANSIT/THEODOLITE  WARNING  PO NOT START THIS INSPECTION UNTIL TRANSMITTER IS IN USE. AND ARRANGEMENTS ARE MADE TO ENSURE IT REMAINS OFF THROUGHOUT THE ENTIRE INSPECTION.  2. TURN OFF THE TRANSMITTER RACK MAIN POWER, THE UPS AND THE FACILITY: INPUT POWER CIRCUIT BREAKER.  3. INSPECT THE FOLLOWING TRANSMIT ANTENNA ITEMS AND SERVICE AS NECESSAR  PUBLICATION NUMBER AND DATE  TYPE MECH ROR  MECH NO.  CARD TIME  PUBLICATION NUMBER AND DATE  15 DE												SUB -SYS	RK UNIT	
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			Y KIND TO GUY E PREMATURE	ANT/PAIN: OR INS	DO NOT APPLY SEAL WIRES, ANCHOR ROD EQUIPMENT FAILURE				-	
	ŧ		.49	ANCHOR RODS FOR ABUSE BY VEHICLES, MOWERS, ETC.	H. ANCHOR RODS FOR		+			~~
	450 LBS,	129, 150-4	N 6635-00-530-1: 198 LBS:	GUY AND APRON TENSION. USE CABLE TENSIOMETER, FSN 6635-00-530-1129, 150-450 LBS, \$508.61. GUY WIRES ARE 300 LBS AND APRON CABLES ARE 198 LBS:	G. GUY AND APRON TE \$508.61. GUY WIRES	51117				
	,			K MOVEMENT.	F. GUY ANCHOR BLOCK MOVEMENT			-d-duidentyspisja		
	÷ J			GUY WIRE TO ANCHOR ATTACHMENT AND SAFETY WIRES.	E. GUY WIRE TO ANCH		-	- <del> </del>		
	THE	ACHED TO	HER DEVICES ATT/	TOWER BASE FASTENERS ARE TIGHT AND LADDERS OR OTHER DEVICES ATTACHED TO THE TOWER ARE SECURE AND SAFE FOR INTENDED USE.	D. TOWER BASE FASTE TOWER ARE SECURI					- 11-01 - 5.5.
	OB-	FOREIGN	AND FREE OF ANY	APRON AND TRANSMISSION LINE ARE PROPERLY IN PLACE AND FREE OF ANY FOREIGN OBJECTS.	<ul><li>C. APRON AND TRANSMITTER</li><li>JECTS.</li></ul>		·			
	DOLITE).	VSIT/THEO	SURVEYOR'S TRAIN	GUY WIRES ARE IN PLACE AND THE TOWER IS PLUMB (USE SURVEYOR'S TRANSIT/THEODOLITE).	B. GUY WIRES ARE IN F					
	0	ALVANIZEL	NG OF PAINT OR G	METALLIC SURFACES FOR RUST, CORROSION OR BLISTERING OF PAINT OR GALVANIZED COATING.	A. METALLIC SURFACE COATING.					
MINISTER OF STREET	2-007	ОИТ	OFF	REQUIREMENTS	168 DAY SERVICE	SYS- BUS	SYS S	AREA	NN	3
	CARD NO.	SERVICE	ELECTRICAL POWER	INSPECTION		TINU	WORK UNIT	ORK	-	Z.

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2-008	CARD NO.	·9							,	÷	NIN.	MAN
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	WORK AREA(S)										SUB -SYS	WORK UNIT
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	TYPE MECH ROR	TURN ON, FACILITY INPUT POWER CIRCUIT BREAKER, THE TRANSMITTER RACK MAIN POWER AND THE UPS.	P. TOWER LIGHTS	O. ALL CONNECTIONS ARE TIGHT AND FREE	N. BALUN LIGHTNING ARRE PORTION BURNED AWAY	M. BALUN CASE FO	L. ALL NON-BURIED GROUNDS FOR WIRE	K. CABLE DUCTS I	J. COAXIAL LINES SUPPO SPAN SPOT CHECKS).	I. INSULATORS FO	168 DAY SERVICE	
	MECH NO.	INPUT POWE	FOR PROPE	ONS ARE TIC	NG ARREST	OR CLEANLI	ED GROUND	FOR FOREIG	SUPPORTEI	OR CLEANLI	П	
	CARD TIME	ER CIRCUIT	R OPERATI	SHT AND FR	OR GAPS F	VESS AND	S FOR WIR	N MATTER	BY MESSI	NESS AND F		
31M1-2FMQ12-6WC-1	PUBLICATION NUMBER AND DATE	BREAKER, THE TRAN	TOWER LIGHTS FOR PROPER OPERATION AND SECURE MECHANICAL CONDITION.	EE OF FOREIGN MATERIAL.	BALUN LIGHTNING ARRESTOR GAPS FOR DAMAGE AND PROPER SPACING. REPLACE IF ANY PORTION BURNED AWAY.	BALUN CASE FOR CLEANLINESS AND SECURE GROUND CONNECTION.	E TO ROD MECHANICAL/ELECTRICAL INTEGRITY.	CABLE DUCTS FOR FOREIGN MATTER SUCH AS RODENTS, INSECTS OR WATER.	COAXIAL LINES SUPPORTED BY MESSENGER CABLE FOR OUTER JACKET WEAR (SEVERAL MID-SPAN SPOT CHECKS).	INSULATORS FOR CLEANLINESS AND FREEDOM FROM FOREIGN MATERIALS.	REQUIREMENTS	INSPECTION
	ND DATE	USMITTER RACK M	CHANICAL COND	TERIAL.	OPER SPACING. F	ONNECTION.	CAL/ELECTRICAL I	INSECTS OR WAT	OUTER JACKET WE	REIGN MATERIALS	OFF	ELECTRICAL POWER
15 DEC 98		IAIN POWE	TION.		REPLACE		NTEGRITY	ER.	AR (SEVE	•.	TUO	10
	CHANGE NO.	ER AND		b	FANY	, ,,			RAL MID-		2-008	CARD NO.

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CARD NO. 4-001		A 11	MIN	MAN	
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8			SYS	WOF	74.
WORK AREA(S)		<b>3</b>	SUB -SYS	WORK UNIT	-
		1. EVERY 730 DAYS, REPLACE: A. 14 AMPLIFIER TUBES, P	TIME		, ,
TYPE MECH ROR	**	ERY 730 DAYS, REPLACE:	TIME REPLACEMENT ITEMS		
MECH NO.	,	E: PN 8590.	ENT ITEM		
CARD TIME		AS	S		
PUBLICATION NUMBER AND DATE 31M1-2FMQ12-6WC-1		Required	REQUIREMENTS	INSPECTION	1
	44			ELECTRICAL POWER	,
15 DEC 98				SERVICE	ſ
CHANGE NO.			4-001	CARD NO.	

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WORK AREA(S)	A00 AA0 CFA	SVS-8US	WORK UNIT
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TYPE MECH RQR	TURNSTILE LOOP ANTENNA:  A. REPAIR BEYOND CORROSION TANTENNA PREAMPLIFIER:  A. NO REPAIR AUTHORIZED.  RF ANALYST:  A. NO REPAIR AUTHORIZED.  UNINTERRUPTIBLE POWER SUPPLY:  A. NO REPAIR AUTHORIZED BEYO	REPAIR RESTRICTIONS	
MECH NO.	NTENNA: D CORROSIC IFIER: IHORIZED. POWER SUP IHORIZED BI	CTIONS	
CARD TIME	ON TREATM PLY: EYOND BAT		
PUBLICATION NUMBER AND DATE  31M1-2FMQ12-6WC-1	INSTILE LOOP ANTENNA: REPAIR BEYOND CORROSION TREATMENT NOT AUTHORIZED. ENNA PREAMPLIFIER: NO REPAIR AUTHORIZED. NO REPAIR AUTHORIZED. NTERRUPTIBLE POWER SUPPLY: NO REPAIR AUTHORIZED BEYOND BATTERY REPLACEMENT.	REQUIREMENTS	INSPECTION
			ELECTRICAL POWER
15 DEC 98			ER SERVICE
CHANGE NO.		5-001	CARD NO.

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