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92-16483



TASK ANALYSIS

This document (Volume II of the training requirements analysis) includes the task analysis data for the F-111 Avionics Test Station and Component Specialty (AFSC 451X6). This analysis encompasses tasks from the AFSC 451X6 USAF Job Inventory as well as additional tasks identified during interviews.

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Copies of this document and the training requirements analysis (Volume I) are available upon request to the USAF Occupational Measurement Squadron, Attention: Chief, Airman Analysis Section (OMYO), Randolph AFB, TX 78150-5000 or Det 5 USAFOMS, Lowry AFB, CO 80230-5000.

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Availability Codes	
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TASK ANALYSIS DATA ELEMENTS

The following provides an explanation of the data elements contained in the task analysis:

TASK NUMBER: Training Requirements Analysis (TRA) task number.

TASK STATEMENT: The task to be performed.

TASK NOTES: Contains brief comments or explanations to enhance understanding of the task statement.

TRAINING RECOMMENDATIONS: Provides a training recommendation at the major task level. Specific training recommendations are found in Volume I in the proposed STS. Many recommendations may appear unjustified due to the small percentages performing as identified in the occupational survey report. Changes in the equipment and job requirements, such as increased usage of AIS/R test stations, have occurred since the survey was accomplished that make these recommendations valid.

EQUIPMENT, TOOLS, SUPPLIES: Equipment, tools, supplies, etc., required to perform the task.

REFERENCES: Lists the TOs, AFOSH Standards, Regulations, and any other references required to perform the task.

CONDITIONS: Environment in which a task is performed. Includes consideration of the actual physical environment. A condition for all tasks is "In a secured area." If no condition is listed, it is understood that this is the only condition for that task.

CUES: Actions or directives that initiate, signal, or prompt the performance of the task.

STANDARDS: Specifies the job performance evaluation standards for performing the task accurately and expediently.

ACTIVITIES: Significant steps required to perform the task.

SKILLS: Skills involve physical or manipulative activities often requiring knowledge and special requirements for speed, accuracy, or coordination for task execution.

KNOWLEDGE: Knowledge, not directly observable, involves the use of mental process enabling recall of facts, identification of concepts, application of rules or principles, solving of problems, or creative thinking, etc.

RELATED OCCUPATIONAL SURVEY DATA: Occupational survey data is used with the Training Decisions Logic Table (ATCR 52-22, Occupational Analysis Program, Attachment 1) to determine where tasks should be trained and to what level. The following explains the data columns listed within this report.

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	Automated
:	:	:	:	:	:	:	:	Training
:	:	:	:	:	:	:	:	Indicator
:	:	:	:	:	:	:	:	(Not available
:	:	:	:	:	:	:	:	for this AFSC)
:	:	:	:	:	:	:	:	Task Difficulty Rating
:	:	:	:	:	:	:	:	(4.00-6.00 = average
:	:	:	:	:	:	:	:	difficulty)
:	:	:	:	:	:	:	:	Percentage of 7-skill level
:	:	:	:	:	:	:	:	survey respondents who
:	:	:	:	:	:	:	:	perform the task
:	:	:	:	:	:	:	:	Percentage of 5-skill level
:	:	:	:	:	:	:	:	survey respondents who perform
:	:	:	:	:	:	:	:	the task
:	:	:	:	:	:	:	:	Percentage of 1- to 48-month survey
:	:	:	:	:	:	:	:	respondents who perform the task
:	:	:	:	:	:	:	:	Percentage of 1- to 24-month survey
:	:	:	:	:	:	:	:	respondents who perform the task
:	:	:	:	:	:	:	:	Training Emphasis Rating
:	:	:	:	:	:	:	:	(Not available for this AFSC)
:	:	:	:	:	:	:	:	USAF Job Inventory duty code and task number

Identifies shredded data by alpha suffix (No suffix indicates data is representative of entire AFSC)

USAF JOB INVENTORY TASK STATEMENTS: A listing of job inventory statements applicable to the task. Some job inventory tasks are related to TRA tasks, but they cannot be classified as activity, skill, or knowledge behaviors. These are normally equipment specific statements and are included because they will provide additional information about the task.

ADDITIONAL INFORMATION ON TASK ANALYSIS

The majority of the tasks analyzed were broad areas that covered many different pieces of equipment. (For a detailed listing of all equipment covered by each task, refer to Appendix A.) To ensure complete coverage, every possible piece of equipment, tool, supply, activity, skill, and knowledge is listed. As a result, every item may not be applicable to the specific task being performed. An example would be an isolating malfunction task. The steps a technician takes, the knowledge and skills required, and the equipment used, depend upon the particular malfunction encountered. What each analysis has tried to show is every conceivable possibility. The approach just described pertains to the majority of tasks within this analysis -- not just isolating malfunctions.

Usually, the only items listed in the "Equipment, Tools, and Supplies" section are those which are not supplied with the test station. Cables, test packages, holding fixtures, adapters, test equipment, etc., are not listed since they are supplied with the station. If an oscilloscope, multimeter, adapter, etc., is listed, it is referring to a piece of equipment not usually in the station. The only exception is when subject matter experts (SMEs) felt a supplied item required specialized knowledge or skills. In this case, the equipment was listed even though it is technically a part of the test station.

Throughout the analysis the skill of "Use common handtools" appears. These tools are those commonly found in a consolidated tool kit (CTK) that require no special or unique skills or knowledge to use. A list of the tools considered to be common is located in Appendix C.

The analysis uses the knowledge "Annotate Forms" to show the need for forms documentation. There are many diverse forms used in this Air Force specialty and to preclude listing each form in every task, the generic knowledge was used. A list of forms, derived from the job inventory, is given in Appendix D.

Although a piece of equipment is maintained from the first test through the final repair action, "maintaining" is too large to analyze. To effectively analyze all aspects of maintaining a piece of equipment, we divided it into smaller tasks, i.e., test, isolate malfunctions, and repair. An exception to this is when after analysis, the skills and knowledge required to perform the smaller tasks were similar. In this case, the smaller tasks were combined back into a "Maintain" task.

When a TRA task is used as an activity, skill, or knowledge it will be identified as "(Task Number: 6XXXX)." All requirements for the referenced task are also requirements for the task being performed. This approach was taken to eliminate some of the duplication in the analysis.

Some statements in the activities, skills, and knowledge area have a letter and number, i.e., F 210, in parenthesis at the end of the statement. This shows that the statement came directly from the job inventory and links the statement with the applicable occupational survey data. If no reference is present, the statement was derived during interviews with specialty SMEs.

Many times throughout the document there are data under the 'RELATED OCCUPATIONAL SURVEY DATA' and the 'USAF JOB INVENTORY TASK STATEMENTS' areas that are not referenced in the analysis. These items are related to the task being analyzed but are subsumed under the TRA task statement or a broader activity, skill, or knowledge.

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'A' SHRED TASKS

TASK NUMBER: 60010

TASK STATEMENT:

PERFORM CONFIDENCE TESTS OF AUTOMATIC TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; TEST STATION
VERIFICATION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE

A EXECUTE CONFIDENCE TEST

SKILLS:

S CONNECT ADAPTERS AND CABLES

S OPERATE TEST STATION

S USE OSCILLOSCOPE TO MEASURE PULSE CHARACTERISTICS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

K DETERMINE WHICH PART OF CONFIDENCE TO EXECUTE

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	K 473		3	4	5	1	5.07	
451X6B	K 473		0	1	1	1	5.07	
451X6	K 473		2	3	3	1	5.07	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	L 486		5	6	5	2	4.85	
451X6B	L 486		0	0	0	2	4.85	
451X6	L 486		3	3	3	2	4.85	
451X6A	L 487		0	8	8	1	4.93	
451X6B	L 487		0	0	0	1	4.93	
451X6	L 487		0	4	4	1	4.93	
451X6A	L 488		5	4	5	3	4.62	
451X6B	L 488		0	0	0	3	4.62	
451X6	L 488		3	2	3	3	4.62	
451X6A	M 505		11	10	7	1	4.35	
451X6B	M 505		0	0	1	1	4.35	
451X6	M 505		6	5	4	1	4.35	
451X6A	M 506		3	2	4	1	4.39	
451X6B	M 506		0	0	0	1	4.39	
451X6	M 506		2	1	2	1	4.39	
451X6A	M 507		5	3	2	1	4.35	
451X6B	M 507		0	0	0	1	4.35	
451X6	M 507		3	2	1	1	4.35	
451X6A	N 541		3	2	1	0	4.71	
451X6B	N 541		0	0	0	0	4.71	
451X6	N 541		2	1	1	0	4.71	
451X6A	N 542		8	9	8	0	4.50	
451X6B	N 542		0	0	0	0	4.50	
451X6	N 542		5	5	4	0	4.50	
451X6A	N 543		5	4	4	2	4.53	
451X6B	N 543		0	0	0	2	4.53	
451X6	N 543		3	2	2	2	4.53	
451X6A	N 544		5	6	6	2	4.45	
451X6B	N 544		0	0	0	2	4.45	
451X6	N 544		3	3	3	2	4.45	
451X6A	P 578		5	8	10	1	4.55	
451X6B	P 578		0	0	0	1	4.55	
451X6	P 578		3	4	5	1	4.55	
451X6A	P 579		3	3	4	1	4.77	
451X6B	P 579		0	0	0	1	4.77	
451X6	P 579		2	2	2	1	4.77	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	P 580		0	3	6	1	5.16	
451X6B	P 580		0	0	0	1	5.16	
451X6	P 580		0	2	3	1	5.16	
451X6A	Q 593		0	2	2	1	4.73	
451X6B	Q 593		0	0	0	1	4.73	
451X6	Q 593		0	1	1	1	4.73	
451X6A	Q 594		5	4	6	1	4.32	
451X6B	Q 594		0	0	0	1	4.32	
451X6	Q 594		3	2	4	1	4.32	
451X6A	R 605		8	9	10	4	4.59	
451X6B	R 605		0	0	0	4	4.59	
451X6	R 605		5	5	5	4	4.59	
451X6A	T 858		3	2	2	0	5.08	
451X6B	T 858		0	0	0	0	5.08	
451X6	T 858		2	1	1	0	5.08	

USAF JOB INVENTORY TASK STATEMENTS:

K 473 PERFORM CONFIDENCE TESTS OF ATTITUDE AND RATE TEST STATIONS

L 486 PERFORM CONFIDENCE TESTS OF ELECTRONIC SYSTEMS TEST STATIONS

L 487 PERFORM CONFIDENCE TESTS OF INDICATORS AND MODULES TEST STATIONS

L 488 PERFORM CONFIDENCE TESTS OF INDICATORS AND SENSORS TEST STATIONS

M 505 PERFORM CONFIDENCE TESTS OF COMPUTER (6803) TEST STATIONS

M 506 PERFORM CONFIDENCE TESTS OF CONVERTER AND FLIGHT CONTROLS TEST STATIONS

M 507 PERFORM CONFIDENCE TESTS OF NAVIGATION AND FLIGHT CONTROLS TEST STATIONS

N 541 PERFORM CONFIDENCE TESTS OF RADAR ALTIMETER (6836) TEST STATIONS

N 542 PERFORM CONFIDENCE TESTS OF VIDEO (6815) TEST STATIONS

N 543 PERFORM CONFIDENCE TESTS OF VIDEO (6875) TEST STATIONS

N 544 PERFORM CONFIDENCE TESTS OF VIDEO (6885) TEST STATIONS

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P 580 PERFORM CONFIDENCE TESTS OF RECEIVER-TRANSMITTER-MODULATOR (6882) TEST STATIONS

Q 593 PERFORM CONFIDENCE TESTS OF INDICATORS AND SERVOS (6895) TEST STATIONS

USAF JOB INVENTORY TASK STATEMENTS:

**Q 594 PERFORM CONFIDENCE TESTS OF SERVOS AND INDICATORS (6825)
TEST STATIONS**

**R 605 PERFORM CONFIDENCE TESTS OF DIGITAL NAVIGATION AND WEAPONS
DELIVERY (6863) TEST STATIONS**

T 858 PERFORM CONFIDENCE TESTS OF DISPLAYS TEST STATIONS

TASK NUMBER: 60020

TASK STATEMENT:

PERFORM MAINTENANCE TESTS OF AUTOMATIC TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

DECADE RESISTOR BOX

SYNCHRO BRIDGE

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; EVERY 180 DAYS

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE

A EXECUTE MAINTENANCE TEST

SKILLS:

S CONNECT ADAPTERS AND CABLES

S OPERATE TEST STATION

S USE DECADE RESISTER BOX

S USE SYNCHRO BRIDGE

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

K DETERMINE WHICH PART OF MAINTENANCE TO EXECUTE

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 244		47	66	72	38	5.10	
451X6B	F 244		42	48	54	38	5.10	
451X6	F 244		45	56	64	38	5.10	
451X6A	K 474		3	3	4	1	5.15	
451X6B	K 474		0	1	0	1	5.15	
451X6	K 474		2	2	2	1	5.15	
451X6A	L 489		5	4	4	2	4.98	
451X6B	L 489		0	0	0	2	4.98	
451X6	L 489		3	2	2	2	4.98	
451X6A	L 490		0	8	8	2	5.14	
451X6B	L 490		0	0	0	2	5.14	
451X6	L 490		0	4	4	2	5.14	
451X6A	L 491		5	4	5	2	5.15	
451X6B	L 491		0	0	0	2	5.15	
451X6	L 491		3	2	3	2	5.15	
451X6A	M 508		11	10	8	1	4.88	
451X6B	M 508		0	0	1	1	4.88	
451X6	M 508		6	5	4	1	4.88	
451X6A	M 509		3	3	4	1	4.88	
451X6B	M 509		0	0	0	1	4.88	
451X6	M 509		2	2	2	1	4.88	
451X6A	M 510		5	3	2	1	4.89	
451X6B	M 510		0	0	0	1	4.89	
451X6	M 510		3	2	1	1	4.89	
451X6A	N 545		0	2	1	1	4.54	
451X6B	N 545		0	0	0	1	4.54	
451X6	N 545		0	1	0	1	4.54	
451X6A	N 546		5	8	9	1	5.24	
451X6B	N 546		0	1	0	1	5.24	
451X6	N 546		3	5	5	1	5.24	
451X6A	N 547		5	6	6	2	5.44	
451X6B	N 547		0	0	0	2	5.44	
451X6	N 547		3	3	3	2	5.44	
451X6A	N 548		8	8	7	2	5.43	
451X6B	N 548		0	0	0	2	5.43	
451X6	N 548		5	4	4	2	5.43	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	P 581		8	8	9	1	5.36	
451X6B	P 581		0	0	0	1	5.36	
451X6	P 581		5	4	5	1	5.36	
451X6A	P 582		3	3	3	2	5.28	
451X6B	P 582		0	0	0	2	5.28	
451X6	P 582		2	2	2	2	5.28	
451X6A	P 583		0	3	6	2	5.52	
451X6B	P 583		0	0	0	2	5.52	
451X6	P 583		0	2	3	2	5.52	
451X6A	Q 595		0	2	2	1	5.42	
451X6B	Q 595		0	0	0	1	5.42	
451X6	Q 595		0	1	1	1	5.42	
451X6A	Q 596		5	4	7	1	5.57	
451X6B	Q 596		0	0	0	1	5.57	
451X6	Q 596		3	2	4	1	5.57	
451X6A	R 606		8	9	10	4	5.23	
451X6B	R 606		0	0	0	4	5.23	
451X6	R 606		5	5	5	4	5.23	
451X6A	T 859		0	0	1	0	5.43	
451X6B	T 859		0	0	0	0	5.43	
451X6	T 859		0	0	1	0	5.43	

USAF JOB INVENTORY TASK STATEMENTS:

F 244 PERFORM MAINTENANCE TAPE TESTS OF TEST STATIONS
 K 474 PERFORM OA/FI TESTS OF ATTITUDE AND RATE TEST STATIONS
 L 489 PERFORM MAINTENANCE TESTS OF ELECTRONIC SYSTEMS TEST STATIONS
 L 490 PERFORM MAINTENANCE TESTS OF INDICATORS AND MODULES TEST STATIONS
 L 491 PERFORM MAINTENANCE TESTS OF INDICATORS AND SENSORS TEST STATIONS
 M 508 PERFORM MAINTENANCE TESTS OF COMPUTER (6803) TEST STATIONS
 M 509 PERFORM MAINTENANCE TESTS OF CONVERTER AND FLIGHT CONTROLS TEST STATIONS
 M 510 PERFORM MAINTENANCE TESTS OF NAVIGATION AND FLIGHT CONTROLS TEST STATIONS
 N 545 PERFORM MAINTENANCE TESTS OF RADAR ALTIMETER (6836) TEST STATIONS
 N 546 PERFORM MAINTENANCE TESTS OF VIDEO (6815) TEST STATIONS
 N 547 PERFORM MAINTENANCE TESTS OF VIDEO (6875) TEST STATIONS
 N 548 PERFORM MAINTENANCE TESTS OF VIDEO (6885) TEST STATIONS
 P 581 PERFORM MAINTENANCE TESTS OF RECEIVER-TRANSMITTER-MODULATOR (6802) TEST STATIONS

USAF JOB INVENTORY TASK STATEMENTS:

P 582 PERFORM MAINTENANCE TESTS OF RECEIVER-TRANSMITTER-MODULATOR
(6872) TEST STATIONS

P 583 PERFORM MAINTENANCE TESTS OF RECEIVER-TRANSMITTER-MODULATOR
(6882) TEST STATIONS

Q 595 PERFORM MAINTENANCE TESTS OF INDICATORS AND SERVOS (6895)
TEST STATIONS

Q 596 PERFORM MAINTENANCE TESTS OF SERVOS AND INDICATORS (6825)
TEST STATIONS

R 606 PERFORM MAINTENANCE TESTS OF DIGITAL NAVIGATION AND WEAPONS
DELIVER (6863) TEST STATIONS

T 859 PERFORM MAINTENANCE TESTS OF DISPLAYS TEST STATIONS

TASK NUMBER: 60030

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN AUTOMATIC TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AUDIO OSCILLATOR
CAPACITANCE TEST SET
CAPACITOR SUBSTITUTION BOX
CTK
DIGITAL LOGIC PROBE
DISTORTION ANALYZER
EXTENDER BOARDS
FREQUENCY COUNTER
ISOLATOR
LOGIC PROBE
MULTIMETER
OSCILLOSCOPE
PHOTOMETER
SOLDERING STATION
SPECTRUM ANALYZER
SYNCHRO BRIDGE
TDR

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A PERFORM CONFIDENCE TEST OF AUTOMATIC TEST STATIONS
(TASK NUMBER: 60010)
- A PERFORM MAINTENANCE TEST OF AUTOMATIC TEST STATIONS
(TASK NUMBER: 60020)

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S INSTALL EXTENDER BOARDS
- S OPERATE TEST STATION
- S PERFORM VISUAL INSPECTIONS
- S SOLDER OR DESOLDER TERMINAL CONNECTIONS
- S USE AUDIO OSCILLATOR TO PRODUCE FREQUENCY
- S USE CAPACITANCE TEST SET TO MEASURE CAPACITANCE
- S USE CAPACITOR SUBSTITUTION BOX TO MEASURE CAPACITOR INPUT/OUTPUT
- S USE COMMON HANDTOOLS
- S USE DIGITAL LOGIC PROBE
- S USE DISTORTION ANALYZER TO OPERATIONALLY CHECK INTERCOM CONTROL BOX
- S USE FREQUENCY COUNTER
- S USE ISOLATOR
- S USE LOGIC PROBE TO TROUBLESHOOT LOGIC BOARD
- S USE MULTIMETER TO CHECK CONTINUITY AND VOLTAGES
- S USE OSCILLOSCOPE TO MEASURE VOLTAGES AND PULSE CHARACTERISTICS
- S USE PHOTOMETER
- S USE SOLDERING STATION
- S USE SPECTRUM ANALYZER
- S USE SYNCHRO BRIDGE
- S USE TDR

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC GENERATOR THEORY OF OPERATION
- K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY AM RECEIVER THEORY OF OPERATION
- K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DC GENERATOR THEORY OF OPERATION
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FM RECEIVER THEORY OF OPERATION
- K APPLY FM TRANSMITTER THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION

KNOWLEDGE:

- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SINGLE SIDEBAND RECEIVER THEORY OF OPERATION
- K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVEGUIDE THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DECODE PROGRAM
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AC GENERATORS
- K ISOLATE FAULTY AM RECEIVERS
- K ISOLATE FAULTY AM TRANSMITTERS
- K ISOLATE FAULTY APPROXIMATION A/D CONVERTERS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY DC GENERATORS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FM MODULATION TRANSMITTERS
- K ISOLATE FAULTY FM RECEIVERS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY PULSE MODULATION RECEIVERS

KNOWLEDGE:

- K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SINGLE SIDEBAND RECEIVERS
- K ISOLATE FAULTY SINGLE SIDEBAND TRANSMITTERS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY SYNCHROS-SERVOS
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TUNNEL DIODES
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K ISOLATE FAULTY WAVEGUIDES
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K ISOLATE FAULTY ZENER DIODES
- K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF AN INSTALLED LRU (TASK NUMBER: 61370)
- K PERFORM BASIC DC CIRCUIT CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC GENERATORS
- K TROUBLESHOOT AM RECEIVER CIRCUITS
- K TROUBLESHOOT AM TRANSMITTERS
- K TROUBLESHOOT APPROXIMATION A/D CONVERTERS
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT DC GENERATORS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT FM MODULATION TRANSMITTERS
- K TROUBLESHOOT FM RECEIVER CIRCUITS
- K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT LOGIC COUNTERS
- K TROUBLESHOOT LOGIC REGISTERS
- K TROUBLESHOOT MAIN LOGIC GATES
- K TROUBLESHOOT OPERATIONAL AMPLIFIERS
- K TROUBLESHOOT POWER SUPPLY CIRCUITS
- K TROUBLESHOOT POWER SUPPLY FILTERS
- K TROUBLESHOOT POWER SUPPLY RECTIFIERS
- K TROUBLESHOOT PULSE MODULATION RECEIVERS
- K TROUBLESHOOT PULSE MODULATION TRANSMITTERS
- K TROUBLESHOOT RELAYS
- K TROUBLESHOOT SINGLE SIDEBAND RECEIVERS
- K TROUBLESHOOT SINGLE SIDEBAND TRANSMITTERS
- K TROUBLESHOOT SYNCHROS-SERVOS
- K TROUBLESHOOT THREE-PHASE TRANSFORMERS

KNOWLEDGE:

K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
 K TROUBLESHOOT VOLTAGE REGULATOR
 K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
 K TROUBLESHOOT WAVESHAPING CIRCUITS
 K USE COMPUTER PROGRAMMING LANGUAGE
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	G 291		34	50	54	19	6.97	
451X6B	G 291		0	11	9	19	6.97	
451X6	G 291		20	31	32	19	6.97	
451X6A	G 292		39	57	58	22	6.82	
451X6B	G 292		4	8	10	22	6.82	
451X6	G 292		25	33	35	22	6.82	
451X6A	G 293		34	54	57	23	6.30	
451X6B	G 293		0	9	15	23	6.30	
451X6	G 293		20	32	37	23	6.30	
451X6A	G 294		37	54	57	22	6.34	
451X6B	G 294		4	11	13	22	6.34	
451X6	G 294		23	33	36	22	6.34	
451X6A	G 295		21	33	32	20	6.75	
451X6B	G 295		8	15	16	20	6.75	
451X6	G 295		15	24	24	20	6.75	
451X6A	G 296		8	14	19	17	7.27	
451X6B	G 296		12	19	22	17	7.27	
451X6	G 296		9	16	20	17	7.27	
451X6A	G 297		45	61	66	25	6.55	
451X6B	G 297		12	14	15	25	6.55	
451X6	G 297		31	38	41	25	6.55	
451X6A	G 298		45	63	66	27	6.34	
451X6B	G 298		12	16	17	27	6.34	
451X6	G 298		31	40	42	27	6.34	
451X6A	G 299		16	31	30	10	6.44	
451X6B	G 299		0	1	1	10	6.44	
451X6	G 299		9	16	16	10	6.44	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	G 300		16	32	29	10	6.40	
451X6B	G 300		0	1	1	10	6.40	
451X6	G 300		9	17	16	10	6.40	
451X6A	G 301		42	59	64	24	6.46	
451X6B	G 301		8	11	10	24	6.46	
451X6	G 301		28	35	38	24	6.46	
451X6A	G 302		45	61	65	25	6.31	
451X6B	G 302		8	14	13	25	6.31	
451X6	G 302		29	38	40	25	6.31	
451X6A	G 303		24	37	34	10	6.40	
451X6B	G 303		0	2	5	10	6.40	
451X6	G 303		14	20	20	10	6.40	
451X6A	G 304		16	30	30	8	6.30	
451X6B	G 304		0	1	1	8	6.30	
451X6	G 304		9	16	16	8	6.30	
451X6A	G 305		18	32	29	7	6.03	
451X6B	G 305		0	1	1	7	6.03	
451X6	G 305		11	17	16	7	6.03	
451X6A	G 306		18	33	31	14	5.78	
451X6B	G 306		4	7	9	14	5.78	
451X6	G 306		12	20	20	14	5.78	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

G 291 ISOLATE MALFUNCTIONS IN BINARY DATA REGISTER-ROUTERS (DATA) USING MAINTENANCE TAPE OR SCHEMATICS

G 292 ISOLATE MALFUNCTIONS IN COUNTER TIMERS USING MAINTENANCE TAPES OR SCHEMATICS

G 293 ISOLATE MALFUNCTIONS IN LOGIC POWER SUPPLIES USING MAINTENANCE TAPES OR SCHEMATICS

G 294 ISOLATE MALFUNCTIONS IN MICROLOGIC POWER SUPPLIES USING MAINTENANCE TAPES OR SCHEMATICS

G 295 ISOLATE MALFUNCTIONS IN PPGs USING FRONT PANEL CONTROLS, MAINTENANCE TAPES, OR SCHEMATICS

G 296 ISOLATE MALFUNCTIONS IN RF GENERATORS USING MAINTENANCE TAPES OR SCHEMATICS

G 297 ISOLATE MALFUNCTIONS IN STIMULUS CONTROLLERS USING MAINTENANCE TAPES, MANUAL PROGRAMMING, OR SCHEMATICS

G 298 ISOLATE MALFUNCTIONS IN STIMULUS RELAYS USING MAINTENANCE TAPES, MANUAL PROGRAMMING, OR SCHEMATICS

G 299 ISOLATE MALFUNCTIONS IN SYNCHRO BRIDGES USING MAINTENANCE TAPES, MANUAL PROGRAMMING, OR SCHEMATICS

USAF JOB INVENTORY TASK STATEMENTS:

- G 300 ISOLATE MALFUNCTIONS IN SYNCHRO STANDARDS USING MAINTENANCE TAPES, MANUAL PROGRAMMING, OR SCHEMATICS
- G 301 ISOLATE MALFUNCTIONS IN TEST POINT CONTROLLERS USING MANUAL PROGRAMMING, MAINTENANCE TAPES, OR SCHEMATICS
- G 302 ISOLATE MALFUNCTIONS IN TEST POINT RELAYS USING MANUAL PROGRAMMING, MAINTENANCE TAPES, OR SCHEMATICS
- G 303 ISOLATE MALFUNCTIONS IN TRANSFORMER/CONVERTERS USING MANUAL PROGRAMMING, MAINTENANCE TAPES, OR SCHEMATICS
- G 304 ISOLATE MALFUNCTIONS IN TRYGON POWER SUPPLIES
- G 305 ISOLATE MALFUNCTIONS IN TRYGON POWER SUPPLY CONTROLLERS
- G 306 ISOLATE MALFUNCTIONS IN VARIABLE POWER SUPPLY CONTROLS USING SCHEMATICS

TASK NUMBER: 60040

TASK STATEMENT:

REPAIR AUTOMATIC TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
OSCILLOSCOPE

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN TEST STATION
A CLEAN CONTACTS (F 210)
A EXECUTE TEST STATION PROGRAM (CALIBRATION OR OA/FI)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR CIRCUIT CARDS AND CORDWOOD MODULES
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs
A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

SKILLS:

S CONNECT ADAPTER AND CABLES
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS

SKILLS:

S USE DIGITAL MULTIMETER TO CHECK VOLTAGE
S USE FREQUENCY COUNTER TO MEASURE PULSES PER SECOND
S USE OSCILLOSCOPE TO CHECK WAVEFORM

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	G 282		37	42	44	18	5.38	
451X6B	G 282		0	9	10	18	5.38	
451X6	G 282		22	26	28	18	5.38	
451X6A	G 283		42	54	57	21	4.85	
451X6B	G 283		8	15	16	21	4.85	
451X6	G 283		28	35	38	21	4.85	
451X6A	G 284		42	54	59	22	5.10	
451X6B	G 284		0	12	14	22	5.10	
451X6	G 284		25	33	37	22	5.10	
451X6A	G 285		18	29	27	20	5.46	
451X6B	G 285		8	18	18	20	5.46	
451X6	G 285		14	23	23	20	5.46	
451X6A	G 286		8	13	17	17	6.61	
451X6B	G 286		8	19	23	17	6.61	
451X6	G 286		8	16	20	17	6.61	
451X6A	G 287		11	23	20	6	5.69	
451X6B	G 287		0	0	1	6	5.69	
451X6	G 287		6	12	11	6	5.69	
451X6A	G 288		8	20	18	5	5.51	
451X6B	G 288		0	1	2	5	5.51	
451X6	G 288		5	11	10	5	5.51	
451X6A	G 289		18	34	34	8	5.38	
451X6B	G 289		0	1	1	8	5.38	
451X6	G 289		11	18	18	8	5.38	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	G 290		18	30	29	6	5.34	
451X6B	G 290		0	1	1	6	5.34	
451X6	G 290		11	16	15	6	5.34	
451X6A	K 471		3	4	6	1	6.62	
451X6B	K 471		0	0	0	1	6.62	
451X6	K 471		2	2	4	1	6.62	
451X6A	K 472		0	3	6	1	5.89	
451X6B	K 472		0	0	0	1	5.89	
451X6	K 472		0	2	3	1	5.89	
451X6A	L 478		5	4	4	1	6.29	
451X6B	L 478		0	0	0	1	6.29	
451X6	L 478		3	2	2	1	6.29	
451X6A	L 479		5	4	5	2	5.94	
451X6B	L 479		0	0	0	2	5.94	
451X6	L 479		3	2	3	2	5.94	
451X6A	L 480		0	0	1	0	5.57	
451X6B	L 480		0	0	0	0	5.57	
451X6	L 480		0	0	0	0	5.57	
451X6A	L 481		0	7	7	2	5.65	
451X6B	L 481		0	0	0	2	5.65	
451X6	L 481		0	3	4	2	5.65	
451X6A	L 482		3	1	3	1	6.20	
451X6B	L 482		0	0	0	1	6.20	
451X6	L 482		2	1	1	1	6.20	
451X6A	L 483		5	4	5	3	5.61	
451X6B	L 483		0	0	0	3	5.61	
451X6	L 483		3	2	3	3	5.61	
451X6A	M 502		11	10	7	1	5.68	
451X6B	M 502		0	0	1	1	5.68	
451X6	M 502		6	5	4	1	5.68	
451X6A	M 503		3	3	4	1	5.65	
451X6B	M 503		0	0	0	1	5.65	
451X6	M 503		2	2	3	1	5.65	
451X6A	M 504		3	2	2	1	5.43	
451X6B	M 504		0	0	0	1	5.43	
451X6	M 504		2	1	1	1	5.43	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	N 521		5	3	1	0	6.02	
451X6B	N 521		0	0	0	0	6.02	
451X6	N 521		3	2	1	0	6.02	
451X6A	N 522		5	7	9	0	6.05	
451X6B	N 522		0	0	0	0	6.05	
451X6	N 522		3	3	5	0	6.05	
451X6A	N 523		3	3	4	1	6.52	
451X6B	N 523		0	0	0	1	6.52	
451X6	N 523		2	2	2	1	6.52	
451X6A	N 524		8	7	7	1	6.50	
451X6B	N 524		0	0	0	1	6.50	
451X6	N 524		5	3	4	1	6.50	
451X6A	P 575		8	9	11	3	6.32	
451X6B	P 575		0	0	0	3	6.32	
451X6	P 575		5	5	6	3	6.32	
451X6A	Q 591		0	1	2	1	5.65	
451X6B	Q 591		0	0	0	1	5.65	
451X6	Q 591		0	1	1	1	5.65	
451X6A	Q 592		5	4	7	1	5.74	
451X6B	Q 592		0	0	0	1	5.74	
451X6	Q 592		3	2	4	1	5.74	
451X6A	R 603		5	8	10	4	6.33	
451X6B	R 603		0	0	0	4	6.33	
451X6	R 603		3	4	5	4	6.33	
451X6A	T 853		0	0	1	1	6.05	
451X6B	T 853		0	0	0	1	6.05	
451X6	T 853		0	0	1	1	6.05	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 G 282 ALIGN COUNTER TIMERS
 G 283 ALIGN LOGIC POWER SUPPLIES
 G 284 ALIGN MICROLOGIC POWER SUPPLIES
 G 285 ALIGN PROGRAMMABLE PULSE GENERATORS (PPG)
 G 286 ALIGN RADIO FREQUENCY (RF) GENERATORS
 G 287 ALIGN SYNCHRO BRIDGES
 G 288 ALIGN SYNCHRO STANDARDS
 G 289 ALIGN TRYON POWER SUPPLIES
 G 290 ALIGN TRYON POWER SUPPLY CONTROLLERS
 K 471 ALIGN AND CALIBRATE ATTITUDE AND RATE TEST STATION RATE
 TABLES

USAF JOB INVENTORY TASK STATEMENTS:

K 472 CALIBRATE ATTITUDE AND RATE TEST STATIONS
L 478 ALIGN AND CALIBRATE ELECTRONIC SYSTEMS TEST STATION RATE
TABLES
L 479 ALIGN AND CALIBRATE ELECTRONIC SYSTEMS TEST STATIONS
L 480 ALIGN AND CALIBRATE INDICATORS AND MODULES TEST STATION
RATE TABLES
L 481 ALIGN AND CALIBRATE INDICATORS AND MODULES TEST STATIONS
L 482 ALIGN AND CALIBRATE INDICATORS AND SENSORS TEST STATION
RATE TABLES
L 483 ALIGN AND CALIBRATE INDICATORS AND SENSORS TEST STATIONS
M 502 ALIGN AND CALIBRATE COMPUTER (6803) TEST STATIONS
M 503 ALIGN AND CALIBRATE CONVERTER AND FLIGHT CONTROLS TEST
STATIONS
M 504 ALIGN AND CALIBRATE NAVIGATION AND FLIGHT CONTROLS TEST
STATIONS
N 521 ALIGN AND CALIBRATE RADAR ALTIMETER (6836) TEST STATIONS
N 522 ALIGN AND CALIBRATE VIDEO (6815) TEST STATIONS
N 523 ALIGN AND CALIBRATE VIDEO (6875) TEST STATIONS
N 524 ALIGN AND CALIBRATE VIDEO (6885) TEST STATIONS
P 575 ALIGN AND CALIBRATE RECEIVER-TRANSMITTER-MODULATOR TEST
STATIONS (6802, 6872, 6882)
Q 591 ALIGN AND CALIBRATE INDICATORS AND SERVOS (6895) TEST
STATIONS
Q 592 ALIGN AND CALIBRATE SERVOS AND INDICATORS (6825) TEST
STATIONS
R 603 ALIGN AND CALIBRATE DIGITAL NAVIGATION AND WEAPONS DELIVERY
(6863) TEST STATIONS
T 853 CALIBRATE DISPLAYS TEST STATIONS

TASK NUMBER: 60050

TASK STATEMENT:

PERFORM PERIODIC INSPECTIONS ON AUTOMATIC TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIR HOSE
ALL PURPOSE SPRAY CLEANER
BRUSHES
CONTACT CLEANER
CTK
LONG Q-TIPS
MAGNETIC HEAD CLEANER
RAGS

REFERENCES:

APPLICABLE TEST STATION TO

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A CLEAN PUNCH TAPE READER HEADS (F 212)
A CLEAN PUNCH TAPES (F 213)
A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
A CLEAN TRUs AND TRU BAYS
A ORDER PARTS
A PERFORM MAINTENANCE TEST OF AUTOMATIC TEST
STATION (TASK NUMBER: 60020)
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

SKILLS:

S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 212		3	6	12	14	3.08	
451X6B	F 212		27	24	27	14	3.08	
451X6	F 212		12	14	19	14	3.08	
451X6A	F 213		0	0	4	5	3.09	
451X6B	F 213		19	7	7	5	3.09	
451X6	F 213		8	3	5	5	3.09	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 212 CLEAN PUNCH TAPE READER HEADS
F 213 CLEAN PUNCH TAPES
F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

TASK NUMBER: 60060

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN F-111D RADAR SST

TASK NOTES:

SST IS LOCATED ONLY AT CANNON AFB, NM. IT CONSISTS OF AN MRU, EPU, LVPS, MFG, DDP, ARS RACK, AND TRANSMITTER. THE SST WILL BE REPLACED BY DTS.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

BIDEC CONVERTER
CTK
DIGITAL MULTIMETER
OSCILLOSCOPE
RF POWER METER

REFERENCES:

ENGINEERING BLUEPRINTS (AUTONETICS)
27 TFW LCL-033 (ARS ANTENNA CHECKLIST)

CONDITIONS:

COOLING AIR REQUIRED; 2 PERSON REQUIREMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PERFORM OPERATIONAL TEST OF F-111D ARS ANTENNA (TASK NUMBER: 60090)

SKILLS:

S CONNECT ADAPTER AND CABLES
S OPERATE SST
S PERFORM VISUAL INSPECTIONS
S USE BIDEC CONVERTER TO MEASURE ANGLE OF ANTENNA
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER
S USE OSCILLOSCOPE TO MEASURE AC/DC VOLTAGES AND PULSE CHARACTERISTICS

SKILLS:

S USE RF POWER METER TO MEASURE RF OUTPUT
S VERIFY MASTER FREQUENCY GENERATOR OUTPUT LEVELS (N 564)

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY SYSTEM THEORY
K APPLY TECHNICAL DATA
K DETERMINE F-111D LOCAL OSCILLATOR AND TWT OUTPUT LEVELS (N 529)
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	N 529		0	3	2	0	6.35	
451X6B	N 529		0	0	0	0	6.35	
451X6	N 529		0	2	1	0	6.35	
451X6A	N 564		0	3	2	0	6.07	
451X6B	N 564		0	0	0	0	6.07	
451X6	N 564		0	2	1	0	6.07	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
N 529 DETERMINE F-111D LOCAL OSCILLATOR AND TRAVELING WAVE TUBE OUTPUT LEVELS
N 564 VERIFY MASTER FREQUENCY GENERATOR OUTPUT LEVELS

TASK NUMBER: 60070

TASK STATEMENT:

ALIGN AND CALIBRATE F-111D SST RANGE

TASK NOTES:

SST IS LOCATED ONLY AT CANNON AFB, NM. IT CONSISTS OF AN MRU, EPU, LVPS, MFG, DDP, ARS RACK, AND TRANSMITTER. THE SST WILL BE REPLACED BY DTS.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

BORESIGHT TELESCOPES
CALIBRATED REFERENCE PLATE
CLINOMETER
CTK
HOLDING FIXTURE
LADDER
TAPE MEASURE
TELESCOPE MOUNT
THEODOLITE

REFERENCES:

SST BORESIGHT RANGE AND EQUIPMENT REQUIREMENTS CHECKLIST

CONDITIONS:

AN OPERATIONAL ANTENNA UNIT; A VISUALLY UNOBSTRUCTED AREA FOR APPROXIMATELY 40' IN FRONT OF THE HOLDING FIXTURE; 2 PERSON REQUIREMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A DETERMINE BORESIGHT TELESCOPE MOUNT ERROR
A DETERMINE TARGET HORN POINTING ANGLE
A TEST OR ADJUST RELATIVE ROLL ANGLE

SKILLS:

- S OPERATE SST.
- S POSITION LADDER
- S USE BORESIGHT TELESCOPE TO ALIGN RANGE
- S USE CLINOMETER TO CALIBRATE RANGE
- S USE COMMON HANDTOOLS
- S USE HOLDING FIXTURE TO SECURE MOUNT AND GIMBAL SUPPORT UNIT
OF ARS ANTENNA
- S USE REFERENCE PLATE TO DETERMINE TRUE ZERO
- S USE TAPE MEASURE
- S USE TELESCOPE MOUNT TO SECURE TELESCOPE
- S USE THEODOLITE TO ALIGN RANGE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA
- K PERFORM MATHEMATICAL CONVERSIONS

TASK NUMBER: 60080

TASK STATEMENT:

REPAIR F-111D SST

TASK NOTES:

SST IS LOCATED ONLY AT CANNON AFB, NM. IT CONSISTS OF AN MRU, EPU, LVPS, MFG, DDP, ARS RACK, AND TRANSMITTER. THE SST WILL BE REPLACED BY DTS.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK

REFERENCES:

12P2-2APQ130-2
ENGINEERING BLUEPRINTS

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ALIGN AND CALIBRATE F-111D SST RANGE (TASK NUMBER: 60070)
- A ORDER PARTS
- A REMOVE AND REPLACE ARS COMPONENTS (I 431)
- A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
- A REPAIR TOGGLE AND ROTARY SWITCHES
- A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S USE COMMON HANDTOOLS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 268		3	12	19	19	3.93	
451X6B	F 268		27	39	34	19	3.93	
451X6	F 268		12	25	26	19	3.93	
451X6A	I 431		0	10	14	1	4.78	
451X6B	I 431		0	0	0	1	4.78	
451X6	I 431		0	5	8	1	4.78	

USAF JOB INVENTORY TASK STATEMENTS:

F 268 REMOVE OR REPLACE SIMULATOR OR MOCKUP SUBASSEMBLIES
I 431 REMOVE OR REPLACE ARS COMPONENTS

TASK NUMBER: 60090

TASK STATEMENT:

PERFORM OPERATIONAL TEST OF THE F-111D ARS ANTENNA

TASK NOTES:

ACCOMPLISHED ON SST AT CANNON AFB, NM. TEST SRUs BY
PERFORMING OPERATIONAL CHECK OF ARS ANTENNA

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

BREAKOUT BOX
CTK
DIGITAL VOLTMETER
SST
VECTOR VOLTMETER

REFERENCES:

27 TFW LCL-033 (ARS ANTENNA CHECKLIST)

CONDITIONS:

COOLING AIR REQUIRED; 2 PERSON REQUIREMENT; KNOWN GOOD ARS
ANTENNA (DETERMINING BAD ACTOR)

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CHECK FOR ANTENNA OSCILLATION
A CHECK OUTPUT OF TIME SHARE SWITCH
A CHECK POSITION TRANSMITTERS (TILT, AZIMUTH, AND PITCH)
A ELECTRICALLY BORESIGHT F-111D ARS ANTENNAS (N 535)
A PERFORM AZIMUTH ROTARY JOINT TEST
A PERFORM AZIMUTH TILT NULL TEST
A PERFORM CIRCULAR POLARIZER TEST
A PERFORM MOTION COMPENSATION TEST
A PERFORM PENCIL/SPOIL TEST
A PERFORM PITCH CAGE TEST
A PERFORM PRESSURE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
 S CONNECT ANTENNA
 S OPERATE SST
 S PERFORM VISUAL INSPECTIONS
 S PROBE DC VOLTAGES USING BREAK-OUT BOXES
 S STOW/UNSTOW ANTENNA
 S USE COMMON HANDTOOLS
 S USE DIGITAL VOLTMETER TO MEASURE DC VOLTAGES
 S USE GAUGE ON INTERFACE PANEL
 S USE PECULIAR TEST EQUIPMENT BAY
 S USE VECTOR VOLTMETER TO CHECK PHASING AND NULLS

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SYSTEM THEORY
 K APPLY TECHNICAL DATA
 K DISTINGUISH BETWEEN HIGH AND LOW PITCH ON DIAPHRAGM VACUUM

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	N 530		0	2	1	0	5.64	
451X6B	N 530		0	0	0	0	5.64	
451X6	N 530		0	1	0	0	5.64	
451X6A	N 531		0	3	2	0	5.10	
451X6B	N 531		0	0	0	0	5.10	
451X6	N 531		0	2	1	0	5.10	
451X6A	N 532		0	3	2	0	5.54	
451X6B	N 532		0	0	0	0	5.54	
451X6	N 532		0	2	1	0	5.54	
451X6A	N 533		0	3	2	0	5.45	
451X6B	N 533		0	0	0	0	5.45	
451X6	N 533		0	2	1	0	5.45	
451X6A	N 534		0	3	2	0	5.34	
451X6B	N 534		0	0	0	0	5.34	
451X6	N 534		0	2	1	0	5.34	
451X6A	N 535		0	3	2	0	6.58	
451X6P	N 535		0	0	0	0	6.58	
451X6	N 535		0	2	1	0	6.58	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	N 561		0	2	2	0	5.06	
451X6B	N 561		0	0	0	0	5.06	
451X6	N 561		0	1	1	0	5.06	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRU_s ISSUED FROM SUPPLY

N 530 DETERMINE STATUS OF F-111D BAD ACTOR ARS ELECTRONICS
PROCESSOR UNITS

N 531 DETERMINE STATUS OF F-111D BAD ACTOR ARS LOW VOLTAGE POWER
SUPPLIES

N 532 DETERMINE STATUS OF F-111D BAD ACTOR ARS MASTER FREQUENCY
GENERATORS

N 533 DETERMINE STATUS OF F-111D BAD ACTOR ARS MICROWAVE RECEIVER
UNITS

N 534 DETERMINE STATUS OF F-111D BAD ACTOR ARS TRANSMITTERS

N 535 ELECTRICALLY BORESIGHT F-111D ARS ANTENNAS

N 561 TEST F-111D ARS ANTENNA SRU_s

TASK NUMBER: 60100

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN THE F-111D ARS ANTENNA

TASK NOTES:

ACCOMPLISHED ON SST AT CANNON AFB, NM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

VECTOR VOLTMETER

REFERENCES:

12P2-2APQ130-2

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

- S PERFORM VISUAL INSPECTIONS
- S USE VECTOR VOLTMETER TO CHECK NULLS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY LRU THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60110

TASK STATEMENT: .

REPAIR THE F-111D ARS ANTENNA

TASK NOTES:

ACCOMPLISHED ON SST AT CANNON AFB, NM. ADJUSTMENTS ARE MADE DURING OPERATIONAL CHECK.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
VECTOR VOLTMETER

REFERENCES:

12P2-2APQ130-2
UTM-APQ130F-111
APQ-130 ANTENNA BORESIGHTING WAIVER

CONDITIONS:

COOLING AIR REQUIRED; 2 PERSON REQUIREMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ADJUST CLEVIS BOLTS ON REFLECTOR
A ADJUST VIDEO PHASE SHIFT OF F-111D ARS ANTENNAS (N 520)
A ALIGN F-111D ARS ANTENNA SRUs (N 526)
A FLIP THE HARNESS
A ORDER PARTS
A PERFORM OPERATIONAL TEST OF F-111D ARS ANTENNA
(TASK NUMBER: 60090)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE WAVEGUIDES
A REPAIR GSU COMPONENTS
A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S REMOVE AND REPLACE HARNESS
S REMOVE REFLECTOR
S USE COMMON HANDTOOLS
S USE VECTOR VOLTMETER TO ADJUST PHASING

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	N 520		0	3	2	0	6.89	
451X6B	N 520		0	0	0	0	6.89	
451X6	N 520		0	2	1	0	6.89	
451X6A	N 525		0	3	3	0	6.60	
451X6B	N 525		0	0	0	0	6.60	
451X6	N 525		0	2	2	0	6.60	
451X6A	N 526		0	3	3	0	6.48	
451X6B	N 526		0	0	0	0	6.48	
451X6	N 526		0	2	2	0	6.48	

USAF JOB INVENTORY TASK STATEMENTS:

N 520 ADJUST VIDEO PHASE SHIFT OF F-111D ARS ANTENNAS
N 525 ALIGN F-111D ARS ANTENNA FOR CORRECT LOCKON
N 526 ALIGN F-111D ARS ANTENNA SRUs

TASK NUMBER: 60120

TASK STATEMENT:

MAINTAIN TFR MOCKUP

TASK NOTES:

THE MOCKUP CONSISTS OF: 2 ANTENNA RECEIVERS, 2 TFR COMPUTERS,
2 TRANSMITTER-SYNCHRONIZERS, 2 TFR POWER SUPPLIES, TFR INDICATOR,
TFR CONTROL BOX, AND RACK

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL VOLTMETER
ECHO ABSORBING CHAMBER
MULTIMETER
OSCILLOSCOPE

REFERENCES:

LOCAL CHECKLIST
12AE1-73-1048A
12P2-2APQ110-12 (ORIGINAL SYSTEM)
12P2-2APQ128-2 (UPDATED SYSTEM)
APPLICABLE FLIGHTLINE TO
LOCAL INTERCONNECT DRAWINGS

CONDITIONS:

15' OF CLEARANCE REQUIRED TO TRANSMIT OUTDOORS; ECHO
ABSORBING CHAMBER REQUIRED TO TRANSMIT INDOORS;
2 PERSON REQUIREMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SIMULATORS OR MOCKUPS (F 205)
A CHECK OUTPUTS OF MOCKUP
A ISOLATE MALFUNCTIONS IN TFR MOCKUPS (I 424)
A ORDER PARTS
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE TFR COMPONENTS (I 438)

ACTIVITIES

- A REPAIR WIRING (TASK NUMBER: 61440)
- A VERIFY MOCKUP SERVICABILITY

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S CONNECT WAVEGUIDES
- S INSTALL LRUs
- S INSTALL SINGLE TFR CHANNEL
- S OPERATE TFR MOCKUP
- S PERFORM VISUAL INSPECTIONS
- S USE CHAMBER TO ABSORB RF WHEN TRANSMITTING INDOORS
- S USE COMMON HANDTOOLS
- S USE DIGITAL VOLTMETER TO MEASURE DC VOLTAGES
- S USE MULTIMETER TO CHECK CONTINUITY
- S USE OSCILLOSCOPE TO CHECK VIDEO SIGNALS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY LRU THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TFR SYSTEM INTEGRATION THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHICH SECTION OF TEST TO EXECUTE
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSFORMERS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TUNE ANTENNA RECEIVER TO TRANSMITTER SYNCHRONIZER
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 205		5	12	17	14	5.41	
451X6B	F 205		46	42	33	14	5.41	
451X6	F 205		22	27	24	14	5.41	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 234		3	17	22	20	6.19	
451X6B	F 234		35	44	38	20	6.19	
451X6	F 234		15	29	29	20	6.19	
451X6A	F 268		3	12	19	19	3.93	
451X6B	F 268		27	39	34	19	3.93	
451X6	F 268		12	25	26	19	3.93	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	I 424		3	14	16	3	6.05	
451X6B	I 424		0	0	0	3	6.05	
451X6	I 424		2	7	9	3	6.05	
451X6A	I 430		3	13	16	3	5.42	
451X6B	I 430		0	0	0	3	5.42	
451X6	I 430		2	7	8	3	5.42	
451X6A	I 438		5	17	20	4	4.17	
451X6B	I 438		0	0	0	4	4.17	
451X6	I 438		3	8	10	4	4.17	
451X6A	S 768		11	13	15	2	4.25	
451X6B	S 768		0	0	2	2	4.25	
451X6	S 768		6	7	9	2	4.25	

USAF JOB INVENTORY TASK STATEMENTS:

F 205 ALIGN SIMULATORS OR MOCKUPS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 F 234 ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS
 F 268 REMOVE OR REPLACE SIMULATOR OR MOCKUP SUBASSEMBLIES
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 I 424 ISOLATE MALFUNCTIONS IN TFR MOCKUPS
 I 430 PERFORM OPERATIONAL TESTS OF TFR MOCKUPS
 I 438 REMOVE OR REPLACE TFR COMPONENTS
 S 768 PERFORM OPERATIONAL TESTS OF TFR RACKS

TASK NUMBER: 60130

TASK STATEMENT:

MAINTAIN ARS MOCKUP

TASK NOTES:

ARS MOCKUP CONSISTS OF INDICATOR RECEIVER, RADAR SET CONTROL, MRT, TRACKING HANDLE, ELECTRICAL SYNCHRONIZER, ANTENNA, ACU, AND ROLL PEDESTAL. OWNED BY CONTRACTOR (GENERAL ELECTRIC).

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
ECHO ABSORBING SCREEN
OSCILLOSCOPE

REFERENCES:

12AEI-73-4009
LOCAL CHECKLIST (BEING DEVELOPED)
ALR 32271 (GENERAL DYNAMIC STUDENT HANDBOOK)

CONDITIONS:

CLEAR AND OPEN AREA TO TRANSMIT; 2 PERSON REQUIREMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SIMULATORS OR MOCKUPS (F 205)
A ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS (F 234)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE LRUs
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REPAIR WIRING (TASK NUMBER: 61440)
A VERIFY MOCKUP SERVICEABILITY

SKILLS:

S CONNECT ADAPTER AND CABLES
 S CONNECT WAVEGUIDES
 S INSTALL LRU#
 S OPERATE MOCKUP
 S PERFORM VISUAL INSPECTIONS
 S PRESSURIZE LRU# (TASK NUMBER: 61460)
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO CHECK VOLTAGES
 S USE OSCILLOSCOPE TO CHECK VIDEO PULSES

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY LRU THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SYSTEM INTEGRATION THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K CHECK ECHO ABSORBING SCREEN FOR PROPER POSITIONING
 K DETERMINE HOW A BREAK IN WIRING WILL AFFECT LRU OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K DETERMINE WHICH SECTION OF TEST TO EXECUTE
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 205		5	12	17	14	5.41	
451X6B	F 205		46	42	33	14	5.41	
451X6	F 205		22	27	24	14	5.41	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	F 234		3	17	22	20	6.19	
451X6B	F 234		35	44	38	20	6.19	
451X6	F 234		15	29	29	20	6.19	
451X6A	F 268		3	12	19	19	3.93	
451X6B	F 268		27	39	34	19	3.93	
451X6	F 268		12	25	26	19	3.93	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	I 411		0	7	10	0	6.26	
451X6B	I 411		0	0	0	0	6.26	
451X6	I 411		0	3	5	0	6.26	
451X6A	I 418		0	7	10	1	6.57	
451X6B	I 418		0	0	0	1	6.57	
451X6	I 418		0	3	5	1	6.57	
451X6A	I 429		0	8	12	1	5.31	
451X6B	I 429		0	0	0	1	5.31	
451X6	I 429		0	4	6	1	5.31	
451X6A	N 562		0	3	2	0	5.16	
451X6B	N 562		0	0	0	0	5.16	
451X6	N 562		0	2	1	0	5.16	

USAF JOB INVENTORY TASK STATEMENTS:

F 205 ALIGN SIMULATORS OR MOCKUPS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 F 234 ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS
 F 268 REMOVE OR REPLACE SIMULATOR OR MOCKUP SUBASSEMBLIES
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 I 411 ALIGN ATTACK RADAR SYSTEM (ARS) MOCKUPS
 I 418 ISOLATE MALFUNCTIONS IN ARS MOCKUPS
 I 429 PERFORM OPERATIONAL TESTS OF ARS MOCKUPS
 N 562 VERIFY ARS ANTENNA RACKS

TASK NUMBER: 60140

TASK STATEMENT: .

MAINTAIN LARA MOCKUP

TASK NOTES:

LARA MOCKUP CONSISTS OF 2 LARAs, LARA RACK, LAM, 2 ANTENNAS, ANALOG MULTIPLEXER, LARA INDICATOR, 2 FILTERS, AND 300' OF DELAY LINE

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER

REFERENCES:

LOCAL CHECKLIST
APPLICABLE FLIGHTLINE TO

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ALIGN SIMULATORS OR MOCKUPS (F 205)
- A ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS (F 234)
- A ORDER PARTS
- A REMOVE AND REPLACE DELAY LINES
- A REMOVE AND REPLACE LRUs
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A VERIFY MOCKUP SERVICEABILITY

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S INSTALL LRUs
- S OPERATE LARA MOCKUP

SKILLS:

S PERFORM VISUAL INSPECTIONS
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO CHECK CONTINUITY

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY LRU THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SYSTEM INTEGRATION THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 205		5	12	17	14	5.41	
451X6B	F 205		46	42	33	14	5.41	
451X6	F 205		22	27	24	14	5.41	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	F 234		3	17	22	20	6.19	
451X6B	F 234		35	44	38	20	6.19	
451X6	F 234		15	29	29	20	6.19	
451X6A	F 268		3	12	19	19	3.93	
451X6B	F 268		27	39	34	19	3.93	
451X6	F 268		12	25	26	19	3.93	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 205 ALIGN SIMULATORS OR MOCKUPS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR LINE REPLACEABLE UNITS (LRU)
 F 234 ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS
 F 268 REMOVE OR REPLACE SIMULATOR OR MOCKUP SUBASSEMBLIES
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60150

TASK STATEMENT:

PERFORM CONFIDENCE TESTS OF AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK

TORQUE WRENCH (PRESSURE SIMULATOR SYSTEM)

REFERENCES:

33D7-38-208-1

33D7-38-209-1

33D7-38-227-1

33D7-38-228-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; POWER-ON

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ENTER HEADER DATA

A INITIALIZE CONFIDENCE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES

S CONNECT ANCILLARY EQUIPMENT

S OPERATE TEST STATION

S USE KEYBOARD

S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

K DETERMINE WHICH SECTION OF TEST TO EXECUTE

KNOWLEDGE:

K FOLLOW INSTRUCTIONS ON CRT AND PCM
K INTERPRET FLAG INDICATIONS ON PCM
K INTERPRET PRINTOUT

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 385		16	11	12	7	3.84	
451X6B	H 385		0	1	2	7	3.84	
451X6	H 385		9	6	7	7	3.84	
451X6A	H 386		16	10	8	5	3.84	
451X6B	H 386		0	1	2	5	3.84	
451X6	H 386		9	6	5	5	3.84	
451X6A	H 387		13	8	7	7	3.74	
451X6B	H 387		0	1	2	7	3.74	
451X6	H 387		8	5	5	7	3.74	
451X6A	H 388		11	12	10	7	3.86	
451X6B	H 388		0	2	2	7	3.86	
451X6	H 388		6	7	6	7	3.86	

USAF JOB INVENTORY TASK STATEMENTS:

H 385 PERFORM CONFIDENCE TESTS OF AIS/R COMPUTER TEST STATIONS
OTHER THAN (6803) COMPUTER TEST STATIONS
H 386 PERFORM CONFIDENCE TESTS OF AIS/R EW TEST STATIONS
H 387 PERFORM CONFIDENCE TESTS OF AIS/R VIDEO TEST STATIONS
H 388 PERFORM CONFIDENCE TESTS OF RF TEST STATIONS

TASK NUMBER: 60160

TASK STATEMENT: .

PERFORM OA/FI TESTS OF AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

LOADS

MAINTENANCE ITA

POWER ATTENUATORS (RF AND EW ONLY)

POWER HEADS (RF AND EW ONLY)

THEODOLITE (VIDEO)

REFERENCES:

33D7-38-208-1

33D7-38-209-1

33D7-38-227-1

33D7-38-228-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN CROSS-HAIRS AND MIRRORS TO CALIBRATE THEODOLITE

A ENTER HEADER DATA

A INITIALIZE OA/FI

A UTILIZE FRONT CONTROLS OR MAKE MANUAL INTERVENTION
(RF AND EW)

SKILLS:

S CONNECT ADAPTER AND CABLES

S CONNECT WAVEGUIDES

S OPERATE TEST STATION

S USE ATTENUATORS TO SIMULATE LRU SIGNALS

S USE KEYBOARD

S USE LOADS TO ATTENUATE SIGNALS, IMPEDANCE MATCH, AND
SIMULATE LOADS

SKILLS:

- S USE POWER HEADS FOR IMPEDANCE MATCHING
- S USE SPECTRUM ANALYZER TO MEASURE POWER, FREQUENCY BANDWIDTHS, ETC (RF AND EW)
- S USE WAVEFORM ANALYZER TO MEASURE PULSE CHARACTERISTICS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA
- K DETERMINE WHICH SECTION OF TEST TO EXECUTE
- K FOLLOW INSTRUCTIONS ON CRT AND PCM

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 391		16	11	10	8	4.94	
451X6B	H 391		0	1	2	8	4.94	
451X6	H 391		9	6	6	8	4.94	
451X6A	H 392		16	10	7	5	5.14	
451X6B	H 392		0	1	2	5	5.14	
451X6	H 392		9	6	5	5	5.14	
451X6A	H 393		18	10	7	8	4.84	
451X6B	H 393		0	1	2	8	4.84	
451X6	H 393		11	6	5	8	4.84	
451X6A	H 394		13	11	8	6	4.94	
451X6B	H 394		0	2	2	6	4.94	
451X6	H 394		8	7	5	6	4.94	

USAF JOB INVENTORY TASK STATEMENTS:

- H 391 PERFORM OPERATIONAL ASSURANCE/FAULT ISOLATION (OA/FI) TESTS OF AIS/R COMPUTER TEST STATIONS
- H 392 PERFORM OA/FI TESTS OF AIS/R EW TEST STATIONS
- H 393 PERFORM OA/FI TESTS OF AIS/R VIDEO TEST STATIONS
- H 394 PERFORM OA/FI TESTS OF RF TEST STATIONS

TASK NUMBER: 60170

TASK STATEMENT:

MANIPULATE CIIL

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIS/R TEST STATION

REFERENCES:

33D7-38-207-11
CIIL ATLAS DICTIONARY

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DURING TROUBLESHOOTING

STANDARDS:

IAW REFERENCES

SKILLS:

S OPERATE TEST STATION
S USE KEYBOARD
S USE PRINTER TO PRINT CIIL

KNOWLEDGE:

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K APPLY VARIOUS CIIL COMMANDS
K INTERPRET STATION RESPONSES

TASK NUMBER: 60180

TASK STATEMENT:

PERFORM DIAGNOSTIC CHECKS OF SEL COMPUTERS (H 389)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIS/R TEST STATION
MAGNETIC DIAGNOSTIC TAPE

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
31S5-4-638-4038-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A INITIALIZE COMPUTER
A LOAD FILE FROM TAPE TO COMPUTER
A EXECUTE APPROPRIATE FILE

SKILLS:

S LOAD DIAGNOSTIC TAPE
S OPERATE TEST STATION
S USE COMMUNICATION COMMANDS
S USE KEYBOARD

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHICH FILE ON DIAGNOSTIC TAPE IS REQUIRED

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 389		0	3	6	3	4.63	
451X6B	H 389		0	0	1	3	4.63	
451X6	H 389		0	2	4	3	4.63	

USAF JOB INVENTORY TASK STATEMENTS:

H 389 PERFORM DIAGNOSTIC CHECKS OF SEL COMPUTERS

TASK NUMBER: 60190

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN AIS/R TEST STATIONS

TASK NOTES:

AIS/R TROUBLESHOOTING IS LIMITED DUE TO WARRANTY; ATSCS
TROUBLESHOOTING IS LIMITED TO TRU IDENTIFICATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CAPACITOR SUBSTITUTION BOX

CAPACITOR TESTER

CTK

DC RESTORER

DIGITAL LOGIC PROBE

ESD PROTECTIVE EQUIPMENT

ESS

FIELD STRENGTH TESTER

LOGIC ANALYZER

LOGIC CURRENT TRACER

LOGIC PULSER

MULTIMETER

SIGNATURE ANALYZER

SOURCE LISTING

TDR

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

33AA43-13-1 (ATSCS)

33D7-38-207-11

33DA-122-4-1 (ESS)

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A EXTEND CCA_s
- A EXTEND TRU_s
- A PERFORM CONFIDENCE TEST OF AIS/R TEST STATIONS
(TASK NUMBER: 60150)
- A PERFORM OA/FI TESTS OF AIS/R TEST STATIONS
(TASK NUMBER: 60160)

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S CONNECT WAVEGUIDES
- S INSTALL EXTENDER BOARDS
- S LOAD COMPUTER PROGRAMS
- S MASK/UNMASK TRU USING THE PCM
- S OPERATE TEST STATION
- S PERFORM VISUAL INSPECTIONS
- S USE CAPACITOR SUBSTITUTION BOX
- S USE CAPACITOR TESTER
- S USE COMMON HANDTOOLS
- S USE DC RESTORER
- S USE DIGITAL LOGIC PROBE
- S USE DIGITIZER
- S USE ESS TO TEST TRU_s (WHEN STATION CANNOT DETECT FAILURE)
- S USE FIELD STRENGTH TESTER
- S USE LOGIC ANALYZER
- S USE LOGIC CURRENT TRACER
- S USE LOGIC PULSER
- S USE MULTIMETER
- S USE SIGNAL GENERATOR
- S USE SIGNATURE ANALYZER
- S USE SPECTRUM ANALYZER
- S USE TDR
- S USE UNIVERSAL COUNTER

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY ATLAS FOR TEST STATION MAINTENANCE
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY COMPUTER SUBASSEMBLY THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION

KNOWLEDGE:

- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY PHOTOSENSITIVE DEVICE THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SIMULATED SYNCHRO THEORY OF OPERATION
- K APPLY SOLENOID THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVEGUIDE THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K CONVERT DEGREES, MINUTES, AND SECONDS TO DECIMAL
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K INTERPRET RESISTOR COLOR CODES
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY COMPUTER MAJOR UNITS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY PHOTOSENSITIVE DEVICES
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SIMULATED SYNCHROS
- K ISOLATE FAULTY SOLENOIDS
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS

KNOWLEDGE:

K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
 K ISOLATE FAULTY TRANSMISSION LINES
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K ISOLATE FAULTY WAVEGUIDES
 K ISOLATE FAULTY WAVESHAPING CIRCUITS
 K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF
 AN INSTALLED LRU (TASK NUMBER: 61370)
 K MANIPULATE CIIL (TASK NUMBER: 60170)
 K PERFORM TRANSMISSION LINE MEASUREMENTS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT COMPUTER MAJOR UNITS
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT POWER SUPPLY CIRCUITS
 K TROUBLESHOOT POWER SUPPLY FILTERS
 K TROUBLESHOOT POWER SUPPLY RECTIFIERS
 K TROUBLESHOOT RCL CIRCUITS
 K USE BLOCK DIAGRAMS
 K USE COMPUTER PROGRAMMING LANGUAGE
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 225		5	9	12	9	6.81	
451X6B	F 225		4	5	8	9	6.81	
451X6	F 225		5	7	10	9	6.81	
451X6A	F 227		0	2	6	6	7.01	
451X6B	F 227		4	7	13	6	7.01	
451X6	F 227		2	5	10	6	7.01	
451X6A	F 230		32	39	48	27	5.94	
451X6B	F 230		46	40	44	27	5.94	
451X6	F 230		37	39	46	27	5.94	
451X6A	F 231		32	42	55	31	5.81	
451X6B	F 231		38	44	55	31	5.81	
451X6	F 231		34	42	55	31	5.81	
451X6A	F 237		0	8	11	7	6.73	
451X6B	F 237		0	4	9	7	6.73	
451X6	F 237		0	6	10	7	6.73	
451X6A	F 238		18	34	43	22	6.40	
451X6B	F 238		35	36	32	22	6.40	
451X6	F 238		25	35	38	22	6.40	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 239		3	2	6	8	6.43	
451X6B	F 239		4	7	12	8	6.43	
451X6	F 239		3	5	9	8	6.43	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	H 341		13	14	12	8	5.27	
451X6B	H 341		0	0	3	8	5.27	
451X6	H 341		8	7	8	8	5.27	
451X6A	H 342		5	8	7	3	5.16	
451X6B	H 342		0	0	3	3	5.16	
451X6	H 342		3	4	5	3	5.16	
451X6A	H 343		16	16	12	6	5.17	
451X6B	H 343		0	2	4	6	5.17	
451X6	H 343		9	9	8	6	5.17	
451X6A	H 344		13	17	16	6	5.18	
451X6B	H 344		0	2	3	6	5.18	
451X6	H 344		8	10	10	6	5.18	
451X6A	H 345		13	16	14	7	5.14	
451X6B	H 345		0	0	3	7	5.14	
451X6	H 345		8	8	8	7	5.14	
451X6A	H 346		5	8	10	5	5.35	
451X6B	H 346		0	1	2	5	5.35	
451X6	H 346		3	5	6	5	5.35	
451X6A	H 347		5	6	8	4	4.96	
451X6B	H 347		0	0	1	4	4.96	
451X6	H 347		3	3	5	4	4.96	
451X6A	H 348		0	2	4	2	5.43	
451X6B	H 348		0	0	1	2	5.43	
451X6	H 348		0	1	3	2	5.43	
451X6A	H 349		8	7	10	5	5.13	
451X6B	H 349		4	1	2	5	5.13	
451X6	H 349		6	4	6	5	5.13	
451X6A	H 350		8	6	5	3	5.26	
451X6B	H 350		0	0	2	3	5.26	
451X6	H 350		5	3	4	3	5.26	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 351		8	8	7	3	5.50	
451X6B	H 351		0	0	3	3	5.50	
451X6	H 351		5	4	5	3	5.50	
451X6A	H 352		3	4	8	5	4.84	
451X6B	H 352		0	0	1	5	4.84	
451X6	H 352		2	2	5	5	4.84	
451X6A	H 353		5	4	8	4	5.85	
451X6B	H 353		0	0	1	4	5.85	
451X6	H 353		3	2	5	4	5.85	
451X6A	H 354		11	12	11	6	5.69	
451X6B	H 354		0	0	3	6	5.69	
451X6	H 354		6	6	8	6	5.69	
451X6A	H 355		8	4	6	3	5.81	
451X6B	H 355		0	0	2	3	5.81	
451X6	H 355		5	2	4	3	5.81	
451X6A	H 356		11	13	10	3	5.71	
451X6B	H 356		4	1	3	3	5.71	
451X6	H 356		8	7	6	3	5.71	
451X6A	H 357		3	2	5	3	5.83	
451X6B	H 357		0	0	2	3	5.83	
451X6	H 357		2	1	3	3	5.83	
451X6A	H 358		11	7	5	3	5.83	
451X6B	H 358		0	0	2	3	5.83	
451X6	H 358		6	3	4	3	5.83	
451X6A	H 359		3	7	6	3	5.76	
451X6B	H 359		0	1	3	3	5.76	
451X6	H 359		2	4	4	3	5.76	
451X6A	H 360		13	12	10	4	4.51	
451X6B	H 360		0	0	2	4	4.51	
451X6	H 360		8	6	6	4	4.51	
451X6A	H 361		13	10	10	5	5.47	
451X6B	H 361		0	0	2	5	5.47	
451X6	H 361		8	5	6	5	5.47	
451X6A	H 362		11	11	10	6	6.01	
451X6B	H 362		0	1	2	6	6.01	
451X6	H 362		6	6	6	6	6.01	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 363		0	0	1	0	5.72	
451X6B	H 363		0	0	0	0	5.72	
451X6	H 363		0	0	1	0	5.72	
451X6A	H 364		3	3	6	2	6.44	
451X6B	H 364		0	1	1	2	6.44	
451X6	H 364		2	2	4	2	6.44	
451X6A	H 365		11	8	9	5	6.56	
451X6B	H 365		0	0	2	5	6.56	
451X6	H 365		6	4	6	5	6.56	
451X6A	H 366		16	10	9	5	6.65	
451X6B	H 366		0	1	2	5	6.65	
451X6	H 366		9	6	5	5	6.65	
451X6A	H 367		0	2	4	2	6.40	
451X6B	H 367		0	0	0	2	6.40	
451X6	H 367		0	1	2	2	6.40	
451X6A	H 368		8	7	9	5	6.41	
451X6B	H 368		0	0	2	5	6.41	
451X6	H 368		5	3	6	5	6.41	
451X6A	H 369		0	3	6	3	6.50	
451X6B	H 369		0	0	0	3	6.50	
451X6	H 369		0	2	3	3	6.50	
451X6A	H 370		18	12	12	7	6.24	
451X6B	H 370		0	0	2	7	6.24	
451X6	H 370		11	6	7	7	6.24	
451X6A	H 371		8	7	10	5	6.32	
451X6B	H 371		0	0	2	5	6.32	
451X6	H 371		5	3	6	5	6.32	
451X6A	H 372		3	8	7	2	6.46	
451X6B	H 372		0	0	1	2	6.46	
451X6	H 372		2	4	4	2	6.46	
451X6A	H 373		18	13	12	7	6.67	
451X6B	H 373		0	1	2	7	6.67	
451X6	H 373		11	7	7	7	6.67	
451X6A	H 374		5	4	8	5	6.10	
451X6B	H 374		0	0	2	5	6.10	
451X6	H 374		3	2	5	5	6.10	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 375		0	1	2	1	6.28	
451X6B	H 375		0	0	0	1	6.28	
451X6	H 375		0	1	1	1	6.28	
451X6A	H 376		11	9	6	2	6.60	
451X6B	H 376		0	0	2	2	6.60	
451X6	H 376		6	5	4	2	6.60	
451X6A	H 377		0	0	2	2	7.25	
451X6B	H 377		0	0	2	2	7.25	
451X6	H 377		0	0	2	2	7.25	
451X6A	H 378		8	7	7	4	6.27	
451X6B	H 378		0	1	2	4	6.27	
451X6	H 378		5	4	5	4	6.27	
451X6A	H 379		24	17	13	6	6.82	
451X6B	H 379		0	2	2	6	6.82	
451X6	H 379		14	10	8	6	6.82	
451X6A	H 380		3	2	6	5	6.30	
451X6B	H 380		0	0	1	5	6.30	
451X6	H 380		2	1	4	5	6.30	
451X6A	H 381		3	3	6	3	6.25	
451X6B	H 381		0	0	1	3	6.25	
451X6	H 381		2	2	4	3	6.25	
451X6A	H 382		13	8	8	4	5.07	
451X6B	H 382		0	1	1	4	5.07	
451X6	H 382		8	5	5	4	5.07	
451X6A	H 383		3	4	6	2	6.29	
451X6B	H 383		0	0	1	2	6.29	
451X6	H 383		2	2	4	2	6.29	
451X6A	H 384		3	4	4	1	5.77	
451X6B	H 384		0	0	1	1	5.77	
451X6	H 384		2	2	2	1	5.77	

USAF JOB INVENTORY TASK STATEMENTS:

F 225 ISOLATE MALFUNCTIONS IN COMPUTER TERMINALS
 F 227 ISOLATE MALFUNCTIONS IN DISK DRIVES
 F 230 ISOLATE MALFUNCTIONS IN HIGH VOLTAGE POWER SUPPLIES
 F 231 ISOLATE MALFUNCTIONS IN LOW VOLTAGE POWER SUPPLIES
 F 237 ISOLATE MALFUNCTIONS TO COMPUTER TERMINALS
 F 238 ISOLATE MALFUNCTIONS TO CORDWOOD MODULES OR CIRCUIT CARDS
 F 239 ISOLATE MALFUNCTIONS TO DISK DRIVES
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

USAF JOB INVENTORY TASK STATEMENTS:

H 341 ISOLATE MALFUNCTIONS TO AC AUXILIARY POWER SUPPLIES
H 342 ISOLATE MALFUNCTIONS TO CONTINUOUS WAVE (CW) POWER METERS
H 343 ISOLATE MALFUNCTIONS TO DC AUXILIARY POWER SUPPLIES
H 344 ISOLATE MALFUNCTIONS TO DC PROGRAMMABLE POWER SUPPLIES
H 345 ISOLATE MALFUNCTIONS TO DIGITAL MULTIMETERS
H 346 ISOLATE MALFUNCTIONS TO DIGITAL WORD GENERATOR POWER
SUPPLIES
H 347 ISOLATE MALFUNCTIONS TO DISPLAY TERMINALS
H 348 ISOLATE MALFUNCTIONS TO GRAPHIC DISPLAY TEST ASSEMBLIES
H 349 ISOLATE MALFUNCTIONS TO KEYBOARDS
H 350 ISOLATE MALFUNCTIONS TO MICROWAVE PULSE COUNTERS
H 351 ISOLATE MALFUNCTIONS TO PEAK POWER METERS
H 352 ISOLATE MALFUNCTIONS TO PRINTERS
H 353 ISOLATE MALFUNCTIONS TO PROGRAMMABLE SYNCHRO/RESOLVER
SIMULATORS
H 354 ISOLATE MALFUNCTIONS TO PULSE GENERATORS
H 355 ISOLATE MALFUNCTIONS TO SCALER NETWORK ANALYZERS
H 356 ISOLATE MALFUNCTIONS TO SPECTRUM ANALYZERS
H 357 ISOLATE MALFUNCTIONS TO SYNTHESIZED SIGNAL GENERATORS
H 358 ISOLATE MALFUNCTIONS TO SYNTHESIZED SWEEPERS
H 359 ISOLATE MALFUNCTIONS TO TRAVELING WAVE TUBE AMPLIFIERS
H 360 ISOLATE MALFUNCTIONS TO UNIT UNDER TEST (UUT) BLOWERS
H 361 ISOLATE MALFUNCTIONS TO WAVEFORM ANALYZERS
H 362 ISOLATE MALFUNCTIONS WITHIN AC PROGRAMMABLE POWER SUPPLIES
H 363 ISOLATE MALFUNCTIONS WITHIN ANTENNA COUPLER/LOAD CART
ASSEMBLIES
H 364 ISOLATE MALFUNCTIONS WITHIN ATSCSs
H 365 ISOLATE MALFUNCTIONS WITHIN DIGITAL WORD GENERATOR
CONTROLLERS
H 366 ISOLATE MALFUNCTIONS WITHIN DIGITAL WORD GENERATORS
H 367 ISOLATE MALFUNCTIONS WITHIN DISPLAY TEST ASSEMBLIES
H 368 ISOLATE MALFUNCTIONS WITHIN DISTRIBUTED PROCESSORS
H 369 ISOLATE MALFUNCTIONS WITHIN GYRO ACCELEROMETER TEST
ASSEMBLIES
H 370 ISOLATE MALFUNCTIONS WITHIN INTERFACE TEST ADAPTERS
H 371 ISOLATE MALFUNCTIONS WITHIN LOAD DRAWERS
H 372 ISOLATE MALFUNCTIONS WITHIN MICROWAVE TEST ASSEMBLIES
H 373 ISOLATE MALFUNCTIONS WITHIN MULTIFUNCTION UNITS
H 374 ISOLATE MALFUNCTIONS WITHIN POWER CONTROL MONITORS (PCM)
H 375 ISOLATE MALFUNCTIONS WITHIN PRESSURE SIMULATOR SYSTEMS
H 376 ISOLATE MALFUNCTIONS WITHIN RF INTERFACE ADAPTERS
H 377 ISOLATE MALFUNCTIONS WITHIN SEL COMPUTERS
H 378 ISOLATE MALFUNCTIONS WITHIN SIA POWER SUPPLIES
H 379 ISOLATE MALFUNCTIONS WITHIN SIAs
H 380 ISOLATE MALFUNCTIONS WITHIN TAPE DISK DRIVE ASSEMBLIES
H 381 ISOLATE MALFUNCTIONS WITHIN UNIVERSAL COUNTERS
H 382 ISOLATE MALFUNCTIONS WITHIN UUT BLOWERS
H 383 ISOLATE MALFUNCTIONS WITHIN WAVEFORM ANALYZERS
H 384 ISOLATE MALFUNCTIONS WITHIN WAVEGUIDE PRESSURIZATION
ASSEMBLIES

TASK NUMBER: 60200

TASK STATEMENT:

REPAIR AIS/R TEST STATIONS

TASK NOTES:

PMEL REPAIRS THE ATSCS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ATSCS
CLEANING SOLVENTS AND BRUSHES
CTK
CW POWER METER
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
ESS
FREQUENCY COUNTER
OSCILLOSCOPE
PEAK POWER METER
RF PULSE GENERATOR
SCALER NETWORK ANALYZER
SPECTRUM ANALYZER
SYNCH SWEEPER

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
33AA43-13-1
33DA-122-4-1 (EES)

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN DISK DRIVE POWER SUPPLY (FLOATING CAMBOLT SCREWS)
A ALIGN TRUs
A CALIBRATE TEST STATIONS
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

ACTIVITIES:

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S USE ATSCS TO CALIBRATE TEST STATION
S USE COMMON HANDTOOLS
S USE CW POWER METER
S USE DIGITAL MULTIMETER TO CHECK VOLTAGES
S USE ESS TO ADJUST TRUs (WHEN ALIGNMENT IS NOT POSSIBLE WITH TEST STATION)
S USE FREQUENCY COUNTER TO CHECK FREQUENCY OF SIGNAL
S USE OSCILLOSCOPE TO CHECK WAVEFORMS AND PULSE PERIODS
S USE PEAK POWER METER TO READ PEAK POWER OF WAVEFORM
S USE RF PULSE GENERATOR TO SET UP SQUARE WAVE (RF)
S USE SCALER NETWORK ANALYZER TO READ SWEEPER FREQUENCY
S USE SPECTRUM ANALYZER TO SET UP FREQUENCY RANGE AND POWER OUTPUT
S USE SYNCH SWEEPER TO READ SWEEPER FREQUENCY

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SCIENTIFIC NOTATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 198		13	11	11	10	4.97	
451X6B	F 198		12	7	12	10	4.97	
451X6	F 198		12	9	12	10	4.97	
451X6A	F 199		0	0	3	5	6.50	
451X6B	F 199		15	11	13	5	6.50	
451X6	F 199		6	6	8	5	6.50	
451X6A	F 201		47	53	55	36	4.92	
451X6B	F 201		65	55	61	36	4.92	
451X6	F 201		54	54	58	36	4.92	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 202		47	58	65	40	4.64	
451X6B	F 202		62	58	64	40	4.64	
451X6	F 202		52	57	65	40	4.64	
451X6A	F 203		13	18	26	23	5.34	
451X6B	F 203		35	34	34	23	5.34	
451X6	F 203		22	25	30	23	5.34	
451X6A	F 204		3	6	11	14	5.47	
451X6B	F 204		23	19	29	14	5.47	
451X6	F 204		11	12	19	14	5.47	
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	H 322		11	9	10	6	5.27	
451X6B	H 322		0	2	4	6	5.27	
451X6	H 322		6	6	7	6	5.27	
451X6A	H 323		11	9	10	6	5.35	
451X6B	H 323		0	2	2	6	5.35	
451X6	H 323		6	6	6	6	5.35	
451X6A	H 324		0	0	4	2	5.79	
451X6B	H 324		0	1	0	2	5.79	
451X6	H 324		0	1	3	2	5.79	
451X6A	H 325		3	1	3	0	5.31	
451X6B	H 325		0	0	0	0	5.31	
451X6	H 325		2	1	1	0	5.31	
451X6A	H 326		11	10	11	5	5.21	
451X6B	H 326		0	4	3	5	5.21	
451X6	H 326		6	7	7	5	5.21	
451X6A	H 327		18	16	12	7	4.98	
451X6B	H 327		0	4	3	7	4.98	
451X6	H 327		11	10	8	7	4.98	
451X6A	H 328		5	4	7	3	5.26	
451X6B	H 328		0	2	1	3	5.26	
451X6	H 328		3	3	4	3	5.26	
451X6A	H 329		5	2	4	2	5.33	
451X6B	H 329		0	1	0	2	5.33	
451X6	H 329		3	2	2	2	5.33	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 330		3	1	3	2	5.74	
451X6B	H 330		0	0	0	2	5.74	
451X6	H 330		2	1	1	2	5.74	
451X6A	H 331		0	3	4	0	6.00	
451X6B	H 331		0	1	1	0	6.00	
451X6	H 331		0	2	3	0	6.00	
451X6A	H 332		8	6	6	4	5.16	
451X6B	H 332		0	4	2	4	5.16	
451X6	H 332		5	5	4	4	5.16	
451X6A	H 333		0	1	6	2	5.43	
451X6B	H 333		0	2	1	2	5.43	
451X6	H 333		0	2	4	2	5.43	
451X6A	H 334		5	3	7	4	5.93	
451X6B	H 334		0	0	1	4	5.93	
451X6	H 334		3	2	4	4	5.93	
451X6A	H 336		0	3	7	3	7.13	
451X6B	H 336		0	1	2	3	7.13	
451X6	H 336		0	2	5	3	7.13	
451X6A	H 337		0	1	4	3	7.26	
451X6B	H 337		0	1	1	3	7.26	
451X6	H 337		0	1	3	3	7.26	
451X6A	H 338		0	1	5	2	7.01	
451X6B	H 338		0	1	2	2	7.01	
451X6	H 338		0	1	4	2	7.01	
451X6A	H 339		0	4	5	2	7.10	
451X6B	H 339		0	2	2	2	7.10	
451X6	H 339		0	3	4	2	7.10	

USAF JOB INVENTORY TASK STATEMENTS:

F 198 ADJUST PRINTERS
 F 199 ALIGN DISK DRIVES
 F 201 ALIGN HIGH VOLTAGE POWER SUPPLIES
 F 202 ALIGN LOW VOLTAGE POWER SUPPLIES
 F 203 ALIGN PULSE GENERATORS
 F 204 ALIGN PUNCH TAPE READERS
 F 210 CLEAN CONTACTS
 H 322 ALIGN ALTERNATING CURRENT (AC) AUXILIARY POWER SUPPLIES
 H 323 ALIGN AC PROGRAMMABLE POWER SUPPLIES
 H 324 ALIGN AND CALIBRATE GYRO ACCELEROMETER TEST ASSEMBLIES
 H 325 ALIGN ANTENNA COUPLER-LOAD CART ASSEMBLIES
 H 326 ALIGN DIRECT CURRENT (DC) AUXILIARY POWER SUPPLIES

USAF JOB INVENTORY TASK STATEMENTS:

H 327 ALIGN DC PROGRAMMABLE POWER SUPPLIES
H 328 ALIGN DIGITAL WORD GENERATOR POWER SUPPLIES
H 329 ALIGN DISPLAY TERMINALS
H 330 ALIGN DISPLAY TEST ASSEMBLIES
H 331 ALIGN MICROWAVE TEST ASSEMBLIES
H 332 ALIGN SWITCHING INTERFACE ASSEMBLIES (SIA) POWER SUPPLIES
H 333 ALIGN UNIVERSAL COUNTERS
H 334 ALIGN WAVEFORM ANALYZERS
H 336 CALIBRATE AVIONIC INTERMEDIATE SHOP/REPLACEMENT (AIS/R)
COMPUTER TEST STATIONS USING ATSCS
H 337 CALIBRATE AIS/R ELECTRONIC WARFARE (EW) TEST STATIONS USING
AUTOMATIC TEST SET CALIBRATION SETS (ATSCS)
H 338 CALIBRATE AIS/R VIDEO TEST STATIONS USING ATSCS_s
H 339 CALIBRATE RADIO FREQUENCY (RF) TEST STATIONS USING ATSCS_s

TASK NUMBER: 60210

TASK STATEMENT: .

PERFORM MAGNETIC TAPE LOADS OF AIS/R PROGRAMS (H 390)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

TAPE
TEST STATION

REFERENCES:

APPLICABLE TEST STATION SOFTWARE TO
APPLICABLE SHOP SYSTEM TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

RECEIPT OF NEW OR REVISED PROGRAM

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A INITIATE COMMANDS
A INITIATE LOAD

SKILLS:

S LOAD TAPE
S OPERATE TEST STATION

KNOWLEDGE:

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	H 390		0	1	5	3	4.15	
451X6B	H 390		0	2	2	3	4.15	
451X6	H 390		0	2	4	3	4.15	

USAF JOB INVENTORY TASK STATEMENTS:

H 390 PERFORM MAGNETIC TAPE LOADS OF AIS/R PROGRAMS

TASK NUMBER: 60220

TASK STATEMENT:

PERFORM PERIODIC INSPECTIONS ON AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING RAGS
CLEANING SOLVENT AND BRUSHES
CTK
Q-TIPS

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALIBRATE TEST STATION
A CLEAN CONTACTS (F 210)
A CLEAN MAGNETIC TAPE HEADS (H 340)
A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
A CLEAN WORK SURFACE
A ORDER PARTS
A PERFORM CONFIDENCE TESTS OF AIS/R TEST STATIONS (TASK NUMBER: 60150)
A PERFORM DIAGNOSTIC CHECK OF SEL COMPUTER (TASK NUMBER: 60180)
A PERFORM OA/FI TEST OF AIS/R TEST STATIONS (TASK NUMBER: 60160)
A PERFORM SELF TEST OF PCM (H 395)
A VISUALLY INSPECT HARDWARE, WIRING, LIGHTS, KNOBS, ETC

SKILLS:

S OPERATE TEST STATION
S USE ATSCS TO CALIBRATE TEST STATION
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	H 340		16	12	11	5	3.01	
451X6B	H 340		0	0	3	5	3.01	
451X6	H 340		9	6	7	5	3.01	
451X6A	H 395		16	9	8	7	3.95	
451X6B	H 395		0	2	2	7	3.95	
451X6	H 395		9	6	5	7	3.95	
451X6A	H 396		8	4	5	3	3.71	
451X6B	H 396		0	0	1	3	3.71	
451X6	H 396		5	2	3	3	3.71	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
H 340 CLEAN MAGNETIC TAPE HEADS
H 395 PERFORM SELF TESTS OF POWER CONTROL MONITORS
H 396 PERFORM SELF TESTS OF PRINTERS

TASK NUMBER: 60230

TASK STATEMENT:

MAINTAIN INERTIAL TEST SET

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
CLEANING SOLVENTS AND BRUSHES
MULTIMETER
SOLDERING STATION

REFERENCES:

APPLICABLE TEST SET TO

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN ITS (I 414)
A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN ITS (I 421)
A ORDER PARTS
A REMOVE AND REPLACE ITS (I 435)
A REMOVE AND REPLACE ITS COMPONENTS (I 434)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER 61410)

SKILLS:

S OPERATE ITS
S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER PC BOARDS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

KNOWLEDGE:

K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	I 414		3	3	6	1	6.06	
451X6B	I 414		0	0	0	1	6.06	
451X6	I 414		2	2	3	1	6.06	
451X6A	I 421		0	2	5	1	6.39	
451X6B	I 421		0	0	0	1	6.39	
451X6	I 421		0	1	3	1	6.39	
451X6A	I 434		0	1	5	1	4.80	
451X6B	I 434		0	0	0	1	4.80	
451X6	I 434		0	1	3	1	4.80	
451X6A	I 435		0	1	4	0	4.64	
451X6B	I 435		0	0	0	0	4.64	
451X6	I 435		0	1	2	0	4.64	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
I 414 ALIGN INERTIAL TEST SETS (ITS)
I 421 ISOLATE MALFUNCTIONS IN ITSs
I 434 REMOVE OR REPLACE ITs COMPONENTS
I 435 REMOVE OR REPLACE ITSs

TASK NUMBER: 60240

TASK STATEMENT:

MAINTAIN INS DTS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ANGLE POSITION INDICATOR
CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE
SOLDERING STATION

REFERENCES:

5N1-3-17-2
5N1-3-17-48-1
5N1-4-15-2
5N1-4-15-3

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN INS DTS (I 413)
A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN INS DTS (I 420)
A PERFORM MAINTENANCE TEST OF INS DTS (I 426)
A PERFORM OPERATIONAL TEST OF INS DTS
A ORDER PARTS
A REMOVE AND REPLACE CABLES
A REMOVE AND REPLACE INS DTS COMPONENTS (I 433)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A RESEAT SRUs

SKILLS:

S CONNECT ADAPTER AND CABLES
 S LOAD COMPUTER PROGRAM
 S LOAD DATE AND TIME
 S OPERATE DTS
 S PERFORM VISUAL INSPECTIONS
 S SOLDER OR DESOLDER COAXIAL CONNECTORS
 S SOLDER OR DESOLDER MULTIPIN CONNECTORS
 S SOLDER OR DESOLDER PC BOARDS
 S SOLDER OR DESOLDER TERMINAL CONNECTIONS
 S USE ANGLE POSITION INDICATOR
 S USE COMMON HANDTOOLS
 S USE MULTIMETER TO MONITOR VOLTAGES
 S USE OSCILLOSCOPE TO MONITOR VOLTAGES AND PULSES

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AC CIRCUIT THEORY OF OPERATION
 K APPLY CMOSs THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY ESD PRECAUTIONS
 K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SYSTEM THEORY
 K APPLY TECHNICAL DATA
 K IDENTIFY UPPER AND LOWER LEVEL RANGE TOLERANCES
 K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
 K MONITOR TEST POINTS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	I 413		5	7	8	5	6.35	
451X6B	I 413		0	1	1	5	6.35	
451X6	I 413		3	4	5	5	6.35	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	I 420		0	4	8	2	6.65	
451X6B	I 420		0	0	0	2	6.65	
451X6	I 420		0	2	5	2	6.65	
451X6A	I 426		0	6	9	5	4.92	
451X6B	I 426		0	0	0	5	4.92	
451X6	I 426		0	3	5	5	4.92	
451X6A	I 433		0	3	8	3	4.64	
451X6B	I 433		0	0	0	3	4.64	
451X6	I 433		0	2	4	3	4.64	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
I 413 ALIGN INERTIAL NAVIGATION SYSTEM (INS) DTSs
I 420 ISOLATE MALFUNCTIONS IN INS DTSs
I 426 PERFORM MAINTENANCE TESTS OF INS DTSs
I 433 REMOVE OR REPLACE INS DTS COMPONENTS

TASK NUMBER: 60250

TASK STATEMENT:

MAINTAIN DCC/MCC DTS

TASK NOTES:

DCC DTS IS FULLY AUTOMATED

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CALIBRATION STANDARD SET
CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL LOGIC PROBE
DIP/IC CLIPS
ESD PROTECTIVE EQUIPMENT
IC CHIP REMOVAL TOOL
IC EXTENDER
JUMPER LEADS
LOGIC ANALYZER
LOGIC PULSER
MULTIMETER
OSCILLOSCOPE
POWER SUPPLY
TEST LEADS

REFERENCES:

33D7-3-247-2-1 (DRAFT)
33D7-3-247-2-2

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN DCC/MCC DTS (I 412)
A CALIBRATE MCC DTS
A CLEAN CONTACTS (F 210)
A ENSURE EXTERNAL POWER CONNECTED

ACTIVITIES

- A ENSURE TEST SET CONFIGURATION
- A INSTALL LRU
- A ISOLATE MALFUNCTIONS IN DCC/MCC DTS (I 419)
- A ORDER PARTS
- A PERFORM MAINTENANCE TESTS OF DCC/MCC DTSs (I 425)
- A REMOVE AND REPLACE DCC/MCC DTSs (I 432)
- A REMOVE AND REPLACE DTS COMPONENTS
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A RESEAT SRUs

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S ENTER HEX DATA
- S LOAD COMPUTER PROGRAMS
- S OPERATE DTS
- S PERFORM VISUAL INSPECTIONS
- S USE CALIBRATION STANDARD SET
- S USE COMMON HANDTOOLS
- S USE DIGITAL LOGIC PROBE TO CHECK OUTPUT
- S USE DIP/IC CLIPS
- S USE IC CHIP REMOVAL TOOL
- S USE IC EXTENDER
- S USE JUMPER LEADS
- S USE LOGIC ANALYZER TO CHECK LOGIC POINTS
- S USE LOGIC PULSER
- S USE MULTIMETER TO CHECK VOLTAGE LEVELS AND MONITOR WAVEFORMS
- S USE OSCILLOSCOPE TO CHECK VOLTAGE/TIMING AND TEST POINTS
- S USE POWER SUPPLIES
- S USE TEST LEADS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CMOS THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY COMPUTER SUBASSEMBLY THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY INFORMATION PRESENTED ON DISPLAY
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY JFET THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION

KNOWLEDGE:

- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MOSFET THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MAJOR UNITS
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY COMPUTER SUBASSEMBLIES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY JFETs
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MOSFETs
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SCRs

KNOWLEDGE:

K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY SYNCHROS-SERVOS
 K ISOLATE FAULTY TRANSFORMERS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K ISOLATE FAULTY TTLs
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K ISOLATE FAULTY WAVESHAPING CIRCUITS
 K ISOLATE FAULTY ZENER DIODES
 K PERFORM BASIC AC CIRCUIT CALCULATIONS
 K PERFORM BASIC DC CIRCUIT CALCULATIONS
 K PERFORM BINARY CONVERSIONS
 K PERFORM HEXADECIMAL CONVERSIONS
 K PERFORM OCTAL CONVERSIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT CMOS LOGIC FAMILIES
 K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
 K TROUBLESHOOT COMPUTER PERIPHERAL DEVICES
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT FLIP-FLOPS
 K TROUBLESHOOT LIMITER CIRCUIT DIODES
 K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
 K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
 K TROUBLESHOOT LOGIC COUNTERS
 K TROUBLESHOOT LOGIC REGISTERS
 K TROUBLESHOOT MAIN LOGIC GATES
 K TROUBLESHOOT OPERATIONAL AMPLIFIERS
 K TROUBLESHOOT RELAYS
 K TROUBLESHOOT SYNCHROS-SERVOS
 K TROUBLESHOOT TRANSFORMERS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K TROUBLESHOOT VOLTAGE REGULATOR
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	I 412		3	1	4	2	6.52	
451X6B	I 412		0	0	0	2	6.52	
451X6	I 412		2	1	2	2	6.52	
451X6A	I 419		0	0	4	3	6.84	
451X6B	I 419		0	0	0	3	6.84	
451X6	I 419		0	0	2	3	6.84	
451X6A	I 425		0	0	4	2	5.26	
451X6B	I 425		0	0	0	2	5.26	
451X6	I 425		0	0	2	2	5.26	
451X6A	I 432		0	0	2	1	4.42	
451X6B	I 432		0	0	0	1	4.42	
451X6	I 432		0	0	1	1	4.42	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 I 412 ALIGN DIGITAL COMPUTER COMPLEX (DCC)/MISSION COMPUTER
 COMPLEX (MCC) DYNAMIC TEST SETS (DTS)
 I 419 ISOLATE MALFUNCTIONS IN DCC/MCC DTSs
 I 425 PERFORM MAINTENANCE TESTS OF DCC/MCC DTSs
 I 432 REMOVE OR REPLACE DCC/MCC DTSs

TASK NUMBER: 60260

TASK STATEMENT:

MAINTAIN FLIGHTLINE MDL

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
COMPUTER SIMULATOR
CTK
DIGITAL COMPUTER COMPLEX
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE

REFERENCES:

33DA-112-11-1

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN FLIGHTLINE MDL (F 200)
A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN FLIGHTLINE MDLs (F 228)
A ORDER PARTS
A PERFORM OPERATIONAL CHECKS OF FLIGHTLINE MDLs (F 245)
A REMOVE AND REPLACE FLIGHTLINE MDL COMPONENTS (F 257)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT ADAPTER AND CABLES
S USE COMMON HANDTOOLS
S USE COMPUTER SIMULATOR
S USE DIGITAL COMPUTER COMPLEX
S USE MULTIMETER
S USE OSCILLOSCOPE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT POWER SUPPLY CIRCUITS
- K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 200		11	8	7	5	5.17	
451X6B	F 200		12	6	3	5	5.17	
451X6	F 200		11	7	5	5	5.17	
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 228		3	3	6	4	6.30	
451X6B	F 228		4	1	2	4	6.30	
451X6	F 228		3	2	4	4	6.30	
451X6A	F 245		3	4	7	5	4.58	
451X6B	F 245		12	6	3	5	4.58	
451X6	F 245		6	5	5	5	4.58	
451X6A	F 257		3	2	6	4	4.09	
451X6B	F 257		8	2	2	4	4.09	
451X6	F 257		5	2	4	4	4.09	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 200 ALIGN FLIGHTLINE MISSION DATA LOADERS (MDL)
 F 210 CLEAN CONTACTS
 F 228 ISOLATE MALFUNCTIONS IN FLIGHTLINE MDLs
 F 245 PERFORM OPERATIONAL CHECKS OF FLIGHTLINE MDLs
 F 257 REMOVE OR REPLACE FLIGHTLINE MDL COMPONENTS
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60270

TASK STATEMENT: .

MAINTAIN TSLVC

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MCC
MULTIMETER
OSCILLOSCOPE
SOLDERING STATION

REFERENCES:

33D7-3-237-1
5N1-1-168-1

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ISOLATE MALFUNCTIONS IN TSLVC
A ORDER PARTS
A PERFORM LOAD
A PERFORM OPERATIONAL CHECKS OF TSLVC (F 247)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE TSLVC COMPONENTS (F 277)
A REPAIR RUNS ON BOARDS
A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S OPERATE TSLVC
S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER PC BOARDS
S USE COMMON HANDTOOLS
S USE MCC
S USE MULTIMETER
S USE OSCILLOSCOPE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CMOSs THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION
- K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TTLS
- K ISOLATE FAULTY TUNNEL DIODES
- K ISOLATE FAULTY ZENER DIODES
- K PERFORM BINARY CONVERSIONS
- K PERFORM BINARY MATH OPERATION
- K PERFORM HEXADECIMAL CONVERSIONS
- K PERFORM HEXADECIMAL MATH OPERATION
- K PERFORM OCTAL CONVERSIONS
- K PERFORM OCTAL MATH OPERATION
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)

KNOWLEDGE:

K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K USE METRIC NOTATION
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 247		5	3	5	2	4.55	
451X6B	F 247		8	2	2	2	4.55	
451X6	F 247		6	3	4	2	4.55	
451X6A	F 277		3	1	5	2	4.38	
451X6B	F 277		0	0	1	2	4.38	
451X6	F 277		2	1	3	2	4.38	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 247 PERFORM OPERATIONAL CHECKS OF TEST SET LOADER/VERIFIER
COMPUTERS (TSLVC)
F 277 REMOVE OR REPLACE TSLVC COMPONENTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60280

TASK STATEMENT:

MAINTAIN FLUID PRESSURIZATION (65AN) FILL STATION

TASK NOTES:

USED TO DRAIN AND FILL F-111D ARS TRANSMITTER

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
FC-40
LIQUID NITROGEN
MULTIMETER
SAFETY EQUIPMENT

REFERENCES:

APPLICABLE IPB
33D7-44-185-1
12P-22APQ130-2 ARS TRANSMITTER

CONDITIONS:

ADEQUATE VENTILATION

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A CHECK OIL LEVEL IN VACUUM PUMP
- A CLEAN CONTACTS (F 210)
- A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
- A DISPOSE OF CONTAINMENTS
- A ISOLATE MALFUNCTIONS IN FLUID PRESSURIZATION (65AN) FILL STATIONS (P 576)
- A MEASURE RATE OF FLOW
- A ORDER PARTS
- A PERFORM PERIODIC INSPECTIONS OF FLUID PRESSURIZATION (65AN) FILL STATIONS
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

ACTIVITIES:

- A REMOVE AND REPLACE OVERFLOW TANKS
- A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A SERVICE FLUID PRESSURIZATION (65AN) FILL STATIONS (P 590)

SKILLS:

- S DISCHARGE CAPACITORS PRIOR TO MAINTENANCE
- S FILL STATION WITH FC-40
- S FILL STATION WITH LIQUID NITROGEN
- S OPERATE FILL STATION
- S PERFORM SAFETY WIRING (TASK NUMBER: 61450)
- S PERFORM VISUAL INSPECTIONS
- S RUN VACUUM CHECKS
- S USE COMMON HANDTOOLS
- S USE LIQUID NITROGEN TO FILL COLD TRAP
- S USE MULTIMETER TO CHECK VOLTAGE AND CONTINUITY
- S USE SAFETY EQUIPMENT TO HANDLE LIQUID NITROGEN

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC MOTOR THEORY OF OPERATION
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DC MOTOR THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLENOID THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K DOCUMENT HAZARDOUS WASTE LEVELS
- K IDENTIFY PROPER STORAGE CONTAINER FOR CONTAMINANTS
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY DC MOTORS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLENOIDS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K UTILIZE ELECTRICAL SCHEMATIC DIAGRAMS
- K UTILIZE MECHANICAL DIAGRAMS
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	P 574		3	1	1	1	5.43	
451X6B	P 574		0	0	0	1	5.43	
451X6	P 574		2	1	0	1	5.43	
451X6A	P 576		3	2	2	1	5.96	
451X6B	P 576		0	0	0	1	5.96	
451X6	P 576		2	1	1	1	5.96	
451X6A	P 577		3	2	2	0	6.24	
451X6B	P 577		0	0	0	0	6.24	
451X6	P 577		2	1	1	0	6.24	
451X6A	P 590		0	3	2	1	5.56	
451X6B	P 590		0	0	0	1	5.56	
451X6	P 590		0	2	1	1	5.56	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 P 574 ALIGN AND CALIBRATE FLUID PRESSURIZATION (65AN) TEST
 STATIONS
 P 576 ISOLATE MALFUNCTIONS IN FLUID PRESSURIZATION (65AN) FILL
 STATIONS
 P 577 OVERHAUL FLUID PRESSURIZATION (65AN) FILL STATIONS
 P 590 SERVICE FLUID PRESSURIZATION (65AN) FILL STATIONS

TASK NUMBER: 60290

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON LRUs THAT RUN ON AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIS/R TEST STATION

CTK

ESD PROTECTIVE EQUIPMENT

MICROWAVE TEST CART

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
SYSTEM TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; NEW ISSUE FROM SUPPLY;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A LOAD COMPUTER PROGRAM

A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES

S CONNECT LRU TO TEST STATION

S OPERATE TEST STATION

S PERFORM VISUAL INSPECTIONS

S PRESSURIZE LRU (TASK NUMBER: 61460)

S USE COMMON HANDTOOLS

S USE MICROWAVE TEST CART

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY INFORMATION PRESENTED ON SCREEN
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY

TASK NUMBER: 60300

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN LRUs THAT RUN ON AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIS/R TEST STATION

CAPACITOR TESTER

CTK

DIGITAL MULTIMETER

ESD PROTECTIVE EQUIPMENT

OSCILLOSCOPE

SOLDERING STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
SYSTEM TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES

S OPERATE TEST STATION

S SOLDER OR DESOLDER PC BOARDS

S SOLDER OR DESOLDER TERMINAL CONNECTIONS

S USE CAPACITOR TESTER

S USE COMMON HANDTOOLS

S USE DIGITAL MULTIMETER

S USE OSCILLOSCOPE

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY AC CIRCUIT THEORY OF OPERATION

K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION

KNOWLEDGE:

K APPLY AM RECEIVER THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY FM RECEIVER THEORY OF OPERATION
K APPLY FM TRANSMITTER THEORY OF OPERATION
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY INDUCTOR THEORY OF OPERATION
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY JFET THEORY OF OPERATION
K APPLY LCD THEORY OF OPERATION
K APPLY LED THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY METER MOVEMENT THEORY OF OPERATION
K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
K APPLY MOSFET THEORY OF OPERATION
K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY RESONANT CAVITY THEORY OF OPERATION
K APPLY SCR THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SINGLE SIDEBAND RECEIVER THEORY OF OPERATION
K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
K APPLY TRANSDUCER THEORY OF OPERATION
K APPLY TRANSFORMER THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
K APPLY TUNNEL DIODE THEORY OF OPERATION

KNOWLEDGE:

K APPLY UJT THEORY OF OPERATION
K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
K APPLY WAVEGUIDE THEORY OF OPERATION
K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
K APPLY ZENER DIODE THEORY OF OPERATION
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY AM RECEIVERS
K ISOLATE FAULTY AM TRANSMITTERS
K ISOLATE FAULTY CAPACITORS
K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
K ISOLATE FAULTY COMPUTER MEMORIES
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY FLIP-FLOPS
K ISOLATE FAULTY FM MODULATION TRANSMITTERS
K ISOLATE FAULTY FM RECEIVERS
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K ISOLATE FAULTY INDUCTORS
K ISOLATE FAULTY INTEGRATED CIRCUITS
K ISOLATE FAULTY JFETs
K ISOLATE FAULTY LCDS
K ISOLATE FAULTY LEDs
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY LOGIC COUNTERS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY METER MOVEMENTS
K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
K ISOLATE FAULTY MOSFETs
K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
K ISOLATE FAULTY OSCILLATOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K ISOLATE FAULTY PULSE MODULATION RECEIVERS
K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
K ISOLATE FAULTY RCL CIRCUITS
K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY RESISTORS
K ISOLATE FAULTY RESONANT CAVITIES
K ISOLATE FAULTY SCRs
K ISOLATE FAULTY SINGLE SIDEBAND RECEIVERS
K ISOLATE FAULTY SINGLE SIDEBAND TRANSMITTERS
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
K ISOLATE FAULTY TRANSDUCERS
K ISOLATE FAULTY TRANSFORMERS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS

KNOWLEDGE:

K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
K ISOLATE FAULTY TUNNEL DIODES
K ISOLATE FAULTY UJT_s
K ISOLATE FAULTY VOLTAGE REGULATORS
K ISOLATE FAULTY WAVEGUIDES
K ISOLATE FAULTY WAVESHAPING CIRCUITS
K ISOLATE FAULTY ZENER DIODES
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 273)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT AC CIRCUITS
K TROUBLESHOOT AM RECEIVER CIRCUITS
K TROUBLESHOOT AM TRANSMITTERS
K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
K TROUBLESHOOT DC CIRCUITS
K TROUBLESHOOT FM MODULATION TRANSMITTERS
K TROUBLESHOOT FM RECEIVER CIRCUITS
K TROUBLESHOOT INDUCTORS
K TROUBLESHOOT LIMITER CIRCUIT DIODES
K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
K TROUBLESHOOT LOGIC COUNTERS
K TROUBLESHOOT LOGIC REGISTERS
K TROUBLESHOOT MAIN LOGIC GATES
K TROUBLESHOOT METER MOVEMENTS
K TROUBLESHOOT OPERATIONAL AMPLIFIERS
K TROUBLESHOOT POWER SUPPLY CIRCUITS
K TROUBLESHOOT POWER SUPPLY FILTERS
K TROUBLESHOOT POWER SUPPLY RECTIFIERS
K TROUBLESHOOT PULSE MODULATION RECEIVERS
K TROUBLESHOOT PULSE MODULATION TRANSMITTERS
K TROUBLESHOOT RCL CIRCUITS
K TROUBLESHOOT RELAYS
K TROUBLESHOOT RESONANT CAVITIES
K TROUBLESHOOT SINGLE SIDEBAND RECEIVERS
K TROUBLESHOOT SINGLE SIDEBAND TRANSMITTERS
K TROUBLESHOOT THREE-PHASE TRANSFORMERS
K TROUBLESHOOT TRANSDUCERS
K TROUBLESHOOT TRANSFORMERS
K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K TROUBLESHOOT VOLTAGE REGULATOR
K TROUBLESHOOT WAVE GENERATING CIRCUIT MULTIVIBRATORS
K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
K TROUBLESHOOT WAVESHAPING CIRCUITS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRU_s

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60310

TASK STATEMENT:

REPAIR LRUs THAT RUN ON AIS/R TEST STATIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES.

CTK

ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)

A CLEAN LRU

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S OPERATE TEST STATION

S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

TASK NUMBER: 60320

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON RF TYPE LRU_s

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
POWER METER
OSCILLOSCOPE
SPECTRUM ANALYZER
TEST STATION
VECTOR VOLTMETER

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT; 2 PERSON REQUIREMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; NEW ISSUE FROM SUPPLY;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S PRESSURIZE LRU_s (TASK NUMBER: 61460)
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE VOLTAGE
S USE OSCILLOSCOPE TO MEASURE VOLTAGES AND PULSE
CHARACTERISTICS

SKILLS:

S USE POWER METER
 S USE SPECTRUM ANALYZER
 S USE VECTOR VOLTMETER TO MEASURE PHASE SHIFT AND POWER

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	N 563		0	3	2	0	5.95	
451X6B	N 563		0	0	0	0	5.95	
451X6	N 563		0	2	1	0	5.95	
451X6A	S 717		0	3	5	1	4.57	
451X6B	S 717		0	0	0	1	4.57	
451X6	S 717		0	2	3	1	4.57	
451X6A	S 736		0	0	0	0	4.63	
451X6B	S 736		0	0	0	0	4.63	
451X6	S 736		0	0	0	0	4.63	
451X6A	S 737		0	3	5	0	4.84	
451X6B	S 737		0	0	0	0	4.84	
451X6	S 737		0	2	3	0	4.84	
451X6A	S 751		5	10	11	3	4.82	
451X6B	S 751		0	0	0	3	4.82	
451X6	S 751		3	5	6	3	4.82	
451X6A	S 754		0	4	5	1	5.05	
451X6B	S 754		0	0	0	1	5.05	
451X6	S 754		0	2	3	1	5.05	
451X6A	S 756		0	6	7	1	5.50	
451X6B	S 756		0	1	0	1	5.50	
451X6	S 756		0	3	4	1	5.50	
451X6A	S 757		5	11	13	2	5.88	
451X6B	S 757		0	0	2	2	5.88	
451X6	S 757		3	6	8	2	5.88	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 761		0	0	1	0	4.51	
451X6B	S 761		0	0	0	0	4.51	
451X6	S 761		0	0	1	0	4.51	
451X6A	S 767		8	18	20	4	5.84	
451X6B	S 767		0	0	2	4	5.84	
451X6	S 767		5	9	11	4	5.84	
451X6A	S 770		8	19	20	3	4.05	
451X6B	S 770		0	0	1	3	4.05	
451X6	S 770		5	10	11	3	4.05	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY

N 563 VERIFY F-111D ARS TRANSMITTER MAXIMUM OUTPUT LEVELS

S 717 PERFORM OPERATIONAL TESTS OF APQ-130 TRANSMITTERS

S 736 PERFORM OPERATIONAL TESTS OF ELECTRONIC PROCESSING UNITS

S 737 PERFORM OPERATIONAL TESTS OF F-111D ARS ANTENNAS

S 751 PERFORM OPERATIONAL TESTS OF LARA/RTs

S 754 PERFORM OPERATIONAL TESTS OF MASTER FREQUENCY GENERATORS

S 756 PERFORM OPERATIONAL TESTS OF MICROWAVE RECEIVER UNITS

S 757 PERFORM OPERATIONAL TESTS OF MRTs

S 761 PERFORM OPERATIONAL TESTS OF RRTs

S 767 PERFORM OPERATIONAL TESTS OF TFR ANTENNA RECEIVERS

S 770 PERFORM OPERATIONAL TESTS OF TFR TRANSMITTER-SYNCHRONIZERS

TASK NUMBER: 60330

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN RF TYPE LRU_s

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
FILL STATION (65AN)
DIGITAL MULTIMETER
TEST STATION
REFLECTOMETER
VECTOR VOLTMETER

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S PRESSURIZE LRU_s (TASK NUMBER: 61460)
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE VOLTAGES AND CONTINUITY
S USE FILL STATION TO CREATE PRESSURE TO ISOLATE FC-40 LEAK
(TRANSMITTER)
S USE OSCILLOSCOPE TO MEASURE VOLTAGE AND PULSE CHARACTERISTICS
S USE REFLECTOMETER
S USE VECTOR VOLTMETER TO MEASURE RF VOLTAGE AND DEGREES OF
PHASE SHIFT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY AC MOTOR THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY CMOSs THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY RADAR PRINCIPLES
K APPLY RESISTOR THEORY OF OPERATION
K APPLY RESONANT CAVITY THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLENOID THEORY OF OPERATION
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY TRANSMITTER THEORY OF OPERATION
K APPLY TTL THEORY OF OPERATION
K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
K APPLY WAVEGUIDE THEORY OF OPERATION
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY AC MOTORS
K ISOLATE FAULTY CAPACITORS
K ISOLATE FAULTY CMOSs
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY FLIP-FLOPS
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
K ISOLATE FAULTY OSCILLATOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K ISOLATE FAULTY RESISTORS
K ISOLATE FAULTY RESONANT CAVITIES
K ISOLATE FAULTY SOLENOIDS

KNOWLEDGE:

K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY TTLs
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K ISOLATE FAULTY WAVEGUIDES
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT AC MOTORS
 K TROUBLESHOOT CMOS LOGIC FAMILIES
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT FLIP-FLOPS
 K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
 K TROUBLESHOOT LIMITER CIRCUIT DIODES
 K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
 K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
 K TROUBLESHOOT MAIN LOGIC GATES
 K TROUBLESHOOT OPERATIONAL AMPLIFIERS
 K TROUBLESHOOT POWER SUPPLY CIRCUITS
 K TROUBLESHOOT POWER SUPPLY FILTERS
 K TROUBLESHOOT POWER SUPPLY RECTIFIERS
 K TROUBLESHOOT RESONANT CAVITIES
 K TROUBLESHOOT SOLENOIDS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K TROUBLESHOOT VOLTAGE REGULATOR
 K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 655		3	4	5	1	5.75	
451X6B	S 655		0	0	0	1	5.75	
451X6	S 655		2	2	3	1	5.75	
451X6A	S 673		0	1	1	0	5.61	
451X6B	S 673		0	0	0	0	5.61	
451X6	S 673		0	1	1	0	5.61	
451X6A	S 674		0	3	4	1	5.37	
451X6B	S 674		0	0	0	1	5.37	
451X6	S 674		0	2	2	1	5.37	
451X6A	S 688		8	13	12	2	5.30	
451X6B	S 688		0	0	0	2	5.30	
451X6	S 688		5	7	6	2	5.30	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 691		0	4	5	2	5.59	
451X6B	S 691		0	0	0	2	5.59	
451X6	S 691		0	2	3	2	5.59	
451X6A	S 693		0	4	8	1	5.70	
451X6B	S 693		0	1	0	1	5.70	
451X6	S 693		0	3	4	1	5.70	
451X6A	S 694		8	12	13	1	5.93	
451X6B	S 694		0	0	2	1	5.93	
451X6	S 694		5	6	8	1	5.93	
451X6A	S 697		0	0	0	0	5.73	
451X6B	S 697		0	0	0	0	5.73	
451X6	S 697		0	0	0	0	5.73	
451X6A	S 705		8	19	19	2	6.12	
451X6B	S 705		0	1	2	2	6.12	
451X6	S 705		5	10	11	2	6.12	
451X6A	S 708		8	19	19	3	4.77	
451X6B	S 708		0	0	1	3	4.77	
451X6	S 708		5	10	11	3	4.77	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 S 655 ISOLATE MALFUNCTIONS IN APQ-130 TRANSMITTERS
 S 673 ISOLATE MALFUNCTIONS IN ELECTRONIC PROCESSING UNITS
 S 674 ISOLATE MALFUNCTIONS IN F-111D ARS ANTENNAS TO SHOP
 REPLACEABLE UNIT (SRU)
 S 688 ISOLATE MALFUNCTIONS IN LARA/RTs
 S 691 ISOLATE MALFUNCTIONS IN MASTER FREQUENCY GENERATORS
 S 693 ISOLATE MALFUNCTIONS IN MICROWAVE RECEIVER UNITS
 S 694 ISOLATE MALFUNCTIONS IN MRTs
 S 697 ISOLATE MALFUNCTIONS IN RADAR RECEIVER-TRANSMITTERS (RRT)
 S 705 ISOLATE MALFUNCTIONS IN TFR ANTENNA RECEIVERS
 S 708 ISOLATE MALFUNCTIONS IN TFR TRANSMITTER SYNCHRONIZERS

TASK NUMBER: 60340

TASK STATEMENT:

REPAIR RF TYPE LRU_s

TASK NOTES:

RF HAZARD

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

DIGITAL MULTIMETER

FILL STATION (65AN)

PRESSURE TESTER

TEST STATION

VECTOR VOLTMETER

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRU_s

A CLEAN CONTACTS (F 210)

A DRAIN AND FILL APQ-130 ATTACK RADAR TRANSMITTER (S 649)

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRU_s (TASK NUMBER: 61390)

A REPAIR WIRING (TASK NUMBER: 61440)

A RESEAT SRU_s

SKILLS:

S INSTALL EXTENDER BOARDS
 S OPERATE PRESSURE TESTER
 S OPERATE TEST STATION
 S PERFORM VISUAL INSPECTIONS
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO CHECK VOLTAGES AND CONTINUITY
 S USE FILL STATION (65AN) TO DRAIN AND VACUUM FILL ARS TRANSMITTER
 S USE VECTOR VOLTMETER TO MEASURE RF VOLTAGE AND PHASE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	S 611		0	1	3	1	5.08	
451X6B	S 611		0	0	0	1	5.08	
451X6	S 611		0	1	1	1	5.08	
451X6A	S 621		0	0	0	0	5.45	
451X6B	S 621		0	0	0	0	5.45	
451X6	S 621		0	0	0	0	5.45	
451X6A	S 622		0	3	5	0	6.01	
451X6B	S 622		0	0	0	0	6.01	
451X6	S 622		0	2	3	0	6.01	
451X6A	S 634		8	13	12	2	5.37	
451X6B	S 634		0	0	0	2	5.37	
451X6	S 634		5	7	6	2	5.37	
451X6A	S 636		0	3	4	1	5.20	
451X6B	S 636		0	0	0	1	5.20	
451X6	S 636		0	2	2	1	5.20	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 637		0	3	7	1	5.54	
451X6B	S 637		0	0	0	1	5.54	
451X6	S 637		0	2	4	1	5.54	
451X6A	S 638		8	12	13	2	6.05	
451X6B	S 638		0	0	2	2	6.05	
451X6	S 638		5	6	8	2	6.05	
451X6A	S 644		8	20	20	4	6.74	
451X6B	S 644		0	1	2	4	6.74	
451X6	S 644		5	11	11	4	6.74	
451X6A	S 646		8	17	18	3	5.06	
451X6B	S 646		0	0	1	3	5.06	
451X6	S 646		5	8	10	3	5.06	
451X6A	S 649		0	3	4	1	5.38	
451X6B	S 649		0	0	0	1	5.38	
451X6	S 649		0	2	2	1	5.38	
451X6A	S 777		0	3	4	1	4.67	
451X6B	S 777		0	0	0	1	4.67	
451X6	S 777		0	2	2	1	4.67	
451X6A	S 778		0	3	4	1	4.65	
451X6B	S 778		0	0	0	1	4.65	
451X6	S 778		0	2	2	1	4.65	
451X6A	S 799		0	1	0	0	4.33	
451X6B	S 799		0	0	0	0	4.33	
451X6	S 799		0	1	0	0	4.33	
451X6A	S 800		0	1	1	0	4.11	
451X6B	S 800		0	0	0	0	4.11	
451X6	S 800		0	1	0	0	4.11	
451X6A	S 801		0	3	4	0	4.44	
451X6B	S 801		0	0	0	0	4.44	
451X6	S 801		0	2	2	0	4.44	
451X6A	S 802		0	3	4	0	4.33	
451X6B	S 802		0	0	0	0	4.33	
451X6	S 802		0	2	2	0	4.33	
451X6A	S 818		5	11	11	2	3.58	
451X6B	S 818		0	0	0	2	3.58	
451X6	S 818		3	6	6	2	3.58	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 820		0	3	5	2	4.71	
451X6B	S 820		0	0	0	2	4.71	
451X6	S 820		0	2	3	2	4.71	
451X6A	S 821		0	4	4	2	4.60	
451X6B	S 821		0	0	0	2	4.60	
451X6	S 821		0	2	2	2	4.60	
451X6A	S 823		0	4	6	1	4.70	
451X6B	S 823		0	1	0	1	4.70	
451X6	S 823		0	3	4	1	4.70	
451X6A	S 824		0	4	6	1	4.58	
451X6B	S 824		0	1	1	1	4.58	
451X6	S 824		0	3	3	1	4.58	
451X6A	S 825		5	8	11	1	5.17	
451X6B	S 825		0	0	2	1	5.17	
451X6	S 825		3	4	7	1	5.17	
451X6A	S 826		5	10	12	1	4.53	
451X6B	S 826		0	0	2	1	4.53	
451X6	S 826		3	5	7	1	4.53	
451X6A	S 831		0	0	0	0	4.87	
451X6B	S 831		0	0	0	0	4.87	
451X6	S 831		0	0	0	0	4.87	
451X6A	S 832		0	0	0	0	4.64	
451X6B	S 832		0	0	0	0	4.64	
451X6	S 832		0	0	0	0	4.64	
451X6A	S 843		3	13	16	2	5.72	
451X6B	S 843		0	0	2	2	5.72	
451X6	S 843		2	7	9	2	5.72	
451X6A	S 845		3	11	14	2	5.73	
451X6B	S 845		0	0	2	2	5.73	
451X6	S 845		2	6	8	2	5.73	
451X6A	S 847		5	13	16	2	4.00	
451X6B	S 847		0	0	1	2	4.00	
451X6	S 847		3	7	9	2	4.00	
451X6A	S 848		5	16	16	2	3.89	
451X6B	S 848		0	0	1	2	3.89	
451X6	S 848		3	8	9	2	3.89	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
S 611 ALIGN APQ-130 TRANSMITTERS
S 621 ALIGN ELECTRONIC PROCESSING UNITS
S 622 ALIGN F-111D ARS ANTENNAS
S 634 ALIGN LARA R/T
S 636 ALIGN MASTER FREQUENCY GENERATORS
S 637 ALIGN MICROWAVE RECEIVER UNITS
S 638 ALIGN MODULATOR RECEIVER-TRANSMITTERS (MRT)
S 644 ALIGN TERRAIN FOLLOWING RADAR (TFR) ANTENNA-RECEIVERS
S 646 ALIGN TFR TRANSMITTER-SYNCHRONIZERS
S 649 DRAIN AND FILL APQ-130 ATTACK RADAR TRANSMITTERS
S 777 REMOVE OR REPLACE APQ-130 TRANSMITTER COMPONENTS
S 778 REMOVE OR REPLACE APQ-130 TRANSMITTER SRUs
S 799 REMOVE OR REPLACE ELECTRONIC PROCESSING UNIT COMPONENTS
S 800 REMOVE OR REPLACE ELECTRONIC PROCESSING UNIT SRUs
S 801 REMOVE OR REPLACE F-111D ARS ANTENNA SRU COMPONENTS
S 802 REMOVE OR REPLACE F-111D ARS ANTENNA SRUs
S 818 REMOVE OR REPLACE LARA/RT SRUs
S 820 REMOVE OR REPLACE MASTER FREQUENCY GENERATOR COMPONENTS
S 821 REMOVE OR REPLACE MASTER FREQUENCY GENERATOR SRUs
S 823 REMOVE OR REPLACE MICROWAVE RECEIVER UNIT COMPONENTS
S 824 REMOVE OR REPLACE MICROWAVE RECEIVER UNIT SRUs
S 825 REMOVE OR REPLACE MRT COMPONENTS
S 826 REMOVE OR REPLACE MRT SRUs
S 831 REMOVE OR REPLACE RRT COMPONENTS
S 832 REMOVE OR REPLACE RRT SRUs
S 843 REMOVE OR REPLACE TFR ANTENNA RECEIVER COMPONENTS
S 845 REMOVE OR REPLACE TFR RADAR ANTENNA RECEIVER SRUs
S 847 REMOVE OR REPLACE TFR TRANSMITTER SYNCHRONIZER COMPONENTS
S 848 REMOVE OR REPLACE TFR TRANSMITTER SYNCHRONIZER SRUs

TASK NUMBER: 60350

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON DIGITAL TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

MULTIMETER

CTK

ESD PROTECTIVE EQUIPMENT

OSCILLOSCOPE

TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; NEW ISSUE FROM SUPPLY;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE

A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES

S CONNECT LRU TO TEST STATION

S OPERATE TEST STATION

S PERFORM VISUAL INSPECTIONS

S USE COMMON HANDTOOLS

S USE MULTIMETER

S USE OSCILLOSCOPE

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

KNOWLEDGE:

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	S 712		5	8	8	3	4.30	
451X6B	S 712		0	0	0	3	4.30	
451X6	S 712		3	4	4	3	4.30	
451X6A	S 721		13	12	14	5	4.55	
451X6B	S 721		0	0	2	5	4.55	
451X6	S 721		8	6	8	5	4.55	
451X6A	S 722		13	13	12	4	5.26	
451X6B	S 722		0	0	0	4	5.26	
451X6	S 722		8	7	6	4	5.26	
451X6A	S 727		3	2	1	0	4.32	
451X6B	S 727		0	0	0	0	4.32	
451X6	S 727		2	1	1	0	4.32	
451X6A	S 728		8	9	6	1	4.68	
451X6B	S 728		0	0	0	1	4.68	
451X6	S 728		5	5	3	1	4.68	
451X6A	S 733		3	1	1	0	4.65	
451X6B	S 733		0	0	0	0	4.65	
451X6	S 733		2	1	1	0	4.65	
451X6A	S 740		3	4	3	1	3.82	
451X6B	S 740		0	0	0	1	3.82	
451X6	S 740		2	2	2	1	3.82	
451X6A	S 741		21	19	18	7	4.75	
451X6B	S 741		0	0	2	7	4.75	
451X6	S 741		12	10	10	7	4.75	
451X6A	S 742		16	17	17	7	4.08	
451X6B	S 742		0	0	1	7	4.08	
451X6	S 742		11	9	9	7	4.08	
451X6A	S 747		16	19	14	3	4.13	
451X6B	S 747		0	0	0	3	4.13	
451X6	S 747		9	10	8	3	4.13	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 755		3	3	6	3	4.61	
451X6B	S 755		0	0	0	3	4.61	
451X6	S 755		2	2	3	3	4.61	
451X6A	S 760		0	0	1	0	4.43	
451X6B	S 760		0	0	0	0	4.43	
451X6	S 760		0	0	0	0	4.43	
451X6A	S 762		11	20	20	7	4.48	
451X6B	S 762		0	0	0	7	4.48	
451X6	S 762		6	10	10	7	4.48	
451X6A	S 764		11	16	17	5	5.42	
451X6B	S 764		0	0	0	5	5.42	
451X6	S 764		6	8	9	5	5.42	
451X6A	S 771		3	1	4	1	4.37	
451X6B	S 771		0	0	0	1	4.37	
451X6	S 771		2	1	2	1	4.37	
451X6A	T 861		0	0	0	0	4.69	
451X6B	T 861		0	0	0	0	4.69	
451X6	T 861		0	0	0	0	4.69	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I) OF LRUs ISSUED FROM SUPPLY

S 712 PERFORM OPERATIONAL TESTS OF AJN-16 NCUs

S 721 PERFORM OPERATIONAL TESTS OF ARS ANTENNAS OTHER THAN F-111D

S 722 PERFORM OPERATIONAL TESTS OF ARS ELECTRICAL SYNCHRONIZERS

S 727 PERFORM OPERATIONAL TESTS OF AYK-6 GENERAL PURPOSE COMPUTERS

S 728 PERFORM OPERATIONAL TESTS OF BCUs

S 733 PERFORM OPERATIONAL TESTS OF DDPUs

S 740 PERFORM OPERATIONAL TESTS OF FDCs

S 741 PERFORM OPERATIONAL TESTS OF FEEL AND TRIM ASSEMBLIES

S 742 PERFORM OPERATIONAL TESTS OF FLIGHT CONTROL COMPUTERS

S 747 PERFORM OPERATIONAL TESTS OF INTERFERENCE BLANKERS

S 755 PERFORM OPERATIONAL TESTS OF MCUs

S 760 PERFORM OPERATIONAL TESTS OF RI RECORDERS

S 762 PERFORM OPERATIONAL TESTS OF SIS COMPUTERS

S 764 PERFORM OPERATIONAL TESTS OF TF COMPUTERS

S 771 PERFORM OPERATIONAL TESTS OF WNC/MCs

T 861 PERFORM OPERATIONAL TESTS OF HORIZONTAL SITUATION DISPLAY PROCESSORS (HSDP)

TASK NUMBER: 60360

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN DIGITAL TYPE LRU

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
OSCILLOSCOPE
TEST STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO CHECK VOLTAGES AND CONTINUITY
S USE DVM TO MEASURE VOLTAGES AND CHECK CONTINUITY
S USE OSCILLOSCOPE TO CHECK VOLTAGES AND PULSE CHARACTERISTICS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS

KNOWLEDGE:

K APPLY LRU THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RELAY THEORY OF OPERATION
 K APPLY RESISTOR THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SOLID STATE DIODE THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
 K ISOLATE FAULTY AC CIRCUITS
 K ISOLATE FAULTY CAPACITORS
 K ISOLATE FAULTY DC CIRCUITS
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY RESISTORS
 K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 652		5	10	12	5	5.96	
451X6B	S 652		0	0	0	5	5.96	
451X6	S 652		3	5	6	5	5.96	
451X6A	S 659		16	13	12	4	5.44	
451X6B	S 659		0	0	1	4	5.44	
451X6	S 659		9	7	7	4	5.44	
451X6A	S 662		11	14	13	3	5.79	
451X6B	S 662		0	0	0	3	5.79	
451X6	S 662		6	7	7	3	5.79	
451X6A	S 665		3	2	1	0	5.69	
451X6B	S 665		0	0	0	0	5.69	
451X6	S 665		2	1	1	0	5.69	
451X6A	S 666		5	9	8	1	5.33	
451X6B	S 666		0	0	1	1	5.33	
451X6	S 666		3	5	5	1	5.33	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 672		3	1	0	0	5.20	
451X6B	S 672		0	0	0	0	5.20	
451X6	S 672		2	1	0	0	5.20	
451X6A	S 677		0	0	3	2	5.26	
451X6B	S 677		0	0	0	2	5.26	
451X6	S 677		0	0	1	2	5.26	
451X6A	S 678		26	22	19	7	5.99	
451X6B	S 678		0	0	2	7	5.99	
451X6	S 678		15	11	11	7	5.99	
451X6A	S 679		18	18	16	7	6.27	
451X6B	S 679		0	0	0	7	6.27	
451X6	S 679		11	9	9	7	6.27	
451X6A	S 680		18	18	16	5	5.05	
451X6B	S 680		0	0	1	5	5.05	
451X6	S 680		12	10	9	5	5.05	
451X6A	S 685		13	16	15	4	4.95	
451X6B	S 685		0	0	0	4	4.95	
451X6	S 685		8	8	8	4	4.95	
451X6A	S 692		3	3	6	2	4.93	
451X6B	S 692		0	0	0	2	4.93	
451X6	S 692		2	2	3	2	4.93	
451X6A	S 695		8	10	12	2	5.40	
451X6B	S 695		0	0	0	2	5.40	
451X6	S 695		5	5	6	2	5.40	
451X6A	S 696		0	0	0	0	5.54	
451X6B	S 696		0	0	0	0	5.54	
451X6	S 696		0	0	0	0	5.54	
451X6A	S 698		5	3	1	0	5.50	
451X6B	S 698		0	0	0	0	5.50	
451X6	S 698		3	2	1	0	5.50	
451X6A	S 699		13	21	18	8	4.76	
451X6B	S 699		0	0	0	8	4.76	
451X6	S 699		8	11	9	8	4.76	
451X6A	S 702		13	18	16	4	6.07	
451X6B	S 702		0	0	0	4	6.07	
451X6	S 702		8	9	8	4	6.07	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 710		3	1	4	1	5.85	
451X6B	S 710		0	0	0	1	5.85	
451X6	S 710		2	1	2	1	5.85	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 S 652 ISOLATE MALFUNCTIONS IN AJN-16 NAVIGATION COMPUTER UNITS
 S 659 ISOLATE MALFUNCTIONS IN ARS ANTENNAS OTHER THAN F-111D
 S 662 ISOLATE MALFUNCTIONS IN ATTACK RADAR SET ELECTRICAL
 SYNCHRONIZERS
 S 665 ISOLATE MALFUNCTIONS IN AYK-6 GENERAL PURPOSE COMPUTERS
 S 666 ISOLATE MALFUNCTIONS IN BALLISTIC COMPUTER UNITS (BCU)
 S 672 ISOLATE MALFUNCTIONS IN DIGITAL DOPPLER PROCESSING UNITS
 S 677 ISOLATE MALFUNCTIONS IN F-111D TF AMP/PSs TO SRU COMPONENT
 S 678 ISOLATE MALFUNCTIONS IN FEEL AND TRIM ASSEMBLIES
 S 679 ISOLATE MALFUNCTIONS IN FEEL AND TRIM ASSEMBLY SRUs
 S 680 ISOLATE MALFUNCTIONS IN FLIGHT CONTROL COMPUTERS
 S 685 ISOLATE MALFUNCTIONS IN INTERFERENCE BLANKERS
 S 692 ISOLATE MALFUNCTIONS IN MCUs
 S 695 ISOLATE MALFUNCTIONS IN NAVIGATION DISPLAY UNITS
 S 696 ISOLATE MALFUNCTIONS IN RADAR INDICATORS (RI)
 S 698 ISOLATE MALFUNCTIONS IN SDCs
 S 699 ISOLATE MALFUNCTIONS IN SIS COMPUTERS
 S 702 ISOLATE MALFUNCTIONS IN TF COMPUTERS
 S 710 ISOLATE MALFUNCTIONS IN WEAPONS NAVIGATION COMPUTERS (WNC)/
 MISSION COMPUTERS (MC)

TASK NUMBER: 60370

TASK STATEMENT:

REPAIR DIGITAL TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

ESD PROTECTIVE EQUIPMENT

TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs

A CLEAN CONTACTS (F 210)

A ORDER PARTS

A REPAIR WIRING (TASK NUMBER: 61440)

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A RESEAT SRUs

SKILLS:

S INSTALL EXTENDER BOARDS

S OPERATE TEST STATION

S PERFORM VISUAL INSPECTIONS

S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	S 614		5	7	12	4	5.17	
451X6B	S 614		0	0	1	4	5.17	
451X6	S 614		3	3	6	4	5.17	
451X6A	S 616		11	11	13	3	5.66	
451X6B	S 616		0	0	0	3	5.66	
451X6	S 616		6	6	7	3	5.66	
451X6A	S 617		3	3	2	0	5.14	
451X6B	S 617		0	0	0	0	5.14	
451X6	S 617		2	2	1	0	5.14	
451X6A	S 625		3	2	3	2	5.10	
451X6B	S 625		0	0	0	2	5.10	
451X6	S 625		2	1	1	2	5.10	
451X6A	S 626		21	17	16	6	5.41	
451X6B	S 626		0	0	2	6	5.41	
451X6	S 626		12	8	9	6	5.41	
451X6A	S 627		3	3	4	1	4.80	
451X6B	S 627		0	0	0	1	4.80	
451X6	S 627		2	2	2	1	4.80	
451X6A	S 632		13	16	14	2	4.55	
451X6B	S 632		0	0	0	2	4.55	
451X6	S 632		8	8	8	2	4.55	
451X6A	S 635		3	1	3	1	5.02	
451X6B	S 635		0	0	0	1	5.02	
451X6	S 635		2	1	1	1	5.02	
451X6A	S 640		3	2	2	0	4.75	
451X6B	S 640		0	0	0	0	4.75	
451X6	S 640		2	1	1	0	4.75	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 642		13	20	16	6	4.78	
451X6B	S 642		0	0	0	6	4.78	
451X6	S 642		8	10	9	6	4.78	
451X6A	S 643		16	19	16	4	6.52	
451X6B	S 643		0	0	0	4	6.52	
451X6	S 643		9	10	8	4	6.52	
451X6A	S 773		8	12	12	4	3.90	
451X6B	S 773		0	0	0	4	3.90	
451X6	S 773		5	6	6	4	3.90	
451X6A	S 781		13	12	15	5	4.81	
451X6B	S 781		0	0	2	5	4.81	
451X6	S 781		8	6	9	5	4.81	
451X6A	S 783		8	12	12	2	3.94	
451X6B	S 783		0	0	0	2	3.94	
451X6	S 783		5	6	6	2	3.94	
451X6A	S 787		3	2	1	0	3.56	
451X6B	S 787		0	0	0	0	3.56	
451X6	S 787		2	1	0	0	3.56	
451X6A	S 788		3	2	1	0	3.73	
451X6B	S 788		0	0	0	0	3.73	
451X6	S 788		2	1	1	0	3.73	
451X6A	S 789		8	6	6	1	3.66	
451X6B	S 789		0	0	0	1	3.66	
451X6	S 789		5	3	3	1	3.66	
451X6A	S 794		0	0	0	0	4.47	
451X6B	S 794		0	0	0	0	4.47	
451X6	S 794		0	0	0	0	4.47	
451X6A	S 796		3	1	0	0	4.06	
451X6B	S 796		0	0	0	0	4.06	
451X6	S 796		2	1	0	0	4.06	
451X6A	S 797		0	0	1	0	3.96	
451X6B	S 797		0	0	0	0	3.96	
451X6	S 797		0	0	1	0	3.96	
451X6A	S 805		26	22	18	7	4.74	
451X6B	S 805		0	0	2	7	4.74	
451X6	S 805		15	11	11	7	4.74	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 806		29	23	18	7	4.83	
451X6B	S 806		0	0	2	7	4.83	
451X6	S 806		17	12	10	7	4.83	
451X6A	S 807		26	22	18	5	3.50	
451X6B	S 807		0	0	1	5	3.50	
451X6	S 807		17	12	10	5	3.50	
451X6A	S 812		13	16	14	3	3.59	
451X6B	S 812		0	0	0	3	3.59	
451X6	S 812		8	8	7	3	3.59	
451X6A	S 814		8	13	14	3	3.62	
451X6B	S 814		0	0	0	3	3.62	
451X6	S 814		5	7	8	3	3.62	
451X6A	S 822		3	3	5	2	4.04	
451X6B	S 822		0	0	0	2	4.04	
451X6	S 822		2	2	3	2	4.04	
451X6A	S 827		5	8	8	3	4.16	
451X6B	S 827		0	0	0	3	4.16	
451X6	S 827		3	4	4	3	4.16	
451X6A	S 828		11	11	10	2	3.75	
451X6B	S 828		0	0	0	2	3.75	
451X6	S 828		6	6	5	2	3.75	
451X6A	S 829		0	0	0	0	4.87	
451X6B	S 829		0	0	0	0	4.87	
451X6	S 829		0	0	0	0	4.87	
451X6A	S 830		0	0	0	0	4.64	
451X6B	S 830		0	0	0	0	4.64	
451X6	S 830		0	0	0	0	4.64	
451X6A	S 833		0	2	2	0	4.49	
451X6B	S 833		0	0	0	0	4.49	
451X6	S 833		0	1	1	0	4.49	
451X6A	S 834		11	19	16	5	3.39	
451X6B	S 834		0	0	0	5	3.39	
451X6	S 834		6	10	9	5	3.39	
451X6A	S 837		11	14	14	3	4.38	
451X6B	S 837		0	0	0	3	4.38	
451X6	S 837		6	7	8	3	4.38	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 838		8	12	14	4	3.96	
451X6B	S 838		0	0	0	4	3.96	
451X6	S 838		5	6	7	4	3.96	
451X6A	S 850		0	1	2	0	3.98	
451X6B	S 850		0	0	0	0	3.98	
451X6	S 850		0	1	1	0	3.98	
451X6A	T 871		0	0	0	0	4.43	
451X6B	T 871		0	0	0	0	4.43	
451X6	T 871		0	0	0	0	4.43	
451X6A	T 872		0	0	0	0	4.09	
451X6B	T 872		0	0	0	0	4.09	
451X6	T 872		0	0	0	0	4.09	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

S 614 ALIGN ARS ANTENNAS OTHER THAN F-111D ARS ANTENNAS

S 616 ALIGN ATTACK RADAR SET ELECTRICAL SYNCHRONIZERS

S 617 ALIGN AYK-6 GENERAL PURPOSE COMPUTERS

S 625 ALIGN F-111D TERRAIN FOLLOWING AMPLIFIER - POWER SUPPLIES

S 626 ALIGN FEEL AND TRIM ASSEMBLIES

S 627 ALIGN FLIGHT DIRECTOR COMPUTERS (FDC)

S 632 ALIGN INTERFERENCE BLANKERS

S 635 ALIGN MAINTENANCE CONTROL UNITS (MCU)

S 640 ALIGN SIGNAL DATA CONVERTERS (SDC)

S 642 ALIGN STALL INHIBITOR SYSTEM (SIS) COMPUTERS

S 643 ALIGN TERRAIN FOLLOWING (TF) COMPUTERS

S 773 REMOVE OR REPLACE AJN-16 NAVIGATION COMPUTER UNIT SRUs

S 781 REMOVE OR REPLACE ARS ANTENNA COMPONENTS OTHER THAN F-111D

S 783 REMOVE OR REPLACE ARS ELECTRICAL SYNCHRONIZER SRUs

S 787 REMOVE OR REPLACE AYK-6 GENERAL PURPOSE COMPUTER COMPONENTS

S 788 REMOVE OR REPLACE AYK-6 GENERAL PURPOSE COMPUTER SRUs

S 789 REMOVE OR REPLACE BCU SRUs

S 794 REMOVE OR REPLACE CONVERTER SET COMPONENTS

S 796 REMOVE OR REPLACE DDPU COMPONENTS

S 797 REMOVE OR REPLACE DDPU SRUs

S 805 REMOVE OR REPLACE FEEL AND TRIM ASSEMBLY COMPONENTS

S 806 REMOVE OR REPLACE FEEL AND TRIM ASSEMBLY SRUs

S 807 REMOVE OR REPLACE FLIGHT CONTROL COMPUTER SRUs

S 812 REMOVE OR REPLACE INTERFERENCE BLANKER POWER SUPPLIES

S 814 REMOVE OR REPLACE INTERFERENCE BLANKER SRUs

S 822 REMOVE OR REPLACE MCU SRUs

S 827 REMOVE OR REPLACE NAVIGATION DISPLAY UNIT COMPONENTS

S 828 REMOVE OR REPLACE NAVIGATION DISPLAY UNIT SRUs

S 829 REMOVE OR REPLACE RI COMPONENTS

USAF JOB INVENTORY TASK STATEMENTS:

S 830 REMOVE OR REPLACE RI SRUs
S 833 REMOVE OR REPLACE SDCs
S 834 REMOVE OR REPLACE SIS COMPUTER SRUs
S 837 REMOVE OR REPLACE TF COMPUTER COMPONENTS
S 838 REMOVE OR REPLACE TF COMPUTER SRUs
S 850 REMOVE OR REPLACE WNC/MCs
T 871 REMOVE OR REPLACE HSDP COMPONENTS
T 872 REMOVE OR REPLACE HSDP SRUs

TASK NUMBER: 60380

TASK STATEMENT: .

PERFORM OPERATIONAL TESTS ON ANALOG TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK; NEW
ISSUE FROM SUPPLY

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	S 701		5	9	12	4	5.03	
451X6B	S 701		0	0	1	4	5.03	
451X6	S 701		3	5	6	4	5.03	
451X6A	S 713		11	9	7	1	4.11	
451X6B	S 713		0	0	1	1	4.11	
451X6	S 713		6	5	4	1	4.11	
451X6A	S 735		5	10	14	5	4.73	
451X6B	S 735		0	0	0	5	4.73	
451X6	S 735		3	5	8	5	4.73	
451X6A	S 748		5	9	14	4	5.36	
451X6B	S 748		0	0	0	4	5.36	
451X6	S 748		3	5	7	4	5.36	
451X6A	S 759		13	13	16	5	4.57	
451X6B	S 759		0	0	0	5	4.57	
451X6	S 759		8	7	9	5	4.57	
451X6A	S 763		0	2	4	0	5.32	
451X6B	S 763		0	0	0	0	5.32	
451X6	S 763		0	1	2	0	5.32	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRU_s ISSUED FROM SUPPLY

S 701 ISOLATE MALFUNCTIONS IN TF AMP/PS_s TO SRU

S 713 PERFORM OPERATIONAL TESTS OF AJQ-20 NCUs

S 735 PERFORM OPERATIONAL TESTS OF DISPLACEMENT GYROSCOPES

S 748 PERFORM OPERATIONAL TESTS OF IRUs

S 759 PERFORM OPERATIONAL TESTS OF RATE GYROSCOPES/ACCELEROMETERS

S 763 PERFORM OPERATIONAL TESTS OF SPU_s

TASK NUMBER: 60390

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN ANALOG TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CALIBRATION MONITOR UNIT
CTK
TEST STATION

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE CALIBRATION MONITOR UNIT
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY LRU THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)

KNOWLEDGE:

K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 653		11	10	7	1	5.52	
451X6B	S 653		0	0	1	1	5.52	
451X6	S 653		6	5	4	1	5.52	
451X6A	S 686		5	9	14	4	7.30	
451X6B	S 686		0	0	0	4	7.30	
451X6	S 686		3	5	7	4	7.30	
451X6A	S 700		0	4	6	1	6.29	
451X6B	S 700		0	0	0	1	6.29	
451X6	S 700		0	2	3	1	6.29	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
S 653 ISOLATE MALFUNCTIONS IN AJQ-20 NCUs
S 686 ISOLATE MALFUNCTIONS IN IRUs
S 700 ISOLATE MALFUNCTIONS IN STABILIZED PLATFORM UNITS TO SRU OR
COMPONENT LEVEL

TASK NUMBER: 60400

TASK STATEMENT: .

REPAIR ANALOG TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
TEST STATION

REFERENCES:

APPLICABLE IPB
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE TEST PROCEDURES TO

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	S 610		0	0	0	0	4.61	
451X6B	S 610		0	0	0	0	4.61	
451X6	S 610		0	0	0	0	4.61	
451X6A	S 630		5	9	10	4	5.87	
451X6B	S 630		0	0	0	4	5.87	
451X6	S 630		3	5	5	4	5.87	
451X6A	S 641		0	3	6	1	6.00	
451X6B	S 641		0	0	0	1	6.00	
451X6	S 641		0	2	3	1	6.00	
451X6A	S 648		3	6	11	4	5.34	
451X6B	S 648		0	0	0	4	5.34	
451X6	S 648		2	3	6	4	5.34	
451X6A	S 774		8	9	8	1	3.81	
451X6B	S 774		0	0	0	1	3.81	
451X6	S 774		6	5	5	1	3.81	
451X6A	S 815		8	10	13	5	5.60	
451X6B	S 815		0	0	0	5	5.60	
451X6	S 815		5	5	7	5	5.60	
451X6A	S 816		8	10	13	4	4.98	
451X6B	S 816		0	0	0	4	4.98	
451X6	S 816		5	5	7	4	4.98	
451X6A	S 835		0	2	4	0	4.34	
451X6B	S 835		0	0	0	0	4.34	
451X6	S 835		0	1	2	0	4.34	
451X6A	S 836		0	1	4	0	4.21	
451X6B	S 836		0	0	0	0	4.21	
451X6	S 836		0	1	2	0	4.21	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

S 610 ALIGN ACCELEROMETER SIGNAL SIMULATORS

USAF JOB INVENTORY TASK STATEMENTS:

- S 630 ALIGN INERTIAL REFERENCE UNIT (IRU) OR INERTIAL NAVIGATION SYSTEMS (INS) TEST SETS
- S 641 ALIGN STABILIZED PLATFORM UNITS (SPU)
- S 648 CALIBRATE IRUs
- S 774 REMOVE OR REPLACE AJQ-20 NCU SRUs
- S 815 REMOVE OR REPLACE IRU COMPONENTS
- S 816 REMOVE OR REPLACE IRU SRUs
- S 835 REMOVE OR REPLACE SPU COMPONENTS
- S 836 REMOVE OR REPLACE SPU SRUs

TASK NUMBER: 60410

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON DISPLAY TYPE LRU_s

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; NEW ISSUE FROM SUPPLY;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	S 744		8	9	10	2	4.93	
451X6B	S 744		0	0	0	2	4.93	
451X6	S 744		5	5	5	2	4.93	
451X6A	S 753		0	3	6	1	4.57	
451X6B	S 753		0	0	0	1	4.57	
451X6	S 753		0	2	4	1	4.57	
451X6A	S 765		11	19	18	5	4.58	
451X6B	S 765		0	0	0	5	4.58	
451X6	S 765		6	10	10	5	4.58	
451X6A	T 860		5	2	2	0	4.77	
451X6B	T 860		0	0	0	0	4.77	
451X6	T 860		3	1	1	0	4.77	
451X6A	T 862		3	1	1	0	4.97	
451X6B	T 862		0	0	0	0	4.97	
451X6	T 862		2	1	1	0	4.97	
451X6A	T 863		0	0	0	0	4.77	
451X6B	T 863		0	0	0	0	4.77	
451X6	T 863		0	0	0	0	4.77	
451X6A	T 864		0	0	0	0	4.71	
451X6B	T 864		0	0	0	0	4.71	
451X6	T 864		0	0	0	0	4.71	
451X6A	T 865		0	0	0	0	4.95	
451X6B	T 865		0	0	0	0	4.95	
451X6	T 865		0	0	0	0	4.95	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRU_s ISSUED FROM SUPPLY

S 744 PERFORM OPERATIONAL TESTS OF INDICATOR RECORDERS

S 753 PERFORM OPERATIONAL TESTS OF LCOS_s OPTICAL DISPLAY SIGHTS

S 765 PERFORM OPERATIONAL TESTS OF TF INDICATORS

T 860 PERFORM OPERATIONAL TESTS OF HORIZONTAL SITUATION DISPLAY
INDICATORS (HSDI)

T 862 PERFORM OPERATIONAL TESTS OF HEAD UP DISPLAY (HUD) UNITS

T 863 PERFORM OPERATIONAL TESTS OF MSD_s

T 864 PERFORM OPERATIONAL TESTS OF RDC_s

T 865 PERFORM OPERATIONAL TESTS OF VSD_s

TASK NUMBER: 60420

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN DISPLAY TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
TEST STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY LRU THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY PHOTOSENSITIVE DEVICE THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS

KNOWLEDGE:

K ISOLATE FAULTY PHOTOSENSITIVE DEVICES
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 681		5	3	1	1	5.11	
451X6B	S 681		0	0	0	1	5.11	
451X6	S 681		3	2	0	1	5.11	
451X6A	S 682		8	10	9	2	5.80	
451X6B	S 682		0	0	0	2	5.80	
451X6	S 682		5	5	5	2	5.80	
451X6A	S 703		11	18	17	4	5.25	
451X6B	S 703		0	0	0	4	5.25	
451X6	S 703		6	9	9	4	5.25	
451X6A	S 709		5	4	3	0	5.41	
451X6B	S 709		0	0	0	0	5.41	
451X6	S 709		3	2	1	0	5.41	
451X6A	T 855		0	0	0	0	5.39	
451X6B	T 855		0	0	0	0	5.39	
451X6	T 855		0	0	0	0	5.39	
451X6A	T 856		0	0	0	0	5.53	
451X6B	T 856		0	0	0	0	5.53	
451X6	T 856		0	0	0	0	5.53	
451X6A	T 857		0	0	0	0	5.81	
451X6B	T 857		0	0	0	0	5.81	
451X6	T 857		0	0	0	0	5.81	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
S 681 ISOLATE MALFUNCTIONS IN HUD UNITS
S 682 ISOLATE MALFUNCTIONS IN INDICATOR RECORDERS
S 703 ISOLATE MALFUNCTIONS IN TF INDICATORS
S 709 ISOLATE MALFUNCTIONS IN VIDS
T 855 ISOLATE MALFUNCTIONS IN MSDs
T 856 ISOLATE MALFUNCTIONS IN RADAR DISPLAY CONTROLS (RDC)
T 857 ISOLATE MALFUNCTIONS IN VSDs

TASK NUMBER: 60430

TASK STATEMENT:

REPAIR DISPLAY TYPE LRU_s

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
SOLDERING STATION
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRU_s
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRU_s (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRU_s

SKILLS:

S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER PC BOARDS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK CONTINUITY

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	S 628		3	3	4	2	4.81	
451X6B	S 628		0	0	0	2	4.81	
451X6	S 628		2	2	2	2	4.81	
451X6A	S 629		5	8	8	3	5.74	
451X6B	S 629		0	0	0	3	5.74	
451X6	S 629		3	4	4	3	5.74	
451X6A	S 639		8	6	7	2	5.27	
451X6B	S 639		0	0	0	2	5.27	
451X6	S 639		5	3	4	2	5.27	
451X6A	S 645		16	20	17	5	5.88	
451X6B	S 645		0	0	0	5	5.88	
451X6	S 645		9	10	9	5	5.88	
451X6A	S 647		3	3	3	0	5.66	
451X6B	S 647		0	0	0	0	5.66	
451X6	S 647		2	2	1	0	5.66	
451X6A	S 808		8	9	10	2	4.80	
451X6B	S 808		0	0	0	2	4.80	
451X6	S 808		5	5	5	2	4.80	
451X6A	S 809		8	8	7	2	4.58	
451X6B	S 809		0	0	0	2	4.58	
451X6	S 809		5	4	4	2	4.58	
451X6A	S 839		11	17	15	4	4.35	
451X6B	S 839		0	0	0	4	4.35	
451X6	S 839		6	8	8	4	4.35	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 840		8	12	13	4	4.04	
451X6B	S 840		0	0	0	4	4.04	
451X6	S 840		5	6	7	4	4.04	
451X6A	S 849		3	4	2	0	4.29	
451X6B	S 849		0	0	0	0	4.29	
451X6	S 849		2	2	1	0	4.29	
451X6A	T 851		0	0	0	0	5.75	
451X6B	T 851		0	0	0	0	5.75	
451X6	T 851		0	0	0	0	5.75	
451X6A	T 852		0	0	0	0	5.75	
451X6B	T 852		0	0	0	0	5.75	
451X6	T 852		0	0	0	0	5.75	
451X6A	T 869		0	0	0	0	4.86	
451X6B	T 869		0	0	0	0	4.86	
451X6	T 869		0	0	0	0	4.86	
451X6A	T 870		0	0	0	0	4.79	
451X6B	T 870		0	0	0	0	4.79	
451X6	T 870		0	0	0	0	4.79	
451X6A	T 873		5	2	1	0	4.57	
451X6B	T 873		0	0	0	0	4.57	
451X6	T 873		3	1	0	0	4.57	
451X6A	T 874		3	1	1	0	4.23	
451X6B	T 874		0	0	0	0	4.23	
451X6	T 874		2	1	1	0	4.23	
451X6A	T 877		0	0	0	0	4.81	
451X6B	T 877		0	0	0	0	4.81	
451X6	T 877		0	0	0	0	4.81	
451X6A	T 878		0	0	0	0	4.40	
451X6B	T 878		0	0	0	0	4.40	
451X6	T 878		0	0	0	0	4.40	
451X6A	T 879		0	0	0	0	4.69	
451X6B	T 879		0	0	0	0	4.69	
451X6	T 879		0	0	0	0	4.69	
451X6A	T 880		0	0	0	0	4.01	
451X6B	T 880		0	0	0	0	4.01	
451X6	T 880		0	0	0	0	4.01	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	T 881		0	0	0	0	4.48	
451X6B	T 881		0	0	0	0	4.48	
451X6	T 881		0	0	0	0	4.48	
451X6A	T 882		0	0	0	0	4.08	
451X6B	T 882		0	0	0	0	4.08	
451X6	T 882		0	0	0	0	4.08	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 S 628 ALIGN HEAD UP DISPLAY (HUD) UNITS
 S 629 ALIGN INDICATOR RECORDERS
 S 639 ALIGN OPTICAL DISPLAY SIGHTS
 S 645 ALIGN TF INDICATORS
 S 647 ALIGN VIRTUAL IMAGE DISPLAYS (VID)
 S 808 REMOVE OR REPLACE INDICATOR RECORDER COMPONENTS
 S 809 REMOVE OR REPLACE INDICATOR RECORDER SRUs
 S 839 REMOVE OR REPLACE TF INDICATOR COMPONENTS
 S 840 REMOVE OR REPLACE TF INDICATOR SRUs
 S 849 REMOVE OR REPLACE VIDs
 T 851 ALIGN MULTISENSOR DISPLAYS (MSD)
 T 852 ALIGN VIDEO SIGNALS DISPLAYS (VSD)
 T 869 REMOVE OR REPLACE HSDI COMPONENTS
 T 870 REMOVE OR REPLACE HSDI SRUs
 T 873 REMOVE OR REPLACE HUD UNIT COMPONENTS
 T 874 REMOVE OR REPLACE HUD UNIT SRUs
 T 877 REMOVE OR REPLACE MSD COMPONENTS
 T 878 REMOVE OR REPLACE MSD SRUs
 T 879 REMOVE OR REPLACE RDC COMPONENTS
 T 880 REMOVE OR REPLACE RDC SRUs
 T 881 REMOVE OR REPLACE VSD COMPONENTS
 T 882 REMOVE OR REPLACE VSD SRUs

TASK NUMBER: 60440

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON MISCELLANEOUS TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

TEST STATION
CTK

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK; NEW
ISSUE FROM SUPPLY

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	S 711		5	12	14	5	4.35	
451X6B	S 711		0	0	1	5	4.35	
451X6	S 711		3	6	8	5	4.35	
451X6A	S 715		8	9	12	6	4.25	
451X6B	S 715		0	0	2	6	4.25	
451X6	S 715		5	5	7	6	4.25	
451X6A	S 716		3	3	9	2	4.10	
451X6B	S 716		0	0	1	2	4.10	
451X6	S 716		2	2	5	2	4.10	
451X6A	S 718		5	10	15	3	4.78	
451X6B	S 718		0	0	0	3	4.78	
451X6	S 718		3	5	8	3	4.78	
451X6A	S 719		11	9	11	2	3.99	
451X6B	S 719		0	0	2	2	3.99	
451X6	S 719		6	5	7	2	3.99	
451X6A	S 723		16	13	15	3	3.95	
451X6B	S 723		0	0	2	3	3.95	
451X6	S 723		9	7	9	3	3.95	
451X6A	S 724		8	9	12	2	3.61	
451X6B	S 724		0	0	0	2	3.61	
451X6	S 724		5	5	6	2	3.61	
451X6A	S 725		13	12	16	5	3.87	
451X6B	S 725		0	0	2	5	3.87	
451X6	S 725		8	6	9	5	3.87	
451X6A	S 726		11	10	12	4	3.55	
451X6B	S 726		0	0	1	4	3.55	
451X6	S 726		6	5	7	4	3.55	
451X6A	S 729		8	7	7	1	3.61	
451X6B	S 729		0	0	0	1	3.61	
451X6	S 729		5	3	4	1	3.61	
451X6A	S 730		18	17	15	5	4.40	
451X6B	S 730		0	0	1	5	4.40	
451X6	S 730		11	8	8	5	4.40	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 731		3	2	6	2	3.98	
451X6B	S 731		0	0	0	2	3.98	
451X6	S 731		2	1	3	2	3.98	
451X6A	S 738		5	7	6	2	4.26	
451X6B	S 738		0	0	0	2	4.26	
451X6	S 738		3	3	3	2	4.26	
451X6A	S 743		8	8	5	1	3.53	
451X6B	S 743		0	0	0	1	3.53	
451X6	S 743		5	4	3	1	3.53	
451X6A	S 745		5	10	12	5	3.89	
451X6B	S 745		0	0	1	5	3.89	
451X6	S 745		3	5	7	5	3.89	
451X6A	S 746		11	11	10	3	4.05	
451X6B	S 746		0	0	0	3	4.05	
451X6	S 746		6	6	5	3	4.05	
451X6A	S 749		3	9	5	1	4.01	
451X6B	S 749		0	0	0	1	4.01	
451X6	S 749		2	5	3	1	4.01	
451X6A	S 750		18	17	15	2	3.46	
451X6B	S 750		0	0	0	2	3.46	
451X6	S 750		11	8	8	2	3.46	
451X6A	S 752		0	0	2	0	4.05	
451X6B	S 752		0	0	0	0	4.05	
451X6	S 752		0	0	1	0	4.05	
451X6A	S 758		5	8	8	2	4.32	
451X6B	S 758		0	0	0	2	4.32	
451X6	S 758		3	4	4	2	4.32	
451X6A	S 766		13	16	18	4	4.85	
451X6B	S 766		0	0	2	4	4.85	
451X6	S 766		8	8	10	4	4.85	
451X6A	S 769		11	17	16	6	4.10	
451X6B	S 769		0	0	2	6	4.10	
451X6	S 769		6	8	9	6	4.10	
451X6A	U 973		0	0	1	6	4.26	
451X6B	U 973		19	20	13	6	4.26	
451X6	U 973		8	10	7	6	4.26	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRU_s ISSUED FROM SUPPLY

S 711 PERFORM OPERATIONAL TESTS OF AFRS ECA_s

S 715 PERFORM OPERATIONAL TESTS OF AMI ECA_s

S 716 PERFORM OPERATIONAL TESTS OF AMI_s

S 718 PERFORM OPERATIONAL TESTS OF ARS ACU_s

S 719 PERFORM OPERATIONAL TESTS OF ARS AIC_s

S 723 PERFORM OPERATIONAL TESTS OF ARS RADAR SET CONTROL BOXES

S 724 PERFORM OPERATIONAL TESTS OF ATTITUDE DIRECTOR INDICATORS

S 725 PERFORM OPERATIONAL TESTS OF AVVI ECA_s

S 726 PERFORM OPERATIONAL TESTS OF AVVI_s

S 729 PERFORM OPERATIONAL TESTS OF BEARING DISTANCE HEADING
INDICATORS (BDHI)

S 730 PERFORM OPERATIONAL TESTS OF CMDS CONTROLS

S 731 PERFORM OPERATIONAL TESTS OF COMPUTER CONTROL UNITS

S 738 PERFORM OPERATIONAL TESTS OF F-111D ARS LVPS_s

S 743 PERFORM OPERATIONAL TESTS OF HORIZONTAL DISPLAY INDICATORS

S 745 PERFORM OPERATIONAL TESTS OF INERTIAL BATTERY UNITS

S 746 PERFORM OPERATIONAL TESTS OF INTERFERENCE BLANKER POWER
SUPPLIES

S 749 PERFORM OPERATIONAL TESTS OF ISC_s

S 750 PERFORM OPERATIONAL TESTS OF LAM_s

S 752 PERFORM OPERATIONAL TESTS OF LCOS_s AMPLIFIERS

S 758 PERFORM OPERATIONAL TESTS OF NAVIGATION DATA DISPLAY PANELS

S 766 PERFORM OPERATIONAL TESTS OF TFR AMPLIFIER POWER SUPPLIES

S 769 PERFORM OPERATIONAL TESTS OF TFR RADAR SET CONTROLS (RSC)

U 973 PERFORM OPERATIONAL TESTS OF ARN-118 TACAN HORIZONTAL
SITUATION INDICATORS

TASK NUMBER: 60450

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN MISCELLANEOUS TYPE LRU's

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

TEST STATION
CTK

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY LRU THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRU's

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 651		13	12	14	5	4.80	
451X6B	S 651		0	0	2	5	4.80	
451X6	S 651		8	6	8	5	4.80	
451X6A	S 654		16	13	12	5	4.79	
451X6B	S 654		0	0	2	5	4.79	
451X6	S 654		9	7	7	5	4.79	
451X6A	S 656		8	8	13	3	5.07	
451X6B	S 656		0	0	2	3	5.07	
451X6	S 656		5	4	8	3	5.07	
451X6A	S 657		11	12	15	5	5.61	
451X6B	S 657		0	0	1	5	5.61	
451X6	S 657		6	6	8	5	5.61	
451X6A	S 661		16	17	16	4	4.58	
451X6B	S 661		0	0	1	4	4.58	
451X6	S 661		9	8	9	4	4.58	
451X6A	S 663		26	26	21	7	4.34	
451X6B	S 663		0	0	2	7	4.34	
451X6	S 663		15	13	12	7	4.34	
451X6A	S 664		3	10	14	5	5.38	
451X6B	S 664		0	0	0	5	5.38	
451X6	S 664		2	5	8	5	5.38	
451X6A	S 667		3	6	9	2	5.05	
451X6B	S 667		0	0	0	2	5.05	
451X6	S 667		2	3	5	2	5.05	
451X6A	S 668		21	17	16	7	5.53	
451X6B	S 668		0	0	0	7	5.53	
451X6	S 668		12	8	9	7	5.53	
451X6A	S 675		5	4	5	3	4.84	
451X6B	S 675		0	0	0	3	4.84	
451X6	S 675		3	2	3	3	4.84	
451X6A	S 683		3	7	11	5	5.93	
451X6B	S 683		0	0	0	5	5.93	
451X6	S 683		2	3	6	5	5.93	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 684		8	9	9	3	5.65	
451X6B	S 684		0	0	0	3	5.65	
451X6	S 684		5	5	5	3	5.65	
451X6A	S 689		0	0	2	0	4.67	
451X6B	S 689		0	0	0	0	4.67	
451X6	S 689		0	0	1	0	4.67	
451X6A	S 690		21	17	16	3	4.28	
451X6B	S 690		0	0	0	3	4.28	
451X6	S 690		12	8	8	3	4.28	
451X6A	S 704		13	14	17	5	5.28	
451X6B	S 704		0	0	2	5	5.28	
451X6	S 704		8	7	10	5	5.28	
451X6A	S 707		5	16	17	5	4.99	
451X6B	S 707		0	0	2	5	4.99	
451X6	S 707		3	8	10	5	4.99	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

S 651 ISOLATE MALFUNCTIONS IN AIRSPEED MACH INDICATOR (AMI)
ELECTRONIC CONTROL AMPLIFIERS (ECA)

S 654 ISOLATE MALFUNCTIONS IN ALTITUDE VERTICAL VELOCITY
INDICATOR (AVVI) ECAs

S 656 ISOLATE MALFUNCTIONS IN ARS AICs

S 657 ISOLATE MALFUNCTIONS IN ARS ANTENNA CONTROL UNITS (ACU)

S 661 ISOLATE MALFUNCTIONS IN ARS RADAR SET CONTROL BOXES

S 663 ISOLATE MALFUNCTIONS IN AUTOPILOT DAMPER PANELS (APDP)

S 664 ISOLATE MALFUNCTIONS IN AUXILIARY FLIGHT REFERENCE SYSTEM
(AFRS) ECAs

S 667 ISOLATE MALFUNCTIONS IN COMPUTER CONTROL UNITS

S 668 ISOLATE MALFUNCTIONS IN COUNTERMEASURES DISPENSING SYSTEM
(CMDS) CONTROLS

S 675 ISOLATE MALFUNCTIONS IN F-111D ARS LVPSs

S 683 ISOLATE MALFUNCTIONS IN INERTIAL BATTERY UNITS TO SRU OR
COMPONENT LEVEL

S 684 ISOLATE MALFUNCTIONS IN INTERFERENCE BLANKER POWER SUPPLIES
TO COMPONENT LEVEL

S 689 ISOLATE MALFUNCTIONS IN LCOSs AMPLIFIERS

S 690 ISOLATE MALFUNCTIONS IN LOW ALTITUDE MONITORS (LAM)

S 704 ISOLATE MALFUNCTIONS IN TFR AMPLIFIER POWER SUPPLIES

S 707 ISOLATE MALFUNCTIONS IN TFR RADAR SET CONTROLS

TASK NUMBER: 60460

TASK STATEMENT:

REPAIR MISCELLANEOUS TYPE LRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	S 612		13	14	15	3	4.95	
451X6B	S 612		0	0	2	3	4.95	
451X6	S 612		8	7	9	3	4.95	
451X6A	S 615		8	8	14	3	4.36	
451X6B	S 615		0	0	1	3	4.36	
451X6	S 615		5	4	8	3	4.36	
451X6A	S 623		5	6	5	2	4.63	
451X6B	S 623		0	0	0	2	4.63	
451X6	S 623		3	3	3	2	4.63	
451X6A	S 631		5	6	9	3	4.78	
451X6B	S 631		0	0	0	3	4.78	
451X6	S 631		3	3	5	3	4.78	
451X6A	S 633		3	3	5	0	5.06	
451X6B	S 633		0	0	0	0	5.06	
451X6	S 633		2	2	3	0	5.06	
451X6A	S 772		0	7	11	4	3.90	
451X6B	S 772		0	0	0	4	3.90	
451X6	S 772		0	3	6	4	3.90	
451X6A	S 776		5	7	10	4	3.40	
451X6B	S 776		0	0	2	4	3.40	
451X6	S 776		3	3	6	4	3.40	
451X6A	S 779		3	7	10	1	3.63	
451X6B	S 779		0	0	1	1	3.63	
451X6	S 779		2	3	6	1	3.63	
451X6A	S 780		5	7	11	1	4.21	
451X6B	S 780		0	0	2	1	4.21	
451X6	S 780		3	3	6	1	4.21	
451X6A	S 784		5	8	12	2	4.17	
451X6B	S 784		0	0	1	2	4.17	
451X6	S 784		3	4	7	2	4.17	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 785		13	14	12	3	3.87	
451X6B	S 785		0	0	1	3	3.87	
451X6	S 785		8	7	7	3	3.87	
451X6A	S 786		8	11	13	5	3.26	
451X6B	S 786		0	0	1	5	3.26	
451X6	S 786		5	6	7	5	3.26	
451X6A	S 790		16	16	13	5	4.82	
451X6B	S 790		0	0	0	5	4.82	
451X6	S 790		9	8	7	5	4.82	
451X6A	S 791		11	13	13	5	4.68	
451X6B	S 791		0	0	0	5	4.68	
451X6	S 791		6	7	7	5	4.68	
451X6A	S 792		0	3	7	1	4.47	
451X6B	S 792		0	0	0	1	4.47	
451X6	S 792		0	2	4	1	4.47	
451X6A	S 793		3	3	7	2	3.88	
451X6B	S 793		0	0	0	2	3.88	
451X6	S 793		2	2	4	2	3.88	
451X6A	S 803		3	1	4	2	3.63	
451X6B	S 803		0	0	0	2	3.63	
451X6	S 803		2	1	2	2	3.63	
451X6A	S 810		0	7	10	5	4.27	
451X6B	S 810		0	0	1	5	4.27	
451X6	S 810		0	3	5	5	4.27	
451X6A	S 811		3	8	10	5	3.85	
451X6B	S 811		0	0	0	5	3.85	
451X6	S 811		2	4	5	5	3.85	
451X6A	S 813		11	10	10	3	4.43	
451X6B	S 813		0	0	1	3	4.43	
451X6	S 813		6	5	6	3	4.43	
451X6A	S 817		13	12	12	2	3.26	
451X6B	S 817		0	0	0	2	3.26	
451X6	S 817		8	6	6	2	3.26	
451X6A	S 819		0	0	2	0	3.88	
451X6B	S 819		0	0	0	0	3.88	
451X6	S 819		0	0	1	0	3.88	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 841		5	9	12	3	4.22	
451X6B	S 841		0	0	2	3	4.22	
451X6	S 841		3	5	7	3	4.22	
451X6A	S 842		5	13	16	4	3.66	
451X6B	S 842		0	0	2	4	3.66	
451X6	S 842		3	7	9	4	3.66	
451X6A	S 846		3	13	14	6	4.69	
451X6B	S 846		0	0	2	6	4.69	
451X6	S 846		2	7	8	6	4.69	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

S 612 ALIGN ATTACK RADAR SYSTEM (ARS) ANTENNA INDICATOR CONTROLS

S 815 ALIGN ARS SET CONTROL BOXES

S 623 ALIGN F-111D ARS LOW VOLTAGE POWER SUPPLIES (LVPS)

S 631 ALIGN INSTRUMENT SET COUPLERS (ISC)

S 633 ALIGN LEAD COMPUTING OPTICAL SIGHTS (LCOSs)

S 772 REMOVE OR REPLACE AFRS ECA SRUs

S 776 REMOVE OR REPLACE AMI ECA SRUs

S 779 REMOVE OR REPLACE ARS ACU SRUs

S 780 REMOVE OR REPLACE ARS AIC COMPONENTS

S 784 REMOVE OR REPLACE ARS RADAR RSC COMPONENTS

S 785 REMOVE OR REPLACE AUTOPILOT DAMPER PANELS

S 786 REMOVE OR REPLACE AVVI ECA SRUs

S 790 REMOVE OR REPLACE CMDS CONTROL COMPONENTS

S 791 REMOVE OR REPLACE CMDS CONTROL SRUs

S 792 REMOVE OR REPLACE COMPUTER CONTROL UNIT COMPONENTS

S 793 REMOVE OR REPLACE COMPUTER CONTROL UNIT SRUs

S 803 REMOVE OR REPLACE F-111D ARS LOW VOLTAGE POWER SUPPLY SRUs

S 810 REMOVE OR REPLACE INERTIAL BATTERY UNIT COMPONENTS

S 811 REMOVE OR REPLACE INERTIAL BATTERY UNIT SRUs

S 813 REMOVE OR REPLACE INTERFERENCE BLANKER POWER SUPPLY
COMPONENTS

S 817 REMOVE OR REPLACE LAM SRUs

S 819 REMOVE OR REPLACE LCOSs AMPLIFIERS

S 841 REMOVE OR REPLACE TFR AMPLIFIER POWER SUPPLY SRU COMPONENTS

S 842 REMOVE OR REPLACE TFR AMPLIFIER POWER SUPPLY SRUs

S 846 REMOVE OR REPLACE TFR SET CONTROL COMPONENTS

'B' SHRED TASKS

TASK NUMBER: 60470

TASK STATEMENT:

PERFORM CONFIDENCE TESTS OF THE CADC (1803A1) TEST STATION
(V1085)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ESD PROTECTIVE EQUIPMENT
85D-12A1803A1-T001-001

REFERENCES:

33D3-24-18-2

33D3-24-18-8-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; EVERY 180 DAYS; AFTER REPAIR; AFTER
PHYSICAL MOVE

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A LOAD TAPE INTO READER

A EXECUTE TEST

SKILLS:

S ADJUST SYNCHROS USING API

S CONNECT SELF-TEST HARNESS CABLES

S OPERATE TEST STATION

S USE DIGITAL MULTIMETER TO MEASURE AC AND DC VOLTAGES AND
POSITIVE AND NEGATIVE RATIOS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY TECHNICAL DATA
K INTERPRET API
K INTERPRET PSVM

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1085		0	0	0	4	4.57	
451X6B	V1085		8	12	10	4	4.57	
451X6	V1085		3	6	5	4	4.57	

USAF JOB INVENTORY TASK STATEMENTS:

V1085 PERFORM CONFIDENCE TESTS OF CADC (1803A1) TEST STATIONS

TASK NUMBER: 60480

TASK STATEMENT:

PERFORM MAINTENANCE TESTS OF THE CADC (1803A1) TEST STATION
(V1088)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ESD PROTECTIVE EQUIPMENT
85D-12A1803A1-T001-00A

REFERENCES:

33D3-24-18-2
33D3-24-18-8-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; PI EVERY 180 DAYS; AFTER REPAIR; AFTER
PHYSICAL MOVE

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A LOAD TAPE INTO READER
A EXECUTE TEST
A PERFORM CONFIDENCE TEST OF THE CADC (1803A1) TEST STATION
(TASK NUMBER: 60470)

SKILLS:

S ADJUST SYNCHROS USING API
S CONNECT SELF TEST HARNESS AND CABLES
S OPERATE TEST STATION
S USE DIGITAL MULTIMETER TO MEASURE AC AND DC VOLTAGES AND
POSITIVE AND NEGATIVE RATIOS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K INTERPRET API
K INTERPRET PSVM

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 244		47	66	72	38	5.10	
451X6B	F 244		42	48	54	38	5.10	
451X6	F 244		45	56	64	38	5.10	
451X6A	V1088		0	0	0	3	5.35	
451X6B	V1088		8	11	9	3	5.35	
451X6	V1088		3	5	4	3	5.35	

USAF JOB INVENTORY TASK STATEMENTS:

F 244 PERFORM MAINTENANCE TAPE TESTS OF TEST STATIONS
V1088 PERFORM MAINTENANCE TESTS OF CADC (1803A1) TEST STATIONS

TASK NUMBER: 60490

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN THE CADC (1803A1) TEST STATION (V1071)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
EXTENDER BOARDS
OSCILLOSCOPE
SYNCHRO STANDARD

REFERENCES:

33D3-24-18-1
33D3-24-18-2
APPROPRIATE TRU TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CHECK DIGITAL INPUTS
A PERFORM CONFIDENCE TEST OF THE CADC (1803A1) TEST STATION
(TASK NUMBER: 60470)
A PERFORM MAINTENANCE TEST OF THE CADC (1803A1) TEST STATION
(TASK NUMBER: 60480)

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO CHECK TRANSISTORS, DIODES AND
RESISTORS CHARACTERISTICS AND CHECK CONTINUITY

SKILLS:

- S USE OSCILLOSCOPE TO MEASURE AC AND DC VOLTAGES AND PULSE
- S USE SYNCHRO STANDARD TO ALIGN SYNCHROS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY BASIC DIGITAL PRINCIPLES
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY GENERAL DIGITAL PRINCIPLES
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY PHOTOSENSITIVE DEVICE THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K DETERMINE WHICH PUSH-BUTTON SWITCHES REQUIRE AN ADAPTER CAP
- K IDENTIFY PROPER CONTROL PANEL SWITCH CALLED OUT IN SCHEMATICS
- K INTERPRET RESISTOR COLOR CODES
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY PHOTOSENSITIVE DEVICES
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY SYNCHROS-SERVOS
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS

KNOWLEDGE:

K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF
 AN INSTALLED LRU (TASK NUMBER: 61370)
 K PERFORM BINARY CONVERSIONS
 K PERFORM BINARY MATH OPERATIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT INDUCTORS
 K TROUBLESHOOT LIMITER CIRCUIT DIODES
 K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
 K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
 K TROUBLESHOOT PHOTOSENSITIVE DEVICES
 K TROUBLESHOOT POWER SUPPLY CIRCUITS
 K TROUBLESHOOT RELAYS
 K TROUBLESHOOT SYNCHROS-SERVOS
 K TROUBLESHOOT THREE-PHASE TRANSFORMERS
 K TROUBLESHOOT TRANSFORMERS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	V1071		0	0	0	4	6.65	
451X6B	V1071		4	12	10	4	6.65	
451X6	V1071		2	6	5	4	6.65	
451X6A	V1075		0	0	0	3	6.35	
451X6B	V1075		0	4	6	3	6.35	
451X6	V1075		0	2	3	3	6.35	
451X6A	V1077		0	0	0	3	6.56	
451X6B	V1077		4	7	7	3	6.56	
451X6	V1077		2	3	3	3	6.56	
451X6A	V1078		0	0	0	2	6.38	
451X6B	V1078		4	6	8	2	6.38	
451X6	V1078		2	3	4	2	6.38	
451X6A	V1080		0	0	0	3	6.27	
451X6B	V1080		4	7	8	3	6.27	
451X6	V1080		2	3	4	3	6.27	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1082		0	0	0	3	6.40	
451X6B	V1082		4	5	6	3	6.40	
451X6	V1082		2	2	3	3	6.40	
451X6A	V1083		0	0	0	3	6.35	
451X6B	V1083		4	7	7	3	6.35	
451X6	V1083		2	3	4	3	6.35	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
V1071 ISOLATE MALFUNCTIONS IN CADC (1803A1) TEST STATIONS
V1075 ISOLATE MALFUNCTIONS IN TEST STATION ANGLE POSITION
INDICATORS TO SRU OR COMPONENT LEVEL
V1077 ISOLATE MALFUNCTIONS IN TEST STATION AUTOMATIC CONTROL
PANELS TO COMPONENT LEVEL
V1078 ISOLATE MALFUNCTIONS IN TEST STATION DIGITAL COMPARATORS TO
SRU OR COMPONENT LEVEL
V1080 ISOLATE MALFUNCTIONS IN TEST STATION MANUAL CONTROL PANELS
TO COMPONENT LEVEL
V1082 ISOLATE MALFUNCTIONS IN TEST STATION SIGNAL SIMULATE AND
MEASURE PANELS TO SRU OR COMPONENT LEVEL
V1083 ISOLATE MALFUNCTIONS IN TEST STATION TAPE BLOCK READERS TO
SRU OR COMPONENT LEVEL

TASK NUMBER: 60500

TASK STATEMENT:

REPAIR THE CADC (1803A1) TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

ESD PROTECTIVE EQUIPMENT

EXTENDER BOARDS

OSCILLOSCOPE

REFERENCES:

33D-24-18-2

33D-24-18-4

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN CADC (1803A1) TEST STATIONS (V1042)

A CLEAN CONTACTS (F 210)

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)

A REPAIR WIRING (TASK NUMBER: 61440)

A RESEAT SRUs

SKILLS:

S INSTALL EXTENDER BOARDS

S OPERATE TEST STATION

S USE COMMON HANDTOOLS

S USE OSCILLOSCOPE TO ALIGN SYNCHROS AND TAPE READER

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

KNOWLEDGE:

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	V1042		0	0	0	4	6.27	
451X6B	V1042		4	9	10	4	6.27	
451X6	V1042		2	5	5	4	6.27	
451X6A	V1047		0	0	0	2	5.76	
451X6B	V1047		0	4	6	2	5.76	
451X6	V1047		0	2	3	2	5.76	
451X6A	V1051		0	0	0	2	5.54	
451X6B	V1051		4	4	6	2	5.54	
451X6	V1051		2	2	3	2	5.54	
451X6A	V1052		0	0	0	3	5.84	
451X6B	V1052		4	5	6	3	5.84	
451X6	V1052		2	2	3	3	5.84	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
V1042 ALIGN CENTRAL AIR DATA COMPUTER (CADC) (1803A1) TEST STATIONS
V1047 ALIGN TEST STATION ANGLE POSITION INDICATORS
V1051 ALIGN TEST STATION SIGNAL SIMULATE AND MEASURE PANELS
V1052 ALIGN TEST STATION TAPE BLOCK READERS

TASK NUMBER: 60510

TASK STATEMENT:

PERFORM PERIODIC INSPECTIONS ON THE CADC (1803A1) TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING RAGS
CLEANING SOLVENTS AND BRUSHES
CTK
Q-TIPS
85D-12A1803A1-T001-001
85D-12A1803A1-T001-00A

REFERENCES:

33D3-24-18-2
33D3-24-18-8-1
00-25-234

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALIBRATE CADC (1803A1) TEST STATION (V1053)
A CLEAN CONTACTS (F 210)
A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
A LOAD TAPE INTO READER
A ORDER PARTS
A PERFORM CONFIDENCE TEST OF THE CADC (1803A1) TEST STATION
(TASK NUMBER: 60470)
A PERFORM MAINTENANCE TEST OF THE CADC (1803A1) TEST STATION
(TASK NUMBER: 60480)

SKILLS:

S CONNECT SELF-TEST HARNESS AND CABLES
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHICH TRU OR SRU REQUIRES CALIBRATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	V1053		0	0	0	4	6.25	
451X6B	V1053		0	6	9	4	6.25	
451X6	V1053		0	3	5	4	6.25	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
V1053 CALIBRATE CAD/C (1803A1) TEST STATIONS

TASK NUMBER: 60520

TASK STATEMENT:

PERFORM OPERATIONAL TESTS ON LRUs THAT RUN ON THE CADC (1803A1)
TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
TEST STATION
TTU-205

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK; NEW
ISSUE FROM SUPPLY

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A LOAD TAPE INTO READER
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE TTU-205 TO PRESSURIZE LRUs

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	V1112		0	0	1	3	5.12	
451X6B	V1112		8	15	10	3	5.12	
451X6	V1112		3	7	5	3	5.12	
451X6A	V1113		0	0	0	3	4.41	
451X6B	V1113		8	15	10	3	4.41	
451X6	V1113		3	7	5	3	4.41	
451X6A	V1114		0	0	0	3	4.90	
451X6B	V1114		4	8	9	3	4.90	
451X6	V1114		2	4	4	3	4.90	
451X6A	V1115		0	0	0	2	5.05	
451X6B	V1115		4	2	3	2	5.05	
451X6	V1115		2	1	2	2	5.05	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY
V1112 PERFORM OPERATIONAL TESTS OF CADCS
V1113 PERFORM OPERATIONAL TESTS OF MSMA's
V1114 PERFORM OPERATIONAL TESTS OF SUBSYSTEM TIE-IN TEST SETS
V1115 PERFORM OPERATIONAL TESTS OF TFR TEST SETS

TASK NUMBER: 60530

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRU# THAT RUN ON THE CADC (1803A1) TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE
SOLDERING STATION
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK VOLTAGES
S USE OSCILLOSCOPE TO CHECK SIGNALS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION

KNOWLEDGE:

K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY CRT THEORY OF OPERATION
K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY DISPLAY TUBE THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY INDUCTOR THEORY OF OPERATION
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY LCD THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY METER MOVEMENT THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY PHOTSENSITIVE DEVICE THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLENOID THEORY OF OPERATION
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY SYNCHRO-SERVO THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
K APPLY TRANSDUCER THEORY OF OPERATION
K APPLY TRANSFORMER THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY APPROXIMATION A/D CONVERTERS
K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
K ISOLATE FAULTY CRTs
K ISOLATE FAULTY CLAMPER CIRCUITS
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY DISPLAY TUBES
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K ISOLATE FAULTY INDUCTORS
K ISOLATE FAULTY INTEGRATED CIRCUITS

KNOWLEDGE:

K ISOLATE FAULTY LCDs
 K ISOLATE FAULTY LIMITER CIRCUIT DIODES
 K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
 K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
 K ISOLATE FAULTY LOGIC COUNTERS
 K ISOLATE FAULTY METER MOVEMENTS
 K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
 K ISOLATE FAULTY PHOTOSENSITIVE DEVICES
 K ISOLATE FAULTY POWER SUPPLY FILTERS
 K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
 K ISOLATE FAULTY RAMP A/D CONVERTERS
 K ISOLATE FAULTY RCL CIRCUITS
 K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY RESISTORS
 K ISOLATE FAULTY SOLENOIDS
 K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY SYNCHROS-SERVOS
 K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
 K ISOLATE FAULTY TRANSDUCERS
 K ISOLATE FAULTY TRANSFORMERS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K ISOLATE FAULTY WEIGHTED RESISTOR D/A CONVERTERS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	V1072		0	0	1	3	6.16	
451X6B	V1072		8	14	10	3	6.16	
451X6	V1072		3	7	5	3	6.16	
451X6A	V1073		0	0	0	3	5.59	
451X6B	V1073		8	15	10	3	5.59	
451X6	V1073		3	7	5	3	5.59	
451X6A	V1074		0	0	0	3	6.03	
451X6B	V1074		4	9	9	3	6.03	
451X6	V1074		2	5	5	3	6.03	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1084		0	3	2	2	6.71	
451X6B	V1084		4	4	3	2	6.71	
451X6	V1084		2	3	2	2	6.71	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
V1072 ISOLATE MALFUNCTIONS IN CADCS TO SRU OR COMPONENT LEVEL
V1073 ISOLATE MALFUNCTIONS IN MSMA TO SRU OR COMPONENT LEVEL
V1074 ISOLATE MALFUNCTIONS IN SUBSYSTEM TIE-IN TEST SETS TO SRU
OR COMPONENT LEVEL
V1084 ISOLATE MALFUNCTIONS IN TFR TEST SETS TO SRU OR COMPONENT
LEVEL

TASK NUMBER: 60540

TASK STATEMENT:

REPAIR LRUs THAT RUN ON THE CADc (1803A1) TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S OPERATE TEST STATION
S PERFORM SAFETY WIRING (TASK NUMBER: 61450)
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK VOLTAGES AND CONTINUITY
S USE OSCILLOSCOPE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	V1043		0	0	0	3	6.05	
451X6B	V1043		4	12	9	3	6.05	
451X6	V1043		2	6	4	3	6.05	
451X6A	V1044		0	0	0	3	4.86	
451X6B	V1044		8	14	10	3	4.86	
451X6	V1044		3	7	5	3	4.86	
451X6A	V1045		0	0	0	3	5.42	
451X6B	V1045		4	9	8	3	5.42	
451X6	V1045		2	5	4	3	5.42	
451X6A	V1046		0	1	1	2	5.82	
451X6B	V1046		4	4	3	2	5.82	
451X6	V1046		2	2	2	2	5.82	
451X6A	V1140		0	0	0	3	3.55	
451X6B	V1140		8	13	9	3	3.55	
451X6	V1140		3	6	4	3	3.55	
451X6A	V1141		0	0	0	3	4.39	
451X6B	V1141		4	9	8	3	4.39	
451X6	V1141		2	5	4	3	4.39	
451X6A	V1153		0	0	0	2	4.38	
451X6B	V1153		8	6	3	2	4.38	
451X6	V1153		3	3	2	2	4.38	
451X6A	V1154		0	0	0	3	3.19	
451X6B	V1154		8	12	10	3	3.19	
451X6	V1154		3	6	5	3	3.19	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
V1043 ALIGN CENTRAL AIR DATA COMPUTERS (CADC)
V1044 ALIGN MAXIMUM SAFE MACH ASSEMBLIES (MSMA)
V1045 ALIGN SUBSYSTEM TIE-IN TEST SETS
V1046 ALIGN TERRAIN FOLLOWING RADAR (TFR) TEST SETS
V1140 REMOVE OR REPLACE MSMA SRUs OR COMPONENTS
V1141 REMOVE OR REPLACE SUBSYSTEM TIE-IN TEST SET SRUs OR
COMPONENTS
V1153 REMOVE OR REPLACE TFR TEST SET SRUs OR COMPONENTS
V1154 SAFETY WIRE CADC SRUs

TASK NUMBER: 60550

TASK STATEMENT: -

TRANSFER DATA FROM FDR 30-TRACK TAPE MAGAZINE TO 7-TRACK
TAPE (U1029)

TASK NOTES:

PERFORMED AT MT HOME AFB AND RAF UPPER HEYFORD

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
SIGNAL DATA CONVERTER

REFERENCES:

CHECKLIST ON INSIDE PANEL OF SDC

CUES:

RECEIPT OF FLIGHT DATA MAGAZINE

STANDARDS:

IAW INSTRUCTION CHECKLIST

ACTIVITIES:

A MOUNT 30 TRACK TAPE MAGAZINE
A MOUNT 7 TRACK TAPE
A TRANSFER DATA
A ERASE TAPE

SKILLS:

S CONNECT CABLES
S OPERATE SDC
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY INFORMATION ON CHECKLIST
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U1029		0	0	0	3	3.36	
451X6B	U1029		12	16	11	3	3.36	
451X6	U1029		5	8	5	3	3.36	

USAF JOB INVENTORY TASK STATEMENTS:

U1029 TRANSFER DATA FROM FLIGHT DATA RECORDER 30-TRACK TAPE
MAGAZINES TO 7-TRACK TAPES

TASK NUMBER: 60560

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF LRUs THAT COMPRISE THE APX-64 IFF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

APM-137 TEST SET
APM-239A TEST SET
APM-245 TEST SET
CTK
FAULT ISOLATION TEST METER
MULTIMETER
OSCILLOSCOPE

REFERENCES:

12P4-2APX64-2
12P-APX-142

CONDITIONS:

2 PERSON REQUIREMENT; DRY ENVIRONMENT; KNOWN GOOD SHOP STANDARDS

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST
A MEASURE TRANSMISSION POWER

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE APM-137 TEST SET
S USE APM-239A TEST SET
S USE APM-245 TEST SET
S USE COMMON HANDTOOLS
S USE FAULT ISOLATION TEST METER TO MEASURE VOLTAGES FROM POWER SUPPLY AND LRU SIGNALS

SKILLS:

- S USE MULTIMETER.
- S USE OSCILLOSCOPE TO CHECK BANDWIDTH, FREQUENCY, AND SIDELOBES

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	U 952		0	0	1	8	4.46	
451X6B	U 952		31	35	27	8	4.46	
451X6	U 952		12	17	13	8	4.46	
451X6A	U 953		0	0	1	10	5.05	
451X6B	U 953		35	36	29	10	5.05	
451X6	U 953		14	18	14	10	5.05	
451X6A	U 954		0	0	1	8	4.73	
451X6B	U 954		23	31	21	8	4.73	
451X6	U 954		9	15	11	8	4.73	

USAF JOB INVENTORY TASK STATEMENTS:

- F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I) OF LRU_s ISSUED FROM SUPPLY
- U 952 PERFORM OPERATIONAL TESTS OF APX-64 IFF SYSTEM RADIO SET CONTROLS
- U 953 PERFORM OPERATIONAL TESTS OF APX-64 IFF SYSTEM RECEIVER-TRANSMITTERS
- U 954 PERFORM OPERATIONAL TESTS OF APX-64 IFF TRANSPONDER TEST SETS

TASK NUMBER: 60570

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN LRUs THAT COMPRISE THE APX-64 IFF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

APM-137 TEST SET
APM-239A TEST SET
APM-245 TEST SET
CAPACITOR TESTER
CARD EXTENDERS
CTK
DIGITAL LOGIC PROBE
FAULT ISOLATION TEST METER
MODULE EXTENDERS
MULTIMETER
OSCILLOSCOPE
SIGNAL GENERATOR
SOLDERING STATION
TUBE TESTER

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER PC BOARDS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE APM-137 TEST SET
S USE APM-239A TEST SET
S USE APM-245 TEST SET
S USE CAPACITOR TESTER
S USE CARD EXTENDERS TO FACILITATE TROUBLESHOOTING
S USE COMMON HANDTOOLS
S USE DIGITAL LOGIC PROBE
S USE FAULT ISOLATION TEST METER
S USE MULTIMETER TO CHECK VOLTAGES AND CONTINUITY

SKILLS:

- S USE OSCILLOSCOPE TO CHECK VOLTAGES AND MEASURE PULSE CHARACTERISTICS
- S USE SIGNAL GENERATOR
- S USE TUBE TESTER

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LRU THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MATH PRINCIPLES
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY RESONANT CAVITY THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY MAIN LOGIC GATES

KNOWLEDGE:

- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY RESONANT CAVITIES
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K ISOLATE FAULTY ZENER DIODES
- K PERFORM BASIC AC CIRCUIT CALCULATIONS
- K PERFORM BASIC DC CIRCUIT CALCULATIONS
- K PERFORM OCTAL CONVERSIONS
- K PERFORM RCL CIRCUIT CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT MAIN LOGIC GATES
- K TROUBLESHOOT POWER SUPPLY CIRCUITS
- K TROUBLESHOOT POWER SUPPLY FILTERS
- K TROUBLESHOOT POWER SUPPLY RECTIFIERS
- K TROUBLESHOOT PULSE MODULATION TRANSMITTER
- K TROUBLESHOOT RCL CIRCUITS
- K TROUBLESHOOT RELAYS
- K TROUBLESHOOT RESONANT CAVITIES
- K TROUBLESHOOT TRANSFORMERS
- K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
- K TROUBLESHOOT VOLTAGE REGULATOR
- K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
- K TROUBLESHOOT WAVESHAPING CIRCUITS
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 905		0	0	0	7	5.44	
451X6B	U 905		31	33	27	7	5.44	
451X6	U 905		12	16	13	7	5.44	
451X6A	U 906		0	0	0	7	6.14	
451X6B	U 906		35	34	25	7	6.14	
451X6	U 906		14	16	12	7	6.14	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 905 ISOLATE MALFUNCTIONS IN APX-64 IFF RADIO SET CONTROLS TO
SRU OR COMPONENT LEVEL
U 906 ISOLATE MALFUNCTIONS IN APX-64 IFF SYSTEM RECEIVER-
TRANSMITTERS TO SRU OR COMPONENT LEVEL

TASK NUMBER: 60580

TASK STATEMENT: .

REPAIR LRUs THAT COMPRISE THE APX-64 IFF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

ESD PROTECTIVE EQUIPMENT

SOLDERING STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs

A CLEAN CONTACTS (F 210)

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A REPAIR WIRING (TASK NUMBER: 61440)

A RESEAT SRUs

A TUNE OR ADJUST RESONANT CAVITIES

SKILLS:

S PERFORM VISUAL INSPECTIONS

S SOLDER OR DESOLDER PC BOARDS

S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	U 885		0	0	0	9	6.31	
451X6B	U 885		35	35	26	9	6.31	
451X6	U 885		14	17	13	9	6.31	
451X6A	U 994		0	0	0	7	4.44	
451X6B	U 994		23	26	21	7	4.44	
451X6	U 994		9	12	10	7	4.44	
451X6A	U 995		0	0	0	7	4.33	
451X6B	U 995		38	32	25	7	4.33	
451X6	U 995		15	15	12	7	4.33	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
U 885 ALIGN APX-64 IDENTIFICATION FRIEND OR FOE (IFF) SYSTEM
RECEIVER-TRANSMITTERS
U 994 REMOVE OR REPLACE APX-64 IFF RADIO SET CONTROL COMPONENTS
U 995 REMOVE OR REPLACE APX-64 IFF SYSTEM RECEIVER-TRANSMITTER
SRUs OR COMPONENTS

TASK NUMBER: 60590

TASK STATEMENT:

MAINTAIN IFF MODE IV COMPUTERS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
OSCILLOSCOPE
PULSE GENERATOR
SIGNAL GENERATOR
ST-21 TEST SET

REFERENCES:

KAM-225 E/TSEC (S)
SAM-22B/TSEC (S)
AFKAM-225C (S) (AF SUP)

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN IFF MODE IV COMPUTERS TO SRU (U 931)
A ORDER PARTS
A PERFORM OPERATIONAL TESTS OF IFF MODE IV COMPUTERS (U 981)
A REMOVE AND REPLACE IFF MODE IV COMPUTER SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A RESEAT SRUs

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE OSCILLOSCOPE TO CHECK VOLTAGES
S USE PULSE GENERATOR
S USE SIGNAL GENERATOR TO SUPPLY PULSE
S USE ST-21 TEST SET

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 931		0	0	0	7	5.85	
451X6B	U 931		15	16	16	7	5.85	
451X6	U 931		6	8	8	7	5.85	
451X6A	U 981		0	0	0	7	4.85	
451X6B	U 981		23	16	17	7	4.85	
451X6	U 981		9	8	8	7	4.85	
451X6A	U1019		0	0	0	5	4.12	
451X6B	U1019		19	16	14	5	4.12	
451X6	U1019		8	8	7	5	4.12	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 931 ISOLATE MALFUNCTIONS IN IFF MODE IV COMPUTERS TO SRU
U 981 PERFORM OPERATIONAL TESTS OF IFF MODE IV COMPUTERS
U1019 REMOVE OR REPLACE IFF MODE IV COMPUTER SRUs

TASK NUMBER: 60600

TASK STATEMENT: ,

MAINTAIN TEST SETS USED WITH THE APX-64 IFF SYSTEM

TASK NOTES:

THIS TASK COVERS APM-239A ONLY. OTHER TEST SETS (APM-245, UPM-137, AND UPM-137A) ARE MAINTAINED BY PMEL.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
IFF R/T
LOGIC CURVE TRACER
OSCILLOSCOPE
SOLDERING STATION

REFERENCES:

12P4-2APX64-2
33A1-3-358-11
33A1-3-358-11S-3

CONDITIONS:

KNOWN GOOD SHOP STANDARD

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ORDER PARTS
A PERFORM IFF R/T FUNCTIONAL TEST
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S CONNECT LRU TO TEST SETS
S OPERATE IFF R/T

SKILLS:

S PERFORM VISUAL INSPECTIONS
 S SOLDER OR DESOLDER PC BOARDS
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO CHECK CONTINUITY AND VOLTAGE
 S USE LOGIC CURVE TRACER TO IDENTIFY SOLID STATE CHARACTERISTICS
 S USE OSCILLOSCOPE TO CHECK VOLTAGE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AC CIRCUIT THEORY OF OPERATION
 K APPLY AC GENERATOR THEORY OF OPERATION
 K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY ESD PRECAUTIONS
 K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
 K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
 K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RESISTOR THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SOLID STATE DIODE THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K PERFORM BASIC AC CIRCUIT CALCULATIONS
 K PERFORM BASIC DC CIRCUIT CALCULATIONS
 K PERFORM RCL CIRCUIT CALCULATIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 944		0	0	0	4	4.92	
451X6B	U 944		23	15	14	4	4.92	
451X6	U 944		9	7	7	4	4.92	
451X6A	U 945		0	0	0	4	5.01	
451X6B	U 945		19	15	14	4	5.01	
451X6	U 945		8	7	7	4	5.01	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U 946		0	0	0	3	5.24	
451X6B	U 946		8	9	7	3	5.24	
451X6	U 946		3	5	4	3	5.24	
451X6A	U 947		0	0	0	3	5.23	
451X6B	U 947		19	12	11	3	5.23	
451X6	U 947		8	6	5	3	5.23	
451X6A	U 980		0	0	1	8	4.83	
451X6B	U 980		31	32	25	8	4.83	
451X6	U 980		12	15	13	8	4.83	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 944 ISOLATE MALFUNCTIONS TO APM-239A TEST SETS
U 945 ISOLATE MALFUNCTIONS TO APM-245 TEST SETS
U 946 ISOLATE MALFUNCTIONS TO UPM-137 TEST SETS
U 947 ISOLATE MALFUNCTIONS TO UPM-137A TEST SETS
U 980 PERFORM OPERATIONAL TESTS OF IFF MOCKUP TEST EQUIPMENT

TASK NUMBER: 60610

TASK STATEMENT:

MAINTAIN MODE IV INTERROGATOR TEST SETS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
MULTIMETER
OSCILLOSCOPE

REFERENCES:

KAM-225 E/TSEC (S)
SAM-22B/TSEC (S)
AFKAM-225C (S) (AF SUP)

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN MODE IV INTERROGATOR TEST SETS TO SRU
OR COMPONENT LEVEL (U 935)
A ORDER PARTS
A PERFORM KIT/KIR FUNCTIONAL TEST
A REMOVE AND REPLACE IFF MODE IV INTERROGATOR TEST SET SRUs OR
COMPONENTS (U1020)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK CONTINUITY AND VOLTAGE
S USE OSCILLOSCOPE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT POWER SUPPLY CIRCUITS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 935		0	0	0	5	5.59	
451X6B	U 935		15	14	12	5	5.59	
451X6	U 935		6	7	6	5	5.59	
451X6A	U1020		0	0	0	5	3.99	
451X6B	U1020		19	13	14	5	3.99	
451X6	U1020		8	6	7	5	3.99	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 935 ISOLATE MALFUNCTIONS IN MODE IV INTERROGATOR TEST SETS TO SRU OR COMPONENT LEVEL
U1020 REMOVE OR REPLACE IFF MODE IV INTERROGATOR TEST SET SRUs OR COMPONENTS

TASK NUMBER: 60620

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF LRU_s THAT COMPRISE THE ARC-164
UHF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ARC-164 TEST SET
CTK
HEAD SET
MULTIMETER
OSCILLATOR
OSCILLOSCOPE
POWER OUTPUT METER
SIGNAL GENERATOR
TACAN R/T (ARN-118)
TACAN TEST SET (972V-1)
TEST ADAPTER
WATT METER (25 WATT)
28V POWER SUPPLY

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

KNOWN GOOD LRU_s IN SYSTEM

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE 28V POWER SUPPLY TO POWER TEST SET
S USE ARC-164 TEST SET TO INTERCONNECT SYSTEM
S USE COMMON HANDTOOLS
S USE HEAD SET TO HEAR AUDIO

SKILLS:

S USE MULTIMETER TO MEASURE RESISTANCE
S USE OSCILLATOR TO PROVIDE 2 MHz REFERENCE
S USE OSCILLOSCOPE TO MEASURE MODULATION AND FREQUENCY
S USE POWER OUTPUT METER TO MEASURE DB AND MILLI-WATTS
S USE SIGNAL GENERATOR TO SIMULATE SIGNALS AND MEASURE FREQUENCY
S USE TACAN R/T TO TEST TACAN PORTION OF UHF BLADE ANTENNA
S USE TACAN TEST SET TO POWER TACAN R/T
S USE TEST ADAPTER TO KEY HEAD SET
S USE WATT METER TO VERIFY REFLECTED POWER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE THE SIZE OF WATT CRYSTAL NEEDED
K READ DBM INDICATIONS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	U 960		0	0	1	9	4.04	
451X6B	U 960		38	42	34	9	4.04	
451X6	U 960		15	20	17	9	4.04	
451X6A	U 961		0	0	1	9	4.37	
451X6B	U 961		38	42	34	9	4.37	
451X6	U 961		15	20	17	9	4.37	
451X6A	U 962		0	0	1	10	4.69	
451X6B	U 962		46	48	37	10	4.69	
451X6	U 962		18	23	18	10	4.69	
451X6A	U 989		0	0	0	4	3.50	
451X6B	U 989		8	14	13	4	3.50	
451X6	U 989		3	7	6	4	3.50	

USAF JOB INVENTORY TASK STATEMENTS:

- F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY
- U 960 PERFORM OPERATIONAL TESTS OF ARC-164 UHF FREQUENCY
INDICATORS
- U 961 PERFORM OPERATIONAL TESTS OF ARC-164 UHF RADIO SET CONTROLS
- U 962 PERFORM OPERATIONAL TESTS OF ARC-164 UHF RECEIVER-
TRANSMITTERS
- U 989 PERFORM OPERATIONAL TESTS OF UHF BLADE ANTENNAS

TASK NUMBER: 60630

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN LRUs THAT COMPRISE THE ARC-164 UHF
SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CAPACITOR TESTER
CTK
DIGITAL LOGIC PROBE
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
MULTIMETER
OSCILLOSCOPE
POWER OUTPUT METER
SIGNAL GENERATOR
THRULINE WATTMETER

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

KNOWN GOOD SHOP STANDARD

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE CAPACITOR TESTER TO TEST POWER CAPACITOR SUPPLY FILTERS
S USE COMMON HANDTOOLS
S USE DIGITAL LOGIC PROBE TO ISOLATE MALFUNCTION IN MODULES
S USE FREQUENCY COUNTER TO CHECK FREQUENCY
S USE MULTIMETER TO CHECK TRANSISTOR PROBE VOLTAGE AND ISOLATE
POWER SUPPLY
S USE OSCILLOSCOPE TO CHECK WAVE SHAPES AND VOLTAGE LEVELS
S USE POWER OUTPUT METER TO CHECK POWER READINGS
S USE SIGNAL GENERATOR TO SUPPLY GENERATED SIGNAL INTO MODULE TO
PRODUCE SIGNAL
S USE THRULINE WATTMETER

KNOWLEDGE

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY AM RECEIVER THEORY OF OPERATION
- K APPLY ANTENNA THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FM RECEIVER THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LRU THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PRACTICES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AM RECEIVERS
- K ISOLATE FAULTY AM TRANSMITTERS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY FLIP-FLOPS

KNOWLEDGE:

K ISOLATE FAULTY FM RECEIVERS
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K ISOLATE FAULTY INDUCTORS
K ISOLATE FAULTY INTEGRATED CIRCUITS
K ISOLATE FAULTY LEDs
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
K ISOLATE FAULTY OSCILLATOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
K ISOLATE FAULTY RCL CIRCUITS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
K ISOLATE FAULTY TRANSFORMERS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K ISOLATE FAULTY TUNNEL DIODES
K ISOLATE FAULTY VOLTAGE REGULATORS
K ISOLATE FAULTY WAVESHAPING CIRCUITS
K ISOLATE FAULTY ZENER DIODES
K PERFORM BASIC AC CIRCUIT CALCULATIONS
K PERFORM BASIC DC CIRCUIT CALCULATIONS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 912		0	0	1	8	5.24	
451X6B	U 912		31	38	32	8	5.24	
451X6	U 912		12	18	16	8	5.24	
451X6A	U 913		0	0	0	8	5.12	
451X6B	U 913		38	38	33	8	5.12	
451X6	U 913		15	18	16	8	5.12	

USAF JOB INVENTORY TASK STATEMENTS:

- F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
- U 912 ISOLATE MALFUNCTIONS IN ARC-164 ULTRA HIGH FREQUENCY (UHF)
RADIO SET CONTROLS TO SRU OR COMPONENT LEVEL
- U 913 ISOLATE MALFUNCTIONS IN ARC-164 UHF RECEIVER-TRANSMITTERS
TO SRU

TASK NUMBER: 60640

TASK STATEMENT: .

REPAIR LRUs THAT COMPRISE THE ARC-164 UHF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
SOLDERING STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER PC BOARDS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

KNOWLEDGE:

K CALCULATE PERCENTAGE OF MODULATION
K USE METRIC NOTATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	U 889		0	0	1	9	5.03	
451X6B	U 889		38	45	33	9	5.03	
451X6	U 889		15	21	16	9	5.03	
451X6A	U1000		0	0	1	7	4.02	
451X6B	U1000		35	35	29	7	4.02	
451X6	U1000		14	17	14	7	4.02	
451X6A	U1001		0	0	1	8	3.89	
451X6B	U1001		38	39	30	8	3.89	
451X6	U1001		15	19	15	8	3.89	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
U 889 ALIGN ARC-164 UHF RECEIVER-TRANSMITTERS
U1000 REMOVE OR REPLACE ARC-164 UHF RADIO SET CONTROL SRUs OR
COMPONENTS
U1001 REMOVE OR REPLACE ARC-164 UHF RECEIVER-TRANSMITTERS SRUs

TASK NUMBER: 60650

TASK STATEMENT:

MAINTAIN TEST SETS USED WITH THE ARC-164 UHF SYSTEM.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ARC-164 UHF LRUs
AUDIO OSCILLATOR
CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
FREQUENCY COUNTER
HEADSET
MX-9533 TEST ADAPTER
OSCILLOSCOPE
POWER OUTPUT METER
POWER SUPPLY
RF POWER METER
SIGNAL GENERATOR
THRULINE WATTMETER
VARIABLE ATTENUATOR

REFERENCES:

33D7-50-159-1
12R2-2ARC164-32

CONDITIONS:

KNOWN GOOD SHOP STANDARD

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN ARC-164 UHF SYSTEM TEST SETS
A ORDER PARTS
A PERFORM OPERATIONAL TESTS OF ARC-164 UHF SYSTEM TEST SETS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

ACTIVITIES:

- A REPAIR WIRING (TASK NUMBER: 61440)
- A RESEAT SRUs

SKILLS:

- S CONNECT LRU TO TEST SETS
- S PERFORM VISUAL INSPECTIONS
- S USE ARC-164 UHF LRUs
- S USE AUDIO OSCILLATOR
- S USE COMMON HANDTOOLS
- S USE DIGITAL MULTIMETER TO CHECK VOLTAGES
- S USE FREQUENCY COUNTER
- S USE HEADSET
- S USE MX-9533 TEST ADAPTER
- S USE OSCILLOSCOPE TO CHECK VOLTAGES
- S USE POWER OUTPUT METER
- S USE POWER SUPPLY
- S USE RF POWER METER
- S USE SIGNAL GENERATOR
- S USE THRULINE WATTMETER
- S USE VARIABLE ATTENUATOR

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY ARC-164 UHF SYSTEM THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY SOLID STATE DIODES
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
- K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 911		0	0	1	8	5.07	
451X6B	U 911		35	31	29	8	5.07	
451X6	U 911		14	15	14	8	5.07	
451X6A	U 921		0	0	0	4	5.18	
451X6B	U 921		8	9	8	4	5.18	
451X6	U 921		3	5	4	4	5.18	
451X6A	U 959		0	0	0	10	4.53	
451X6B	U 959		31	33	28	10	4.53	
451X6	U 959		12	16	14	10	4.53	
451X6A	U 970		0	0	1	4	4.30	
451X6B	U 970		0	7	10	4	4.30	
451X6	U 970		0	3	5	4	4.30	
451X6A	U 990		0	0	1	8	4.26	
451X6B	U 990		31	36	33	8	4.26	
451X6	U 990		12	18	16	8	4.26	
451X6A	U1009		0	0	1	2	4.26	
451X6B	U1009		0	5	8	2	4.26	
451X6	U1009		0	2	4	2	4.26	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 U 911 ISOLATE MALFUNCTIONS IN ARC-164 TEST SETS
 U 921 ISOLATE MALFUNCTIONS IN ARM-173 TEST SETS TO COMPONENT
 LEVEL
 U 959 PERFORM OPERATIONAL TESTS OF ARC-164 TEST SETS
 U 970 PERFORM OPERATIONAL TESTS OF ARM-173 TEST SETS
 U 990 PERFORM OPERATIONAL TESTS OF UHF MOCKUP TEST EQUIPMENT
 U1009 REMOVE OR REPLACE ARM-173 TEST SET COMPONENTS

TASK NUMBER: 60660

TASK STATEMENT:

MAINTAIN UHF TEST ADAPTER

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
HEADSET AND MICROPHONE
OSCILLOSCOPE
POWER SUPPLY
RADIO TEST SET
TEST ADAPTER

REFERENCES:

12R-2ARC-164-12

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ISOLATE MALFUNCTION IN UHF TEST ADAPTER (U939)
A OPERATIONALLY CHECK UHF TEST ADAPTERS
A ORDER PARTS
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE UHF TEST ADAPTER COMPONENTS (U1026)

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER
S USE HEADSET AND MICROPHONE
S USE OSCILLOSCOPE
S USE POWER SUPPLY
S USE RADIO TEST SET
S USE TEST ADAPTER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION

KNOWLEDGE:

K APPLY CAPACITOR THEORY OF OPERATION
K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY INDUCTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY CAPACITORS
K ISOLATE FAULTY CLAMPER CIRCUITS
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY INDUCTORS
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT LIMITER CIRCUIT DIODES
K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
K TROUBLESHOOT POWER SUPPLY CIRCUITS
K TROUBLESHOOT POWER SUPPLY FILTERS
K TROUBLESHOOT POWER SUPPLY RECTIFIERS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 939		0	0	0	4	4.96	
451X6B	U 939		8	14	17	4	4.96	
451X6	U 939		3	7	8	4	4.96	
451X6A	U1026		0	0	1	3	3.88	
451X6B	U1026		15	16	16	3	3.88	
451X6	U1026		6	8	8	3	3.88	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 939 ISOLATE MALFUNCTIONS IN UHF TEST ADAPTERS
U1026 REMOVE OR REPLACE UHF TEST ADAPTER COMPONENTS

TASK NUMBER: 60670

TASK STATEMENT: .

PERFORM OPERATIONAL TESTS OF LRUs THAT COMPRISE THE ARC-190 HF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ANTENNA SIMULATOR TEST SET
AUDIO OSCILLATOR
COUPLER TEST SET
CTK
DISTORTION ANALYZER
DVM
ESD PROTECTIVE EQUIPMENT
HF TEST SET
HIGH POWER TERMINATION
OSCILLOSCOPE
RF POWER METER
RF SIGNAL GENERATOR
SPECTRUM ANALYZER

REFERENCES:

12R2-2ARC-190-2
12R2-4-242-2
12R2-2ARC190-3-2

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE ANTENNA SIMULATOR TEST SET
S USE AUDIO OSCILLATOR
S USE COMMON HANDTOOLS
S USE COUPLER TEST SET
S USE DISTORTION ANALYZER TO CHECK POWER OUTPUT

SKILLS:

S USE DVM TO CHECK VOLTAGES
 S USE HF TEST SET
 S USE HIGH POWER TERMINATION TO ABSORB HIGH POWER
 S USE OSCILLOSCOPE TO CHECK VOLTAGES
 S USE RF POWER METER TO CHECK POWER
 S USE RF SIGNAL GENERATOR TO GENERATE SIGNALS FOR R/T
 S USE SPECTRUM ANALYZER TO TRANSMIT

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	U 963		0	0	0	7	4.71	
451X6B	U 963		38	32	23	7	4.71	
451X6	U 963		15	15	11	7	4.71	
451X6A	U 967		0	0	0	8	4.40	
451X6B	U 967		35	32	24	8	4.40	
451X6	U 967		14	15	12	8	4.40	
451X6A	U 968		0	0	0	6	4.25	
451X6B	U 968		31	25	18	6	4.25	
451X6	U 968		12	12	9	6	4.25	
451X6A	U 969		0	0	0	8	4.92	
451X6B	U 969		46	36	27	8	4.92	
451X6	U 969		18	18	13	8	4.92	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
 OF LRU_s ISSUED FROM SUPPLY
 U 963 PERFORM OPERATIONAL TESTS OF ARC-190 ANTENNA COUPLERS
 U 967 PERFORM OPERATIONAL TESTS OF ARC-190 RADIO SET CONTROLS
 U 968 PERFORM OPERATIONAL TESTS OF ARC-190 RADIO SYSTEM MOUNTS
 U 969 PERFORM OPERATIONAL TESTS OF ARC-190 RECEIVER-TRANSMITTERS

TASK NUMBER: 60680

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT COMPRISE THE ARC-190 HF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ANTENNA SIMULATOR TEST SET
AUDIO OSCILLATOR
COUPLER TEST SET
CTK
DISTORTION ANALYZER
DVM
ESD PROTECTIVE EQUIPMENT
HF TEST SET
HIGH POWER TERMINATION
OSCILLOSCOPE
RF POWER METER
RF SIGNAL GENERATOR
SPECTRUM ANALYZER

REFERENCES:

12R2-2ARC-190-2
12R2-4-242-2
12R2-2ARC190-3-2

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE ANTENNA SIMULATOR TEST SET
S USE AUDIO OSCILLATOR
S USE COMMON HANDTOOLS
S USE COUPLER TEST SET
S USE DISTORTION ANALYZER TO CHECK POWER OUTPUT
S USE DVM TO CHECK VOLTAGES
S USE HF TEST SET
S USE HIGH POWER TERMINATOR TO ABSORB HIGH POWER
S USE OSCILLOSCOPE TO CHECK VOLTAGES

SKILLS:

S USE RF POWER METER TO CHECK POWER
 S USE RF SIGNAL GENERATOR TO GENERATE SIGNALS FOR R/T
 S USE SPECTRUM ANALYZER TO TRANSMIT

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AC CIRCUIT THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY ESD PRECAUTIONS
 K APPLY LRU THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SPEAKER THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K APPLY COMPUTER MEMORY THEORY OF OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 915		0	0	0	7	5.17	
451X6B	U 915		35	24	19	7	5.17	
451X6	U 915		14	11	9	7	5.17	
451X6A	U 918		0	0	0	6	5.36	
451X6B	U 918		23	20	18	6	5.36	
451X6	U 918		9	10	9	6	5.36	
451X6A	U 919		0	0	0	5	4.59	
451X6B	U 919		27	19	17	5	4.59	
451X6	U 919		11	9	8	5	4.59	
451X6A	U 920		0	0	0	6	5.43	
451X6B	U 920		38	27	19	6	5.43	
451X6	U 920		15	13	9	6	5.43	

USAF JOB INVENTORY TASK STATEMENTS:

- F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
- U 915 ISOLATE MALFUNCTIONS IN ARC-190 ANTENNA COUPLERS TO SRU
- U 918 ISOLATE MALFUNCTIONS IN ARC-190 RADIO SET CONTROLS TO SRU
OR COMPONENT LEVEL
- U 919 ISOLATE MALFUNCTIONS IN ARC-190 RADIO SYSTEM MOUNTS TO
COMPONENT LEVEL
- U 920 ISOLATE MALFUNCTIONS IN ARC-190 RECEIVER-TRANSMITTERS TO
SRU

TASK NUMBER: 60690

TASK STATEMENT:

REPAIR LRUs THAT COMPRISE THE ARC-190 HF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS

S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PRACTICES

K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	U1002		0	0	0	5	4.05	
451X6B	U1002		31	24	18	5	4.05	
451X6	U1002		12	11	9	5	4.05	
451X6A	U1006		0	0	0	5	4.26	
451X6B	U1006		23	19	17	5	4.26	
451X6	U1006		9	9	9	5	4.26	
451X6A	U1007		0	0	0	5	4.01	
451X6B	U1007		23	16	14	5	4.01	
451X6	U1007		9	8	7	5	4.01	
451X6A	U1008		0	0	0	4	4.41	
451X6B	U1008		42	26	19	4	4.41	
451X6	U1008		17	12	9	4	4.41	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 U1002 REMOVE OR REPLACE ARC-190 ANTENNA COUPLER SRUs
 U1006 REMOVE OR REPLACE ARC-190 RADIO SET CONTROL SRUs OR
 COMPONENTS
 U1007 REMOVE OR REPLACE ARC-190 RADIO SYSTEM MOUNT COMPONENTS
 U1008 REMOVE OR REPLACE ARC-190 RECEIVER-TRANSMITTER SRUs

TASK NUMBER: 60700

TASK STATEMENT:

MAINTAIN TEST SETS USED WITH THE ARC-190 HF SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE

REFERENCES:

33D7-71-40-1

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ISOLATE MALFUNCTIONS IN ARC-190 TEST SETS
- A ORDER PARTS
- A PERFORM OPERATIONAL TESTS OF ARC-190 TEST SETS
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

SKILLS:

- S PERFORM VISUAL INSPECTIONS
- S USE COMMON HANDTOOLS
- S USE MULTIMETER TO CHECK VOLTAGES AND CONTINUITY
- S USE OSCILLOSCOPE TO CHECK DIGITAL CIRCUITS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY TECHNICAL DATA
 K ISOLATE FAULTY FLIP-FLOPS
 K ISOLATE FAULTY MAIN LOGIC GATES
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 914		0	0	0	7	5.43	
451X6B	U 914		19	19	17	7	5.43	
451X6	U 914		8	9	8	7	5.43	
451X6A	U 916		0	0	0	6	5.34	
451X6B	U 916		15	18	16	6	5.34	
451X6	U 916		6	8	8	6	5.34	
451X6A	U 917		0	0	0	7	5.68	
451X6B	U 917		31	21	19	7	5.68	
451X6	U 917		12	10	9	7	5.68	
451X6A	U 964		0	0	0	5	4.55	
451X6B	U 964		31	25	16	5	4.55	
451X6	U 964		12	12	8	5	4.55	
451X6A	U 965		0	0	0	5	4.57	
451X6B	U 965		38	29	18	5	4.57	
451X6	U 965		15	14	9	5	4.57	
451X6A	U 966		0	0	0	8	4.64	
451X6B	U 966		38	31	24	8	4.64	
451X6	U 966		15	15	12	8	4.64	
451X6A	U1003		0	0	0	4	3.97	
451X6B	U1003		23	15	12	4	3.97	
451X6	U1003		9	7	6	4	3.97	
451X6A	U1004		0	0	0	5	4.04	
451X6B	U1004		23	15	13	5	4.04	
451X6	U1004		9	7	6	5	4.04	
451X6A	U1005		0	0	0	5	4.17	
451X6B	U1005		31	21	18	5	4.17	
451X6	U1005		12	10	9	5	4.17	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 914 ISOLATE MALFUNCTIONS IN ARC-190 ANTENNA COUPLER TEST SETS
TO SRU OR COMPONENT LEVEL
U 916 ISOLATE MALFUNCTIONS IN ARC-190 ANTENNA SIMULATOR TEST SETS
TO SRU OR COMPONENT LEVEL
U 917 ISOLATE MALFUNCTIONS IN ARC-190 HIGH FREQUENCY (HF) TEST
SETS TO SRU OR COMPONENT LEVEL
U 964 PERFORM OPERATIONAL TESTS OF ARC-190 ANTENNA SIMULATOR TEST
SETS
U 965 PERFORM OPERATIONAL TESTS OF ARC-190 COUPLER TEST SETS
U 966 PERFORM OPERATIONAL TESTS OF ARC-190 HF TEST SETS
U1003 REMOVE OR REPLACE ARC-190 ANTENNA SIMULATOR TEST SET SRUs
OR COMPONENTS
U1004 REMOVE OR REPLACE ARC-190 COUPLER TEST SET SRUs OR
COMPONENTS
U1005 REMOVE OR REPLACE ARC-190 HF TEST SET SRUs OR COMPONENTS

TASK NUMBER: 60710

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF LRU_s THAT COMPRISE THE ILS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
FREQUENCY COUNTER
OSCILLOSCOPE
SPECTRUM ANALYZER
SYNTHESIZED SWEEPER

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; VERIFICATION OF SHOP
STANDARD; NEW ISSUE FROM SUPPLY; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT LRU TO TEST SETS
S LOAD COMPUTER PROGRAM
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO CHECK GROUNDING
S USE FREQUENCY COUNTER TO CHECK SIGNAL FREQUENCY RISE/FALL
TIME PULSES
S USE OSCILLOSCOPE TO CHECK WAVEFORMS
S USE SPECTRUM ANALYZER TO CHECK OUT FREQUENCY RESPONSE
S USE SYNTHESIZED SWEEPER TO APPLY RF ENERGY

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K USE METRIC NOTATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	U 982		3	2	2	4	4.45	
451X6B	U 982		19	27	19	4	4.45	
451X6	U 982		9	14	10	4	4.45	
451X6A	U 983		3	2	2	4	4.41	
451X6B	U 983		15	27	20	4	4.41	
451X6	U 983		8	14	10	4	4.41	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY
U 982 PERFORM OPERATIONAL TESTS OF ILS GLIDE SLOPE MARKER BEACON
RECEIVERS
U 983 PERFORM OPERATIONAL TESTS OF ILS LOCALIZER RECEIVERS

TASK NUMBER: 60720

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT COMPRISE THE ILS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
DIGITAL MULTIMETER
FREQUENCY COUNTER
OSCILLOSCOPE
SPECTRUM ANALYZER
SYNTHESIZED SWEEPER

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO CHECK GROUNDING
S USE FREQUENCY COUNTER TO CHECK SIGNAL FREQUENCY RISE/FALL
TIME PULSES
S USE OSCILLOSCOPE TO CHECK WAVEFORMS
S USE SPECTRUM ANALYZER TO CHECK CUT FREQUENCY RESPONSE
S USE SYNTHESIZED SWEEPER TO APPLY RF ENERGY

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY AM RECEIVER THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY AM RECEIVERS
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K USE METRIC NOTATION
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 932		0	1	2	5	5.73	
451X6B	U 932		15	25	18	5	5.73	
451X6	U 932		6	12	10	5	5.73	
451X6A	U 933		0	1	2	5	5.77	
451X6B	U 933		15	24	18	5	5.77	
451X6	U 933		6	12	10	5	5.77	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 932 ISOLATE MALFUNCTIONS IN ILS GLIDE SLOPE MARKER BEACON
RECEIVERS TO SRU OR COMPONENT LEVEL
U 933 ISOLATE MALFUNCTIONS IN ILS LOCALIZER RECEIVERS TO SRU OR
COMPONENT LEVEL

TASK NUMBER: 60730

TASK STATEMENT:

REPAIR LRUs THAT COMPRISE THE ILS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
SOLDERING STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A PERFORM ALIGNMENT
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K USE METRIC NOTATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	U 896		3	1	1	5	5.30	
451X6B	U 896		19	29	20	5	5.30	
451X6	U 896		9	15	10	5	5.30	
451X6A	U 897		3	1	2	4	5.40	
451X6B	U 897		15	28	20	4	5.40	
451X6	U 897		8	14	10	4	5.40	
451X6A	U1021		3	1	1	3	4.32	
451X6B	U1021		15	26	18	3	4.32	
451X6	U1021		8	13	9	3	4.32	
451X6A	U1022		3	1	1	3	4.23	
451X6B	U1022		15	25	17	3	4.23	
451X6	U1022		8	12	9	3	4.23	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 U 896 ALIGN ILS LOCALIZER RECEIVERS
 U 897 ALIGN INSTRUMENT LANDING SYSTEM (ILS) GLIDE SLOPE MARKER
 BEACON RECEIVERS
 U1021 REMOVE OR REPLACE ILS GLIDE SLOPE MARKER BEACON RECEIVER
 SRUs OR COMPONENTS
 U1022 REMOVE OR REPLACE ILS LOCALIZER RECEIVER SRUs OR COMPONENTS

TASK NUMBER: 60740

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF LRUs THAT COMPRISE THE ARN-118 TACAN SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL VOLTMETER
ESD PROTECTIVE EQUIPMENT
TACAN TEST SET AN/ALR-135A
TACAN TEST SET 972V-1

REFERENCES:

00-25-234
12R-2-ARN118-12
12R5-2ARN118-1

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; NEW ISSUE FROM SUPPLY;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL VOLTMETER TO CHECK VOLTAGES
S USE TACAN TEST SETS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	U 971		0	0	1	9	4.21	
451X6B	U 971		31	35	28	9	4.21	
451X6	U 971		12	17	14	9	4.21	
451X6A	U 972		0	0	1	9	3.97	
451X6B	U 972		19	20	21	9	3.97	
451X6	U 972		8	10	10	9	3.97	
451X6A	U 974		0	0	1	9	4.10	
451X6B	U 974		31	35	29	9	4.10	
451X6	U 974		12	17	14	9	4.10	
451X6A	U 975		0	0	1	11	4.64	
451X6B	U 975		46	45	34	11	4.64	
451X6	U 975		18	21	17	11	4.64	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I) OF LRUs ISSUED FROM SUPPLY

U 971 PERFORM OPERATIONAL TESTS OF ARN-118 TACAN CONVERTER-ADAPTERS

U 972 PERFORM OPERATIONAL TESTS OF ARN-118 TACAN ELECTRICAL EQUIPMENT MOUNTING BASES

U 974 PERFORM OPERATIONAL TESTS OF ARN-118 TACAN RADIO SET CONTROLS

U 975 PERFORM OPERATIONAL TESTS OF ARN-118 TACAN RECEIVER-TRANSMITTERS

TASK NUMBER: 60750

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT COMPRISE THE ARN-118 TACAN SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE
TACAN TEST SET AN/ALR-135A
TACAN TEST SET 972V-1

REFERENCES:

00-25-234
12R-2-ARN118-12
12R5-2ARN118-1

CONDITIONS:

KNOWN GOOD SHOP STANDARD

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK VOLTAGE
S USE OSCILLOSCOPE TO CHECK LOGIC LEVELS (927V-1)
S USE TACAN TEST SETS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION

KNOWLEDGE:

K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY TACAN SYSTEM THEORY OF OPERATION
K APPLY TECHNICAL DATA
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY INTEGRATED CIRCUITS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY RCL CIRCUITS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT AC CIRCUITS
K TROUBLESHOOT DC CIRCUITS
K TROUBLESHOOT RCL CIRCUITS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 922		0	0	1	9	5.02	
451X6B	U 922		27	34	27	9	5.02	
451X6	U 922		11	16	13	9	5.02	
451X6A	U 923		0	0	1	8	4.80	
451X6B	U 923		19	22	23	8	4.80	
451X6	U 923		8	11	11	8	4.80	
451X6A	U 924		0	0	1	9	4.75	
451X6B	U 924		27	31	24	9	4.75	
451X6	U 924		11	15	12	9	4.75	
451X6A	U 925		0	0	1	8	5.06	
451X6B	U 925		38	34	27	8	5.06	
451X6	U 925		15	16	13	8	5.06	

USAF JOB INVENTORY TASK STATEMENTS:

- F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
- U 922 ISOLATE MALFUNCTIONS IN ARN-118 TACAN CONVERTER-ADAPTERS TO
SRUs
- U 923 ISOLATE MALFUNCTIONS IN ARN-118 TACAN RADIO MOUNTS TO
COMPONENT LEVEL
- U 924 ISOLATE MALFUNCTIONS IN ARN-118 TACAN RADIO SET CONTROLS TO
SRU OR COMPONENT LEVEL
- U 925 ISOLATE MALFUNCTIONS IN ARN-118 TACAN RECEIVER-TRANSMITTERS
TO SRU

TASK NUMBER: 60760

TASK STATEMENT:

REPAIR LRUs THAT COMPRISE THE ARN-118 TACAN SYSTEM

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
MULTIMETER
OSCILLOSCOPE
TACAN TEST SET AN/ALR-135A
TACAN TEST SET 972V-1

REFERENCES:

00-25-234
12R-2-ARN118-12
12R5-2ARN118-1

QUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER FOR IF GAIN ADJUSTMENT
S USE OSCILLOSCOPE TO CHECK VOLTAGE
S USE TEST SETS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	U 890		0	0	1	9	4.65	
451X6B	U 890		27	36	29	9	4.65	
451X6	U 890		11	18	14	9	4.65	
451X6A	U 891		0	0	1	9	4.28	
451X6B	U 891		23	36	28	9	4.28	
451X6	U 891		9	18	14	9	4.28	
451X6A	U 892		0	0	1	9	4.99	
451X6B	U 892		42	45	31	9	4.99	
451X6	U 892		17	21	15	9	4.99	
451X6A	U1010		0	0	0	6	4.08	
451X6B	U1010		23	27	22	6	4.08	
451X6	U1010		9	13	11	6	4.08	
451X6A	U1011		0	0	0	6	4.13	
451X6B	U1011		23	22	19	6	4.13	
451X6	U1011		9	11	9	6	4.13	
451X6A	U1012		0	0	0	6	4.03	
451X6B	U1012		23	26	23	6	4.03	
451X6	U1012		9	12	11	6	4.03	
451X6A	U1013		0	0	0	6	4.21	
451X6B	U1013		31	33	26	6	4.21	
451X6	U1013		12	16	13	6	4.21	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

USAF JOB INVENTORY TASK STATEMENTS:

U 890 ALIGN ARN-118 TACTICAL AIR NAVIGATION (TACAN) CONVERTER-
ADAPTERS
U 891 ALIGN ARN-118 TACAN RADIO SET CONTROLS
U 892 ALIGN ARN-118 TACAN RECEIVER-TRANSMITTERS
U1010 REMOVE OR REPLACE ARN-118 TACAN CONVERTER-ADAPTER SRUs
U1011 REMOVE OR REPLACE ARN-118 TACAN MOUNT COMPONENTS
U1012 REMOVE OR REPLACE ARN-118 TACAN RADIO SET CONTROL SRUs OR
COMPONENTS
U1013 REMOVE OR REPLACE ARN-118 TACAN RECEIVER-TRANSMITTERS SRUs

TASK NUMBER: 60770

TASK STATEMENT: .

MAINTAIN TACAN TEST SETS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
FREQUENCY COUNTER
MULTIMETER
OSCILLOSCOPE
TACAN LRUs

REFERENCES:

33D2-8-383-1
00-25-234

CONDITIONS:

KNOWN GOOD SHOP STANDARD

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ISOLATE MALFUNCTIONS IN TACAN TEST SETS
A ORDER PARTS
A PERFORM OPERATIONAL TESTS OF TACAN LRUs
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT LRU TO TEST SETS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER FOR IF GAIN ADJUSTMENT

SKILLS:

S USE LRU_s
 S USE MULTIMETER TO CHECK VOLTAGE AND CONTINUITY
 S USE OSCILLOSCOPE TO READ PULSE TRAINS AND PERIOD PULSE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AC CIRCUIT THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
 K APPLY MAIN LOGIC GATE THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
 K APPLY RELAY THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K ISOLATE FAULTY AC CIRCUITS
 K ISOLATE FAULTY DC CIRCUITS
 K ISOLATE FAULTY INTEGRATED CIRCUITS
 K ISOLATE FAULTY MAIN LOGIC GATES
 K ISOLATE FAULTY RCL CIRCUITS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT DC CIRCUITS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRU_s

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 941		0	0	1	5	5.55	
451X6B	U 941		15	18	20	5	5.55	
451X6	U 941		6	8	10	5	5.55	
451X6A	U 942		0	0	0	5	5.00	
451X6B	U 942		4	8	9	5	5.00	
451X6	U 942		2	4	4	5	5.00	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U 943		0	0	1	5	5.07	
451X6B	U 943		15	18	18	5	5.07	
451X6	U 943		6	8	9	5	5.07	
451X6A	U 986		0	0	1	7	4.52	
451X6B	U 986		23	31	28	7	4.52	
451X6	U 986		9	15	14	7	4.52	
451X6A	U1028		0	0	1	5	4.28	
451X6B	U1028		8	7	11	5	4.28	
451X6	U1028		3	3	6	5	4.28	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 941 ISOLATE MALFUNCTIONS IN 972V-1 TACAN TEST SETS
U 942 ISOLATE MALFUNCTIONS TO APM-135 TACAN TEST SETS
U 943 ISOLATE MALFUNCTIONS TO APM-135A TACAN TEST SETS
U 986 PERFORM OPERATIONAL TESTS OF TACAN MOCKUP TEST EQUIPMENT
U1028 REMOVE OR REPLACE 972V-1 TEST SETS COMPONENTS

TASK NUMBER: 60780

TASK STATEMENT:

MAINTAIN APX-78 SYSTEM LRU_s

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

APM-137 TEST SET
APM-239A TEST SET
APM-245 TEST SET
CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
OSCILLOSCOPE
PULSE/FUNCTION GENERATOR
SPECTRUM ANALYZER
SYNTHESIZED SWEEPER

REFERENCES:

12P4-2APX78-48-1

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A CLEAN CONTACTS (F 210)
- A ORDER PARTS
- A PERFORM OPERATIONAL TESTS OF LRU_s THAT COMPRISE THE APX-78 SYSTEM
- A ISOLATE MALFUNCTIONS IN LRU_s THAT COMPRISE THE APX-78 SYSTEM
- A ALIGN SRU_s
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A TUNE OR ADJUST RESONANT CAVITIES

SKILLS:

- S CONNECT LRU TO TEST SETS
- S LOAD PROGRAM
- S PERFORM VISUAL INSPECTIONS

SKILLS:

S USE APM-137 TEST SET TO CHECK SIGNALS AND TEST POINTS, AND
 TO PROVIDE RF TO TEST LRU
 S USE APM-239A TEST SET TO POWER LRU, SIMULATE MODES, AND ROUTE
 SIGNALS
 S USE APM-245 TEST SET TO SIMULATE MODE IV COMPUTER
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO CHECK GROUNDING
 S USE OSCILLOSCOPE TO CHECK WAVEFORMS
 S USE PULSE/FUNCTION GENERATOR TO SYNCHRONIZE UNIT
 S USE SPECTRUM ANALYZER TO CHECK OUT FREQUENCY RESPONSE
 S USE SYNTHESIZED SWEEPER TO APPLY RF ENERGY

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
 K APPLY ESD PRECAUTIONS
 K APPLY FM TRANSMITTER THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
 K APPLY RESONANT CAVITY THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K USE METRIC NOTATION
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1030		0	0	0	0	6.20	
451X6B	V1030		0	1	0	0	6.20	
451X6	V1030		0	1	0	0	6.20	
451X6A	V1056		0	0	0	0	6.38	
451X6B	V1056		0	1	0	0	6.38	
451X6	V1056		0	1	0	0	6.38	
451X6A	V1057		0	1	0	0	6.38	
451X6B	V1057		0	1	1	0	6.38	
451X6	V1057		0	1	1	0	6.38	
451X6A	V1098		0	0	0	0	4.79	
451X6B	V1098		0	1	0	0	4.79	
451X6	V1098		0	1	0	0	4.79	
451X6A	V1099		0	1	0	0	5.43	
451X6B	V1099		0	1	1	0	5.43	
451X6	V1099		0	1	1	0	5.43	
451X6A	V1116		0	0	0	0	5.42	
451X6B	V1116		0	0	0	0	5.42	
451X6	V1116		0	0	0	0	5.42	
451X6A	V1117		0	0	0	0	4.84	
451X6B	V1117		0	0	0	0	4.84	
451X6	V1117		0	0	0	0	4.84	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRU_s ISSUED FROM SUPPLY

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

V1030 ALIGN APX-78 RADAR BEACON TRANSPONDER RECEIVER-TRANSMITTERS

V1056 ISOLATE MALFUNCTIONS IN APX-78 RADAR BEACON TRANSPONDER
RADIO SET CONTROLS TO SRU OR COMPONENT LEVEL

V1057 ISOLATE MALFUNCTIONS IN APX-78 RADAR BEACON TRANSPONDER
RECEIVER-TRANSMITTERS TO SRU OR COMPONENT LEVEL

V1098 PERFORM OPERATIONAL TESTS OF APX-78 RADAR BEACON
TRANSPONDER RADIO SET CONTROLS

V1099 PERFORM OPERATIONAL TESTS OF APX-78 RADAR BEACON
TRANSPONDER RECEIVER-TRANSMITTERS

V1116 REMOVE OR REPLACE APX-78 RADAR BEACON TRANSPONDER SYSTEM
RECEIVER-TRANSMITTER SRU_s

V1117 REMOVE OR REPLACE APX-78 RADIO SET CONTROL COMPONENTS

TASK NUMBER: 60790

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF THE AN/ALR-62 TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
OSCILLOSCOPE

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; 180 DAY PE; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A LOAD MAINTENANCE TAPE
A EXECUTE TEST

SKILLS:

S CONNECT CABLES
S CONNECT CALIBRATION BOXES
S EXERCISE REGISTERS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE RESISTANCE AND VOLTAGE
S USE OSCILLOSCOPE TO MEASURE FREQUENCY, PULSE WIDTH, AND
VOLTAGE
S USE TEST STATION FREQUENCY METER
S USE TEST STATION POWER METER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY BASIC MATH PRINCIPLES

KNOWLEDGE:

K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K IDENTIFY VIDEO VOLTAGE SIGNALS
K PERFORM OCTAL CONVERSIONS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 244		47	66	72	38	5.10	
451X6B	F 244		42	48	54	38	5.10	
451X6	F 244		45	56	64	38	5.10	
451X6A	X1270		0	0	0	10	6.01	
451X6B	X1270		8	16	21	10	6.01	
451X6	X1270		3	8	10	10	6.01	
451X6A	X1271		0	0	1	10	5.49	
451X6B	X1271		12	20	24	10	5.49	
451X6	X1271		5	10	12	10	5.49	

USAF JOB INVENTORY TASK STATEMENTS:

F 244 PERFORM MAINTENANCE TAPE TESTS OF TEST STATIONS
X1270 PERFORM OPERATIONAL TESTS OF CRS TEST STATIONS
X1271 PERFORM OPERATIONAL TESTS OF DPTSs

TASK NUMBER: 60800

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN THE AN/ALR-62 TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
CAPACITOR TESTER
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
FREQUENCY METER
LOGIC PROBE
OSCILLOSCOPE
RF POWER METER
SOLDERING STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A MEASURE TRANSMISSION POWER
A PERFORM OPERATIONAL TEST OF AN/ALR-62 TEST
STATION (TASK NUMBER: 60790)

SKILLS:

S CONNECT CABLES
S CONNECT CALIBRATION BOXES
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE CAPACITOR TESTER

SKILLS:

- S USE COMMON HANDTOOLS
- S USE DIGITAL MULTIMETER TO MEASURE RESISTANCE AND VOLTAGE
- S USE FREQUENCY METER
- S USE LOGIC PROBE
- S USE OSCILLOSCOPE TO MEASURE FREQUENCY, PULSE WIDTH, AND VOLTAGE
- S USE RF POWER METER TO CHECK RF POWER MEASUREMENTS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC MOTOR THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY CMOS THEORY OF OPERATION
- K APPLY CRT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DISPLAY TUBE THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY MOSFET THEORY OF OPERATION
- K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY PHOTSENSITIVE DEVICE THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SPEAKER THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES MAGNETIC CORE
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION

KNOWLEDGE:

- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K DEVELOP BOOLEAN EQUATIONS FROM LOGIC DIAGRAMS
- K INTERPRET RESISTOR COLOR CODES
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY CRT
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY MOSFETs
- K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY PHOTSENSITIVE DEVICES
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SCRs
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY SPEAKERS
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS

KNOWLEDGE :

- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY TTLs
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K ISOLATE FAULTY WEIGHTED RESISTOR D/A CONVERTERS
- K ISOLATE FAULTY ZENER DIODES
- K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF AN INSTALLED LRU (TASK NUMBER: 61370)
- K PERFORM AC CIRCUIT CALCULATIONS
- K PERFORM BINARY CONVERSIONS
- K PERFORM BINARY MATH OPERATION
- K PERFORM DC CIRCUIT CALCULATIONS
- K PERFORM OCTAL MATH OPERATION
- K PERFORM TRANSFORMER CALCULATIONS
- K PERFORM TRANSMISSION LINE CALCULATIONS
- K PERFORM TRANSMISSION LINE MEASUREMENTS
- K PERFORM TRANSMISSION POWER CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K SIMPLIFY EXPRESSIONS BY USING BOOLEAN ALGEBRA
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC MOTORS
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT CHOPPERS (SYNCHROUS VIBRATORS)
- K TROUBLESHOOT CLAMPER CIRCUITS
- K TROUBLESHOOT CMOS LOGIC FAMILIES
- K TROUBLESHOOT COMPUTER MEMORIES
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT LOGIC COUNTERS
- K TROUBLESHOOT LOGIC REGISTERS
- K TROUBLESHOOT MAIN LOGIC GATES
- K TROUBLESHOOT OPERATIONAL AMPLIFIERS
- K TROUBLESHOOT PHOTSENSITIVE DEVICES
- K TROUBLESHOOT POWER SUPPLY CIRCUITS
- K TROUBLESHOOT POWER SUPPLY FILTERS
- K TROUBLESHOOT POWER SUPPLY RECTIFIERS
- K TROUBLESHOOT RCL CIRCUITS
- K TROUBLESHOOT RELAYS
- K TROUBLESHOOT SPEAKERS
- K TROUBLESHOOT THREE-PHASE TRANSFORMERS
- K TROUBLESHOOT TRANSFORMERS
- K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS

KNOWLEDGE:

K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K TROUBLESHOOT VOLTAGE REGULATOR
 K TROUBLESHOOT WAVE GENERATING CIRCUIT MULTIVIBRATORS
 K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
 K TROUBLESHOOT WAVESHAPING CIRCUITS
 K TROUBLESHOOT WEIGHTED RESISTOR D/A CONVERTERS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	X1234		0	0	1	7	5.95	
451X6B	X1234		0	11	15	7	5.95	
451X6	X1234		0	5	8	7	5.95	
451X6A	X1235		0	0	1	9	7.44	
451X6B	X1235		4	14	19	9	7.44	
451X6	X1235		2	7	10	9	7.44	
451X6A	X1236		0	0	1	8	6.40	
451X6B	X1236		4	13	18	8	6.40	
451X6	X1236		2	6	9	8	6.40	
451X6A	X1237		0	0	1	8	7.05	
451X6B	X1237		4	13	18	8	7.05	
451X6	X1237		2	6	9	8	7.05	
451X6A	X1238		0	0	1	8	5.55	
451X6B	X1238		4	11	16	8	5.55	
451X6	X1238		2	5	8	8	5.55	
451X6A	X1239		0	0	1	8	5.54	
451X6B	X1239		4	14	17	8	5.54	
451X6	X1239		2	7	9	8	5.54	
451X6A	X1240		0	0	1	9	5.75	
451X6B	X1240		4	13	16	9	5.75	
451X6	X1240		2	6	8	9	5.75	
451X6A	X1241		0	0	0	8	5.62	
451X6B	X1241		4	13	16	8	5.62	
451X6	X1241		2	6	8	8	5.62	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1242		0	0	1	8	5.49	
451X6B	X1242		8	15	17	8	5.49	
451X6	X1242		3	7	9	8	5.49	
451X6A	X1243		0	0	0	8	5.79	
451X6B	X1243		8	14	16	8	5.79	
451X6	X1243		3	7	8	8	5.79	
451X6A	X1244		0	0	0	8	6.10	
451X6B	X1244		4	13	17	8	6.10	
451X6	X1244		2	6	9	8	6.10	
451X6A	X1245		0	0	0	8	6.45	
451X6B	X1245		4	14	17	8	6.45	
451X6	X1245		2	7	8	8	6.45	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
X1234 ISOLATE MALFUNCTIONS IN CRS TEST STATION LOCAL OSCILLATORS
X1235 ISOLATE MALFUNCTIONS IN CRS TEST STATION RF GENERATORS
X1236 ISOLATE MALFUNCTIONS IN CRS TEST STATION RF TEST BAYS
X1237 ISOLATE MALFUNCTIONS IN CRS TEST STATION SWITCHINGS
X1238 ISOLATE MALFUNCTIONS IN CRS TEST STATION TAPE READERS
X1239 ISOLATE MALFUNCTIONS IN DPTS CI CALIBRATION BOXES
X1240 ISOLATE MALFUNCTIONS IN DPTS CORE MEMORIES
X1241 ISOLATE MALFUNCTIONS IN DPTS DOGHOUSE ASSEMBLIES
X1242 ISOLATE MALFUNCTIONS IN DPTS DP CALIBRATION BOXES
X1243 ISOLATE MALFUNCTIONS IN DPTS DP/CI INTERFACE ASSEMBLIES
X1244 ISOLATE MALFUNCTIONS IN DPTS PANEL CONTROL ASSEMBLIES
X1245 ISOLATE MALFUNCTIONS IN DPTS WIRING HARNESS ASSEMBLIES

TASK NUMBER: 60810

TASK STATEMENT:

REPAIR THE AN/ALR-62 TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
FREQUENCY METER
OSCILLOSCOPE
RF POWER METER
SOLDERING STATION

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A CLEAN TAPE READER
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs
A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

SKILLS:

S CONNECT CABLES
S OPERATE TEST STATION

SKILLS:

S PERFORM VISUAL INSPECTIONS
 S SOLDER OR DESOLDER PC BOARDS
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO MEASURE RESISTANCE AND VOLTAGE
 S USE FREQUENCY METER TO MAKE RF FREQUENCY ADJUSTMENTS
 S USE OSCILLOSCOPE TO MEASURE FREQUENCY, PULSE WIDTH, AND VOLTAGE
 S USE RF POWER METER TO CHECK POWER MEASUREMENT

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K PERFORM CAPACITOR CALCULATIONS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	X1206		0	0	1	9	6.05	
451X6B	X1206		4	14	17	9	6.05	
451X6	X1206		2	7	8	9	6.05	
451X6A	X1207		0	0	1	11	7.15	
451X6B	X1207		8	16	20	11	7.15	
451X6	X1207		3	8	10	11	7.15	
451X6A	X1208		0	0	1	10	6.56	
451X6B	X1208		0	9	14	10	6.56	
451X6	X1208		0	5	7	10	6.56	
451X6A	X1209		0	0	1	10	5.41	
451X6B	X1209		8	13	17	10	5.41	
451X6	X1209		3	6	8	10	5.41	
451X6A	X1210		0	0	1	10	6.55	
451X6B	X1210		8	15	20	10	6.55	
451X6	X1210		3	7	10	10	6.55	
451X6A	X1211		0	0	1	10	5.71	
451X6B	X1211		4	13	18	10	5.71	
451X6	X1211		2	6	9	10	5.71	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

X1206 ALIGN COUNTERMEASURES RECEIVER SET (CRS) TEST STATION RF
TEST BAY CONTROL/INTERFACE ASSEMBLIES

X1207 ALIGN CRS TEST STATION RADIO FREQUENCY (RF) GENERATORS

X1208 ALIGN CRS TEST STATION SWITCHING VIDEO ATTENUATORS

X1209 ALIGN CRS TEST STATION TAPE READERS

X1210 ALIGN DIGITAL PROCESSOR TEST STATION (DPTS) CIRCUIT CARD
ASSEMBLIES

X1211 ALIGN DPTS TAPE READER UNITS

TASK NUMBER: 60820

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF THE PEN AIDS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; TEST STATION VERIFICATION; AFTER REPAIR;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S OPERATE TEST STATION

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1272		0	0	0	7	5.42	
451X6B	X1272		4	12	9	7	5.42	
451X6	X1272		2	6	4	7	5.42	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1273		0	0	0	7	5.16	
451X6B	X1273		0	8	8	7	5.16	
451X6	X1273		0	4	4	7	5.16	

USAF JOB INVENTORY TASK STATEMENTS:

X1272 PERFORM OPERATIONAL TESTS OF PEN AIDS TEST STATION
BUFFER/ADAPTERS

X1273 PERFORM OPERATIONAL TESTS OF PEN AIDS TEST STATION HIGH
VOLTAGE/INTERMEDIATE VOLTAGE DIVIDERS

TASK NUMBER: 60830

TASK STATEMENT:

PERFORM PEN AIDS TEST STATION MAINTENANCE TESTS (X1274)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
FREQUENCY COUNTER
HIGH VOLTAGE PROBE

REFERENCES:

33D7-44-121-2
33D7-44-121-8-1
35-1-181-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S OPERATE TEST STATION
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER
S USE HIGH VOLTAGE PROBE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHICH PART OF MAINTENANCE TEST TO EXECUTE

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 244		47	66	72	38	5.10	
451X6B	F 244		42	48	54	38	5.10	
451X6	F 244		45	56	64	38	5.10	
451X6A	X1274		0	0	0	7	6.06	
451X6B	X1274		8	12	8	7	6.06	
451X6	X1274		3	6	4	7	6.06	

USAF JOB INVENTORY TASK STATEMENTS:

F 244 PERFORM MAINTENANCE TAPE TESTS OF TEST STATIONS
X1274 PERFORM PEN AIDS TEST STATION MAINTENANCE TESTS

TASK NUMBER: 60840

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN THE PEN AIDS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
HIGH VOLTAGE PROBE
OSCILLOSCOPE
RF POWER METER
SOLDERING STATION
SPECTRUM ANALYZER

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
33D7-44-121-2
33D7-44-121-8-1
35-1-181-1

CONDITIONS:

2 PERSON REQUIREMENT; AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A MEASURE TRANSMISSION POWER
- A PERFORM OPERATIONAL TEST OF PEN AIDS TEST STATION (TASK NUMBER: 60820)
- A PERFORM PEN AIDS TEST STATION MAINTENANCE TESTS (TASK NUMBER: 60830)

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S OPERATE TEST STATION
- S PERFORM VISUAL INSPECTIONS

SKILLS:

- S SOLDER OR DESOLDER TERMINAL CONNECTIONS
- S USE COMMON HANDTOOLS
- S USE DIGITAL MULTIMETER TO MEASURE CONTINUITY, RESISTANCE, AND VOLTAGE
- S USE FREQUENCY COUNTER TO MEASURE RF
- S USE HIGH VOLTAGE PROBE TO CHECK RF GENERATORS
- S USE OSCILLOSCOPE TO EVALUATE WAVEFORMS
- S USE RF POWER METER TO MEASURE POWER
- S USE SPECTRUM ANALYZER TO ANALYZE RF

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DISPLAY TUBE THEORY OF OPERATION
- K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY JFET THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY METER MOVEMENT THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY MOSFET THEORY OF OPERATION
- K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TRANSFORMER THEORY OF OPERATION

KNOWLEDGE:

- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY UJT THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K ISOLATE FAULTY APPROXIMATION A/D CONVERTERS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY JFETs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY METER MOVEMENTS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY MOSFETs
- K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY PULSE MODULATION RECEIVERS
- K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
- K ISOLATE FAULTY RAMP A/D CONVERTERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SCRs
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY TTLS
- K ISOLATE FAULTY UJT

KNOWLEDGE:

K ISOLATE FAULTY VOLTAGE REGULATORS
 K ISOLATE FAULTY WAVESHAPING CIRCUITS
 K ISOLATE FAULTY WEIGHTED RESISTOR D/A CONVERTERS
 K ISOLATE FAULTY ZENER DIODES
 K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF
 AN INSTALLED LRU (TASK NUMBER: 61370)
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT DC CIRCUITS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	X1246		0	0	0	7	6.31	
451X6B	X1246		8	13	8	7	6.31	
451X6	X1246		3	6	4	7	6.31	
451X6A	X1247		0	0	0	7	5.89	
451X6B	X1247		0	12	8	7	5.89	
451X6	X1247		0	6	4	7	5.89	
451X6A	X1248		0	0	0	7	7.56	
451X6B	X1248		4	12	9	7	7.56	
451X6	X1248		2	6	4	7	7.56	
451X6A	X1249		0	0	0	7	7.65	
451X6B	X1249		4	11	9	7	7.65	
451X6	X1249		2	5	4	7	7.65	
451X6A	X1250		0	0	0	7	6.94	
451X6B	X1250		4	9	7	7	6.94	
451X6	X1250		2	5	4	7	6.94	
451X6A	X1251		0	0	0	7	7.05	
451X6B	X1251		8	13	9	7	7.05	
451X6	X1251		3	6	4	7	7.05	
451X6A	X1252		0	0	0	7	7.36	
451X6B	X1252		8	11	8	7	7.36	
451X6	X1252		3	5	4	7	7.36	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
X1246 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION
BUFFER/ADAPTERS
X1247 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION HIGH
VOLTAGE/INTERMEDIATE VOLTAGE DIVIDERS
X1248 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION RF EVALUATION
UNITS
X1249 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION RF GENERATORS
X1250 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION RMSs
X1251 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION SWITCHING
UNITS
X1252 ISOLATE MALFUNCTIONS IN PEN AIDS TEST STATION VIDEO
EVALUATION UNITS

TASK NUMBER: 60850

TASK STATEMENT:

REPAIR THE PEN AIDS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
HEAT SINK COMPOUND
HIGH VOLTAGE PROBE
RF POWER METER

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs
A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

SKILLS:

S APPLY HEAT SINK COMPOUND TO INSURE GOOD HEAT TRANSFER
 S CONNECT ADAPTER AND CABLES
 S OPERATE TEST STATION
 S USE COMMON HANDTOOLS
 S USE DIGITAL MULTIMETER TO MEASURE VOLTAGE
 S USE FREQUENCY COUNTER TO ALIGN RF
 S USE HIGH VOLTAGE PROBE TO ALIGN RF GENERATORS
 S USE RF POWER METER

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	X1212		0	0	0	7	5.62	
451X6B	X1212		0	7	7	7	5.62	
451X6	X1212		0	3	3	7	5.62	
451X6A	X1213		0	0	0	7	6.27	
451X6B	X1213		4	11	8	7	6.27	
451X6	X1213		2	5	4	7	6.27	
451X6A	X1214		0	0	0	7	7.43	
451X6B	X1214		8	12	8	7	7.43	
451X6	X1214		3	6	4	7	7.43	
451X6A	X1215		0	0	0	7	7.59	
451X6B	X1215		8	13	9	7	7.59	
451X6	X1215		3	6	4	7	7.59	
451X6A	X1216		0	0	0	7	7.38	
451X6B	X1216		4	11	8	7	7.38	
451X6	X1216		2	5	4	7	7.38	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

**X1212 ALIGN PENETRATION AIDS (PEN AIDS) TEST STATION HIGH
VOLTAGE/INTERMEDIATE VOLTAGE DIVIDERS**

X1213 ALIGN PEN AIDS TEST STATION RADAR MODULATION SIMULATORS

X1214 ALIGN PEN AIDS TEST STATION RF EVALUATION UNITS

X1215 ALIGN PEN AIDS TEST STATION RF GENERATORS

X1216 ALIGN PEN AIDS TEST STATION VIDEO EVALUATION UNITS

TASK NUMBER: 60860

TASK STATEMENT:

MAINTAIN PROM PROGRAMMERS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE

REFERENCES:

31S5-4-809-1

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A CLEAN CONTACTS (F 210)
- A PERFORM OPERATIONAL TEST OF PROM PROGRAMMERS (U 985)
- A ISOLATE MALFUNCTIONS IN PROM PROGRAMMERS TO SRU OR COMPONENT LEVEL (U 936)
- A ALIGN PROM PROGRAMMERS (U 898)
- A CLEAN TAPE READER
- A ORDER PARTS
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE POWER SUPPLIES
- A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A RESEAT SRUs

SKILLS:

- S PERFORM VISUAL INSPECTIONS
- S USE COMMON HANDTOOLS
- S USE MULTIMETER TO CHECK VOLTAGES AND RESISTANCE
- S USE OSCILLOSCOPE TO CHECK VOLTAGE AND SIGNALS

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY LED THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY POWER SUPPLY THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
 K APPLY TRANSFORMER THEORY OF OPERATION
 K ISOLATE FAULTY COMPUTER MEMORIES
 K ISOLATE FAULTY LEDs
 K ISOLATE FAULTY POWER SUPPLIES
 K ISOLATE FAULTY TRANSFORMERS
 K PERFORM BASIC DC CIRCUIT CALCULATIONS
 K PERFORM BINARY CONVERSIONS
 K PERFORM BINARY MATH OPERATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 248		0	0	3	16	4.81	
451X6B	F 248		23	28	33	16	4.81	
451X6	F 248		9	14	17	16	4.81	
451X6A	U 898		0	0	1	10	5.64	
451X6B	U 898		4	18	21	10	5.64	
451X6	U 898		2	8	11	10	5.64	
451X6A	U 936		0	0	0	10	6.07	
451X6B	U 936		0	12	17	10	6.07	
451X6	U 936		0	6	8	10	6.07	
451X6A	U 985		0	0	1	12	4.69	
451X6B	U 985		8	20	25	12	4.69	
451X6	U 985		3	10	12	12	4.69	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 248 PERFORM PROGRAMMABLE READ ONLY MEMORY (PROM) BURNER
 OPERATIONAL TESTS
 U 898 ALIGN PROGRAMMABLE READ ONLY MEMORY (PROM) PROGRAMMERS
 U 936 ISOLATE MALFUNCTIONS IN PROM PROGRAMMERS TO SRU OR
 COMPONENT LEVEL
 U 985 PERFORM OPERATIONAL TESTS OF PROM PROGRAMMERS

TASK NUMBER: 60870

TASK STATEMENT:

MAINTAIN USM-427 ECM TEST SETS

TASK NOTES:

COMMONLY CALLED 'SQUIRT BOX'. PMEL RESPONSIBLE FOR MAJORITY OF TASK.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ALCOHOL
CARD SETS
CTK
INTERFACE ADAPTER
PROM ADAPTER
PROM PROGRAMMER
TAPE
ULTRAVIOLET LIGHT

REFERENCES:

33D7-8-115

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CARD PROM WINDOW
A PERFORM BIT OF USM-427 ECM TEST SETS (U 949)
A REPROGRAM
A PERFORM CARD SET CALIBRATION

SKILLS:

S ERASE PROM
S INDEX TAPE
S INSTALL ADAPTERS
S INSTALL CARD SETS
S OPERATE PROM PROGRAMMER
S USE COMMON HANDTOOLS
S USE ULTRAVIOLET LIGHT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K PROTECT PROM WINDOW FROM ULTRAVIOLET LIGHT

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U 949		0	0	0	2	4.38	
451X6B	U 949		0	2	4	2	4.38	
451X6	U 949		0	1	2	2	4.38	

USAF JOB INVENTORY TASK STATEMENTS:

U 949 PERFORM BUILT-IN TESTS (BIT) OF USM-427 ECM TEST SETS

TASK NUMBER: 60880

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF LRUs THAT RUN ON THE PEN AIDS
TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
OSCILLOSCOPE
TEST STATION

REFERENCES:

12P3-ALQ-94-1
12P3-ALQ-94-2

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK; NEW ISSUE
FROM SUPPLY

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE RESISTANCE
S USE OSCILLOSCOPE TO EVALUATE WAVEFORMS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	X1253		0	0	0	7	5.04	
451X6B	X1253		8	15	10	7	5.04	
451X6	X1253		3	7	5	7	5.04	
451X6A	X1254		0	0	0	7	5.98	
451X6B	X1254		12	16	11	7	5.98	
451X6	X1254		5	8	5	7	5.98	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY
X1253 PERFORM OPERATIONAL TESTS OF AN/ALQ-94 LBPA's
X1254 PERFORM OPERATIONAL TESTS OF AN/ALQ-94 LBR's

TASK NUMBER: 60890

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT RUN ON THE PEN AIDS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
OSCILLOSCOPE
RF POWER METER
TEST STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE OSCILLOSCOPE TO MEASURE VOLTAGE AND EVALUATE WAVEFORMS
S USE RF POWER METER TO MEASURE POWER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY AM RECEIVER THEORY OF OPERATION
K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION

KNOWLEDGE:

K APPLY CAPACITOR THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
K APPLY ELECTRON TUBE THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY SCR THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLENOID THEORY OF OPERATION
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
K APPLY TRANSMISSION LINE THEORY OF OPERATION
K APPLY TTL THEORY OF OPERATION
K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
K APPLY ZENER DIODE THEORY OF OPERATION
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR
ADAPTER (TASK NUMBER: 61360)
K ISOLATE FAULTY AC CIRCUITS
K ISOLATE FAULTY AM RECEIVERS
K ISOLATE FAULTY AM TRANSMITTERS
K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
K ISOLATE FAULTY CAPACITORS
K ISOLATE FAULTY DC CIRCUITS
K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
K ISOLATE FAULTY ELECTRON TUBES
K ISOLATE FAULTY FLIP-FLOPS
K ISOLATE FAULTY INTEGRATED CIRCUITS
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
K ISOLATE FAULTY OPERATIONAL AMPLIFIERS

KNOWLEDGE:

K ISOLATE FAULTY OSCILLATOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K ISOLATE FAULTY PULSE MODULATION RECEIVERS
K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY RESISTORS
K ISOLATE FAULTY SCRs
K ISOLATE FAULTY SOLENOIDS
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
K ISOLATE FAULTY TRANSMISSION LINES
K ISOLATE FAULTY TTLs
K ISOLATE FAULTY VOLTAGE REGULATORS
K ISOLATE FAULTY WAVESHAPING CIRCUITS
K ISOLATE FAULTY ZENER DIODES
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	X1217		0	0	0	8	6.49	
451X6B	X1217		8	15	10	8	6.49	
451X6	X1217		3	7	5	8	6.49	
451X6A	X1218		0	0	0	8	7.01	
451X6B	X1218		8	15	10	8	7.01	
451X6	X1218		3	7	5	8	7.01	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
X1217 ISOLATE MALFUNCTIONS IN AN/ALQ-94 LBPA's
X1218 ISOLATE MALFUNCTIONS IN AN/ALQ-94 LBR's

TASK NUMBER: 60900

TASK STATEMENT:

REPAIR LRUs THAT RUN ON THE PEN AIDS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ALIGN SRUs
- A CLEAN CONTACTS (F 210)
- A ORDER PARTS
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A RESEAT SRUs

SKILLS:

- S PERFORM VISUAL INSPECTIONS
- S USE COMMON HANDTOOLS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY ESD PRECAUTIONS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	X1196		0	0	0	7	5.83	
451X6B	X1196		8	14	9	7	5.83	
451X6	X1196		3	7	5	7	5.83	
451X6A	X1197		0	0	0	7	6.69	
451X6B	X1197		12	15	9	7	6.69	
451X6	X1197		5	7	5	7	6.69	
451X6A	X1275		0	0	0	8	4.56	
451X6B	X1275		4	14	10	8	4.56	
451X6	X1275		2	7	5	8	4.56	
451X6A	X1276		0	0	0	8	4.75	
451X6B	X1276		8	15	10	8	4.75	
451X6	X1276		3	7	5	8	4.75	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
X1196 ALIGN AN/ALQ-94 LOW BAND POWER AMPLIFIERS (LBPA)
X1197 ALIGN AN/ALQ-94 LOW BAND RECEIVERS (LBR)
X1275 REMOVE OR REPLACE AN/ALQ-94 LBPA COMPONENTS
X1276 REMOVE OR REPLACE AN/ALQ-94 LBR COMPONENTS

TASK NUMBER: 60910

TASK STATEMENT: .

PERFORM OPERATIONAL TESTS ON LRUs THAT RUN ON THE CRS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
TEST STATION

REFERENCES:

APPLICABLE LRU TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE TEST STATION TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	X1259		0	0	1	9	5.87	
451X6B	X1259		12	19	23	9	5.87	
451X6	X1259		5	9	11	9	5.87	
451X6A	X1261		0	0	1	9	6.62	
451X6B	X1261		12	18	22	9	6.62	
451X6	X1261		5	8	11	9	6.62	
451X6A	X1263		0	0	0	4	4.94	
451X6B	X1263		4	8	6	4	4.94	
451X6	X1263		2	4	3	4	4.94	
451X6A	X1267		0	0	0	4	6.35	
451X6B	X1267		0	8	6	4	6.35	
451X6	X1267		0	4	3	4	6.35	
451X6A	X1269		0	0	0	5	6.22	
451X6B	X1269		0	8	7	5	6.22	
451X6	X1269		0	4	3	5	6.22	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I) OF LRUs ISSUED FROM SUPPLY

X1259 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V3) AFT RADAR RECEIVERS

X1261 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V3) FORWARD RADAR RECEIVERS

X1263 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) ANTENNA SWITCHING UNITS

X1267 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) DUAL CHANNEL RECEIVERS

X1269 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) MULTICHANNEL RECEIVERS

TASK NUMBER: 60920

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT RUN ON THE CRS TEST STATION

TASK NOTES:

LRUs ARE FROM AN/ALR-62 SYSTEM; V3 AND V4 ARE BOTH AT
MT HOME AFB AND RAF UPPER HEYFORD; V4 PECULIAR TO EF-111

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
FREQUENCY COUNTER
OSCILLOSCOPE
RF POWER METER
TEST STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A MEASURE TRANSMISSION POWER

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE SYSTEM VOLTAGES
S USE FREQUENCY COUNTER
S USE OSCILLOSCOPE AND DVM PROBES TO CHECK SIGNALS
S USE POWER METER TO MEASURE RF SIGNAL

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
 K APPLY LRU THEORY OF OPERATION
 K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RESONANT CAVITY THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
 K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
 K APPLY TRANSMISSION LINE THEORY OF OPERATION
 K APPLY TTL THEORY OF OPERATION
 K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
 K ISOLATE FAULTY CLAMPER CIRCUITS
 K ISOLATE FAULTY DC CIRCUITS
 K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
 K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
 K ISOLATE FAULTY RESONANT CAVITIES
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
 K ISOLATE FAULTY TRANSMISSION LINES
 K ISOLATE FAULTY TTLS
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K PERFORM TRANSMISSION LINE CALCULATIONS
 K PERFORM TRANSMISSION LINE MEASUREMENTS
 K PERFORM TRANSMISSION POWER CALCULATIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	X1220		0	0	1	9	6.45	
451X6B	X1220		4	15	21	9	6.45	
451X6	X1220		2	7	10	9	6.45	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1224		0	0	1	9	7.34	
451X6B	X1224		15	19	21	9	7.34	
451X6	X1224		6	9	11	9	7.34	
451X6A	X1227		0	0	0	3	5.56	
451X6B	X1227		4	9	7	3	5.56	
451X6	X1227		2	5	3	3	5.56	
451X6A	X1231		0	0	0	4	6.72	
451X6B	X1231		4	9	6	4	6.72	
451X6	X1231		2	5	3	4	6.72	
451X6A	X1233		0	0	0	4	7.08	
451X6B	X1233		0	8	6	4	7.08	
451X6	X1233		0	4	3	4	7.08	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
X1220 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) AFT RADAR RECEIVERS
X1224 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) FORWARD RADAR
RECEIVERS
X1227 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) ANTENNA SWITCHING
UNITS
X1231 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) DUAL CHANNEL
RECEIVERS
X1233 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) MULTICHANNEL
RECEIVERS

TASK NUMBER: 60930

TASK STATEMENT:

REPAIR LRUs THAT RUN ON THE CRS TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A CLEAN CONTACTS (F 210)
- A ORDER PARTS
- A PERFORM ALIGNMENT
- A RESEAT SRUs
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
- A REPAIR WIRING (TASK NUMBER: 61440)
- A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

SKILLS:

- S PERFORM VISUAL INSPECTIONS
- S USE COMMON HANDTOOLS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	X1198		0	0	1	9	6.13	
451X6B	X1198		12	19	21	9	6.13	
451X6	X1198		5	9	11	9	6.13	
451X6A	X1201		0	0	1	10	7.31	
451X6B	X1201		15	20	21	10	7.31	
451X6	X1201		6	10	11	10	7.31	
451X6A	X1204		0	0	0	4	5.67	
451X6B	X1204		0	8	7	4	5.67	
451X6	X1204		0	4	3	4	5.67	
451X6A	X1205		0	0	0	4	6.53	
451X6B	X1205		0	7	7	4	6.53	
451X6	X1205		0	3	3	4	6.53	
451X6A	X1278		0	0	1	9	5.07	
451X6B	X1278		12	19	21	9	5.07	
451X6	X1278		5	9	11	9	5.07	
451X6A	X1282		0	0	1	9	5.77	
451X6B	X1282		19	20	21	9	5.77	
451X6	X1282		8	10	10	9	5.77	
451X6A	X1288		0	0	0	4	5.19	
451X6B	X1288		0	8	5	4	5.19	
451X6	X1288		0	4	3	4	5.19	
451X6A	X1290		0	0	1	4	5.30	
451X6B	X1290		0	8	5	4	5.30	
451X6	X1290		0	4	3	4	5.30	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

X1198 ALIGN AN/ALR-62 (V3) AFT RADAR RECEIVERS

X1201 ALIGN AN/ALR-62 (V3) FORWARD RADAR RECEIVERS

X1204 ALIGN AN/ALR-62 (V4) DUAL CHANNEL RECEIVERS

USAF JOB INVENTORY TASK STATEMENTS:

X1205 ALIGN AN/ALR-62 (V4) MULTICHANNEL RECEIVERS
X1278 REMOVE OR REPLACE AN/ALR-62 (V3) AFT RADAR RECEIVER
COMPONENTS
X1282 REMOVE OR REPLACE AN/ALR-62 (V3) FORWARD RADAR RECEIVER
SRUs OR COMPONENTS
X1288 REMOVE OR REPLACE AN/ALR-62 (V4) DUAL CHANNEL RECEIVERS
X1290 REMOVE OR REPLACE AN/ALR-62 (V4) MULTICHANNEL RECEIVERS

TASK NUMBER: 60940

TASK STATEMENT: .

PERFORM OPERATIONAL TESTS OF LRUs THAT RUN ON DPTS

TASK NOTES:

LRUs ARE FROM AN/ALR-62 SYSTEM; DP AND CI (V3 AND V4); IP (V3)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIP METER
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIP METER TO CENTER FREQUENCIES DURING VCO ALIGNMENT

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	
451X6A	X1256		0	0	1	8	4.55	
451X6B	X1256		15	25	22	8	4.55	
451X6	X1256		6	12	11	8	4.55	
451X6A	X1257		0	0	1	8	5.33	
451X6B	X1257		19	25	23	8	5.33	
451X6	X1257		8	12	11	8	5.33	
451X6A	X1258		0	0	1	7	4.09	
451X6B	X1258		15	22	22	7	4.09	
451X6	X1258		6	11	11	7	4.09	
451X6A	X1264		0	0	0	5	4.94	
451X6B	X1264		0	12	10	5	4.94	
451X6	X1264		0	6	5	5	4.94	
451X6A	X1266		0	0	0	5	5.62	
451X6B	X1266		4	13	10	5	5.62	
451X6	X1266		2	6	5	5	5.62	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
 OF LRUs ISSUED FROM SUPPLY
 X1256 PERFORM OPERATIONAL TESTS OF AN/ALR 62 (V3) CIs
 X1257 PERFORM OPERATIONAL TESTS OF AN/ALR 62 DP's
 X1258 PERFORM OPERATIONAL TESTS OF AN/ALR 62 IP's
 X1264 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) CONTROL
 INDICATORS
 X1266 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) DIGITAL
 PROCESSORS

TASK NUMBER: 60950

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT RUN ON DPTS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DIGITAL MULTIMETER
DIP METER
ESD PROTECTIVE EQUIPMENT
EXTENDER BOARDS
OSCILLOSCOPE
RF POWER METER
TEST STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE VOLTAGE
S USE DIP METER TO CENTER FREQUENCIES DURING VCO ALIGNMENT
S USE OSCILLOSCOPE TO MEASURE AMPLITUDE AND FREQUENCIES
S USE RF POWER METER TO MEASURE RF OUTPUT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION

KNOWLEDGE:

- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DISPLAY TUBE THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY LRU THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY RAMP A/D CONVERTERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY TTLS
- K PERFORM TRANSMISSION LINE CALCULATIONS
- K PERFORM TRANSMISSION LINE MEASUREMENTS
- K PERFORM TRANSMISSION POWER CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)

KNOWLEDGE:

K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	X1221		0	0	1	9	5.36	
451X6B	X1221		15	26	25	9	5.36	
451X6	X1221		6	12	12	9	5.36	
451X6A	X1222		0	0	1	9	6.21	
451X6B	X1222		12	25	24	9	6.21	
451X6	X1222		5	12	12	9	6.21	
451X6A	X1226		0	0	1	7	4.47	
451X6B	X1226		15	24	23	7	4.47	
451X6	X1226		6	11	11	7	4.47	
451X6A	X1228		0	0	0	5	5.09	
451X6B	X1228		4	13	10	5	5.09	
451X6	X1228		2	6	5	5	5.09	
451X6A	X1230		0	0	0	4	6.55	
451X6B	X1230		8	15	10	4	6.55	
451X6	X1230		3	7	5	4	6.55	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
X1221 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) CIs
X1222 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) DPs
X1226 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) INDICATOR PANELS
X1228 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) CONTROL INDICATORS
X1230 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) DIGITAL PROCESSORS

TASK NUMBER: 60960

TASK STATEMENT:

REPAIR LRUs THAT RUN ON DPTS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

A CLEAN CONTACTS (F 210)

A MEASURE TRANSMISSION POWER

A ORDER PARTS

A PERFORM ALIGNMENT

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A REPAIR WIRING (TASK NUMBER: 61440)

A RESEAT SRUs

SKILLS:

S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS

K APPLY ESD PRECAUTIONS

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	X1199		0	0	1	10	5.23	
451X6B	X1199		15	24	25	10	5.23	
451X6	X1199		6	11	12	10	5.23	
451X6A	X1200		0	0	1	9	5.63	
451X6B	X1200		15	24	24	9	5.63	
451X6	X1200		6	11	12	9	5.63	
451X6A	X1202		0	0	0	5	5.35	
451X6B	X1202		8	14	10	5	5.35	
451X6	X1202		3	7	5	5	5.35	
451X6A	X1203		0	0	0	5	5.41	
451X6B	X1203		4	12	10	5	5.41	
451X6	X1203		2	6	5	5	5.41	
451X6A	X1279		0	0	1	9	4.39	
451X6B	X1279		19	26	23	9	4.39	
451X6	X1279		8	12	11	9	4.39	
451X6A	X1280		0	0	1	9	4.50	
451X6B	X1280		15	25	23	9	4.50	
451X6	X1280		6	12	11	9	4.50	
451X6A	X1284		0	0	1	8	3.75	
451X6B	X1284		15	20	21	8	3.75	
451X6	X1284		6	10	10	8	3.75	
451X6A	X1285		0	0	0	4	3.99	
451X6B	X1285		8	14	9	4	3.99	
451X6	X1285		3	7	4	4	3.99	
451X6A	X1287		0	0	0	4	4.75	
451X6B	X1287		4	13	9	4	4.75	
451X6	X1287		2	6	4	4	4.75	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

X1199 ALIGN AN/ALR-62 (V3) CONTROL INDICATORS (CI)

USAF JOB INVENTORY TASK STATEMENTS:

X1200 ALIGN AN/ALR-62 (V3) DIGITAL PROCESSORS (DP)
X1202 ALIGN AN/ALR-62 (V4) CIs
X1203 ALIGN AN/ALR-62 (V4) DPs
X1279 REMOVE OR REPLACE AN/ALR-62 (V3) CI SRUs OR COMPONENTS
X1280 REMOVE OR REPLACE AN/ALR-62 (V3) DP SRUs OR COMPONENTS
X1284 REMOVE OR REPLACE AN/ALR-62 (V3) IP SRUs OR COMPONENTS
X1285 REMOVE OR REPLACE AN/ALR-62 (V4) CONTROL INDICATOR SRUs OR
COMPONENTS
X1287 REMOVE OR REPLACE AN/ALR-62 (V4) DIGITAL PROCESSOR SRUs OR
COMPONENTS

TASK NUMBER: 60970

TASK STATEMENT: .

MAINTAIN DP/CIU TEST ADAPTER

TASK NOTES:

DALMO VICTOR MADE THREE OF THESE UNITS. THEY ARE AT MT HOME AFB,
RAF UPPER HEYFORD, AND ROBINS AFB.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
DPTS
ESD PROTECTIVE EQUIPMENT

REFERENCES:

33AA39-11-1
APPLICABLE IPB

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs
A CLEAN CONTACTS (F 210)
A ISOLATE DP/CIU TEST ADAPTER MALFUNCTION TO COMPONENT LEVEL
A ORDER PARTS
A PERFORM OPERATIONAL CHECK (SELF CONTAINED)
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT CABLES
S OPERATE DPTS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE :

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SWITCH THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY SWITCHES
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TTLs
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT LOGIC COUNTERS
- K TROUBLESHOOT LOGIC REGISTERS

KNOWLEDGE:

K TROUBLESHOOT MAIN LOGIC GATES
K TROUBLESHOOT OPERATIONAL AMPLIFIERS
K TROUBLESHOOT POWER SUPPLY RECTIFIERS
K TROUBLESHOOT RELAYS
K TROUBLESHOOT TRANSFORMERS
K TROUBLESHOOT TTL LOGIC FAMILIES
K TROUBLESHOOT VOLTAGE REGULATOR
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 60980

TASK STATEMENT:

MAINTAIN AMP/DETs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AMP/DET TEST SET
CLEANING SOLVENTS AND BRUSHES
CTK
DIGITAL MULTIMETER
MODULATOR
OSCILLOSCOPE
PIN MODULATOR
RF POWER METER
PULSE GENERATOR
RF GENERATOR
RMS VOLTMETER
TUNABLE BANPASS FILTER

REFERENCES:

12P3-2-102

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A PERFORM OPERATIONAL TESTS OF AMP/DETs (U 951)
A ISOLATE MALFUNCTIONS IN AMP/DETs
A ALIGN AMP/DET (U 883)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE AMP/DET TEST SET
S USE COMMON HANDTOOLS
S USE DIGITAL MULTIMETER TO MEASURE VOLTAGES
S USE MODULATORS

SKILLS:

S USE OSCILLOSCOPE TO MEASURE SIGNALS
S USE PULSE GENERATOR
S USE RF GENERATOR
S USE RF POWER METER TO MEASURE OUTPUT
S USE RMS VOLTMETER TO MEASURE NOISE LEVELS
S USE TUNABLE BANPASS FILTER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K PERFORM FREQUENCY NOTATIONS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 883		0	0	0	10	5.16	
451X6B	U 883		8	15	17	10	5.16	
451X6	U 883		3	7	9	10	5.16	
451X6A	U 951		0	0	0	9	4.92	
451X6B	U 951		4	12	17	9	4.92	
451X6	U 951		2	6	8	9	4.92	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 883 ALIGN AMPLIFIER/DETECTORS (AMP/DET)
U 951 PERFORM OPERATIONAL TESTS OF AMP/DETS

TASK NUMBER: 60990

TASK STATEMENT:

MAINTAIN AMP/DET TEST SETS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
MULTIMETER
OSCILLOSCOPE
SIGNAL GENERATOR

REFERENCES:

33D7-22-24-2

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A PERFORM OPERATIONAL TESTS OF AMP/DET TEST SETS (U 950)
A ISOLATE MALFUNCTIONS IN AMP/DET TEST SETS
A ALIGN AMP/DET TEST SETS (U 884)
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE MULTIMETER TO MEASURE VOLTAGES
S USE OSCILLOSCOPE TO MEASURE SIGNALS
S USE SIGNAL GENERATOR

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION

KNOWLEDGE:

K APPLY CAPACITOR THEORY OF OPERATION
 K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
 K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY POWER SUPPLY THEORY OF OPERATION
 K APPLY RELAY THEORY OF OPERATION
 K APPLY RESISTOR THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SOLID STATE DIODE THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K APPLY TRANSFORMER THEORY OF OPERATION
 K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
 K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
 K ISOLATE FAULTY AC CIRCUITS
 K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
 K ISOLATE FAULTY CAPACITORS
 K ISOLATE FAULTY CLAMPER CIRCUITS
 K ISOLATE FAULTY DC CIRCUITS
 K ISOLATE FAULTY LIMITER CIRCUIT DIODES
 K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
 K ISOLATE FAULTY POWER SUPPLIES
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY RESISTORS
 K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY TRANSFORMERS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K ISOLATE FAULTY VOLTAGE REGULATORS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT CLAMPER CIRCUITS
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT VOLTAGE REGULATOR
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U 884		0	0	0	10	5.01	
451X6B	U 884		4	8	14	10	5.01	
451X6	U 884		2	4	7	10	5.01	
451X6A	U 902		0	0	0	7	5.83	
451X6B	U 902		0	11	14	7	5.83	
451X6	U 902		0	5	7	7	5.83	
451X6A	U 950		0	0	0	9	4.51	
451X6B	U 950		4	9	14	9	4.51	
451X6	U 950		2	5	7	9	4.51	
451X6A	U 991		0	0	0	7	3.87	
451X6B	U 991		4	8	13	7	3.87	
451X6	U 991		2	4	6	7	3.87	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
U 884 ALIGN AMP/DET TEST SETS
U 902 ISOLATE MALFUNCTIONS IN AMP/DET TEST SETS TO SRU OR
COMPONENT LEVEL
U 950 PERFORM OPERATIONAL TESTS OF AMP/DET TEST SETS
U 991 REMOVE OR REPLACE AMP/DET TEST SET SRUs OR COMPONENTS

TASK NUMBER: 61000

TASK STATEMENT: .

MAINTAIN AN/ALR-62 MOCKUPS

TASK NOTES:

V3 MOCKUP CONSISTS OF AFT RADAR RECEIVER, AFT FORWARD RADAR RECEIVER, ELECTRICAL EQUIPMENT CABINET AND FORWARD RECEIVER/DIGITAL PROCESSOR RACK. V4 MOCKUP (EF VERSION) CONSISTS OF DCR, MCR, ASU, DIGITAL PROCESSOR RACK, AND MCR RACK.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AN/USM-427
CLEANING SOLVENTS AND BRUSHES
CTK
MULTIMETER
OSCILLOSCOPE
TORQUE WRENCH

REFERENCES:

1F-111A-2-20
1F-111(E)A-2-20-2 (EF)
1-1A-14

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A PERFORM BUILT-IN SELF-TESTS OF AN/ALR-62 MOCKUPS (U 948)
A ISOLATE MALFUNCTIONS IN AN/ALR-62 MOCKUPS
A ALIGN SIMULATORS OR MOCKUPS (F 205)
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE LRUs
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRANSMISSION LINE
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S CONNECT CABLES
 S PERFORM VISUAL INSPECTIONS
 S USE AN/USM-427 TO TEST MOCK-UP AFTER REPAIR
 S USE COMMON HANDTOOLS
 S USE MULTIMETER TO MEASURE VOLTAGE AND RESISTANCE
 S USE OSCILLOSCOPE TO MEASURE SIGNALS
 S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY AC CIRCUIT THEORY OF OPERATION
 K APPLY DC CIRCUIT THEORY OF OPERATION
 K APPLY LED THEORY OF OPERATION
 K APPLY LRU THEORY OF OPERATION
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY RELAY THEORY OF OPERATION
 K APPLY RESISTOR THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY SOLID STATE DIODE THEORY OF OPERATION
 K APPLY TECHNICAL DATA
 K APPLY TRANSMISSION LINE THEORY OF OPERATION
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY TRANSMISSION LINES
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT DC CIRCUITS
 K TROUBLESHOOT RELAYS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 205		5	12	17	14	5.41	
451X6B	F 205		46	42	33	14	5.41	
451X6	F 205		22	27	24	14	5.41	
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 234		3	17	22	20	6.19	
451X6B	F 234		35	44	38	20	6.19	
451X6	F 234		15	29	29	20	6.19	
451X6A	F 268		3	12	19	19	3.93	
451X6B	F 268		27	39	34	19	3.93	
451X6	F 268		12	25	26	19	3.93	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	U 903		0	0	1	7	5.76	
451X6B	U 903		12	16	16	7	5.76	
451X6	U 903		5	8	8	7	5.76	
451X6A	U 948		0	0	0	5	4.23	
451X6B	U 948		15	15	12	5	4.23	
451X6	U 948		6	7	6	5	4.23	
451X6A	U 992		0	0	1	5	3.79	
451X6B	U 992		8	15	14	5	3.79	
451X6	U 992		3	7	7	5	3.79	
451X6A	X1223		0	0	0	8	4.44	
451X6B	X1223		8	16	19	8	4.44	
451X6	X1223		3	8	9	8	4.44	
451X6A	X1225		0	0	1	8	4.66	
451X6B	X1225		12	15	19	8	4.66	
451X6	X1225		5	7	10	8	4.66	
451X6A	X1229		0	0	0	4	4.83	
451X6B	X1229		0	9	9	4	4.83	
451X6	X1229		0	5	4	4	4.83	
451X6A	X1232		0	0	0	4	5.45	
451X6B	X1232		0	7	6	4	5.45	
451X6	X1232		0	3	3	4	5.45	
451X6A	X1260		0	0	1	8	4.24	
451X6B	X1260		12	18	19	8	4.24	
451X6	X1260		5	8	9	8	4.24	
451X6A	X1262		0	0	1	8	4.27	
451X6B	X1262		8	13	17	8	4.27	
451X6	X1262		3	6	9	8	4.27	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1265		0	0	0	3	4.61	
451X6B	X1265		4	9	8	3	4.61	
451X6	X1265		2	5	4	3	4.61	
451X6A	X1268		0	0	0	3	4.77	
451X6B	X1268		0	7	6	3	4.77	
451X6	X1268		0	3	3	3	4.77	
451X6A	X1281		0	0	1	8	3.98	
451X6B	X1281		8	13	15	8	3.98	
451X6	X1281		3	6	8	8	3.98	
451X6A	X1283		0	0	1	8	4.02	
451X6B	X1283		15	16	15	8	4.02	
451X6	X1283		6	8	8	8	4.02	
451X6A	X1286		0	0	0	3	4.15	
451X6B	X1286		4	9	7	3	4.15	
451X6	X1286		2	5	4	3	4.15	
451X6A	X1289		0	0	0	3	4.47	
451X6B	X1289		0	7	5	3	4.47	
451X6	X1289		0	3	3	3	4.47	

USAF JOB INVENTORY TASK STATEMENTS:

F 205 ALIGN SIMULATORS OR MOCKUPS
 F 210 CLEAN CONTACTS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 F 234 ISOLATE MALFUNCTIONS IN SIMULATORS OR MOCKUPS
 F 268 REMOVE OR REPLACE SIMULATOR OR MOCKUP SUBASSEMBLIES
 F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 U 903 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) MOCKUPS
 U 948 PERFORM BUILT-IN SELF-TESTS OF AN/ALR-62 (V4) MOCKUP
 SYSTEMS
 U 992 REMOVE OR REPLACE AN/ALR-62 (V4) MOCKUP SRUs OR COMPONENTS
 X1223 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) ELECTRICAL EQUIPMENT
 CABINETS
 X1225 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V3) FORWARD
 RECEIVER/DIGITAL PROCESSOR RACKS
 X1229 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) DIGITAL PROCESSOR
 RACKS
 X1232 ISOLATE MALFUNCTIONS IN AN/ALR-62 (V4) MULTICHANNEL
 RECEIVER RACKS
 X1260 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V3) ELECTRICAL
 EQUIPMENT CABINETS
 X1262 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V3) FORWARD
 RECEIVER/DIGITAL PROCESSOR RACKS

USAF JOB INVENTORY TASK STATEMENTS:

- X1265 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) DIGITAL
PROCESSOR RACKS
- X1268 PERFORM OPERATIONAL TESTS OF AN/ALR-62 (V4) MULTICHANNEL
RECEIVER RACKS
- X1281 REMOVE OR REPLACE AN/ALR-62 (V3) ELECTRICAL EQUIPMENT
CABINETS
- X1283 REMOVE OR REPLACE AN/ALR-62 (V3) FORWARD RECEIVER/DIGITAL
PROCESSOR RACKS
- X1286 REMOVE OR REPLACE AN/ALR-62 (V4) DIGITAL PROCESSOR RACK
SRUs OR COMPONENTS
- X1289 REMOVE OR REPLACE AN/ALR-62 (V4) MULTICHANNEL RECEIVER
RACKS

TASK NUMBER: 61010

TASK STATEMENT:

PERFORM SASE PERIODIC INSPECTIONS (Y1334)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

100ML BOTTLE
CLEANING SOLVENTS AND BRUSHES
CTK
DISK
LINT FREE CLOTHS
PATEC

REFERENCES:

33D7-13-66-21
33D7-13-66-21-2

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ASSIST BIO-ENVIRONMENTAL PERSONNEL IN INSPECTING FORWARD AND AFT ANTENNA SHIELDS (HATS)
- A CALIBRATE SASE
- A CLEAN CONTACTS (F 210)
- A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
- A ORDER PARTS
- A PERFORM OPERATIONAL TEST OF SASE (TASK NUMBER: 61020) (Y1332)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REPLACE COOLANT FILTER
- A SERVICE DISK DRIVE
- A TAKE COOLANT SAMPLE

SKILLS:

- S CONNECT CABLES
- S LOAD DISK

SKILLS:

S OPERATE POD
 S OPERATE SASE
 S PERFORM VISUAL INSPECTIONS
 S USE BOTTLE TO COLLECT SAMPLE
 S USE COMMON HANDTOOLS
 S USE PATEC TO CALIBRATE SASE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY PROPER CARE OF DISKS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K IDENTIFY CHAFFING CHARACTERISTICS
 K PROCESS COOLANT SAMPLE

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	Y1332		0	0	0	2	5.38	
451X6B	Y1332		8	4	7	2	5.38	
451X6	Y1332		3	2	3	2	5.38	
451X6A	Y1334		0	0	0	2	4.98	
451X6B	Y1334		8	2	7	2	4.98	
451X6	Y1334		3	2	3	2	4.98	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
 F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
 LINE REPLACEABLE UNITS (LRU)
 Y1332 PERFORM OPERATIONAL TEST OF SASE
 Y1334 PERFORM SASE PERIODIC INSPECTIONS

TASK NUMBER: 61020

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF SASE (Y1332)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

81B-QRC8001/POD-U001-00A
81B-QRC8001/TST-T001-00A
CTK
DISK
FREQUENCY COUNTER
FRTS
MULTIMETER
OSCILLOSCOPE
PATEC
SIGNAL GENERATOR
SPECTRUM ANALYZER
TORQUE WRENCH

REFERENCES:

33D7-13-66-21
33D7-13-66-21-2

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT CABLES
S LOAD DISKS
S OPERATE SASE
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER
S USE FRTS
S USE MULTIMETER
S USE OSCILLOSCOPE
S USE PATEC
S USE SIGNAL GENERATOR

SKILLS:

S USE SPECTRUM ANALYZER
S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE WHICH PORTION OF SELF-TEST TO EXECUTE

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1332		0	0	0	2	5.38	
451X6B	Y1332		8	4	7	2	5.38	
451X6	Y1332		3	2	3	2	5.38	

USAF JOB INVENTORY TASK STATEMENTS:

Y1332 PERFORM OPERATIONAL TESTS OF SASE

TASK NUMBER: 61030

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN SASE

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

81B-QRC8001/POD-U001-00A
81B-QRC8001/TST-T001-00A
CTK
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
FRTS
MULTIMETER
OSCILLOSCOPE
SIGNAL GENERATOR
SPECTRUM ANALYZER

REFERENCES:

33D7-13-66-21
33D7-13-66-21-2

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S LOAD DISKS
S OPERATE SASE
S PERFORM DIAGNOSTICS
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER
S USE FRTS
S USE MULTIMETER
S USE OSCILLOSCOPE
S USE SIGNAL GENERATOR
S USE SPECTRUM ANALYZER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY AC MOTOR THEORY OF OPERATION
K APPLY BASIC RF PRINCIPLES

KNOWLEDGE :

- K APPLY CMOS THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY DISPLAY TUBE THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY PHOTOSENSITIVE DEVICE THEORY OF OPERATION
- K APPLY PIN DIODE THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PROGRAMMABLE D/A CONVERTER THEORY OF OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SPEAKER THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE STATUS OF DESICCANT
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K INTERPRET INTEGRATED CIRCUIT SPECIFICATIONS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MAJOR UNITS
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY COMPUTER SUBASSEMBLIES
- K ISOLATE FAULTY COOLANT PUMPS
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS

KNOWLEDGE:

K ISOLATE FAULTY PHOTOSENSITIVE DEVICES
 K ISOLATE FAULTY POWER SUPPLIES
 K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY SOLID STATE DIODES
 K ISOLATE FAULTY SPEAKERS
 K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
 K ISOLATE FAULTY TTLS
 K ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF AN INSTALLED LRU (TASK NUMBER: 61370)
 K PERFORM BINARY CONVERSIONS
 K PERFORM HEXADECIMAL CONVERSIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT CMOS LOGIC FAMILIES
 K TROUBLESHOOT COMPUTER MAJOR UNITS
 K TROUBLESHOOT COMPUTER PERIPHERAL DEVICES
 K TROUBLESHOOT COMPUTER SUBASSEMBLIES OR CIRCUITS
 K TROUBLESHOOT MICROPROCESSOR-CONTROLLED SYSTEMS
 K TROUBLESHOOT MICROWAVE OSCILLATORS AND AMPLIFIERS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K UTILIZE SCHEMATIC AND BLOCK DIAGRAMS
 K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	Y1308		0	0	0	2	6.36	
451X6B	Y1308		4	1	6	2	6.36	
451X6	Y1308		2	1	3	2	6.36	
451X6A	Y1314		0	0	1	2	5.55	
451X6B	Y1314		19	8	9	2	5.55	
451X6	Y1314		8	4	5	2	5.55	
451X6A	Y1315		0	0	1	4	6.64	
451X6B	Y1315		19	8	10	4	6.64	
451X6	Y1315		8	5	5	4	6.64	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 Y1308 ISOLATE MALFUNCTIONS IN AN/ALM-126C SASE TEST STATIONS
 Y1314 ISOLATE MALFUNCTIONS IN ECM POD COLDPLATE LIQUID COOLER (PCLC) SYSTEMS
 Y1315 ISOLATE MALFUNCTIONS IN ECM POD TEST STATIONS

TASK NUMBER: 61040

TASK STATEMENT: .

REPAIR SASE

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
COOLANT
CTK
ESD PROTECTIVE EQUIPMENT
TORQUE WRENCH

REFERENCES:

33D7-13-66-21
33D7-13-66-21-2
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN AN/ALM-126C SASE (Y1296)
A ALIGN SRUs
A CALIBRATE SASE
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE DESICCANT
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S ADD COOLANT
S OPERATE SASE
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Y1296		0	0	0	2	6.16	
451X6B	Y1296		8	2	5	2	6.16	
451X6	Y1296		3	2	2	2	6.16	
451X6A	Y1299		0	0	1	2	6.20	
451X6B	Y1299		8	5	8	2	6.20	
451X6	Y1299		3	3	4	2	6.20	
451X6A	Y1301		0	0	0	2	5.90	
451X6B	Y1301		4	2	3	2	5.90	
451X6	Y1301		2	2	1	2	5.90	
451X6A	Y1302		0	0	0	1	5.79	
451X6B	Y1302		0	0	2	1	5.79	
451X6	Y1302		0	1	1	1	5.79	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
Y1296 ALIGN AN/ALM-126C SEMIAUTOMATIC SUPPORT EQUIPMENT (SASE)
Y1299 ALIGN FREQUENCY RESPONSE TEST SETS (FRTS)
Y1301 ALIGN SASE SPECTRUM ANALYZERS
Y1302 ALIGN SIGNAL CONDITIONING ASSEMBLIES

TASK NUMBER: 61050

TASK STATEMENT:

MAINTAIN SASE DISKS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

DISK
SASE
SYSTEM TAPE CARTRIDGE
UTILITY PROGRAM

REFERENCES:

33D7-13-66-21

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A INITIALIZE DISK
A DUPLICATE DISKS (Y1304)
A EXECUTE CHECKSUMS
A EDIT DISKS (Y1306)

SKILLS:

S INSTALL CARTRIDGE
S INSTALL DISKS
S OPERATE SASE (AN/ALM-126C)
S USE CHECKSUMS TO VERIFY CHANGED DATA IS CORRECT
S USE UTILITY PROGRAM TO EDIT DISKS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE FILES THAT MAKE UP DATA DISK
K DETERMINE VARIOUS PROGRAMS THAT CAN BE USED FOR EDITING

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1304		0	0	0	3	4.63	
451X6B	Y1304		8	4	7	3	4.63	
451X6	Y1304		3	2	4	3	4.63	
451X6A	Y1306		0	0	0	2	5.63	
451X6B	Y1306		4	1	4	2	5.63	
451X6	Y1306		2	1	2	2	5.63	

USAF JOB INVENTORY TASK STATEMENTS:

Y1304 DUPLICATE DISKS
Y1306 EDIT DISKS

TASK NUMBER: 61060

TASK STATEMENT: .

PERFORM OPERATIONAL TESTS OF QRC 80-01 ECM PODS (Y1331)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

28VDC POWER SUPPLY
81B-QRC 8001/POD-U001-00A
81B-QRC 8001/POD-U002-00A
81B-QRC 8001/POD-U003-00A
ALIGNMENT TOOLS
CONTROL BOX TESTER
CTK
DIGITAL MULTIMETER
FRTS
HOIST
HVPS TEST SET
LIFTING BARS (FORWARD AND AFT PYLONS)
LUG BAR
OSCILLOSCOPE
PYLON INTERFACE BOX
SASE
STORAGE RACK
TORQUE WRENCH
WORKBENCH

REFERENCES:

12P3-5QRC-80-12-2 (CONFIDENTIAL)
12P3-5QRC-80-12-1 (CONFIDENTIAL)
12P3-2ALQ-122
1F-111D-4-20
LOCAL CHECKLIST
TACTICAL EW EQUIPMENT
SETTINGS HANDBOOK

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; PMI; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A INSTALL POD ON WORKBENCH
- A PERFORM PMI
- A PERFORM OPERATIONAL TESTS CHECKOUT OF QRC 80-01 CONTROL BOXES (Y1328)
- A PERFORM SCA MANUAL MODE HAT CHECK
- A PERFORM OPERATIONAL TEST OF POWER SUPPLIES
- A REMOVE AND INSTALL PANELS
- A REMOVE AND INSTALL PYLON

SKILLS:

- S ATTACH BARS TO PODS
- S CONNECT ADAPTER AND CABLES
- S CONNECT COOLANT LINES
- S LOAD DISKS
- S OPERATE SASE (AN/ALM-126C)
- S PERFORM VISUAL INSPECTIONS
- S SPIN POD
- S USE 28VDC POWER SUPPLY
- S USE ALIGNMENT TOOLS
- S USE COMMON HANDTOOLS
- S USE CONTROL BOX TESTER TO APPLY POWER TO POD
- S USE DIGITAL MULTIMETER TO MEASURE DC VOLTAGES
- S USE FRTS
- S USE HOIST TO LIFT POD
- S USE HVPS TEST SET
- S USE OSCILLOSCOPE TO MEASURE DC VOLTAGE NOISE
- S USE PYLON INTERFACE BOX
- S USE TORQUE WRENCH
- S USE WORKBENCH TO HOLD POD IN PLACE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY PROPER CARE OF DISKS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA
- K APPLY VOLTAGE DIVIDER THEORY OF OPERATION
- K DETERMINE JAMMING TECHNIQUES REQUIRED
- K DETERMINE OPERATING FREQUENCIES
- K DETERMINE WHICH MATRIX NEEDS TO BE EXECUTED
- K FOLLOW INFORMATION PRESENTED ON SCREEN

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1328		0	0	0	2	4.49	
451X6B	Y1328		8	2	7	2	4.49	
451X6	Y1328		3	2	3	2	4.49	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1329		0	0	0	2	5.07	
451X6B	Y1329		8	2	7	2	5.07	
451X6	Y1329		3	2	3	2	5.07	
451X6A	Y1330		0	0	0	2	5.97	
451X6B	Y1330		8	4	7	2	5.97	
451X6	Y1330		3	2	3	2	5.97	
451X6A	Y1331		0	0	0	2	5.66	
451X6B	Y1331		8	4	7	2	5.66	
451X6	Y1331		3	2	3	2	5.66	

USAF JOB INVENTORY TASK STATEMENTS:

Y1328 PERFORM OPERATIONAL TESTS OF QRC 80-01 CONTROL BOXES
Y1329 PERFORM OPERATIONAL TESTS OF QRC 80-01 ECM POD COOLING
SYSTEMS
Y1330 PERFORM OPERATIONAL TESTS OF QRC 80-01 ECM POD POWER
SUPPLIES
Y1331 PERFORM OPERATIONAL TESTS OF QRC 80-01 ECM PODS

TASK NUMBER: 61070

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN QRC 80-01 ECM PODS (Y1317)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

81B-QRC 8001/POD-U001-00A
81B-QRC 8001/POD-U002-00A
81B-QRC 8001/POD-U003-00A
81B-QRC 8001/TST-T001-008
CTK
ESD PROTECTIVE EQUIPMENT
FRTS
FREQUENCY COUNTER
HY-POT TEST STAND
MULTIMETER
OSCILLOSCOPE
SASE
SIGNAL GENERATOR
SPECTRUM ANALYZER

REFERENCES:

12P3-5QRC-80-12-1 (CONFIDENTIAL)
12P3-5QRC-80-12-2 (CONFIDENTIAL)
12P3-5QRC-80-12-2-1 (CONFIDENTIAL)
12P3-5QRC-80-12-3 (CONFIDENTIAL)

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PERFORM HY-POT TESTS OF ECM TWTs (Y1318)
A DETECT LEAKS
A PERFORM TRANSMISSION LINE MEASUREMENTS

SKILLS:

S LOAD DISKS
S OPERATE SASE (AN/ALM-126C)
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER

SKILLS:

S USE FRTS
S USE HY-POT TEST STAND
S USE MULTIMETER TO MEASURE CONTINUITY AND VOLTAGE
S USE OSCILLOSCOPE
S USE SIGNAL GENERATOR
S USE SPECTRUM ANALYZER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY PIN DIODE THEORY
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY PROPER CARE OF DISKS
K APPLY RELAY THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY QRC 80-01 ECM POD SYSTEM THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY TRANSMISSION LINE THEORY OF OPERATION
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K FOLLOW INFORMATION PRESENTED ON SCREEN
K ISOLATE FAULTY ANTENNAS
K ISOLATE FAULTY FLIP-FLOPS
K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY RESONANT CAVITIES
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY TRANSMISSION LINES
K ISOLATE FAULTY WAVEGUIDES
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1317		0	0	0	2	7.30	
451X6B	Y1317		8	2	6	2	7.30	
451X6	Y1317		3	2	3	2	7.30	
451X6A	Y1318		0	0	1	4	5.44	
451X6B	Y1318		23	12	13	4	5.44	
451X6	Y1318		9	6	6	4	5.44	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
Y1317 ISOLATE MALFUNCTIONS IN QRC 80-01 ECM PODS
Y1318 PERFORM HY-POT TESTS OF ECM TRAVELING WAVE TUBES

TASK NUMBER: 61080

TASK STATEMENT:

REPAIR QRC 80-01 ECM PODS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

81B-QRC 8001/POD-U001-00A
81B-QRC 8001/POD-U002-00A
81B-QRC 8001/POD-U003-00A
81B-QRC 8001/TST-T001-008
CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
FORCED AIR
FREQUENCY COUNTER
FRTS
MULTIMETER
OSCILLOSCOPE
PRESSURE GAUGE
SASE
SIGNAL GENERATOR
SPECTRUM ANALYZER
ULTRASONIC CLEANER
VACUUM FILL UNIT

REFERENCES:

12P3-5QRC80-12-1 (CONFIDENTIAL)
12P3-5QRC80-12-2 (CONFIDENTIAL)
12P3-5QRC80-12-14

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN QRC 80-01 ECM PODS (Y1300)
A CHANGE LUGS
A CLEAN CONTACTS (F 210)
A MEASURE DENT DEPTH AND AREA SIZE
A ORDER PARTS
A REMOVE AND REPLACE 'O' RINGS
A REMOVE AND REPLACE HARDLINES
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR COOLANT LEAKS
A REPAIR WIRING (TASK NUMBER: 61440)

ACTIVITIES:

- A REPLACE HEAT EXCHANGERS
- A SERVICE QRC 80-01 ECM POD ACCUMULATORS (Y1343)
- A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

SKILLS:

- S CONNECT COOLANT LINES
- S OPERATE SASE
- S PERFORM VISUAL INSPECTION
- S READ FLOW METER
- S USE COMMON HANDTOOLS
- S USE FORCED AIR TO CLEAN FILTERS
- S USE FREQUENCY COUNTER
- S USE FRTS
- S USE HARMONIZATION MODE ON CPINs
- S USE MULTIMETER
- S USE OSCILLOSCOPE
- S USE PRESSURE GAUGE TO MEASURE RESERVOIR PRESSURE
- S USE SIGNAL GENERATOR
- S USE SPECTRUM ANALYZER
- S USE ULTRASONIC CLEANER TO CLEAN FILTERS
- S USE VACUUM FILL UNIT TO ADD COOLANT

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY BASIC MATH PRINCIPLES TO DETERMINE AREA
- K APPLY BASIC RF PRINCIPLES
- K APPLY ESD PRECAUTIONS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY PROPER CARE OF DISKS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Y1300		0	0	0	2	6.52	
451X6B	Y1300		8	4	7	2	6.52	
451X6	Y1300		3	2	3	2	6.52	
451X6A	Y1343		0	0	0	2	5.58	
451X6B	Y1343		4	1	4	2	5.58	
451X6	Y1343		2	1	2	2	5.58	

USAF JOB INVENTORY TASK STATEMENTS:

- F 210 CLEAN CONTACTS
- Y1300 ALIGN QRC 80-01 ECM PODS
- Y1343 SERVICE QRC 80-01 ECM POD ACCUMULATORS

TASK NUMBER: 61090

TASK STATEMENT: .

PROGRAM ECM PODS FOR MISSION REQUIREMENTS (Y1335)

TASK NOTES:

PREVIOUSLY ACCOMPLISHED BY AFSC 328XX

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

A-FRAME POD HANDLING FIXTURE
AN/ALM-187 ECM POD TEST STATION
CTK
ECM POD INDOOR COOLING UNIT
ECM POD MLV
FREQUENCY COUNTER
POD CRADLE AND DOLLY
POD HOIST AND BAR
SIGNAL GENERATOR
SPECTRUM ANALYZER

REFERENCES:

12D-2ALQ131-1-1
12D3-2ALQ131-12-1

CONDITIONS:

2 PERSON REQUIREMENT

CUES:

CHANGE REQUIRED IN MISSION TAPE OR BLUE TAPE; MODIFY
COUNTERMEASURES PROGRAM

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A UPLOAD POD
A INITIALIZE SOFTWARE

SKILLS:

S CONNECT ADAPTER AND CABLES
S OPERATE TEST STATION
S USE A-FRAME POD HANDLING FIXTURE
S USE COMMON HANDTOOLS
S USE ECM POD INDOOR COOLANT UNIT
S USE ECM POD MLV
S USE FREQUENCY COUNTER TO MEASURE FREQUENCY OF JAM PACKAGE
S USE HOIST AND BAR TO LIFT POD
S USE POD DOLLY AND CRADLE
S USE SIGNAL GENERATOR TO SIMULATE RADAR THREAT
S USE SPECTRUM ANALYZER TO LOOK AT OUTPUT OF POD

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K FOLLOW OPTIONS ON MAIN MENU

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1335		0	0	0	3	5.48	
451X6B	Y1335		19	8	10	3	5.48	
451X6	Y1335		8	4	5	3	5.48	

USAF JOB INVENTORY TASK STATEMENTS:

Y1335 PROGRAM ECM PODS FOR MISSION REQUIREMENTS

TASK NUMBER: 61100

TASK STATEMENT:

PERFORM CONFIDENCE AND COMPREHENSIVE PERIODIC SELF-TESTS OF THE
AN/ALM-204 TEST STATION (Z1352)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

SELF-TEST DISK

REFERENCES:

33D7-38-120-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; WEEKLY (CONFIDENCE)

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A INSTALL DISK
- A EXECUTE TEST

SKILLS:

- S CONNECT ADAPTER AND CABLES
- S LOAD COMPUTER PROGRAM
- S OPERATE TEST STATION

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA
- K DETERMINE WHICH PART OF SELF-TEST TO EXECUTE
- K FOLLOW INFORMATION PRESENTED ON SCREEN

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Z1352		0	0	0	3	5.99	
451X6B	Z1352		0	9	12	3	5.99	
451X6	Z1352		0	5	6	3	5.99	

USAF JOB INVENTORY TASK STATEMENTS:

Z1352 PERFORM CONFIDENCE AND COMPREHENSIVE PERIODIC SELF-TESTS OF
AN/ALM-204 TEST STATIONS

TASK NUMBER: 61110

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN THE AN/ALM-204 TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
DISK DRIVE MAINTENANCE KIT
ESD PROTECTIVE EQUIPMENT
EXTENDER BOARDS
FREQUENCY COUNTER
OSCILLOSCOPE
SIGNAL GENERATOR
SPECTRUM ANALYZER
TEST PROBES

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
ATLAS PROGRAMMING MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PERFORM CONFIDENCE AND COMPREHENSIVE PERIODIC SELF-TEST OF
AN/ALM-204 TEST STATION (TASK NUMBER: 61100)

SKILLS:

S CONNECT ADAPTER AND CABLES
S INSTALL EXTENDER BOARDS
S LOAD COMPUTER PROGRAMS
S MEASURE TRANSMISSION POWER
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS
S USE DISK DRIVE MAINTENANCE KIT TO TROUBLESHOOT

SKILLS:

- S USE FREQUENCY COUNTER
- S USE MULTIMETER
- S USE OSCILLOSCOPE
- S USE PROBES TO CHECK SIGNALS
- S USE SIGNAL GENERATOR
- S USE SPECTRUM ANALYZER

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC MOTOR THEORY OF OPERATION
- K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY AM RECEIVER THEORY OF OPERATION
- K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY CMOS THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY CRT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DISPLAY TUBE THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FM RECEIVER THEORY OF OPERATION
- K APPLY FM TRANSMITTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY JFET THEORY OF OPERATION
- K APPLY LCD THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY METER MOVEMENT THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY MOSFET THEORY OF OPERATION
- K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION

KNOWLEDGE:

- K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY RESONANT CAVITY THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SINGLE SIDEBAND RECEIVER THEORY OF OPERATION
- K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSDUCER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVEGUIDE THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE TEST STATION MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K INTERPRET BIPOLAR JUNCTION TRANSISTOR SPECIFICATIONS
- K INTERPRET INTEGRATED CIRCUIT SPECIFICATIONS
- K INTERPRET RESISTOR COLOR CODES
- K INTERPRET SOLID STATE DIODE COLOR CODES
- K INTERPRET SOLID STATE DIODE SPECIFICATIONS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY AM RECEIVERS
- K ISOLATE FAULTY AM TRANSMITTERS
- K ISOLATE FAULTY APPROXIMATION A/D CONVERTERS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY CRTs
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY FLIP-FLOPS

KNOWLEDGE:

K ISOLATE FAULTY FM MODULATION TRANSMITTERS
K ISOLATE FAULTY FM RECEIVERS
K ISOLATE FAULTY INDUCTORS
K ISOLATE FAULTY INTEGRATED CIRCUITS
K ISOLATE FAULTY JFETs
K ISOLATE FAULTY LCDs
K ISOLATE FAULTY LEDs
K ISOLATE FAULTY LIMITER CIRCUIT DIODES
K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY LOGIC COUNTERS
K ISOLATE FAULTY MAIN LOGIC GATES
K ISOLATE FAULTY METER MOVEMENTS
K ISOLATE FAULTY MICROPROCESSORS
K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
K ISOLATE FAULTY MOSFETs
K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
K ISOLATE FAULTY OSCILLATOR CIRCUITS
K ISOLATE FAULTY POWER SUPPLIES
K ISOLATE FAULTY POWER SUPPLY FILTERS
K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
K ISOLATE FAULTY PULSE MODULATION RECEIVERS
K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
K ISOLATE FAULTY RAMP A/D CONVERTERS
K ISOLATE FAULTY RCL CIRCUITS
K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY RESISTORS
K ISOLATE FAULTY RESONANT CAVITIES
K ISOLATE FAULTY SCRs
K ISOLATE FAULTY SINGLE SIDEBAND RECEIVERS
K ISOLATE FAULTY SINGLE SIDEBAND TRANSMITTERS
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY SYNCHROS-SERVOS
K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
K ISOLATE FAULTY TRANSDUCERS
K ISOLATE FAULTY TRANSFORMERS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION
K ISOLATE FAULTY TRANSMISSION LINES
K ISOLATE FAULTY TTLs
K ISOLATE FAULTY TUNNEL DIODES
K ISOLATE FAULTY VOLTAGE REGULATORS
K ISOLATE FAULTY WAVEGUIDES
K ISOLATE FAULTY WAVESHAPING CIRCUITS
K ISOLATE FAULTY WEIGHTED RESISTOR D/A CONVERTERS
K ISOLATE FAULTY ZENER DIODES
K MANIPULATE ATLAS PROGRAMS
K PERFORM BASIC AC CIRCUIT CALCULATIONS
K PERFORM BASIC DC CIRCUIT CALCULATIONS
K PERFORM BINARY CONVERSIONS

KNOWLEDGE:

- K PERFORM BINARY MATH OPERATIONS
- K PERFORM HEXADECIMAL CONVERSIONS
- K PERFORM HEXADECIMAL MATH OPERATIONS
- K PERFORM INDUCTOR CALCULATIONS
- K PERFORM OCTAL CONVERSIONS
- K PERFORM OCTAL MATH OPERATIONS
- K PERFORM RCL CIRCUIT CALCULATIONS
- K PERFORM TRANSFORMER CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC MOTORS
- K TROUBLESHOOT AM RECEIVER CIRCUITS
- K TROUBLESHOOT AM TRANSMITTERS
- K TROUBLESHOOT APPROXIMATION A/D CONVERTERS
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT CHOPPERS (SYNCHROUS VIBRATORS)
- K TROUBLESHOOT CLAMPER CIRCUITS
- K TROUBLESHOOT CMOS LOGIC FAMILIES
- K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
- K TROUBLESHOOT COMPUTER MEMORIES
- K TROUBLESHOOT COMPUTER SUBASSEMBLIES OR CIRCUITS
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT FM MODULATION TRANSMITTERS
- K TROUBLESHOOT FM RECEIVER CIRCUITS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT LOGIC COUNTERS
- K TROUBLESHOOT LOGIC REGISTERS
- K TROUBLESHOOT MAIN LOGIC GATES
- K TROUBLESHOOT METER MOVEMENTS
- K TROUBLESHOOT MICROPROCESSOR-CONTROLLED SYSTEMS
- K TROUBLESHOOT MICROWAVE OSCILLATORS AND AMPLIFIERS
- K TROUBLESHOOT OPERATIONAL AMPLIFIERS
- K TROUBLESHOOT POWER SUPPLY CIRCUITS
- K TROUBLESHOOT POWER SUPPLY FILTERS
- K TROUBLESHOOT POWER SUPPLY RECTIFIERS
- K TROUBLESHOOT PULSE MODULATION RECEIVERS
- K TROUBLESHOOT PULSE MODULATION TRANSMITTERS
- K TROUBLESHOOT RAMP A/D CONVERTERS
- K TROUBLESHOOT RCL CIRCUITS
- K TROUBLESHOOT RELAYS
- K TROUBLESHOOT RESONANT CAVITIES
- K TROUBLESHOOT SINGLE SIDEBAND RECEIVERS
- K TROUBLESHOOT SINGLE SIDEBAND TRANSMITTERS
- K TROUBLESHOOT SYNCHROS-SERVOS
- K TROUBLESHOOT THREE-PHASE TRANSFORMERS
- K TROUBLESHOOT TRANSDUCERS
- K TROUBLESHOOT TRANSFORMERS

KNOWLEDGE:

K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
 K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K TROUBLESHOOT VOLTAGE REGULATORS
 K TROUBLESHOOT WAVE GENERATING CIRCUIT MULTIVIBRATORS
 K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
 K TROUBLESHOOT WAVESHAPING CIRCUITS
 K TROUBLESHOOT WEIGHTED RESISTOR D/A CONVERTERS
 K USE COMPUTER PROGRAMMING LANGUAGE
 K USE METRIC NOTATION
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUs
 K WRITE ATLAS SUBROUTINES
 K WRITE OR DEBUG COMPUTER PROGRAMS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	Z1352		0	0	0	3	5.99	
451X6B	Z1352		0	9	12	3	5.99	
451X6	Z1352		0	5	6	3	5.99	
451X6A	Z1353		0	0	0	1	6.28	
451X6B	Z1353		0	8	12	1	6.28	
451X6	Z1353		0	4	6	1	6.28	
451X6A	Z1354		0	0	0	2	6.60	
451X6B	Z1354		0	11	13	2	6.60	
451X6	Z1354		0	5	6	2	6.60	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 Z1352 PERFORM CONFIDENCE AND COMPREHENSIVE PERIODIC SELF-TESTS OF
 AN/ALM-204 TEST STATIONS
 Z1353 PERFORM FAULT ISOLATION TESTS OF AN/ALM-204 INTERFACE
 DEVICES (ID) AND CABLES
 Z1354 PERFORM FAULT ISOLATION TESTS OF AN/ALM-204 TEST STATION
 SELF-TEST FAILURES

TASK NUMBER: 61120

TASK STATEMENT:

REPAIR THE AN/ALM-204 TEST STATION

TASK NOTES:

THESE TEST STATIONS ARE FOR SUPPORTING THE EF-111

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
DISK DRIVE MAINTENANCE KIT
ESD PROTECTIVE EQUIPMENT
EXTENDER BOARDS
TORQUE WRENCH

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN AN/ALM-204 TEST STATION TRUs (Z1348)
A CALIBRATE HPMA (Z1351)
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs
A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS
A TUNE OR ADJUST RESONANT CAVITIES

SKILLS:

S INSTALL EXTENDER BOARDS
 S OPERATE TEST STATION
 S PERFORM VISUAL INSPECTIONS
 S USE COMMON HANDTOOLS
 S USE DISK DRIVE MAINTENANCE KIT TO ALIGN DISK DRIVE
 S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Z1344		0	0	0	2	7.54	
451X6B	Z1344		0	8	12	2	7.54	
451X6	Z1344		0	4	6	2	7.54	
451X6A	Z1345		0	0	0	2	7.15	
451X6B	Z1345		0	6	10	2	7.15	
451X6	Z1345		0	3	5	2	7.15	
451X6A	Z1346		0	0	0	2	6.95	
451X6B	Z1346		0	8	12	2	6.95	
451X6	Z1346		0	4	6	2	6.95	
451X6A	Z1347		0	0	0	1	7.34	
451X6B	Z1347		0	9	11	1	7.34	
451X6	Z1347		0	5	6	1	7.34	
451X6A	Z1348		0	0	0	2	7.34	
451X6B	Z1348		0	9	12	2	7.34	
451X6	Z1348		0	5	6	2	7.34	
451X6A	Z1349		0	0	0	1	7.34	
451X6B	Z1349		0	9	11	1	7.34	
451X6	Z1349		0	5	5	1	7.34	
451X6A	Z1351		0	0	0	1	6.99	
451X6B	Z1351		0	9	12	1	6.99	
451X6	Z1351		0	5	6	1	6.99	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
Z1344 ALIGN AN/ALM-204 SYSTRON DONNER GENERATORS
Z1345 ALIGN AN/ALM-204 TEST PATTERN COMPARATORS
Z1346 ALIGN AN/ALM-204 TEST STATION POWER SUPPLIES
Z1347 ALIGN AN/ALM-204 TEST STATION SPECTRUM ANALYZERS
Z1348 ALIGN AN/ALM-204 TEST STATION TRUs
Z1349 ALIGN DIGITAL ANALOG CONVERSION (DAC) IN MULTIPLE MATRIX
SWITCHES (MMS)
Z1351 CALIBRATE HIGH POWER MICROWAVE ASSEMBLIES (HPMA)

TASK NUMBER: 61130

TASK STATEMENT:

PERFORM OPERATIONAL TEST OF LRUs THAT RUN ON THE AN/ALM-204 TEST STATION

TASK NOTES:

LRUs ARE SOFTWARE CONTROLLED

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CALL UP TAPE
A EXECUTE TEST

SKILLS:

S CONNECT ADAPTER AND CABLES
S CONNECT LRU TO TEST STATION
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K FOLLOW INFORMATION DISPLAYED ON CRT

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY

TASK NUMBER: 61140

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRUs THAT RUN ON THE AN/ALM-204 TEST STATION

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A MEASURE TRANSMISSION POWER
A PERFORM HY-POT TESTS OF TWT AND A2 ASSEMBLIES IN AN/ALQ-99
TRANSMITTERS (Z1358)

SKILLS:

S CONNECT ADAPTER AND CABLES
S DETECT LEAKS
S INSTALL EXTENDER BOARDS
S LOAD COMPUTER PROGRAMS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE :

K ANNOTATE FORMS
K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY AC MOTOR THEORY OF OPERATION
K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY AM RECEIVER THEORY OF OPERATION
K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION
K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
K APPLY CMOS THEORY OF OPERATION
K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
K APPLY COMPUTER THEORY OF OPERATION
K APPLY CRT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY DISPLAY TUBE THEORY OF OPERATION
K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
K APPLY ELECTRON TUBE THEORY OF OPERATION
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY FM RECEIVER THEORY OF OPERATION
K APPLY FM TRANSMITTER THEORY OF OPERATION
K APPLY INDUCTOR THEORY OF OPERATION
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY JFET THEORY OF OPERATION
K APPLY LCD THEORY OF OPERATION
K APPLY LED THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY METER MOVEMENT THEORY OF OPERATION
K APPLY MICROPROCESSOR THEORY OF OPERATION
K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
K APPLY MOSFET THEORY OF OPERATION
K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY RESONANT CAVITY THEORY OF OPERATION
K APPLY SCR THEORY OF OPERATION

KNOWLEDGE :

- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SINGLE SIDEBAND RECEIVER THEORY OF OPERATION
- K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY SYNCHRO-SERVO THEORY OF OPERATION
- K APPLY SYSTEM THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSDUCER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY TUNNEL DIODE THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVEGUIDE THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER (TASK NUMBER: 61360)
- K INTERPRET BIPOLAR JUNCTION TRANSISTOR SPECIFICATIONS
- K INTERPRET ELECTRON TUBE SPECIFICATIONS
- K INTERPRET INTEGRATED CIRCUIT SPECIFICATIONS
- K INTERPRET RESISTOR COLOR CODES
- K INTERPRET SOLID STATE DIODE COLOR CODES
- K INTERPRET SOLID STATE DIODE SPECIFICATIONS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY AM RECEIVERS
- K ISOLATE FAULTY AM TRANSMITTERS
- K ISOLATE FAULTY APPROXIMATION A/D CONVERTERS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY CRT
- K ISOLATE FAULTY DISPLAY TUBES
- K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
- K ISOLATE FAULTY ELECTRON TUBES
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FM MODULATION TRANSMITTERS
- K ISOLATE FAULTY FM RECEIVERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY JFETs

KNOWLEDGE:

- K ISOLATE FAULTY LCDs
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY METER MOVEMENTS
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY MOSFETs
- K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY PULSE MODULATION RECEIVERS
- K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
- K ISOLATE FAULTY RAMP A/D CONVERTERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY RESONANT CAVITIES
- K ISOLATE FAULTY SCRs
- K ISOLATE FAULTY SINGLE SIDEBAND RECEIVERS
- K ISOLATE FAULTY SINGLE SIDEBAND TRANSMITTERS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY SYNCHROS-SERVOS
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSDUCERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY TTLs
- K ISOLATE FAULTY TUNNEL DIODES
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K ISOLATE FAULTY WAVEGUIDES
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K ISOLATE FAULTY WEIGHTED RESISTOR D/A CONVERTERS
- K ISOLATE FAULTY ZENER DIODES
- K PERFORM BASIC AC CIRCUIT CALCULATIONS
- K PERFORM BASIC DC CIRCUIT CALCULATIONS
- K PERFORM BINARY CONVERSIONS
- K PERFORM BINARY MATH OPERATIONS
- K PERFORM HEXADECIMAL CONVERSIONS
- K PERFORM HEXADECIMAL MATH OPERATIONS
- K PERFORM INDUCTOR CALCULATIONS
- K PERFORM OCTAL CONVERSIONS
- K PERFORM OCTAL MATH OPERATIONS

KNOWLEDGE:

K PERFORM RCL CIRCUIT CALCULATIONS
K PERFORM TRANSFORMER CALCULATIONS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT AC CIRCUITS
K TROUBLESHOOT AC MOTORS
K TROUBLESHOOT AM RECEIVER CIRCUITS
K TROUBLESHOOT AM TRANSMITTERS
K TROUBLESHOOT APPROXIMATION A/D CONVERTERS
K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
K TROUBLESHOOT CHOPPERS (SYNCHROUS VIBRATORS)
K TROUBLESHOOT CLAMPER CIRCUITS
K TROUBLESHOOT CMOS LOGIC FAMILIES
K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
K TROUBLESHOOT COMPUTER MEMORIES
K TROUBLESHOOT COMPUTER SUBASSEMBLIES OR CIRCUITS
K TROUBLESHOOT DC CIRCUITS
K TROUBLESHOOT ELECTRON TUBE AMPLIFIERS
K TROUBLESHOOT FLIP-FLOPS
K TROUBLESHOOT FM MODULATION TRANSMITTERS
K TROUBLESHOOT FM RECEIVER CIRCUITS
K TROUBLESHOOT INDUCTORS
K TROUBLESHOOT LIMITER CIRCUIT DIODES
K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
K TROUBLESHOOT LOGIC COUNTERS
K TROUBLESHOOT LOGIC REGISTERS
K TROUBLESHOOT MAIN LOGIC GATES
K TROUBLESHOOT METER MOVEMENTS
K TROUBLESHOOT MICROPROCESSOR-CONTROLLED SYSTEMS
K TROUBLESHOOT MICROWAVE OSCILLATORS AND AMPLIFIERS
K TROUBLESHOOT OPERATIONAL AMPLIFIERS
K TROUBLESHOOT POWER SUPPLY CIRCUITS
K TROUBLESHOOT POWER SUPPLY FILTERS
K TROUBLESHOOT POWER SUPPLY RECTIFIERS
K TROUBLESHOOT PULSE MODULATION RECEIVERS
K TROUBLESHOOT PULSE MODULATION TRANSMITTERS
K TROUBLESHOOT RAMP A/D CONVERTERS
K TROUBLESHOOT RCL CIRCUITS
K TROUBLESHOOT RELAYS
K TROUBLESHOOT RESONANT CAVITIES
K TROUBLESHOOT SINGLE SIDEBAND RECEIVERS
K TROUBLESHOOT SINGLE SIDEBAND TRANSMITTERS
K TROUBLESHOOT SYNCHROS-SERVOES
K TROUBLESHOOT THREE-PHASE TRANSFORMERS
K TROUBLESHOOT TRANSDUCERS
K TROUBLESHOOT TRANSFORMERS
K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
K TROUBLESHOOT TTL LOGIC FAMILIES
K TROUBLESHOOT VOLTAGE REGULATOR

KNOWLEDGE:

K TROUBLESHOOT WAVE GENERATING CIRCUIT MULTIVIBRATORS
K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
K TROUBLESHOOT WAVESHAPING CIRCUITS
K TROUBLESHOOT WEIGHTED RESISTOR D/A CONVERTERS
K USE COMPUTER PROGRAMMING LANGUAGE
K USE METRIC NOTATION
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs
K WRITE OR DEBUG COMPUTER PROGRAMS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	Z1358		0	0	0	2	6.18	
451X6B	Z1358		4	9	12	2	6.18	
451X6	Z1358		2	5	6	2	6.18	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
Z1358 PERFORM HY-POT TESTS OF TRAVELING WAVE TUBES (TWT) AND A2
ASSEMBLIES IN AN/ALQ-99 TRANSMITTERS

TASK NUMBER: 61150

TASK STATEMENT:

REPAIR LRUs THAT RUN ON THE AN/ALM-204 TEST STATION

TASK NOTES:

DEAERATION CART IS FOR TRANSMITTER

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

DEAERATION CART

DRAIN AND FILL CART

ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SRUs

A CLEAN CONTACTS (F 210)

A PERFORM FLUID DEAERATION OF TRANSMITTERS (Z1356)

A ORDER PARTS

A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)

A REPAIR WIRING (TASK NUMBER: 61440)

A RESEAT SRUs

A TUNE OR ADJUST MICROWAVE OSCILLATORS OR AMPLIFIERS

A TUNE OR ADJUST RESONANT CAVITIES

SKILLS:

S PERFORM VISUAL INSPECTIONS

S USE COMMON HANDTOOLS

S USE DEAERATION CART TO DEAIR TRANSMITTERS

S USE DRAIN AND FILL CART TO REPLACE COOLANT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K SEAT PNEUMATIC HOSES

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	Z1356		0	0	0	2	5.62	
451X6B	Z1356		0	8	12	2	5.62	
451X6	Z1356		0	4	6	2	5.62	
451X6A	Z1362		0	0	0	1	5.80	
451X6B	Z1362		4	8	11	1	5.80	
451X6	Z1362		2	4	5	1	5.80	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
Z1356 PERFORM FLUID DEAERATION OF TRANSMITTERS
Z1362 PERFORM OPERATIONAL TESTS OF FLUID DEAERATION CARTS

TASK NUMBER: 61160

TASK STATEMENT:

PERFORM GACT CONTINUITY AND LOGIC SELF-TESTS (Z1357)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

C31U-016-03-00-C1-02
C31U-807-03-00-D1-02
CONTINUITY ACCESSORY KIT
LOGIC ACCESSORY KIT

REFERENCES:

33DA-103-32-1
GACT CONTINUITY SELF-TEST BOOK
GACT LOGIC SELF-TEST BOOK

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PERFORM POWER ON SELF-TESTS OF GACTs (Z1365)
A PERFORM CONTINUITY TESTS
A PERFORM LOGIC TESTS

SKILLS:

S CONNECT ADAPTER AND CABLES
S LOAD PROGRAM
S OPERATE GACT
S USE KITS TO PROGRAM GACT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K FOLLOW INFORMATION PRESENTED ON TAPE PRINTOUT

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Z1357		0	0	0	1	5.98	
451X6B	Z1357		4	11	11	1	5.98	
451X6	Z1357		2	5	6	1	5.98	
451X6A	Z1365		0	0	0	1	5.93	
451X6B	Z1365		4	9	10	1	5.93	
451X6	Z1365		2	5	5	1	5.93	

USAF JOB INVENTORY TASK STATEMENTS:

Z1357 PERFORM GRUMMAN AUTOMATIC CABLE TESTER (GACT) CONTINUITY
AND LOGIC SELF-TESTS
Z1365 PERFORM POWER ON SELF-TESTS OF GACTs

TASK NUMBER: 61170

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CHIP PULLER
CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER

REFERENCES:

33DA103-32-1

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S OPERATE GACT
S PERFORM VISUAL INSPECTIONS
S USE CHIP PULLER TO REMOVE CHIPS
S USE COMMON HANDTOOLS
S USE MULTIMETER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
K DETERMINE ONES COMPLEMENTS OF PRINTED FAIL
K DETERMINE WHETHER MALFUNCTION IS IN GACT, ADAPTER, OR LRU
K INTERPRET LOGIC FAIL PRINTOUT
K INTERPRET SWITCHBOARD TROUBLESHOOTING CHART TO DETERMINE WHICH
CHIP HAS FAILED
K ISOLATE FAULTY POWER SUPPLIES

KNOWLEDGE:

K ISOLATE FAULTY SOLID STATE DIODES
K PERFORM BINARY CONVERSIONS
K PERFORM BINARY MATH OPERATION
K PERFORM HEXADECIMAL CONVERSIONS
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 61180

TASK STATEMENT:

REPAIR GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

**CHIP PULLER
CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT**

REFERENCES:

**33DA103-32-1
33DA103-32-4**

CURS:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

**A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs**

SKILLS:

**S PERFORM VISUAL INSPECTIONS
S USE CHIP PULLER TO REMOVE CHIPS
S USE COMMON HANDTOOLS**

KNOWLEDGE:

**K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PRECAUTIONS
K APPLY TECHNICAL DATA**

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

TASK NUMBER: 61190

TASK STATEMENT:

PERFORM PERIODIC INSPECTIONS ON GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ALCOHOL
C31U-806-04-00-01-03 (4 TAPES)
CLEANING SOLVENTS AND BRUSHES
COTTON SWABS

REFERENCES:

33DA103-32-1
GRUMMAN INTERFACE DEVICE ADAPTER BOOK

CONDITIONS:

CANNOT RUN IDA UNLESS GACT IS GOOD

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A CLEAN TAPE HEAD AND MOTOR DRIVE ROLLER
A CLEAN WORK SURFACES
A ORDER PARTS
A PERFORM GACT CONTINUITY AND LOGIC SELF-TESTS (Z1357)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A TEST INTERFACE DEVICE ADAPTER

SKILLS:

S LOAD TAPES
S OPERATE GACT
S PERFORM VISUAL INSPECTIONS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Z1357		0	0	0	1	5.98	
451X6B	Z1357		4	11	11	1	5.98	
451X6	Z1357		2	5	6	1	5.98	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
Z1357 PERFORM POWER ON SELF-TEST OF GACTs

TASK NUMBER: 61200

TASK STATEMENT:

PERFORM OPERATIONAL TEST OF LRUs THAT RUN ON GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AUXILIARY POWER SUPPLY
CTK
GACT
MULTIMETER
TASU

REFERENCES:

APPLICABLE GRUMMAN MANUALS (TAPE)
APPLICABLE TEST PROCEDURES TO

CUES:

SUSPECTED MALFUNCTION; AFTER REPAIR; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE TEST

SKILLS:

S CONNECT LRU TO TESTER
S LOAD TEST PROGRAM
S OPERATE GACT
S PERFORM VISUAL INSPECTIONS
S USE AUXILIARY POWER SUPPLY TO INJECT VOLTAGES IN LRUs THROUGH
TASU
S USE COMMON HANDTOOLS
S USE MULTIMETER
S USE TAPES TO LOAD TEST PROGRAM
S USE TASU TO INTERCONNECT LRUs TO GACT

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY TECHNICAL DATA
K FOLLOW INFORMATION ON TAPE PRINTOUT

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 243		61	62	65	39	4.32	
451X6B	F 243		50	60	59	39	4.32	
451X6	F 243		55	60	62	39	4.32	

USAF JOB INVENTORY TASK STATEMENTS:

F 243 PERFORM FUNCTIONAL CHECKS OR TEST AND INSPECTION (T AND I)
OF LRUs ISSUED FROM SUPPLY

TASK NUMBER: 61210

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN LRU_s THAT RUN ON THE GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AUXILIARY POWER SUPPLY
CTK
ESD PROTECTIVE EQUIPMENT
GACT
MULTIMETER
TASU

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE GRUMMAN MANUALS (TAPE)
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE TEST STATION TO

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S OPERATE GACT
S PERFORM VISUAL INSPECTIONS
S USE AUXILIARY POWER SUPPLY
S USE COMMON HANDTOOLS
S USE MULTIMETER
S USE TASU

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY LED THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LRU THEORY OF OPERATION
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY RELAY THEORY OF OPERATION
K APPLY SCR THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY SYNCHRO-SERVO THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY TRANSFORMER THEORY OF OPERATION
K APPLY ZENER DIODE THEORY OF OPERATION
K ISOLATE FAULTY LEDs
K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY SCRs
K ISOLATE FAULTY SOLID STATE DIODES
K ISOLATE FAULTY SYNCHROS-SERVOS
K ISOLATE FAULTY TRANSFORMERS
K ISOLATE FAULTY ZENER DIODES
K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K TROUBLESHOOT DC CIRCUITS
K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
K TROUBLESHOOT RELAYS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 61220

TASK STATEMENT:

REPAIR LRUs THAT RUN ON THE GACT

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE GRUMMAN MANUAL
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S PERFORM VISUAL INSPECTIONS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)

TASK NUMBER: 61230

TASK STATEMENT:

PERFORM OPERATIONAL TEST OF AN/ALQ-131 ECM PODS (Y1327)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

20DB DIRECTIONAL COUPLERS
500HM DUMMY LOADS
AN/ALM-186
AN/ALM-187
AN/ALM-188
AN/ALM-192
AUTOMATIC PRE-SELECTOR
CTK
DC BLOCKS (FILTERS)
DIGITAL LOGIC PROBE
DIGITAL MULTIMETER
FIX ATTENUATOR
FREQUENCY COUNTER
HIGH PASS FILTER
LOW PASS FILTER
MICROWAVE PULSE COUNTER
OPERATIONAL FLIGHT PROGRAM
OSCILLOSCOPE
POWER DIVIDER
RF DETECTOR
RF GENERATOR
SIGNAL GENERATOR
SPECTRUM ANALYZER
STEP ATTENUATOR
TIME INTERVAL COUNTER
TORQUE WRENCHES
VARIABLE VOLTAGE ATTENUATOR

REFERENCES:

12P3-2ALQ131-12-1-1

CONDITIONS:

RECEIVE ANTENNA ASSEMBLY MUST BE TESTED WITH COVERS ON. SYSTEM
SHOULD NOT BE OPERATED IF LIGHTNING IS WITHIN 10 MILES.

CUES:

SUSPECTED MALFUNCTION; PERIODIC MAINTENANCE; FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A CHECK AFT ANTENNA ASSEMBLY
- A CHECK FORWARD ANTENNA ASSEMBLY
- A CHECK HIGH VOLTAGE POWER SUPPLY
- A CHECK INTERFACE-CONTROL MODULE
- A CHECK LOW VOLTAGE POWER SUPPLY
- A CHECK RECEIVE ANTENNA ASSEMBLY
- A CHECK RF ASSEMBLY
- A CHECK RF BANDS
- A CHECK TRANSMIT CONTROL ASSEMBLY

SKILLS:

- S CONNECT CABLES
- S CONNECT COOLING SYSTEM TO POD
- S CONNECT POD TO AN/ALM-186
- S INSTALL ANTENNA SHIELDS
- S INSTALL POD ON AN/ALM-188
- S LOAD PROGRAM
- S OPERATE AN/ALM-186
- S OPERATE AN/ALM-187
- S OPERATE AN/ALM-192
- S USE 20DB DIRECTIONAL COUPLER
- S USE 500HM DUMMY LOAD
- S USE AUTOMATIC PRE-SELECTOR
- S USE COMMON HANDTOOLS
- S USE DC BLOCKS (FILTERS)
- S USE DIGITAL LOGIC PROBE
- S USE DIGITAL MULTIMETER
- S USE FIX ATTENUATOR
- S USE FREQUENCY COUNTER
- S USE HIGH PASS FILTER
- S USE LOW PASS FILTER
- S USE MICROWAVE PULSE COUNTER
- S USE OSCILLOSCOPE
- S USE POWER DIVIDER
- S USE RF DETECTOR
- S USE RF GENERATOR
- S USE SIGNAL GENERATOR
- S USE SPECTRUM ANALYZER
- S USE STEP ATTENUATOR
- S USE TIME INTERVAL COUNTER
- S USE TORQUE WRENCHES
- S USE VARIABLE VOLTAGE ATTENUATOR

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY TECHNICAL DATA
K COMPUTE RF GAIN
K MONITOR BAND ATTENUATION VALUES
K PERFORM BASIC AC CIRCUIT CALCULATIONS
K PERFORM BASIC DC CIRCUIT CALCULATIONS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1325		0	0	1	1	4.91	
451X6B	Y1325		23	11	8	1	4.91	
451X6	Y1325		9	5	4	1	4.91	
451X6A	Y1326		0	0	1	2	5.19	
451X6B	Y1326		23	11	8	2	5.19	
451X6	Y1326		9	5	4	2	5.19	
451X6A	Y1327		0	0	1	2	6.18	
451X6B	Y1327		23	11	8	2	6.18	
451X6	Y1327		9	5	4	2	6.18	

USAF JOB INVENTORY TASK STATEMENTS:

Y1325 PERFORM OPERATIONAL TESTS OF AN/ALQ-131 ECM POD COOLING
SYSTEMS
Y1326 PERFORM OPERATIONAL TESTS OF AN/ALQ-131 ECM POD POWER
SUPPLIES
Y1327 PERFORM OPERATIONAL TESTS OF AN/ALQ-131 ECM PODS

TASK NUMBER: 61240

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN AN/ALQ-131 ECM PODS (Y1313)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AN/ALM-186
AN/ALM-187
AN/ALM-188
AN/ALM-192
ANTENNA SHIELD
CTK
DC BLOCK
DIGITAL MULTIMETER
DIRECTIONAL COUPLER
EXTENDER BOARDS
FIXED ATTENUATORS
FREQUENCY COUNTER
FREQUENCY RESPONSE TEST SET
MICROWAVE PULSE COUNTER
MONITOR CART
MULTIBAND CONTROL UNIT
PEAK POWER METER
POWER AND FEED THROUGH PANEL
RF DETECTOR
RF DIRECTIONAL COUPLERS
RF SIGNAL GENERATOR
SOLDERING STATION
SOURCE CART
STEP ATTENUATOR
SWEEP OSCILLATOR
TIME BASE AND DELAY GENERATOR
TIME INTERVAL COUNTER
TORQUE WRENCHES
VERTICAL AMPLIFIER

REFERENCES:

12P3-2ALQ131-12-1 (CONFIDENTIAL)
12P3-2ALQ131-12-1-1
12P3-2ALQ131-12-2 (CONFIDENTIAL)
12P3-2ALQ131-12-3 (CONFIDENTIAL)
12P3-2ALQ131-12-4 (CONFIDENTIAL)
12P3-2ALQ131-12-5 (CONFIDENTIAL)
12P3-2ALQ131-14
33D7-6-160-1

CONDITIONS:

SYSTEM SHOULD NOT BE OPERATED IF LIGHTNING IS WITHIN 10 MILES.

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A EXECUTE ABAGOO TEST (OPERATION READY TEST)
- A EXECUTE ATLAS PROGRAM
- A EXECUTE AUTOMATIC TROUBLESHOOTING TREE PROGRAM
- A EXECUTE CITS (PROGRAM)
- A EXECUTE PICK PROGRAM
- A EXECUTE TOTAL SYSTEM TEST PROGRAM
- A EXECUTE TROUBLESHOOTING PROGRAM

SKILLS:

- S CONNECT AN/ALM-186
- S CONNECT AN/ALM-192
- S CONNECT MONITOR CART ASSEMBLY
- S CONNECT SOURCE CART ASSEMBLY
- S INSTALL EXTENDER BOARDS
- S INSTALL POD ON AN/ALM-188
- S INSTALL RECEIVE ANTENNA SHIELD
- S LOAD CITS
- S LOAD PROGRAM
- S OPERATE AN/ALM-186
- S OPERATE AN/ALM-187
- S OPERATE AN/ALM-192
- S PERFORM VISUAL INSPECTIONS
- S SOLDER OR DESOLDER PC BOARDS
- S SOLDER OR DESOLDER TERMINAL CONNECTIONS
- S USE ANTENNA SHIELD
- S USE COMMON HANDTOOLS
- S USE DC BLOCK
- S USE DIGITAL MULTIMETER
- S USE DIRECTIONAL COUPLER
- S USE FIXED ATTENUATORS
- S USE FREQUENCY COUNTER
- S USE FREQUENCY RESPONSE TEST SET
- S USE MICROWAVE PULSE COUNTER
- S USE MONITOR CART
- S USE MULTIBAND CONTROL UNIT
- S USE PEAK POWER METER
- S USE POWER AND FEED THROUGH PANEL
- S USE RF DETECTOR
- S USE RF DIRECTIONAL COUPLERS
- S USE RF SIGNAL GENERATOR

SKILLS:

- S USE SOURCE CART
- S USE STEP ATTENUATOR
- S USE SWEEP OSCILLATOR
- S USE TIME BASE AND DELAY GENERATOR
- S USE TIME INTERVAL COUNTER
- S USE TORQUE WRENCHES
- S USE VERTICAL AMPLIFIER

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC GENERATOR THEORY OF OPERATION
- K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY AM RECEIVER THEORY OF OPERATION
- K APPLY ANTENNA THEORY OF OPERATION
- K APPLY BASIC RF PRINCIPLES
- K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DC GENERATOR THEORY OF OPERATION
- K APPLY DC MOTOR THEORY OF OPERATION
- K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FM RECEIVER THEORY OF OPERATION
- K APPLY FM TRANSMITTER THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY MICROPROCESSOR THEORY OF OPERATION
- K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
- K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
- K APPLY POD THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
- K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
- K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION

KNOWLEDGE :

- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
- K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
- K APPLY TRANSMISSION LINE THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY WAVEGUIDE THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION
- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K INTERPRET RF SPECIFICATIONS
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AC GENERATORS
- K ISOLATE FAULTY AM TRANSMITTERS
- K ISOLATE FAULTY ANTENNAS
- K ISOLATE FAULTY CHOPPERS (SYNCHRONOUS VIBRATORS)
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MAJOR UNITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY DC GENERATORS
- K ISOLATE FAULTY DC MOTORS
- K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FM MODULATION TRANSMITTERS
- K ISOLATE FAULTY FM RECEIVERS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY MICROPROCESSORS
- K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
- K ISOLATE FAULTY MULTIVIBRATOR CIRCUITS
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY OSCILLATOR CIRCUITS
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS

KNOWLEDGE :

- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY PULSE MODULATION RECEIVERS
- K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
- K ISOLATE FAULTY RAMP A/D CONVERTERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SCRs
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER COUPLING CIRCUITS
- K ISOLATE FAULTY TRANSISTOR AMPLIFIER CIRCUITS
- K ISOLATE FAULTY TRANSMISSION LINES
- K ISOLATE FAULTY TTLs
- K ISOLATE FAULTY WAVEGUIDES
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K ISOLATE FAULTY ZENER DIODES
- K PERFORM BASIC AC CIRCUIT CALCULATIONS
- K PERFORM BASIC DC CIRCUIT CALCULATIONS
- K PERFORM FREQUENCY SENSITIVE FILTER CALCULATIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC GENERATORS
- K TROUBLESHOOT AM TRANSMITTERS
- K TROUBLESHOOT ANTENNAS
- K TROUBLESHOOT CHOPPERS (SYNCHROUS VIBRATORS)
- K TROUBLESHOOT CLAMPER CIRCUITS
- K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
- K TROUBLESHOOT COMPUTER MAJOR UNITS
- K TROUBLESHOOT COMPUTER MEMORIES
- K TROUBLESHOOT COMPUTER PERIPHERAL DEVICES
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT DC GENERATORS
- K TROUBLESHOOT DC MOTORS
- K TROUBLESHOOT ELECTRON TUBE AMPLIFIERS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT FM MODULATION TRANSMITTERS
- K TROUBLESHOOT FM RECEIVER CIRCUITS
- K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS
- K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
- K TROUBLESHOOT LOGIC COUNTERS
- K TROUBLESHOOT LOGIC REGISTERS
- K TROUBLESHOOT MAIN LOGIC GATES
- K TROUBLESHOOT MICROPROCESSOR-CONTROLLED SYSTEMS
- K TROUBLESHOOT MICROWAVE OSCILLATORS AND AMPLIFIERS
- K TROUBLESHOOT OPERATIONAL AMPLIFIERS
- K TROUBLESHOOT POWER SUPPLY CIRCUITS

KNOWLEDGE:

K TROUBLESHOOT POWER SUPPLY FILTERS
K TROUBLESHOOT POWER SUPPLY RECTIFIERS
K TROUBLESHOOT PULSE MODULATION RECEIVERS
K TROUBLESHOOT PULSE MODULATION TRANSMITTERS
K TROUBLESHOOT RAMP A/D CONVERTERS
K TROUBLESHOOT THREE-PHASE TRANSFORMERS
K TROUBLESHOOT TRANSFORMERS
K TROUBLESHOOT TRANSISTOR AMPLIFIER STABILIZATION CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER CIRCUITS
K TROUBLESHOOT TRANSISTOR AMPLIFIER COUPLING CIRCUITS
K TROUBLESHOOT TTL LOGIC FAMILIES
K TROUBLESHOOT VOLTAGE REGULATOR
K TROUBLESHOOT WAVE GENERATING CIRCUIT MULTIVIBRATORS
K TROUBLESHOOT WAVE GENERATING CIRCUIT OSCILLATORS
K TROUBLESHOOT WAVESHAPING CIRCUITS
K UTILIZE FLOW CHARTS
K UTILIZE FUNCTIONAL DIAGRAMS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY SRUs

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	Y1313		0	0	1	2	7.40	
451X6B	Y1313		23	11	7	2	7.40	
451X6	Y1313		9	5	4	2	7.40	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
Y1313 ISOLATE MALFUNCTIONS IN AN/ALQ-131 ECM PODS

TASK NUMBER: 61250

TASK STATEMENT:

REPAIR AN/ALQ-131 ECM PODS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AN/ALM-186
AN/ALM-187
BOARD EXTRACTOR
CLEANING SOLVENTS AND BRUSHES
CTK
EXTENDER BOARDS
MULTIMETER
ROLLERS
SCRAPER
SILICONE COMPOUND HEAT SINK
TORQUE WRENCH

REFERENCES:

1-1A-8 CHAPTER 16
12P3-2ALQ131-14

CONDITIONS:

SYSTEM SHOULD NOT BE OPERATED IF LIGHTNING IS WITHIN 10 MILES.

CUES:

ISOLATED MALFUNCTIONS

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN SYSTEM
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE TERMINAL LUGS
A REPAIR HARD LINE CABLES
A REPAIR WIRING (TASK NUMBER: 61440)
A REMOVE AND REPLACE RADOME
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A RESEAT SRUs

SKILLS:

S APPLY SILICONE COMPOUND HEAT SINK
 S INSTALL EXTENDER BOARDS
 S OPERATE AN/ALM-186
 S OPERATE AN/ALM-187
 S PERFORM SAFETY WIRING (TASK NUMBER: 61450)
 S PERFORM VISUAL INSPECTIONS
 S USE BOARD EXTRACTOR
 S USE COMMON HANDTOOLS
 S USE MULTIMETER
 S USE ROLLERS
 S USE SCRAPER
 S USE TORQUE WRENCH

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PRECAUTIONS
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Y1298		0	0	1	2	6.75	
451X6B	Y1298		27	12	7	2	6.75	
451X6	Y1298		11	6	4	2	6.75	
451X6A	Y1339		0	0	1	2	6.33	
451X6B	Y1339		27	12	8	2	6.33	
451X6	Y1339		11	6	4	2	6.33	
451X6A	Y1340		0	0	0	1	4.62	
451X6B	Y1340		8	4	7	1	4.62	
451X6	Y1340		3	2	3	1	4.62	
451X6A	Y1342		0	0	0	0	5.24	
451X6B	Y1342		4	1	1	0	5.24	
451X6	Y1342		2	1	1	0	5.24	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS

Y1298 ALIGN AN/ALQ-131 ECM PODS

Y1339 REMOVE OR REPLACE AN/ALQ-131 ECM POD COMPONENTS

Y1340 REMOVE OR REPLACE PYLONS

Y1342 SERVICE AN/ALQ-131 ECM POD ACCUMULATORS

TASK NUMBER: 61260

TASK STATEMENT:

PERFORM OPERATIONAL TESTS OF TEST SETS USED WITH THE AN/ALQ-131
ECM PODS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIR HOSE
ANTENNA SHIELDS
CTK
HOIST
LUBRICANT
MONITOR CART ASSEMBLY
MULTIMETER
RAGS
SOURCE CART ASSEMBLY
VACUUM CLEANER
WARM SOAPY WATER

REFERENCES:

33D7-6-160-1
33D7-25-34-1
33DA85-25-1

CONDITIONS:

CONSOLE SHOULD NOT BE OPERATED IF LIGHTNING IS WITHIN 10 MILES

CUES:

SUSPECTED MALFUNCTION; PERIODIC MAINTENANCE; AFTER REPAIR;
FUNCTIONAL CHECK

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CLEAN AIR FILTERS, FANS, ETC.
A EXECUTE AGEST TEST
A EXECUTE INPUT/OUTPUT BUFFER TEST
A EXECUTE LODD MODE TEST
A EXECUTE ON-LINE MODE TEST
A EXECUTE SWITCH AND INDICATOR CHECKOUT
A EXECUTE TAPE READ TEST
A EXECUTE WAVEFORM MONITOR TEST
A INSPECT UTILITY OUTLETS, ANTENNA SHIELD, AND HOIST

ACTIVITIES:

- A LUBRICATE CHAINS, MOTOR, WHEELS, CASTERS, ETC.
- A OPERATE ANTENNA SHIELDS

SKILLS:

- S CONNECT AIR HOSE
- S CONNECT CABLES
- S INSTALL ANTENNA SHIELDS
- S OPERATE CONSOLE TAPE LOADER
- S OPERATE TEST SETS
- S PERFORM VISUAL INSPECTIONS
- S USE COMMON HANDTOOLS
- S USE HOIST TO MANEUVER POD
- S USE MONITOR CART ASSEMBLY
- S USE MULTIMETER TO MEASURE VOLTAGES AND RESISTANCE
- S USE SOURCE CART ASSEMBLY

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY GUIDELINES PRESENTED ON COMPUTER CONSOLE
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Y1324		0	0	1	2	4.50	
451X6B	Y1324		23	11	7	2	4.50	
451X6	Y1324		9	5	4	2	4.50	

USAF JOB INVENTORY TASK STATEMENTS:

Y1324 PERFORM OPERATIONAL TESTS OF AN/ALQ-131 CONTROL BOXES

TASK NUMBER: 61270

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN TEST SETS USED WITH AN/ALQ-131 ECM PODS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AN/ALM-186
AN/ALM-187
AN/ALM-188
AN/ALM-192
CTK
DIGITAL LOGIC PROBE
FREQUENCY COUNTER
MULTIMETER
OSCILLOSCOPE
TORQUE WRENCH

REFERENCES:

33DA85-25-1
33D7-6-160-1
33D7-25-34-1
12P3-2ALQ131-12-2 (CONFIDENTIAL)

CONDITIONS:

CONSOLE SHOULD NOT BE TESTED IF LIGHTING IS WITHIN 10 MILES.

CUES:

POD CHECKOUT OR OPERATIONAL CHECKOUT

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A EXECUTE AGEST

SKILLS:

S OPERATE AN/ALM-186
S OPERATE AN/ALM-187
S OPERATE AN/ALM-188
S OPERATE AN/ALM-192
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE DIGITAL LOGIC PROBE

SKILLS:

- S USE FREQUENCY COUNTER
- S USE MULTIMETER TO CHECK VOLTAGES AND CONTINUITY
- S USE OSCILLOSCOPE
- S USE TORQUE WRENCH

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC GENERATOR THEORY OF OPERATION
- K APPLY COMPUTER PERIPHERAL DEVICE THEORY OF OPERATION
- K APPLY COMPUTER THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY INTERLOCK SWITCH THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY THEORY OF OPERATION OF PUSH-BUTTON SWITCHES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
- K ISOLATE FAULTY AC CIRCUITS
- K ISOLATE FAULTY AC GENERATORS
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY COMPUTER MAJOR UNITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
- K ISOLATE FAULTY DC CIRCUITS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TTLs
- K ISOLATE FAULTY WAVESHAPING CIRCUITS
- K PERFORM BASIC AC CIRCUIT CALCULATIONS
- K PERFORM BASIC DC CIRCUIT CALCULATIONS
- K PERFORM BINARY CONVERSIONS
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC GENERATORS
- K TROUBLESHOOT AC MOTORS
- K TROUBLESHOOT COMPUTER MAJOR UNITS

KNOWLEDGE:

K TROUBLESHOOT COMPUTER MEMORIES
K TROUBLESHOOT COMPUTER PERIPHERAL DEVICES
K TROUBLESHOOT DC CIRCUITS
K TROUBLESHOOT LOGIC COUNTERS
K TROUBLESHOOT LOGIC REGISTERS
K TROUBLESHOOT RELAYS
K TROUBLESHOOT THREE-PHASE TRANSFORMERS
K TROUBLESHOOT TRANSFORMERS
K TROUBLESHOOT TTL LOGIC FAMILIES
K TROUBLESHOOT WAVESHAPING CIRCUITS
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	Y1309		0	0	0	1	6.67	
451X6B	Y1309		0	0	1	1	6.67	
451X6	Y1309		0	0	1	1	6.67	
451X6A	Y1312		0	0	1	2	5.01	
451X6B	Y1312		15	7	7	2	5.01	
451X6	Y1312		6	3	4	2	5.01	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
Y1309 ISOLATE MALFUNCTIONS IN AN/ALM-186 TEST STATIONS
Y1312 ISOLATE MALFUNCTIONS IN AN/ALQ-131 CONTROL BOXES

TASK NUMBER: 61280

TASK STATEMENT:

REPAIR TEST SETS USED WITH AN/ALQ-131 ECM PODS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LEVEL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
LUBRICANT
MULTIMETER
SEALANT
THERMAL JOINT COMPOUND

REFERENCES:

33A1-12-1099-1
33D7-25-34-1
33D7-25-34-4
33D7-6-160-1
33D7-6-160-4
33DA85-25-1
33DA85-25-4

CONDITIONS:

CONSOLE SHOULD NOT BE OPERATED IF LIGHTNING IS WITHIN 10 MILES.

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN HIGH VOLTAGE PROBE
A LUBRICATE CHAINS, MOTORS, WHEELS, COASTERS, ETC.
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE HIGH VOLTAGE PROBES
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SRUs

SKILLS:

S APPLY SEALANT
S APPLY THERMAL JOINT COMPOUND
A CLEAN CONTACTS (F 210)
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE MULTIMETER

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
A ORDER PARTS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	Y1338		0	0	1	1	4.48	
451X6B	Y1338		15	8	6	1	4.48	
451X6	Y1338		6	4	3	1	4.48	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
Y1338 REMOVE OR REPLACE AN/ALQ-131 CONTROL BOX COMPONENTS

**TASKS COMMON TO
"A" AND "B" SHREDS**

TASK NUMBER: 61290

TASK STATEMENT:

PERFORM CENPAC PERIODIC INSPECTIONS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES
CTK
HEAD DEMAGNETIZER
VACUUM GAUGE

REFERENCES:

33D7-12-21-1
33D7-47-12-2
33D7-47-12-8
33D7-61-43-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN CENPAC MTUs (TASK NUMBER: 61330)
A CLEAN CONTACTS (F 210)
A CLEAN HEADS AND TAPE GUIDES
A CLEAN MTU TRANSPORTS (J 445)
A CLEAN TEST STATION BLOWERS AND FILTERS (F 219)
A DEMAGNETIZE MTU HEADS (J 447)
A ORDER PARTS
A PERFORM MTU VACUUM ADJUSTMENTS (J 456)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A TEST AND INSPECT CENPAC PUNCH TAPE READERS (J 470)
A TEST TELETYPEWRITER

SKILLS:

S OPERATE CENPAC
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS

SKILLS:

S USE HEAD DEMAGNETIZER
S USE VACUUM GAUGE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210			59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	J 445		5	11	12	3	3.29	
451X6B	J 445		4	2	2	3	3.29	
451X6	J 445		5	7	7	3	3.29	
451X6A	J 447		0	7	8	2	3.56	
451X6B	J 447		0	0	0	2	3.56	
451X6	J 447		0	3	4	2	3.56	
451X6A	J 456		3	8	10	3	5.33	
451X6B	J 456		0	0	0	3	5.33	
451X6	J 456		2	4	5	3	5.33	
451X6A	J 470		3	6	9	2	4.31	
451X6B	J 470		0	0	0	2	4.31	
451X6	J 470		2	3	5	2	4.31	

SKILLS:

S USE HEAD DEMAGNETIZER
 S USE VACUUM GAUGE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 219		89	88	82	45	2.78	
451X6B	F 219		85	85	78	45	2.78	
451X6	F 219		86	85	80	45	2.78	
451X6A	F 220		84	81	77	46	3.39	
451X6B	F 220		73	79	76	46	3.39	
451X6	F 220		78	79	77	46	3.39	
451X6A	J 445		5	11	12	3	3.29	
451X6B	J 445		4	2	2	3	3.29	
451X6	J 445		5	7	7	3	3.29	
451X6A	J 447		0	7	8	2	3.56	
451X6B	J 447		0	0	0	2	3.56	
451X6	J 447		0	3	4	2	3.56	
451X6A	J 456		3	8	10	3	5.33	
451X6B	J 456		0	0	0	3	5.33	
451X6	J 456		2	4	5	3	5.33	
451X6A	J 470		3	6	9	2	4.31	
451X6B	J 470		0	0	0	2	4.31	
451X6	J 470		2	3	5	2	4.31	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
F 219 INSPECT AND CLEAN TEST STATION BLOWERS AND FILTERS
F 220 INSPECT AND CLEAN TEST STATIONS, SIMULATORS, MOCKUPS, OR
LINE REPLACEABLE UNITS (LRU)
J 445 CLEAN MTU TRANSPORTS
J 447 DEMAGNETIZE MTU HEADS
J 456 PERFORM MTU VACUUM ADJUSTMENTS
J 470 TEST AND INSPECT CENPAC PUNCH TAPE READERS

TASK NUMBER: 61300

TASK STATEMENT: ,

PERFORM CENPAC SOFTWARE MAINTENANCE

TASK NOTES:

SOME OF THE TRACKING TOOLS ARE LOCALLY MANUFACTURED

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CENPAC
CTK
TRACKING TOOLS

REFERENCES:

33D7-12-21-1
33D7-42-1-108-1
33D7-47-12-2
APPLICABLE LOCAL CHECKLIST

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A COPY CENPAC TAPES (J 446)
A LOAD CENPAC BOOTSTRAPS (J 454)
A LOAD EXECUTIVE PROGRAM
A LOAD UTILITY PROGRAMS

SKILLS:

S INPUT MAINTENANCE CONTROL PANEL
S INPUT TELETYPE
S LOAD TAPES
S OPERATE CENPAC
S PREPARE NEW TAPE
S SET UP PUNCH TAPE READER

SKILLS:

S USE COMMON HANDTOOLS
S USE TRACKING TOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 446		3	9	10	2	4.62	
451X6B	J 446		0	0	0	2	4.62	
451X6	J 446		2	5	5	2	4.62	
451X6A	J 454		3	10	14	6	3.72	
451X6B	J 454		4	5	3	6	3.72	
451X6	J 454		3	7	8	6	3.72	

USAF JOB INVENTORY TASK STATEMENTS:

J 446 COPY CENTRAL PROCESSORS AND CONTROLLERS (CENPAC) TAPES
J 454 LOAD CENPAC BOOTSTRAPS

TASK NUMBER: 61310

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN CENPAC TRUs

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CETP (A/E24T-111)

CTK

ESD PROTECTIVE EQUIPMENT

EXTRACTION TOOL

FREQUENCY COUNTER

MULTIMETER

OSCILLOSCOPE

REFERENCES:

APPLICABLE SHOP SYSTEMS TO

12A-1-68-46

12A-1-68-76

12A-1-68-86

33D7-42-108-1

33D7-47-12-2

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PERFORM DIAGNOSTIC TEST

A PERFORM MEMORY CHECKS ON D-84 COMPUTER

SKILLS:

S CLEAR OUT PROGRAM

S CONNECT ADAPTERS AND CABLES

S LOAD TAPE

S OPERATE CENPAC

S PERFORM VISUAL INSPECTION

S USE CETP (A/E24T-111)

SKILLS:

- S USE COMMON HANDTOOLS
- S USE EXTRACTION TOOL
- S USE FREQUENCY COUNTER
- S USE MULTIMETER
- S USE OSCILLOSCOPE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY AC CIRCUIT THEORY OF OPERATION
- K APPLY AC MOTOR THEORY OF OPERATION
- K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
- K APPLY CAPACITOR THEORY OF OPERATION
- K APPLY CENPAC THEORY OF OPERATION
- K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
- K APPLY CMOS THEORY OF OPERATION
- K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
- K APPLY DC CIRCUIT THEORY OF OPERATION
- K APPLY DC MOTOR THEORY OF OPERATION
- K APPLY ELECTROMECHANICAL SWITCH THEORY OF OPERATION
- K APPLY ESD PRECAUTIONS
- K APPLY FLIP-FLOP THEORY OF OPERATION
- K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
- K APPLY INDUCTOR THEORY OF OPERATION
- K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
- K APPLY LED THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
- K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
- K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
- K APPLY MAIN LOGIC GATE THEORY OF OPERATION
- K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY PHOTOSENSITIVE DEVICE THEORY OF OPERATION
- K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
- K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
- K APPLY POWER SUPPLY THEORY OF OPERATION
- K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
- K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
- K APPLY RELAY THEORY OF OPERATION
- K APPLY RESISTOR THEORY OF OPERATION
- K APPLY SCR THEORY OF OPERATION
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY SOLENOID THEORY OF OPERATION
- K APPLY SOLID STATE DIODE THEORY OF OPERATION
- K APPLY TECHNICAL DATA
- K APPLY THEORY OF OPERATION OF COMPUTER MEMORIES
- K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
- K APPLY TRANSFORMER THEORY OF OPERATION
- K APPLY TTL THEORY OF OPERATION
- K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
- K APPLY ZENER DIODE THEORY OF OPERATION

KNOWLEDGE :

- K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
- K ISOLATE FAULTY AC MOTORS
- K ISOLATE FAULTY BIPOLAR JUNCTION TRANSISTORS
- K ISOLATE FAULTY CAPACITORS
- K ISOLATE FAULTY CLAMPER CIRCUITS
- K ISOLATE FAULTY CMOSs
- K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
- K ISOLATE FAULTY COMPUTER MEMORIES
- K ISOLATE FAULTY DC MOTORS
- K ISOLATE FAULTY FLIP-FLOPS
- K ISOLATE FAULTY FREQUENCY SENSITIVE FILTERS
- K ISOLATE FAULTY INDUCTORS
- K ISOLATE FAULTY INTEGRATED CIRCUITS
- K ISOLATE FAULTY LEDs
- K ISOLATE FAULTY LIMITER CIRCUIT DIODES
- K ISOLATE FAULTY LIMITER CIRCUIT ZENER DIODES
- K ISOLATE FAULTY LIMITER TRANSISTOR CIRCUITS
- K ISOLATE FAULTY LOGIC COUNTERS
- K ISOLATE FAULTY MAIN LOGIC GATES
- K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
- K ISOLATE FAULTY PHOTSENSITIVE DEVICES
- K ISOLATE FAULTY POWER SUPPLIES
- K ISOLATE FAULTY POWER SUPPLY FILTERS
- K ISOLATE FAULTY POWER SUPPLY RECTIFIERS
- K ISOLATE FAULTY RCL CIRCUITS
- K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
- K ISOLATE FAULTY RELAYS
- K ISOLATE FAULTY RESISTORS
- K ISOLATE FAULTY SCRs
- K ISOLATE FAULTY SOLENOIDS
- K ISOLATE FAULTY SOLID STATE DIODES
- K ISOLATE FAULTY THREE-PHASE TRANSFORMERS
- K ISOLATE FAULTY TRANSFORMERS
- K ISOLATE FAULTY TTLS
- K ISOLATE FAULTY VOLTAGE REGULATORS
- K ISOLATE FAULTY ZENER DIODES
- K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
- K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
- K TROUBLESHOOT AC CIRCUITS
- K TROUBLESHOOT AC MOTORS
- K TROUBLESHOOT BIPOLAR JUNCTION TRANSISTORS
- K TROUBLESHOOT CLAMPER CIRCUITS
- K TROUBLESHOOT CMOS LOGIC FAMILIES
- K TROUBLESHOOT COMBINATIONAL LOGIC CIRCUITS
- K TROUBLESHOOT COMPUTER MEMORIES
- K TROUBLESHOOT DC CIRCUITS
- K TROUBLESHOOT DC MOTORS
- K TROUBLESHOOT FLIP-FLOPS
- K TROUBLESHOOT FREQUENCY SENSITIVE FILTERS
- K TROUBLESHOOT INDUCTORS
- K TROUBLESHOOT LIMITER CIRCUIT DIODES
- K TROUBLESHOOT LIMITER CIRCUIT TRANSISTORS

KNOWLEDGE:

K TROUBLESHOOT LIMITER CIRCUIT ZENER DIODES
 K TROUBLESHOOT LOGIC COUNTERS
 K TROUBLESHOOT LOGIC REGISTERS
 K TROUBLESHOOT MAIN LOGIC GATES
 K TROUBLESHOOT OPERATIONAL AMPLIFIERS
 K TROUBLESHOOT PHOTSENSITIVE DEVICES
 K TROUBLESHOOT POWER SUPPLY CIRCUITS
 K TROUBLESHOOT POWER SUPPLY FILTERS
 K TROUBLESHOOT POWER SUPPLY RECTIFIERS
 K TROUBLESHOOT RCL CIRCUITS
 K TROUBLESHOOT RELAYS
 K TROUBLESHOOT SOLENOIDS
 K TROUBLESHOOT THREE-PHASE TRANSFORMERS
 K TROUBLESHOOT TRANSFORMERS
 K TROUBLESHOOT TTL LOGIC FAMILIES
 K TROUBLESHOOT VOLTAGE REGULATORS
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K VERIFY SUSPECTED FAULTY SRUS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 232		0	9	15	9	6.35	
451X6B	F 232		8	4	3	9	6.35	
451X6	F 232		3	6	9	9	6.35	
451X6A	F 233		0	4	10	16	6.05	
451X6B	F 233		12	14	23	16	6.05	
451X6	F 233		5	9	16	16	6.05	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	J 449		0	4	8	2	5.75	
451X6B	J 449		0	0	0	2	5.75	
451X6	J 449		0	2	4	2	5.75	
451X6A	J 450		0	6	7	3	6.74	
451X6B	J 450		0	0	0	3	6.74	
451X6	J 450		0	3	4	3	6.74	
451X6A	J 451		3	6	10	2	6.68	
451X6B	J 451		0	0	0	2	6.68	
451X6	J 451		2	3	5	2	6.68	
451X6A	J 452		0	7	9	2	6.74	
451X6B	J 452		0	0	0	2	6.74	
451X6	J 452		0	3	5	2	6.74	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 453		3	9	11	3	6.63	
451X6B	J 453		0	0	0	3	6.63	
451X6	J 453		2	5	6	3	6.63	
451X6A	L 485		0	9	8	2	6.08	
451X6B	L 485		0	0	0	2	6.08	
451X6	L 485		0	5	4	2	6.08	

USAF JOB INVENTORY TASK STATEMENTS:

F 232 ISOLATE MALFUNCTIONS IN MAGNETIC TAPE READERS
F 233 ISOLATE MALFUNCTIONS IN PUNCH TAPE READERS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
J 449 ISOLATE MALFUNCTIONS IN CENPAC TELETYPEWRITERS
J 450 ISOLATE MALFUNCTIONS IN CENPACs USING COMPUTER EXERCISE
TEST PANELS (CTEP)
J 451 ISOLATE MALFUNCTIONS IN CENPACs USING DIAGNOSTIC TAPES AND
SCHEMATICS
J 452 ISOLATE MALFUNCTIONS IN I/O MODULES
J 453 ISOLATE MALFUNCTIONS IN MTUs
L 485 ISOLATE MALFUNCTIONS IN CENPAC MODULE TESTERS

TASK NUMBER: 61320

TASK STATEMENT:

REPAIR CENPAC

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CETP (A/E24T-111)
CLEANING SOLVENTS AND BRUSHES
CTK
ESD PROTECTIVE EQUIPMENT
EXTRACTION TOOL
FREQUENCY COUNTER
MULTIMETER
OSCILLOSCOPE

REFERENCES:

12A-1-68-46
12A-1-68-76
12A-1-68-86

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN CENPAC MTUs (TASK NUMBER: 61330)
A ALIGN CENPAC TRUs
A CLEAN CONTACTS (F 210)
A ORDER PARTS
A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
A REMOVE AND REPLACE SRUs (TASK NUMBER: 61390)
A REMOVE AND REPLACE TRUs (TASK NUMBER: 61380)
A REPAIR WIRING (TASK NUMBER: 61440)
A RESEAT SFUs

SKILLS:

S CONNECT ADAPTERS AND CABLES
 S OPERATE CENPAC
 S OPERATE TEST STATION
 S PERFORM VISUAL INSPECTION
 S USE CETP (A/E24T-111)
 S USE COMMON HANDTOOLS
 S USE EXTRACTION TOOL
 S USE FREQUENCY COUNTER
 S USE MULTIMETER
 S USE OSCILLOSCOPE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	J 439		0	4	8	1	5.42	
451X6B	J 439		0	0	0	1	5.42	
451X6	J 439		0	2	4	1	5.42	
451X6A	J 440		0	3	6	1	5.42	
451X6B	J 440		0	0	0	1	5.42	
451X6	J 440		0	2	3	1	5.42	
451X6A	J 444		0	6	6	2	6.56	
451X6B	J 444		0	0	0	2	6.56	
451X6	J 444		0	3	3	2	6.56	
451X6A	L 484		0	9	8	2	5.76	
451X6B	L 484		0	0	0	2	5.76	
451X6	L 484		0	5	4	2	5.76	

USAF JOB INVENTORY TASK STATEMENTS:

F 210 CLEAN CONTACTS
 J 439 ALIGN COMPUTER POWER SUPPLIES
 J 440 ALIGN INPUT/OUTPUT (I/O) POWER SUPPLIES
 J 444 ALIGN TELETYPEWRITERS
 L 484 ALIGN CENTRAL PROCESSORS AND CONTROLLERS (CENPAC) NETWORK
 MODULE TESTERS

TASK NUMBER: 61330

TASK STATEMENT:

ALIGN CENPAC MTUs

TASK NOTES:

SOME OF THE TRACKING TOOLS ARE LOCALLY MANUFACTURED

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CETP (A/E24T-111)
CTK
FREQUENCY COUNTER
HEAD DEMAGNETIZER
MAGNETIC TAPE
MULTIMETER
OSCILLOSCOPE
TENSION GAUGE
TEST TAPE
TRACKING TOOLS
VACUUM GAUGE

REFERENCES:

33D7-47-12-2
33DA3-53-2
33D7-61-43-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN MTU CAPSTANS (J 441)
A ALIGN MTU CIRCUIT CARDS (J 442)
A ALIGN MTU POWER SUPPLIES (J 443)
A PERFORM DATA ELECTRONICS ADJUSTMENTS
A PERFORM MTU HEADGATE ADJUSTMENTS (J 455)

SKILLS:

S CONNECT ADAPTERS AND CABLES
S DEMAGNETIZE HEADS
S LOAD MAGNETIC TAPE
S OPERATE CENPAC
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE FREQUENCY COUNTER
S USE MULTIMETER TO MEASURE VOLTAGES
S USE OSCILLOSCOPE TO MEASURE VOLTAGES AND PULSE WIDTH
S USE TENSION GAUGE
S USE TEST TAPE
S USE TRACKING TOOLS
S USE VACUUM GAUGE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 441		3	8	10	2	7.01	
451X6B	J 441		0	0	0	2	7.01	
451X6	J 441		2	4	5	2	7.01	
451X6A	J 442		0	6	9	2	6.23	
451X6B	J 442		0	0	0	2	6.23	
451X6	J 442		0	3	5	2	6.23	
451X6A	J 443		0	6	9	2	5.81	
451X6B	J 443		0	0	0	2	5.81	
451X6	J 443		0	3	5	2	5.81	
451X6A	J 455		0	7	8	3	5.54	
451X6B	J 455		0	0	0	3	5.54	
451X6	J 455		0	3	4	3	5.54	

USAF JOB INVENTORY TASK STATEMENTS:

J 441 ALIGN MAGNETIC TAPE UNITS (MTU) CAPSTANS
J 442 ALIGN MTU CIRCUIT CARDS
J 443 ALIGN MTU POWER SUPPLIES
J 455 PERFORM MTU HEADGATE ADJUSTMENTS

TASK NUMBER: 61340

TASK STATEMENT: .

UTILIZE SCHEMATIC DIAGRAMS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

KNOWLEDGE:

K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY AC GENERATOR THEORY OF OPERATION
K APPLY AC MOTOR THEORY OF OPERATION
K APPLY ALTERNATOR THEORY OF OPERATION
K APPLY AM MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY AM RECEIVER THEORY OF OPERATION
K APPLY ANTENNA THEORY OF OPERATION
K APPLY APPROXIMATION A/D CONVERTER THEORY OF OPERATION
K APPLY BIPOLAR JUNCTION TRANSISTOR THEORY OF OPERATION
K APPLY CAPACITOR THEORY OF OPERATION
K APPLY CHOPPER (SYNCHROUS VIBRATOR) THEORY OF OPERATION
K APPLY CLAMPER CIRCUIT THEORY OF OPERATION
K APPLY CMOS THEORY OF OPERATION
K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
K APPLY CRT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY DC GENERATOR THEORY OF OPERATION
K APPLY DC MOTOR THEORY OF OPERATION
K APPLY DISPLAY TUBE THEORY OF OPERATION
K APPLY ELECTRON TUBE AMPLIFIER THEORY OF OPERATION
K APPLY ELECTRON TUBE THEORY OF OPERATION
K APPLY FLIP-FLOP THEORY OF OPERATION
K APPLY FM RECEIVER THEORY OF OPERATION
K APPLY FM TRANSMITTER THEORY OF OPERATION
K APPLY FREQUENCY SENSITIVE FILTER THEORY OF OPERATION
K APPLY INDUCTOR THEORY OF OPERATION
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY JFET THEORY OF OPERATION

KNOWLEDGE :

K APPLY LCD THEORY OF OPERATION
K APPLY LED THEORY OF OPERATION
K APPLY LIMITER CIRCUIT DIODE THEORY OF OPERATION
K APPLY LIMITER CIRCUIT TRANSISTOR THEORY OF OPERATION
K APPLY LIMITER CIRCUIT ZENER DIODE THEORY OF OPERATION
K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION
K APPLY MAGNETIC AMPLIFIER THEORY OF OPERATION
K APPLY MAIN LOGIC GATE THEORY OF OPERATION
K APPLY MICROPROCESSOR THEORY OF OPERATION
K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
K APPLY MOSFET THEORY OF OPERATION
K APPLY MULTIVIBRATOR CIRCUIT THEORY OF OPERATION
K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
K APPLY OSCILLATOR CIRCUIT THEORY OF OPERATION
K APPLY PHOTSENSITIVE DEVICE THEORY OF OPERATION
K APPLY POWER SUPPLY FILTER THEORY OF OPERATION
K APPLY POWER SUPPLY RECTIFIER THEORY OF OPERATION
K APPLY POWER SUPPLY THEORY OF OPERATION
K APPLY PULSE MODULATION RECEIVER THEORY OF OPERATION
K APPLY PULSE MODULATION TRANSMITTER THEORY OF OPERATION
K APPLY RAMP A/D CONVERTER THEORY OF OPERATION
K APPLY RCL CIRCUIT THEORY OF BASIC OPERATION
K APPLY RCL CIRCUIT THEORY OF RESONANT OPERATION
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY RESONANT CAVITY THEORY OF OPERATION
K APPLY SCR THEORY OF OPERATION
K APPLY SINGLE SIDEBAND TRANSMITTER THEORY OF OPERATION
K APPLY SOLENOID THEORY OF OPERATION
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY SPEAKER THEORY OF OPERATION
K APPLY SYNCHRO-SERVO THEORY OF OPERATION
K APPLY TECHNICAL DATA
K APPLY THREE-PHASE TRANSFORMER THEORY OF OPERATION
K APPLY TRANSDUCER THEORY OF OPERATION
K APPLY TRANSFORMER THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER COUPLING CIRCUIT THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER CIRCUIT THEORY OF OPERATION
K APPLY TRANSISTOR AMPLIFIER STABILIZATION CIRCUIT THEORY OF OPERATION
K APPLY TRANSMISSION LINE THEORY OF OPERATION
K APPLY TTL THEORY OF OPERATION
K APPLY TUNNEL DIODE THEORY OF OPERATION
K APPLY UJT THEORY OF OPERATION
K APPLY VOLTAGE REGULATOR THEORY OF OPERATION
K APPLY WAVEGUIDE THEORY OF OPERATION
K APPLY WAVESHAPING CIRCUIT THEORY OF OPERATION
K APPLY WEIGHTED RESISTOR D/A CONVERTER THEORY OF OPERATION
K APPLY ZENER DIODE THEORY OF OPERATION
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)

TASK NUMBER: 61350

TASK STATEMENT:

TRACE SIGNALS THROUGH INTERCONNECTS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DURING FAULT ISOLATION

STANDARDS:

IAW REFERENCES

KNOWLEDGE:

- K APPLY TECHNICAL DATA
- K LOCATE PINS IN CANNON PLUGS
- K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

TASK NUMBER: 61360

TASK STATEMENT:

DETERMINE WHETHER MALFUNCTION IS IN TEST STATION, LRU, OR ADAPTER

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MEASUREMENT DEVICE (AS APPROPRIATE)
SHOP STANDARD (IF AVAILABLE)

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CHECK FOR CONTINUITY
A CHECK PHASE RELATIONSHIPS
A MEASURE RF OUTPUTS .
A MEASURE VOLTAGES
A MEASURE WAVEFORM CHARACTERISTICS

SKILLS:

S INSTALL SHOP STANDARD
S USE COMMON HANDTOOLS
S USE MEASUREMENT DEVICE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY ESD PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
K VERIFY SUSPECTED FAULTY EQUIPMENT

TASK NUMBER: 61370

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN TEST STATION THROUGH INTERCONNECTS OF AN
INSTALLED LRU (F 236)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ANGLE POSITION INDICATOR
ATSCS TEST SET
COMPUTER
CTK
DIGITAL WORD GENERATOR
DTS
ESD PROTECTIVE EQUIPMENT
FREQUENCY COUNTER
GATS
IEEE BUS MONITOR/ANALYZER
LOGIC PROBE
MICROWAVE PULSE COUNTER
MULTIFUNCTION UNIT
MULTIMETER
OSCILLOSCOPE
PHASE ANGLE METER
POWER METER
POWER SUPPLY
PROBE
PULSE GENERATOR
PULSE/FUNCTION GENERATOR
RF ID
RF POWER METER
SCALER NETWORK ANALYZER
SIGNATURE MULTIMETER
SPECTRUM ANALYZER
SWITCHING ID
SWR METER
SYNCHRO BRIDGE
SYNCHRO STANDARD
SYNTHESIZED SWEEPER
TEST STATION
TIMER COUNTER
TWT
TWT AMPLIFIER
VARIAC

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE SHOP SYSTEMS TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

- S LOAD COMPUTER PROGRAMS
- S OPERATE TEST STATION
- S PERFORM GATS SELF-TEST
- S PERFORM PULSE GENERATOR SELF-TEST
- S USE ANGLE POSITION INDICATOR TO VERIFY SYNCHRO ALIGNMENTS
- S USE ATSCS TEST SET TO ENSURE CALIBRATION OF ENTIRE TEST STATION
- S USE COMMON HANDTOOLS
- S USE COMPUTER TO VERIFY MEASUREMENT AGAINST UPPER AND LOWER LIMITS
- S USE DIGITAL WORD GENERATOR FOR CONTINUITY TEST AND DIGITAL WRAP AROUND TEST
- S USE DTS TO PERFORM DTS, SELF-TEST
- S USE FREQUENCY COUNTER TO VERIFY RISE/FALL/PULSE/RF SIGNALS
- S USE IEEE BUS MONITOR/ANALYZER TO VERIFY IEEE LINES
- S USE LOGIC PROBES TO VERIFY PATH CONTINUITY
- S USE MICROWAVE PULSE COUNTER TO VERIFY TWT AND SYNTHESIZED SWEEPER
- S USE MULTIFUNCTION UNIT TO PRODUCE AND MEASURE VIDEO AND PULSE DC SIGNALS
- S USE MULTIMETER TO VERIFY POWER SUPPLY AND PATH CONTINUITY
- S USE OSCILLOSCOPE TO VERIFY VIDEO AND RF SIGNALS
- S USE PHASE ANGLE METER TO VERIFY AC POWER SUPPLY
- S USE POWER METER TO VERIFY RF SIGNALS
- S USE POWER SUPPLY TO APPLY POWER TO TRUs FOR SELF-VERIFICATION
- S USE PROBE WITH POWER METER
- S USE PULSE/FUNCTION GENERATOR FOR SELF-VERIFICATION
- S USE RF ID TO VERIFY VARIOUS RF PATHS
- S USE RF POWER METER TO VERIFY RF SIGNALS
- S USE SCALER NETWORK ANALYZER FOR SELF-VERIFICATION
- S USE SIGNATURE MULTIMETER TO VERIFY IEEE LINES
- S USE SPECTRUM ANALYZER TO VERIFY RF GENERATION DEVICES
- S USE SWITCHING ID TO SWITCH SIGNALS THROUGHOUT PATHS IN TEST STATION
- S USE SWR METER TO VERIFY TWT AMPLIFIER

SKILLS:

S USE SYNCHRO BRIDGE TO VERIFY GATS
 S USE SYNCHRO STANDARD TO VERIFY GATS
 S USE SYNTHESIZED SWEEPER TO VERIFY RF ID, RF POWER METERS
 S USE TIMER COUNTER TO VERIFY RISE/FALL/PULSE/RF SIGNALS
 S USE TWT AMPLIFIER FOR SELF-VERIFICATION
 S USE TWT FOR SELF-VERIFICATION
 S USE VARIAC TO ADJUST AC VOLTAGE

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY ESD PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K ISOLATE FAULTY AC CIRCUITS
 K ISOLATE FAULTY AM TRANSMITTERS
 K ISOLATE FAULTY COMPUTER MAJOR UNITS
 K ISOLATE FAULTY COMPUTER PERIPHERAL DEVICES
 K ISOLATE FAULTY COMPUTER SUBASSEMBLIES
 K ISOLATE FAULTY DC CIRCUITS
 K ISOLATE FAULTY DC GENERATORS
 K ISOLATE FAULTY ELECTRON TUBE AMPLIFIERS
 K ISOLATE FAULTY FM MODULATION TRANSMITTERS
 K ISOLATE FAULTY MICROPROCESSORS
 K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
 K ISOLATE FAULTY POWER SUPPLIES
 K ISOLATE FAULTY PULSE MODULATION TRANSMITTERS
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY RESISTORS
 K ISOLATE FAULTY SINGLE SIDEBAND TRANSMITTERS
 K ISOLATE FAULTY WAVEGUIDES
 K PERFORM HEXADECIMAL CONVERSIONS
 K PERFORM OCTAL CONVERSIONS
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K TROUBLESHOOT AC CIRCUITS
 K TROUBLESHOOT DC CIRCUITS
 K USE COMPUTER PROGRAMMING LANGUAGE
 K USE METRIC NOTATION
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)
 K WRITE OR DEBUG COMPUTER PROGRAMS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 236		55	63	68	36	6.54	
451X6B	F 236		27	52	49	36	6.54	
451X6	F 236		45	58	59	36	6.54	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 236 ISOLATE MALFUNCTIONS IN TEST STATIONS THROUGH INTERCONNECTS
OF AN INSTALLED LRU

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 61380

TASK STATEMENT:

REMOVE AND REPLACE TRUs (F 275)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK

HOIST

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CONDITIONS:

SOME TRUs REQUIRE TWO PERSON LIFT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A REMOVE POWER

A REMOVE AND REPLACE HARDWARE

A REMOVE GROUNDSTRAPS

SKILLS:

S USE COMMON HANDTOOLS

S USE HOIST TO LIFT TRU (IF REQUIRED)

KNOWLEDGE:

K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 261		32	47	52	34	4.01	
451X6B	F 261		62	59	66	34	4.01	
451X6	F 261		43	52	59	34	4.01	
451X6A	F 262		37	51	60	38	3.95	
451X6B	F 262		62	65	72	38	3.95	
451X6	F 262		46	57	66	38	3.95	
451X6A	F 275		66	64	62	41	2.99	
451X6B	F 275		31	47	51	41	2.99	
451X6	F 275		52	56	57	41	2.99	
451X6A	G 307		39	53	51	20	2.67	
451X6B	G 307		4	11	13	20	2.67	
451X6	G 307		25	32	33	20	2.67	
451X6A	G 308		34	48	44	18	2.88	
451X6B	G 308		0	7	7	18	2.88	
451X6	G 308		20	28	26	18	2.88	
451X6A	G 309		34	49	47	20	2.98	
451X6B	G 309		8	14	15	20	2.98	
451X6	G 309		23	32	32	20	2.98	
451X6A	G 310		32	46	46	19	3.10	
451X6B	G 310		0	12	10	19	3.10	
451X6	G 310		18	29	29	19	3.10	
451X6A	G 311		24	32	29	16	2.87	
451X6B	G 311		8	16	16	16	2.87	
451X6	G 311		17	24	23	16	2.87	
451X6A	G 312		11	16	20	16	3.08	
451X6B	G 312		8	19	18	16	3.08	
451X6	G 312		9	17	19	16	3.08	
451X6A	G 313		37	49	46	18	2.86	
451X6B	G 313		12	14	11	18	2.86	
451X6	G 313		26	32	29	18	2.86	
451X6A	G 314		37	56	57	22	3.54	
451X6B	G 314		12	15	15	22	3.54	
451X6	G 314		26	36	37	22	3.54	
451X6A	G 315		18	29	26	8	3.12	
451X6B	G 315		0	1	1	8	3.12	
451X6	G 315		11	15	14	8	3.12	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	G 316		13	27	26	7	3.20	
451X6B	G 316		0	1	1	7	3.20	
451X6	G 316		8	14	14	7	3.20	
451X6A	G 317		37	49	47	18	2.95	
451X6B	G 317		12	12	8	18	2.95	
451X6	G 317		26	31	29	18	2.95	
451X6A	G 318		42	57	57	22	3.58	
451X6B	G 318		12	13	12	22	3.58	
451X6	G 318		29	35	35	22	3.58	
451X6A	G 319		24	34	31	8	3.28	
451X6B	G 319		4	5	5	8	3.28	
451X6	G 319		15	20	19	8	3.28	
451X6A	G 320		21	32	33	6	3.31	
451X6B	G 320		0	1	1	6	3.31	
451X6	G 320		12	17	18	6	3.31	
451X6A	G 321		16	28	28	6	2.88	
451X6B	G 321		0	0	1	6	2.88	
451X6	G 321		9	14	15	6	2.88	
451X6A	H 399		8	7	8	5	4.16	
451X6B	H 399		0	1	2	5	4.16	
451X6	H 399		5	4	5	5	4.16	
451X6A	H 402		11	7	6	3	4.18	
451X6B	H 402		0	1	1	3	4.18	
451X6	H 402		6	4	4	3	4.18	
451X6A	H 405		11	7	6	4	4.32	
451X6B	H 405		0	1	2	4	4.32	
451X6	H 405		6	4	4	4	4.32	
451X6A	H 406		3	2	6	2	3.86	
451X6B	H 406		0	0	1	2	3.86	
451X6	H 406		2	1	4	2	3.86	
451X6A	H 409		11	13	8	4	4.24	
451X6B	H 409		4	4	2	4	4.24	
451X6	H 409		8	8	5	4	4.24	
451X6A	H 410		8	4	3	4	5.91	
451X6B	H 410		0	0	0	4	5.91	
451X6	H 410		5	2	2	4	5.91	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 459		3	3	7	2	3.86	
451X6B	J 459		0	0	0	2	3.86	
451X6	J 459		2	2	4	2	3.86	
451X6A	J 462		3	4	9	3	3.34	
451X6B	J 462		0	0	0	3	3.34	
451X6	J 462		2	2	5	3	3.34	
451X6A	J 463		3	7	10	2	3.56	
451X6B	J 463		0	0	0	2	3.56	
451X6	J 463		2	3	5	2	3.56	
451X6A	K 477		3	4	7	1	4.15	
451X6B	K 477		0	0	0	1	4.15	
451X6	K 477		2	2	4	1	4.15	
451X6A	L 492		0	7	6	2	4.20	
451X6B	L 492		0	0	0	2	4.20	
451X6	L 492		0	3	3	2	4.20	
451X6A	L 495		5	6	4	1	3.51	
451X6B	L 495		0	0	0	1	3.51	
451X6	L 495		3	3	2	1	3.51	
451X6A	L 498		0	7	6	2	3.62	
451X6B	L 498		0	0	0	2	3.62	
451X6	L 498		0	3	3	2	3.62	
451X6A	L 501		5	4	5	2	3.80	
451X6B	L 501		0	0	0	2	3.80	
451X6	L 501		3	2	3	2	3.80	
451X6A	M 513		11	10	7	1	3.52	
451X6B	M 513		0	0	1	1	3.52	
451X6	M 513		8	6	4	1	3.52	
451X6A	M 516		3	3	4	1	3.57	
451X6B	M 516		0	0	0	1	3.57	
451X6	M 516		2	2	2	1	3.57	
451X6A	M 519		5	3	2	1	3.43	
451X6B	M 519		0	0	0	1	3.43	
451X6	M 519		3	2	1	1	3.43	
451X6A	N 553		0	1	0	0	4.91	
451X6B	N 553		0	0	0	0	4.91	
451X6	N 553		0	1	0	0	4.91	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	N 556		3	3	1	0	4.18	
451X6B	N 556		0	0	0	0	4.18	
451X6	N 556		2	2	0	0	4.18	
451X6A	N 559		8	12	14	3	3.50	
451X6B	N 559		0	0	0	3	3.50	
451X6	N 559		5	6	7	3	3.50	
451X6A	P 589		11	12	14	3	3.62	
451X6B	P 589		0	0	0	3	3.62	
451X6	P 589		6	6	7	3	3.62	
451X6A	Q 599		0	1	2	1	3.81	
451X6B	Q 599		0	0	0	1	3.81	
451X6	Q 599		0	1	1	1	3.81	
451X6A	Q 602		3	3	6	1	3.86	
451X6B	Q 602		0	0	0	1	3.86	
451X6	Q 602		2	2	3	1	3.86	
451X6A	R 609		5	8	10	4	3.76	
451X6B	R 609		0	0	0	4	3.76	
451X6	R 609		3	4	5	4	3.76	
451X6A	T 868		3	1	2	1	4.17	
451X6B	T 868		0	0	0	1	4.17	
451X6	T 868		2	1	1	1	4.17	
451X6A	U1024		0	0	0	9	3.90	
451X6B	U1024		8	14	18	9	3.90	
451X6	U1024		3	7	9	9	3.90	
451X6A	V1132		0	0	0	3	3.74	
451X6B	V1132		8	9	10	3	3.74	
451X6	V1132		3	5	5	3	3.74	
451X6A	V1136		0	0	0	0	4.12	
451X6B	V1136		0	0	0	0	4.12	
451X6	V1136		0	0	0	0	4.12	
451X6A	V1139		0	0	0	0	3.92	
451X6B	V1139		0	1	1	0	3.92	
451X6	V1139		0	1	0	0	3.92	
451X6A	X1294		0	0	0	6	4.58	
451X6B	X1294		0	9	9	6	4.58	
451X6	X1294		0	5	4	6	4.58	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	Z1366		0	0	0	2	6.05	
451X6B	Z1366		0	9	12	2	6.05	
451X6	Z1366		0	5	6	2	6.05	

USAF JOB INVENTORY TASK STATEMENTS:

F 261 REMOVE OR REPLACE HIGH VOLTAGE POWER SUPPLIES
 F 262 REMOVE OR REPLACE LOW VOLTAGE POWER SUPPLIES
 F 275 REMOVE OR REPLACE TESTER REPLACEABLE UNITS (TRU)
 G 307 REMOVE OR REPLACE COUNTER TIMERS
 G 308 REMOVE OR REPLACE DATACs
 G 309 REMOVE OR REPLACE LOGIC POWER SUPPLIES
 G 310 REMOVE OR REPLACE MICROLOGIC POWER SUPPLIES
 G 311 REMOVE OR REPLACE PPGs
 G 312 REMOVE OR REPLACE RF GENERATORS
 G 313 REMOVE OR REPLACE STIMULUS CONTROLLERS
 G 314 REMOVE OR REPLACE STIMULUS RELAYS
 G 315 REMOVE OR REPLACE SYNCHRO BRIDGES
 G 316 REMOVE OR REPLACE SYNCHRO STANDARDS
 G 317 REMOVE OR REPLACE TEST POINT CONTROLLERS
 G 318 REMOVE OR REPLACE TEST POINT RELAYS
 G 319 REMOVE OR REPLACE TRANSFORMER/CONVERTERS
 G 320 REMOVE OR REPLACE TRYGON POWER SUPPLIES
 G 321 REMOVE OR REPLACE TRYGON POWER SUPPLY CONTROLLERS
 H 399 REMOVE OR REPLACE AIS/R COMPUTER TEST STATION TRUs
 H 402 REMOVE OR REPLACE AIS/R EW TEST STATION TRUs
 H 405 REMOVE OR REPLACE AIS/R VIDEO TEST STATION TRUs
 H 406 REMOVE OR REPLACE ATSCS TRUs
 H 409 REMOVE OR REPLACE RF TEST STATION TRUs
 H 410 REMOVE OR REPLACE VIRGINIA PATCH PANELS
 J 459 REMOVE OR REPLACE CENPAC PUNCH TAPE READERS
 J 462 REMOVE OR REPLACE CENPAC TELETYPEWRITERS
 J 463 REMOVE OR REPLACE COMPUTER POWER SUPPLIES
 K 477 REMOVE OR REPLACE ATTITUDE AND RATE TEST STATION TRUs
 L 492 REMOVE OR REPLACE CENPAC NETWORK MODULE TESTERS
 L 495 REMOVE OR REPLACE ELECTRONIC SYSTEMS TEST STATION TRUs
 L 498 REMOVE OR REPLACE INDICATORS AND MODULES TEST STATION TRUs
 L 501 REMOVE OR REPLACE INDICATORS AND SENSORS TEST STATION TRUs
 M 513 REMOVE OR REPLACE COMPUTER (6803) TEST STATION TRUs
 M 516 REMOVE OR REPLACE CONVERTER AND FLIGHT CONTROLS TEST STATION TRUs
 M 519 REMOVE OR REPLACE NAVIGATION AND FLIGHT CONTROLS TEST STATION TRUs
 N 553 REMOVE OR REPLACE F-111D RADAR DTS TEST STATION TRUs
 N 556 REMOVE OR REPLACE RADAR ALTIMETER (6836) TEST STATION TRUs
 N 559 REMOVE OR REPLACE VIDEO (6815, 6875 AND 6885) TEST STATION TRUs
 P 589 REMOVE OR REPLACE RECEIVER-TRANSMITTER-MODULATOR TEST STATION TRUs

USAF JOB INVENTORY TASK STATEMENTS:

Q 599 REMOVE OR REPLACE INDICATORS AND SERVOS (6895) TEST STATION TRUs
Q 602 REMOVE OR REPLACE SERVOS AND INDICATORS (6825) TEST STATION TRUs
R 609 REMOVE OR REPLACE DIGITAL NAVIGATION AND WEAPONS DELIVERY (6863) TEST STATION TRUs
T 868 REMOVE OR REPLACE DISPLAYS TEST STATION TRUs
U1024 REMOVE OR REPLACE PROM PROGRAMMER SRUs OR COMPONENTS
V1132 REMOVE OR REPLACE CADc (1803A1) TEST STATION TRUs
V1136 REMOVE OR REPLACE MISSION AND TRAFFIC CONTROL (6849) TEST STATION TRUs
V1139 REMOVE OR REPLACE MISSION AND TRAFFIC CONTROL (6879) TEST STATION TRUs
X1294 REMOVE OR REPLACE PEN AIDS TEST STATION HIGH VOLTAGE/INTERMEDIATE VOLTAGE DIVIDERS
Z1366 REMOVE OR REPLACE AN/ALM-204 TRUs OR SRUs

TASK NUMBER: 61390

TASK STATEMENT:

REMOVE AND REPLACE SRUs (F 267)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CIRCUIT CARD EXTRACTOR
CTK
ESD PROTECTIVE EQUIPMENT
SOLDERING STATION
TORQUE WRENCHES

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A REMOVE POWER
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)
- A REMOVE/INSTALL CONNECTORS

SKILLS:

- S SOLDER OR DESOLDER TERMINAL CONNECTIONS
- S USE CIRCUIT CARD EXTRACTOR
- S USE COMMON HANDTOOLS
- S USE TORQUE WRENCH TO SECURE HARDWARE

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY ESD PRECAUTIONS
- K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 266		0	3	8	4	4.82	
451X6B	F 266		4	4	7	4	4.82	
451X6	F 266		2	3	8	4	4.82	
451X6A	F 267		63	71	74	44	3.78	
451X6B	F 267		42	55	65	44	3.78	
451X6	F 267		55	63	70	44	3.78	
451X6A	H 398		8	8	9	5	4.42	
451X6B	H 398		0	1	2	5	4.42	
451X6	H 398		5	5	5	5	4.42	
451X6A	H 401		8	6	5	3	4.40	
451X6B	H 401		0	1	1	3	4.40	
451X6	H 401		5	3	3	3	4.40	
451X6A	H 404		11	7	6	5	4.48	
451X6B	H 404		0	1	2	5	4.48	
451X6	H 404		6	4	4	5	4.48	
451X6A	H 408		11	13	8	4	4.41	
451X6B	H 408		4	4	2	4	4.41	
451X6	H 408		8	8	5	4	4.41	
451X6A	J 458		0	4	6	2	4.21	
451X6B	J 458		0	0	0	2	4.21	
451X6	J 458		0	2	3	2	4.21	
451X6A	J 460		0	6	9	3	4.29	
451X6B	J 460		0	0	0	3	4.29	
451X6	J 460		0	3	5	3	4.29	
451X6A	J 461		3	7	8	2	4.17	
451X6B	J 461		0	0	0	2	4.17	
451X6	J 461		2	3	4	2	4.17	
451X6A	J 464		3	7	8	2	4.87	
451X6B	J 464		0	0	0	2	4.87	
451X6	J 464		2	3	4	2	4.87	
451X6A	J 465		3	7	9	2	3.42	
451X6B	J 465		0	0	0	2	3.42	
451X6	J 465		2	3	5	2	3.42	
451X6A	J 467		3	6	9	2	5.14	
451X6B	J 467		0	0	0	2	5.14	
451X6	J 467		2	3	5	2	5.14	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 469		0	4	9	2	4.19	
451X6B	J 469		0	0	0	2	4.19	
451X6	J 469		0	2	5	2	4.19	
451X6A	K 476		3	4	7	1	4.41	
451X6B	K 476		0	0	0	1	4.41	
451X6	K 476		2	2	4	1	4.41	
451X6A	L 494		5	4	4	2	4.08	
451X6B	L 494		0	0	0	2	4.08	
451X6	L 494		3	2	2	2	4.08	
451X6A	L 497		0	7	8	2	4.04	
451X6B	L 497		0	0	0	2	4.04	
451X6	L 497		0	3	4	2	4.04	
451X6A	L 500		3	3	5	3	4.32	
451X6B	L 500		0	0	0	3	4.32	
451X6	L 500		2	2	3	3	4.32	
451X6A	M 512		8	9	7	1	3.89	
451X6B	M 512		0	0	1	1	3.89	
451X6	M 512		5	5	4	1	3.89	
451X6A	M 515		3	2	4	1	3.94	
451X6B	M 515		0	0	0	1	3.94	
451X6	M 515		2	1	2	1	3.94	
451X6A	M 518		3	2	2	1	4.03	
451X6B	M 518		0	0	0	1	4.03	
451X6	M 518		2	1	1	1	4.03	
451X6A	N 552		0	1	0	0	4.80	
451X6B	N 552		0	0	0	0	4.80	
451X6	N 552		0	1	0	0	4.80	
451X6A	N 555		3	3	1	1	4.40	
451X6B	N 555		0	0	0	1	4.40	
451X6	N 555		2	2	0	1	4.40	
451X6A	N 558		5	10	14	4	4.37	
451X6B	N 558		0	0	0	4	4.37	
451X6	N 558		3	5	8	4	4.37	
451X6A	O 572		0	0	1	0	4.35	
451X6B	O 572		0	0	0	0	4.35	
451X6	O 572		0	0	0	0	4.35	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	P 584		0	1	2	1	4.58	
451X6B	P 584		0	0	0	1	4.58	
451X6	P 584		0	1	1	1	4.58	
451X6A	P 585		0	1	2	1	4.64	
451X6B	P 585		0	0	0	1	4.64	
451X6	P 585		0	1	1	1	4.64	
451X6A	P 586		0	1	2	0	4.68	
451X6B	P 586		0	0	0	0	4.68	
451X6	P 586		0	1	1	0	4.68	
451X6A	P 588		11	12	14	4	4.16	
451X6B	P 588		0	0	0	4	4.16	
451X6	P 588		6	6	8	4	4.16	
451X6A	Q 598		0	0	1	0	4.38	
451X6B	Q 598		0	0	0	0	4.38	
451X6	Q 598		0	0	1	0	4.38	
451X6A	Q 601		3	3	7	1	4.14	
451X6B	Q 601		0	0	0	1	4.14	
451X6	Q 601		2	2	4	1	4.14	
451X6A	R 608		5	8	10	4	4.18	
451X6B	R 608		0	0	0	4	4.18	
451X6	R 608		3	4	5	4	4.18	
451X6A	T 867		3	1	2	1	4.69	
451X6B	T 867		0	0	0	1	4.69	
451X6	T 867		2	1	1	1	4.69	
451X6A	T 875		0	0	0	0	4.43	
451X6B	T 875		0	0	0	0	4.43	
451X6	T 875		0	0	0	0	4.43	
451X6A	T 876		0	0	0	0	4.09	
451X6B	T 876		0	0	0	0	4.09	
451X6	T 876		0	0	0	0	4.09	
451X6A	V1131		0	0	0	4	4.21	
451X6B	V1131		8	9	10	4	4.21	
451X6	V1131		3	5	5	4	4.21	
451X6A	V1133		0	0	0	2	4.18	
451X6B	V1133		8	14	10	2	4.18	
451X6	V1133		3	7	5	2	4.18	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1135		0	0	0	0	4.24	
451X6B	V1135		0	0	0	0	4.24	
451X6	V1135		0	0	0	0	4.24	
451X6A	V1138		0	0	0	0	4.16	
451X6B	V1138		0	0	0	0	4.16	
451X6	V1138		0	0	0	0	4.16	
451X6A	V1142		0	0	0	3	4.41	
451X6B	V1142		4	5	6	3	4.41	
451X6	V1142		2	2	3	3	4.41	
451X6A	V1143		0	0	0	0	4.48	
451X6B	V1143		0	0	0	0	4.48	
451X6	V1143		0	0	0	0	4.48	
451X6A	V1144		0	0	0	3	4.41	
451X6B	V1144		4	6	6	3	4.41	
451X6	V1144		2	3	3	3	4.41	
451X6A	V1146		0	0	0	3	4.12	
451X6B	V1146		8	6	7	3	4.12	
451X6	V1146		3	3	3	3	4.12	
451X6A	V1147		0	0	0	2	4.61	
451X6B	V1147		8	8	6	2	4.61	
451X6	V1147		3	4	3	2	4.61	
451X6A	V1148		0	0	0	0	4.46	
451X6B	V1148		0	0	1	0	4.46	
451X6	V1148		0	0	0	0	4.46	
451X6A	V1149		0	0	0	3	4.47	
451X6B	V1149		8	6	7	3	4.47	
451X6	V1149		3	3	3	3	4.47	
451X6A	V1150		0	0	0	0	4.92	
451X6B	V1150		4	1	1	0	4.92	
451X6	V1150		2	1	0	0	4.92	
451X6A	V1151		0	0	0	3	4.60	
451X6B	V1151		4	5	7	3	4.60	
451X6	V1151		2	2	4	3	4.60	
451X6A	V1152		0	0	0	3	4.71	
451X6B	V1152		8	8	7	3	4.71	
451X6	V1152		3	4	4	3	4.71	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	X1291		0	0	0	9	4.80	
451X6B	X1291		0	13	17	9	4.80	
451X6	X1291		0	6	9	9	4.80	
451X6A	X1292		0	0	0	9	4.63	
451X6B	X1292		8	16	17	9	4.63	
451X6	X1292		3	8	8	9	4.63	
451X6A	X1293		0	0	0	6	4.53	
451X6B	X1293		4	14	10	6	4.53	
451X6	X1293		2	7	5	6	4.53	
451X6A	X1295		0	0	0	6	5.09	
451X6B	X1295		4	13	9	6	5.09	
451X6	X1295		2	6	4	6	5.09	

USAF JOB INVENTORY TASK STATEMENTS:

F 266 REMOVE OR REPLACE PRINTER COMPONENTS
 F 267 REMOVE OR REPLACE SHOP REPLACEABLE UNITS (SRU)
 H 398 REMOVE OR REPLACE AIS/R COMPUTER TEST STATION SRUs
 H 401 REMOVE OR REPLACE AIS/R EW TEST STATION SRUs
 H 404 REMOVE OR REPLACE AIS/R VIDEO TEST STATION SRUs
 H 408 REMOVE OR REPLACE RF TEST STATION SRUs
 J 458 REMOVE OR REPLACE CENPAC PUNCH TAPE READER SRUs
 J 460 REMOVE OR REPLACE CENPAC SRUs
 J 461 REMOVE OR REPLACE CENPAC SRUs, OTHER THAN MTU OR PUNCH TAPE READER SRUs
 J 464 REMOVE OR REPLACE I/O COMPUTER POWER SUPPLY COMPONENTS
 J 465 REMOVE OR REPLACE I/O MODULES
 J 467 REMOVE OR REPLACE MTU CAPSTAN BELTS
 J 469 REMOVE OR REPLACE MTU SRUs
 K 476 REMOVE OR REPLACE ATTITUDE AND RATE TEST STATION TRU SRUs
 L 494 REMOVE OR REPLACE ELECTRONIC SYSTEMS TEST STATION SRUs
 L 497 REMOVE OR REPLACE INDICATORS AND MODULES TEST STATION SRUs
 L 500 REMOVE OR REPLACE INDICATORS AND SENSORS TEST STATION SRUs
 M 512 REMOVE OR REPLACE COMPUTER (6803) TEST STATION SRUs
 M 515 REMOVE OR REPLACE CONVERTER AND FLIGHT CONTROLS TEST STATION SRUs
 M 518 REMOVE OR REPLACE NAVIGATION AND FLIGHT CONTROLS TEST STATION SRUs
 N 552 REMOVE OR REPLACE F-111D RADAR DTS TEST STATION SRUs
 N 555 REMOVE OR REPLACE RADAR ALTIMETER (6836) TEST STATION SRUs
 N 558 REMOVE OR REPLACE VIDEO (6815, 6875 AND 6885) TEST STATION SRUs
 O 572 REMOVE OR REPLACE DOPPLER RADAR TEST STATION SRUs
 P 584 REMOVE OR REPLACE FLUID PRESSURIZATION (65AN) TEST STATION SRU COMPONENTS
 P 585 REMOVE OR REPLACE FLUID PRESSURIZATION (65AN) TEST STATION SRUs

USAF JOB INVENTORY TASK STATEMENTS:

P 586 REMOVE OR REPLACE FLUID PRESSURIZATION (65AN) TEST STATION TRUs

P 588 REMOVE OR REPLACE RECEIVER-TRANSMITTER-MODULATOR TEST STATION SRUs

Q 598 REMOVE OR REPLACE INDICATORS AND SERVOS (6895) TEST STATION SRUs

Q 601 REMOVE OR REPLACE SERVOS AND INDICATORS (6825) TEST STATION SRUs

R 608 REMOVE OR REPLACE DIGITAL NAVIGATION AND WEAPONS DELIVERY (6863) TEST STATION SRUs

T 867 REMOVE OR REPLACE DISPLAYS TEST STATION TRU SRUs

T 875 REMOVE OR REPLACE INDICATOR DISPLAY SYSTEM MOCKUP COMPONENTS

T 876 REMOVE OR REPLACE INDICATOR DISPLAY SYSTEM MOCKUP SRUs

V1131 REMOVE OR REPLACE CADc (1803A1) TEST STATION SRUs

V1133 REMOVE OR REPLACE CADc SRUs OR COMPONENTS

V1135 REMOVE OR REPLACE MISSION AND TRAFFIC CONTROL (6849) TEST STATION SRUs

V1138 REMOVE OR REPLACE MISSION AND TRAFFIC CONTROL (6879) TEST STATION SRUs

V1142 REMOVE OR REPLACE TEST STATION ANGLE POSITION INDICATOR SRUs OR COMPONENTS

V1143 REMOVE OR REPLACE TEST STATION ARTIFICIAL ANTENNA SRUs OR COMPONENTS

V1144 REMOVE OR REPLACE TEST STATION AUTOMATIC CONTROL PANEL COMPONENTS

V1146 REMOVE OR REPLACE TEST STATION DIGITAL COMPARATOR SRUs OR COMPONENTS

V1147 REMOVE OR REPLACE TEST STATION DUAL POWER SUPPLY COMPONENTS

V1148 REMOVE OR REPLACE TEST STATION EXCITER SRUs OR COMPONENTS

V1149 REMOVE OR REPLACE TEST STATION MANUAL CONTROL PANEL COMPONENTS

V1150 REMOVE OR REPLACE TEST STATION RF AMPLIFIER SRUs OR COMPONENTS

V1151 REMOVE OR REPLACE TEST STATION SIGNAL SIMULATE AND MEASURE PANEL SRUs OR COMPONENTS

V1152 REMOVE OR REPLACE TEST STATION TAPE BLOCK READER COMPONENTS

X1291 REMOVE OR REPLACE CRS TEST STATION SRUs, TRUs, OR COMPONENTS

X1292 REMOVE OR REPLACE DPTS SRUs, TRUs, OR COMPONENTS

X1293 REMOVE OR REPLACE PEN AIDS TEST STATION BUFFER/ADAPTER COMPONENTS

X1295 REMOVE OR REPLACE PEN AIDS TEST STATION TRUs, SRUs, OR COMPONENTS

TASK NUMBER: 61400

TASK STATEMENT:

REMOVE AND REPLACE COMPONENTS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
EXTRACTION TOOLS
INSERTION TOOLS
SOLDERING STATION

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S SOLDER OR DESOLDER COAXIAL CONNECTORS
S SOLDER OR DESOLDER MULTIPIN CONNECTORS
S SOLDER OR DESOLDER PC BOARDS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE COMMON HANDTOOLS
S USE EXTRACTION TOOLS
S USE INSERTION TOOLS

KNOWLEDGE:

K APPLY ESD PRECAUTIONS
K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 256		13	9	9	9	4.22	
451X6B	F 256		8	8	9	9	4.22	
451X6	F 256		11	8	9	9	4.22	
451X6A	F 269		42	44	43	32	3.25	
451X6B	F 269		50	60	59	32	3.25	
451X6	F 269		45	51	50	32	3.25	
451X6A	F 270		45	53	58	38	4.43	
451X6B	F 270		38	44	54	38	4.43	
451X6	F 270		42	48	56	38	4.43	
451X6A	F 271		50	58	62	39	4.20	
451X6B	F 271		35	47	47	39	4.20	
451X6	F 271		43	52	55	39	4.20	
451X6A	F 280		42	58	65	43	5.43	
451X6B	F 280		73	71	70	43	5.43	
451X6	F 280		54	63	68	43	5.43	
451X6A	F 281		92	87	77	47	4.92	
451X6B	F 281		77	80	79	47	4.92	
451X6	F 281		85	82	78	47	4.92	
451X6A	H 397		5	6	8	5	4.68	
451X6B	H 397		0	0	1	5	4.68	
451X6	H 397		3	3	5	5	4.68	
451X6A	H 400		8	6	5	3	4.64	
451X6B	H 400		0	1	1	3	4.64	
451X6	H 400		5	3	3	3	4.64	
451X6A	H 403		5	3	5	4	4.80	
451X6B	H 403		0	0	1	4	4.80	
451X6	H 403		3	2	3	4	4.80	
451X6A	H 407		11	10	6	4	4.75	
451X6B	H 407		4	2	1	4	4.75	
451X6	H 407		8	6	4	4	4.75	
451X6A	J 457		0	4	6	2	4.81	
451X6B	J 457		0	0	0	2	4.81	
451X6	J 457		0	2	3	2	4.81	
451X6A	J 466		0	3	7	2	4.86	
451X6B	J 466		0	0	0	2	4.86	
451X6	J 466		0	2	4	2	4.86	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	J 468		3	6	8	2	4.68	
451X6B	J 468		0	0	0	2	4.68	
451X6	J 468		2	3	4	2	4.68	
451X6A	K 475		3	4	7	1	5.06	
451X6B	K 475		0	0	0	1	5.06	
451X6	K 475		2	2	4	1	5.06	
451X6A	L 493		5	7	4	1	4.51	
451X6B	L 493		0	0	0	1	4.51	
451X6	L 493		3	3	2	1	4.51	
451X6A	L 496		0	8	7	2	4.35	
451X6B	L 496		0	0	0	2	4.35	
451X6	L 496		0	4	4	2	4.35	
451X6A	L 499		3	3	5	3	4.71	
451X6B	L 499		0	0	0	3	4.71	
451X6	L 499		2	2	3	3	4.71	
451X6A	M 511		11	10	7	1	4.28	
451X6B	M 511		0	0	1	1	4.28	
451X6	M 511		6	5	4	1	4.28	
451X6A	M 514		3	2	4	1	4.26	
451X6B	M 514		0	0	0	1	4.26	
451X6	M 514		2	1	2	1	4.26	
451X6A	M 517		3	2	2	1	4.41	
451X6B	M 517		0	0	0	1	4.41	
451X6	M 517		2	1	1	1	4.41	
451X6A	N 550		0	1	0	0	4.58	
451X6B	N 550		0	0	0	0	4.58	
451X6	N 550		0	1	0	0	4.58	
451X6A	N 554		3	2	1	1	4.54	
451X6B	N 554		0	0	0	1	4.54	
451X6	N 554		2	1	1	1	4.54	
451X6A	N 557		11	12	15	4	4.90	
451X6B	N 557		0	0	0	4	4.90	
451X6	N 557		6	6	8	4	4.90	
451X6A	O 571		0	0	1	0	4.44	
451X6B	O 571		0	0	0	0	4.44	
451X6	O 571		0	0	0	0	4.44	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	P 587		11	11	14	3	4.68	
451X6B	P 587		0	0	0	3	4.68	
451X6	P 587		6	6	8	3	4.68	
451X6A	Q 597		0	2	2	1	4.97	
451X6B	Q 597		0	0	0	1	4.97	
451X6	Q 597		0	1	1	1	4.97	
451X6A	Q 600		3	3	7	1	4.75	
451X6B	Q 600		0	0	0	1	4.75	
451X6	Q 600		2	2	4	1	4.75	
451X6A	R 607		5	8	10	4	4.64	
451X6B	R 607		0	0	0	4	4.64	
451X6	R 607		3	4	5	4	4.64	
451X6A	T 866		3	1	1	1	4.83	
451X6B	T 866		0	0	0	1	4.83	
451X6	T 866		2	1	1	1	4.83	
451X6A	V1130		0	0	0	3	4.37	
451X6B	V1130		8	9	9	3	4.37	
451X6	V1130		3	5	5	3	4.37	
451X6A	Y1341		0	0	0	1	5.53	
451X6B	Y1341		4	1	4	1	5.53	
451X6	Y1341		2	1	2	1	5.53	

USAF JOB INVENTORY TASK STATEMENTS:

F 256 REMOVE OR REPLACE COMPUTER TERMINALS OR COMPONENTS
 F 269 REMOVE OR REPLACE SOLDERLESS CIRCUIT CARD COMPONENTS
 F 270 REMOVE OR REPLACE SRU COMPONENTS
 F 271 REMOVE OR REPLACE TEST STATION ADAPTER COMPONENTS
 F 280 SOLDER COMPONENTS, SUCH AS INTEGRATED CIRCUITS OR SEMICONDUCTORS
 F 281 SOLDER COMPONENTS, SUCH AS RELAYS, RESISTERS, OR PLUGS
 H 397 REMOVE OR REPLACE AIS/R COMPUTER TEST STATION SRU COMPONENTS
 H 400 REMOVE OR REPLACE AIS/R EW TEST STATION SRU COMPONENTS
 H 403 REMOVE OR REPLACE AIS/R VIDEO TEST STATION SRU COMPONENTS
 H 407 REMOVE OR REPLACE RF TEST STATION SRU COMPONENTS
 J 457 REMOVE OR REPLACE CENPAC PUNCH TAPE READER SRU COMPONENTS
 J 466 REMOVE OR REPLACE I/O SRU COMPONENTS
 J 468 REMOVE OR REPLACE MTU SRU COMPONENTS
 K 475 REMOVE OR REPLACE ATTITUDE AND RATE TEST STATION SRU COMPONENTS
 L 493 REMOVE OR REPLACE ELECTRONIC SYSTEMS TEST STATION SRU COMPONENTS

USAF JOB INVENTORY TASK STATEMENTS:

L 496 REMOVE OR REPLACE INDICATORS AND MODULES TEST STATION SRU
COMPONENTS
L 499 REMOVE OR REPLACE INDICATORS AND SENSORS TEST STATION SRU
COMPONENTS
M 511 REMOVE OR REPLACE COMPUTER (6803) TEST STATION SRU
COMPONENTS
M 514 REMOVE OR REPLACE CONVERTER AND FLIGHT CONTROLS TEST
STATION SRU COMPONENTS
M 517 REMOVE OR REPLACE NAVIGATION AND FLIGHT CONTROLS TEST
STATION SRU COMPONENTS
N 550 REMOVE OR REPLACE F-111D RADAR DTS TEST STATION COMPONENTS
N 554 REMOVE OR REPLACE RADAR ALTIMETER (6836) TEST STATION SRU
COMPONENTS
N 557 REMOVE OR REPLACE VIDEO (6815, 6875 AND 6885) TEST STATION
SRU COMPONENTS
O 571 REMOVE OR REPLACE DOPPLER RADAR TEST STATION SRU COMPONENTS
P 587 REMOVE OR REPLACE RECEIVER-TRANSMITTER-MODULATOR TEST
STATION SRU COMPONENTS
Q 597 REMOVE OR REPLACE INDICATORS AND SERVOS (6895) TEST STATION
SRU COMPONENTS
Q 600 REMOVE OR REPLACE SERVOS AND INDICATORS (6825) TEST STATION
SRU COMPONENTS
R 607 REMOVE OR REPLACE DIGITAL NAVIGATION AND WEAPONS DELIVERY
(6863) TEST STATION SRU COMPONENTS
T 866 REMOVE OR REPLACE DISPLAYS TEST STATION SRU COMPONENTS
V1130 REMOVE OR REPLACE CAD/C (1803A1) TEST STATION SRU COMPONENTS
Y1341 REMOVE OR REPLACE QRC 80-01 CONTROL BOX COMPONENTS

TASK NUMBER: 61410

TASK STATEMENT:

REMOVE AND REPLACE MINOR HARDWARE

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK

ESD PROTECTIVE EQUIPMENT

TORQUE WRENCH

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION; AFTER REPAIR

STANDARDS:

IAW REFERENCES

SKILLS:

S USE COMMON HANDTOOLS

S USE TORQUE WRENCH

KNOWLEDGE:

K APPLY ESD PRECAUTIONS

K APPLY SHOP SAFETY PROCEDURES

K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 263		92	86	80	47	2.66	
451X6B	F 263		73	82	78	47	2.66	
451X6	F 263		85	84	79	47	2.66	
451X6A	F 274		92	87	80	48	1.82	
451X6B	F 274		85	86	78	48	1.82	
451X6	F 274		89	86	79	48	1.82	

USAF JOB INVENTORY TASK STATEMENTS:

F 263 REMOVE OR REPLACE LRU MINOR HARDWARE

F 274 REMOVE OR REPLACE TEST STATION MINOR HARDWARE SUCH AS,
LIGHT BULBS OR FUSES

TASK NUMBER: 61420

TASK STATEMENT: .

ISOLATE MALFUNCTIONS IN ELECTRICAL EQUIPMENT RACKS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT
MULTIMETER
OSCILLOSCOPE
SIGNAL GENERATOR
REFLECTOMETER

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK CONTINUITY
S USE OSCILLOSCOPE
S USE REFLECTOMETER TO LOCATE WIRING PROBLEM
S USE SIGNAL GENERATOR TO CHECK SIGNAL

KNOWLEDGE:

K APPLY AC CIRCUIT THEORY OF OPERATION
K APPLY COMBINATIONAL LOGIC CIRCUIT THEORY OF OPERATION
K APPLY DC CIRCUIT THEORY OF OPERATION
K APPLY ESD PRECAUTIONS
K APPLY INTEGRATED CIRCUIT THEORY OF OPERATION
K APPLY JFET THEORY OF OPERATION
K APPLY LCD THEORY OF OPERATION
K APPLY LED THEORY OF OPERATION
K APPLY LOGIC CIRCUIT COUNTER THEORY OF OPERATION
K APPLY LOGIC CIRCUIT REGISTER THEORY OF OPERATION

KNOWLEDGE:

K APPLY MICROWAVE OSCILLATOR OR AMPLIFIER THEORY OF OPERATION
 K APPLY MOSFET THEORY OF OPERATION
 K APPLY OPERATIONAL AMPLIFIER THEORY OF OPERATION
 K APPLY RELAY THEORY OF OPERATION
 K APPLY RESISTOR THEORY OF OPERATION
 K APPLY SCR THEORY OF OPERATION
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K APPLY TUNNEL DIODE THEORY OF OPERATION
 K APPLY UJT THEORY OF OPERATION
 K APPLY ZENER DIODE THEORY OF OPERATION
 K DETERMINE MEASUREMENT DEVICE REQUIRED FOR TROUBLESHOOTING
 K ISOLATE FAULTY COMBINATIONAL LOGIC CIRCUITS
 K ISOLATE FAULTY INTEGRATED CIRCUITS
 K ISOLATE FAULTY JFETs
 K ISOLATE FAULTY LCDs
 K ISOLATE FAULTY LEDs
 K ISOLATE FAULTY LOGIC COUNTERS
 K ISOLATE FAULTY MICROWAVE OSCILLATORS OR AMPLIFIERS
 K ISOLATE FAULTY MOSFETs
 K ISOLATE FAULTY OPERATIONAL AMPLIFIERS
 K ISOLATE FAULTY RCL CIRCUITS
 K ISOLATE FAULTY REGISTER LOGIC CIRCUITS
 K ISOLATE FAULTY RELAYS
 K ISOLATE FAULTY RESISTORS
 K ISOLATE FAULTY SCRs
 K ISOLATE FAULTY TUNNEL DIODES
 K ISOLATE FAULTY UJTs
 K ISOLATE FAULTY ZENER DIODES
 K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
 PROCEDURES (F 278)
 K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
 K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	
451X6A	S 658		18	14	14	5	5.53	
451X6B	S 658		0	0	1	5	5.53	
451X6	S 658		11	7	8	5	5.53	
451X6A	S 660		3	9	12	2	4.49	
451X6B	S 660		0	0	1	2	4.49	
451X6	S 660		2	5	7	2	4.49	

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 670		3	2	0	1	4.66	
451X6B	S 670		0	0	0	1	4.66	
451X6	S 670		2	1	0	1	4.66	
451X6A	S 676		5	4	4	2	5.28	
451X6B	S 676		0	0	0	2	5.28	
451X6	S 676		3	2	2	2	5.28	
451X6A	S 687		5	7	4	0	4.29	
451X6B	S 687		0	0	0	0	4.29	
451X6	S 687		3	3	2	0	4.29	
451X6A	S 706		11	13	14	2	4.48	
451X6B	S 706		0	0	2	2	4.48	
451X6	S 706		6	7	8	2	4.48	
451X6A	S 720		16	14	16	5	4.66	
451X6B	S 720		0	0	2	5	4.66	
451X6	S 720		9	7	9	5	4.66	
451X6A	S 739		5	4	3	2	4.46	
451X6B	S 739		0	0	0	2	4.46	
451X6	S 739		3	2	2	2	4.46	
451X6A	X1219		0	0	0	6	4.79	
451X6B	X1219		4	12	9	6	4.79	
451X6	X1219		2	6	5	6	4.79	
451X6A	X1255		0	0	0	5	4.57	
451X6B	X1255		4	9	8	5	4.57	
451X6	X1255		2	5	4	5	4.57	

USAF JOB INVENTORY TASK STATEMENTS:

F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES
 S 658 ISOLATE MALFUNCTIONS IN ARS ANTENNA PEDESTALS OTHER THAN
 F-111D
 S 660 ISOLATE MALFUNCTIONS IN ARS RACKS
 S 670 ISOLATE MALFUNCTIONS IN DIGITAL COMPUTER COMPLEX (DCC)
 RACKS
 S 676 ISOLATE MALFUNCTIONS IN F-111D ARS ROLL PEDESTALS
 S 687 ISOLATE MALFUNCTIONS IN LARA RACKS
 S 706 ISOLATE MALFUNCTIONS IN TFR RACKS
 S 720 PERFORM OPERATIONAL TESTS OF ARS ANTENNA PEDESTALS OTHER
 THAN F-111D
 S 739 PERFORM OPERATIONAL TESTS OF F-111D ARS ROLL PEDESTALS
 X1219 ISOLATE MALFUNCTIONS IN AN/ALQ-94 RACK ASSEMBLIES
 X1255 PERFORM OPERATIONAL TESTS OF AN/ALQ-94 RACK ASSEMBLIES

TASK NUMBER: 61430

TASK STATEMENT:

REPAIR ELECTRICAL EQUIPMENT RACKS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
ESD PROTECTIVE EQUIPMENT

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A ORDER PARTS
- A REPAIR WIRING (TASK NUMBER: 61440)
- A REMOVE AND REPLACE COMPONENTS (TASK NUMBER: 61400)
- A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

SKILLS:

- S PERFORM VISUAL INSPECTION
- S USE COMMON HANDTOOLS

KNOWLEDGE:

- K ANNOTATE FORMS
- K APPLY ESD PRECAUTIONS
- K APPLY SHOP SAFETY PROCEDURES
- K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	S 613		21	16	18	5	5.18	
451X6B	S 613		0	0	2	5	5.18	
451X6	S 613		12	8	10	5	5.18	
451X6A	S 624		5	2	2	2	5.06	
451X6B	S 624		0	0	0	2	5.06	
451X6	S 624		3	1	1	2	5.06	
451X6A	S 782		16	14	14	5	4.92	
451X6B	S 782		0	0	2	5	4.92	
451X6	S 782		9	7	8	5	4.92	
451X6A	S 804		3	2	2	2	4.91	
451X6B	S 804		0	0	0	2	4.91	
451X6	S 804		2	1	1	2	4.91	
451X6A	S 844		8	11	12	2	4.36	
451X6B	S 844		0	0	2	2	4.36	
451X6	S 844		5	6	7	2	4.36	
451X6A	X1277		0	0	0	7	4.13	
451X6B	X1277		0	9	8	7	4.13	
451X6	X1277		0	5	4	7	4.13	

USAF JOB INVENTORY TASK STATEMENTS:

S 613 ALIGN ARS ANTENNA PEDESTALS
 S 624 ALIGN F-111D ARS ROLL PEDESTALS
 S 782 REMOVE OR REPLACE ARS ANTENNA PEDESTAL COMPONENTS OTHER
 THAN F-111D
 S 804 REMOVE OR REPLACE F-111D ARS ROLL PEDESTAL SRUs
 S 844 REMOVE OR REPLACE TFR RACK COMPONENTS
 X1277 REMOVE OR REPLACE AN/ALQ-94 RACK ASSEMBLY COMPONENTS

TASK NUMBER: 61440

TASK STATEMENT:

REPAIR WIRING

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CABLE REPAIR KIT
CTK
SOLDERING STATION
SPECIAL INSERTION/EXTRACTION TOOLS
HEAT GUN
HEAT SHRINK
REFLECTOMETER

REFERENCES:

1-1A-14
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

- A REMOVE OR REPLACE COAXIAL CABLE, WIRING, OR PINS (F 254)
- A REMOVE OR REPLACE LRU PINS OR CONNECTORS (F 264)
- A REMOVE OR REPLACE TEST STATION CABLE ASSEMBLY PINS OR CONNECTORS (F 272)
- A REMOVE OR REPLACE TRIAXIAL CABLE, WIRING, OR PINS (F 276)

SKILLS:

- S ASSEMBLE SOLDERLESS COAXIAL CONNECTORS
- S ASSEMBLE SOLDERLESS CRIMP CONNECTORS
- S ASSEMBLE SOLDERLESS MULTIPIN CONNECTORS
- S PERFORM VISUAL INSPECTION
- S SOLDER OR DESOLDER COAXIAL CONNECTORS
- S SOLDER OR DESOLDER MULTIPIN CONNECTORS
- S SOLDER OR DESOLDER TERMINAL CONNECTIONS
- S USE CABLE REPAIR KIT
- S USE COMMON HANDTOOLS
- S USE HEAT GUN AND HEAT SHRINK TO INSULATE WIRES

SKILLS:

S USE REFLECTOMETER TO LOCATE WIRING PROBLEM
S USE SPECIAL INSERTION/EXTRACTION TOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 217		74	72	65	38	5.16	
451X6B	F 217		77	66	66	38	5.16	
451X6	F 217		74	68	65	38	5.16	
451X6A	F 254		68	67	66	43	5.13	
451X6B	F 254		69	74	77	43	5.13	
451X6	F 254		69	70	71	43	5.13	
451X6A	F 264		87	82	75	42	4.76	
451X6B	F 264		65	75	76	42	4.76	
451X6	F 264		78	79	75	42	4.76	
451X6A	F 272		76	78	70	42	5.27	
451X6B	F 272		50	55	63	42	5.27	
451X6	F 272		66	67	67	42	5.27	
451X6A	F 276		8	10	12	9	5.30	
451X6B	F 276		4	8	12	9	5.30	
451X6	F 276		6	9	12	9	5.30	

USAF JOB INVENTORY TASK STATEMENTS:

F 217 FABRICATE OR REBUILD CABLES
F 254 REMOVE OR REPLACE COAXIAL CABLE WIRING OR PINS
F 264 REMOVE OR REPLACE LRU PINS OR CONNECTORS
F 272 REMOVE OR REPLACE TEST STATION CABLE ASSEMBLY PINS OR
CONNECTORS
F 276 REMOVE OR REPLACE TRIAXIAL CABLE WIRING OR PINS

TASK NUMBER: 61450

TASK STATEMENT: .

PERFORM SAFETY WIRING

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
SAFETY WIRE PLIERS
TORQUE WRENCHES

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
1-1A-15

CUES:

PERIODIC INSPECTION; DURING REPAIR

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A MEASURE SAFETY WIRE
A THREAD WIRE
A TWIST WIRE
A SECURE WIRE

SKILLS:

S USE COMMON HANDTOOLS
S USE SAFETY WIRE PLIERS
S USE TORQUE WRENCH TO TORQUE BOLTS

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	V1154		0	0	0	3	3.19	
451X6B	V1154		8	12	10	3	3.19	
451X6	V1154		3	6	5	3	3.19	

USAF JOB INVENTORY TASK STATEMENTS:

V1154 SAFETY WIRE CADC SRUs

TASK NUMBER: 61460

TASK STATEMENT:

PRESSURIZE LRU_s (F 252)

TASK NOTES:

THERE ARE TWO WAYS TO PRESSURIZE LRU_s: A NITROGEN BOTTLE OR SELF-CONTAINED PRESSURIZATION TEST SET:

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
NITROGEN BOTTLE
PRESSURE REGULATOR
PRESSURIZATION TEST SET

REFERENCES:

APPLICABLE TEST PROCEDURES TO

CUES:

DURING OPERATIONAL TEST

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A RELEASE PRESSURE INTO REGULATOR
A PRESSURIZE LRU TO AMOUNT SPECIFIED
A BLEED OFF PRESSURE

SKILLS:

S CONNECT ADAPTERS
S CONNECT HOSES
S USE COMMON HANDTOOLS
S USE NITROGEN BOTTLE TO SUPPLY GASES
S USE PRESSURE REGULATOR TO CONTROL PRESSURE
S USE PRESSURIZATION TEST SET

KNOWLEDGE:

K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K INTERPRET GAUGES TO DETERMINE PRESSURE LOSS

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 252		16	27	36	19	3.30	
451X6B	F 252		23	26	27	19	3.30	
451X6	F 252		18	26	32	19	3.30	

USAF JOB INVENTORY TASK STATEMENTS:

F 252 PRESSURIZE LRUs

TASK NUMBER: 61470

TASK STATEMENT:

MAINTAIN COMPRESSED GAS BOTTLES

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

APRON
CARTS
COMPRESSED GAS BOTTLES
FACE SHIELD
PROTECTIVE CAP

REFERENCES:

00-20-234
APPLICABLE AFOSH STANDARD
APPLICABLE LOCAL CHECKLIST

CONDITIONS:

NEED HOLDING AREA FOR EMPTY/FULL BOTTLES

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A DON SAFETY EQUIPMENT
A REMOVE AND REPLACE COMPRESSED GAS BOTTLES (F 255)
A REMOVE AND REPLACE REGULATOR

SKILLS:

S PERFORM VISUAL INSPECTION
S SECURE BOTTLES TO TEST STATION
S USE CART TO TRANSPORT BOTTLES
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY SHOP SAFETY PROCEDURES

KNOWLEDGE:

K APPLY TECHNICAL DATA

K DETERMINE WHERE TO INTERFACE NITROGEN WITH TEST STATION

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 255		11	17	23	12	3.32	
451X6B	F 255		8	9	12	12	3.32	
451X6	F 255		9	13	18	12	3.32	
451X6A	V1145		0	0	0	1	3.51	
451X6B	V1145		8	5	5	1	3.51	
451X6	V1145		3	2	3	1	3.51	

USAF JOB INVENTORY TASK STATEMENTS:

F 255 REMOVE OR REPLACE COMPRESSED GAS BOTTLES

V1145 REMOVE OR REPLACE TEST STATION COMPRESSED GAS BOTTLES

TASK NUMBER: 61480

TASK STATEMENT:

MAINTAIN PRESSURE TEST SETS

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

COMPRESSED AIR
CTK
HEAT BLANKETS
NITROGEN
REGULATORS

REFERENCES:

APPLICABLE TEST PROCEDURES TO
APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE IPB

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN PRESSURIZATION TEST SETS
A BAKE BOTTLES
A CALIBRATE PRESSURIZATION TEST SETS (F 208)
A CHECK METERS
A INPUT NITROGEN
A PERFORM PRESSURE CHECK
A REMOVE AND REPLACE PRESSURIZATION TEST SET COMPONENTS (F 265)

SKILLS:

S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE COMPRESSED AIR TO PURGE LINES
S USE HEAT BLANKETS TO BAKE BOTTLE (REMOVES IMPURITIES FROM
SYSTEM)
S USE NITROGEN TO PURGE LINES (CLEAN APPLICATION)
S USE REGULATORS TO CONTROL PRESSURE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 208		0	0	4	3	4.78	
451X6B	F 208		4	5	5	3	4.78	
451X6	F 208		2	2	4	3	4.78	
451X6A	F 265		11	13	9	4	4.23	
451X6B	F 265		4	6	6	4	4.23	
451X6	F 265		8	10	8	4	4.23	
451X6A	R 604		0	0	6	3	5.80	
451X6B	R 604		0	0	0	3	5.80	
451X6	R 604		0	0	3	3	5.80	

USAF JOB INVENTORY TASK STATEMENTS:

F 208 CALIBRATE PRESSURIZATION TEST SETS
F 265 REMOVE OR REPLACE PRESSURIZATION TEST SET COMPONENTS
R 604 ALIGN AND MAINTAIN PRESSURE TEST SETS

TASK NUMBER: 61430

TASK STATEMENT:

ISOLATE MALFUNCTIONS IN TEST STATION ADAPTERS (F 235)

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS
RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CTK
MULTIMETER
TEST STATION

REFERENCES:

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL
APPLICABLE SHOP SYSTEMS TO
APPLICABLE TEST PROCEDURES TO
35-1-181-1
35-1-181-2
35-1-181-3

CUES:

DETECTED MALFUNCTION

STANDARDS:

IAW REFERENCES

SKILLS:

S INSTALL ADAPTERS
S OPERATE TEST STATION
S PERFORM VISUAL INSPECTION
S USE COMMON HANDTOOLS
S USE MULTIMETER TO CHECK CONTINUITY AND MEASURE VOLTAGE

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY RELAY THEORY OF OPERATION
K APPLY RESISTOR THEORY OF OPERATION
K APPLY SHOP SAFETY PROCEDURES
K APPLY SOLID STATE DIODE THEORY OF OPERATION
K APPLY TECHNICAL DATA
K ISOLATE FAULTY RELAYS
K ISOLATE FAULTY RESISTORS
K ISOLATE FAULTY SOLID STATE DIODES

KNOWLEDGE:

K RESEARCH MANUALS TO DETERMINE FAULT ISOLATION
PROCEDURES (F 278)
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 235		61	71	67	38	5.74	
451X6B	F 235		35	45	47	38	5.74	
451X6	F 235		51	58	57	38	5.74	
451X6A	F 278		32	43	51	35	5.04	
451X6B	F 278		54	59	52	35	5.04	
451X6	F 278		42	51	52	35	5.04	

USAF JOB INVENTORY TASK STATEMENTS:

F 235 ISOLATE MALFUNCTIONS IN TEST STATION ADAPTERS
F 278 RESEARCH MANUALS TO DETERMINE FAULT ISOLATION PROCEDURES

TASK NUMBER: 61500

TASK STATEMENT:

REPAIR TEST STATION ADAPTERS

TRAINING RECOMMENDATIONS:

RECOMMEND: 3-LVL CRS

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

CLEANING SOLVENTS AND BRUSHES

CTK

MULTIMETER

TEST STATION

REFERENCES:

APPLICABLE TEST PROCEDURES TO

APPLICABLE INTERMEDIATE MAINTENANCE MANUAL

APPLICABLE IPB

CUES:

ISOLATED MALFUNCTION

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A ALIGN TEST STATION ADAPTERS ELECTRONICALLY (F 206)

A ALIGN TEST STATION ADAPTERS MECHANICALLY (F 207)

A CLEAN CONTACTS (F 210)

A FUNCTIONALLY CHECK ADAPTER OR TEST STATION

A ORDER PARTS

A REMOVE AND REPLACE CONNECTORS

A REMOVE AND REPLACE DEFECTIVE PINS

A REMOVE AND REPLACE MINOR HARDWARE (TASK NUMBER: 61410)

A REMOVE AND REPLACE PHENOLICS

A REMOVE AND REPLACE TEST STATION ADAPTER COMPONENTS (F 271)

A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S INSTALL ADAPTER

S OPERATE TEST STATION

S USE COMMON HANDTOOLS

S USE MULTIMETER TO CHECK CONTINUITY

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 206		8	13	19	19	5.01	
451X6B	F 206		4	11	20	19	5.01	
451X6	F 206		6	12	19	19	5.01	
451X6A	F 207		11	20	24	16	4.50	
451X6B	F 207		8	19	19	16	4.50	
451X6	F 207		9	19	22	16	4.50	
451X6A	F 210		45	54	62	37	2.54	
451X6B	F 210		62	65	62	37	2.54	
451X6	F 210		51	59	62	37	2.54	
451X6A	F 271		50	58	62	39	4.20	
451X6B	F 271		35	47	47	39	4.20	
451X6	F 271		43	52	55	39	4.20	

USAF JOB INVENTORY TASK STATEMENTS:

F 206 ALIGN TEST STATION ADAPTERS ELECTRONICALLY
F 207 ALIGN TEST STATION ADAPTERS MECHANICALLY
F 210 CLEAN CONTACTS
F 271 REMOVE OR REPLACE TEST STATION ADAPTER COMPONENTS

TASK NUMBER: 61510

TASK STATEMENT:

RELOCATE AVIONICS EQUIPMENT

TASK NOTES:

EACH BASE HAS LOCAL CLASSES IN HAZARDOUS CARGO, CARGO PALLET, BUILD-UP, DEPLOYED EQUIPMENT CUSTODIAN, CHEMICAL WARFARE, FORK LIFT TRAINING, ETC.

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

AIR CONDITIONER
CTK
FORK LIFT
GENERATORS
PALLET
STATION JACKS
TORQUE WRENCH

REFERENCES:

AFR 71-4
LOCAL MOBILITY PLAN

CONDITIONS:

ABILITY TO SECURELY MOUNT EQUIPMENT, DRY PROTECTED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA; MOBILITY OPERATIONS

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A PLAN LAYOUT OF FACILITIES (A 19)
A CONFIGURE AVIONICS AND SUPPORT EQUIPMENT FOR OPERATION
A INSTALL TEST STATIONS IN WORK AREAS (F 223)
A INSTALL SIMULATORS OR MOCKUPS IN WORK AREAS (F 222)
A INVENTORY EQUIPMENT
A INVENTORY HAZARDOUS CARGO
A PALLETIZE EQUIPMENT
A PREPARE EQUIPMENT FOR AIR SHIPMENT
A REPAIR WIRING (TASK NUMBER: 61440)

SKILLS:

S CONNECT AIR-CONDITIONER
 S CONNECT GENERATORS
 S OPERATE FORKLIFT
 S PERFORM INITIAL ALIGNMENT OF STABILIZED PLATFORMS
 S SECURE EQUIPMENT ON PALLET
 S SECURE PLATFORM TO TRUE NORTH
 S USE COMMON HANDTOOLS
 S USE STATION JACKS TO MOVE STATION
 S USE TORQUE WRENCH
 S VERIFY ALIGNMENT OF RATE TABLES

KNOWLEDGE:

K ANNOTATE FORMS
 K APPLY OPSEC, COMSEC, AND PHYSICAL SECURITY PRECAUTIONS
 K APPLY SHOP SAFETY PROCEDURES
 K APPLY TECHNICAL DATA
 K COMPLETE MOBILITY FORM/LISTS
 K COMPUTE MAGNETIC NORTH
 K DETERMINE POWER REQUIREMENTS
 K DETERMINE PROPER LOCATION OF EQUIPMENT OR PALLET
 K DETERMINE TRUE NORTH
 K INSPECT GENERATORS
 K INSPECT PALLET

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	A 019		0	0	4	16	5.73	
451X6B	A 019		0	0	3	16	5.73	
451X6	A 019		0	1	3	16	5.73	
451X6A	F 215		3	4	10	19	5.20	
451X6B	F 215		15	13	18	19	5.20	
451X6	F 215		8	9	14	19	5.20	
451X6A	F 222		5	7	7	12	4.33	
451X6B	F 222		27	28	21	12	4.33	
451X6	F 222		14	17	14	12	4.33	
451X6A	F 223		18	20	22	25	4.37	
451X6B	F 223		19	25	35	25	4.37	
451X6	F 223		18	22	28	25	4.37	
451X6A	F 253		13	20	26	21	4.89	
451X6B	F 253		27	29	29	21	4.89	
451X6	F 253		18	25	28	21	4.89	

USAF JOB INVENTORY TASK STATEMENTS:

- A 19 PLAN LAYOUT OF FACILITIES
- F 215 CONFIGURE AVIONICS AND SUPPORT EQUIPMENT AT MOBILITY
OPERATING AREAS
- F 222 INSTALL SIMULATORS OR MOCKUPS IN WORK AREAS
- F 223 INSTALL TEST STATIONS IN WORK AREAS
- F 253 RECONFIGURE AVIONICS AND SUPPORT EQUIPMENT FOR NORMAL
OPERATION AFTER MOBILITY USE

TASK NUMBER: 61520

TASK STATEMENT:

CALIBRATE CATEGORY II TEST EQUIPMENT (U 899)

TASK NOTES:

TRUs GO TO PMEL

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

ATSCS
CTK

REFERENCES:

33AA43-13-1

CONDITIONS:

AIR CONDITIONED ENVIRONMENT

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A CONNECT ATSCS
A WARM-UP ATSCS (MINIMUM 2 HOURS)
A PERFORM CALIBRATION

SKILLS:

S USE ATSCS
S USE COMMON HANDTOOLS

KNOWLEDGE:

K ANNOTATE FORMS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	U 899		0	0	0	5	5.47	
451X6B	U 899		0	6	5	5	5.47	
451X6	U 899		0	3	3	5	5.47	

USAF JOB INVENTORY TASK STATEMENTS:

U 899 CALIBRATE CATEGORY II TEST EQUIPMENT

TASK NUMBER: 61530

TASK STATEMENT:

FABRICATE TEST EQUIPMENT, SIMULATORS, OR MOCKUPS (F 218)

TRAINING RECOMMENDATIONS:

RECOMMEND: 5-LVL OJT

EQUIPMENT, TOOLS, SUPPLIES:

BUILDING SUPPLIES
CTK
ESD PROTECTIVE EQUIPMENT
POWER TOOLS
SOLDERING STATION

REFERENCES:

APPLICABLE SHOP SYSTEMS TO
APPLICABLE AIRCRAFT SYSTEM TO

CONDITIONS:

REQUIRED SHOP STANDARDS

CUES:

AS DIRECTED BY TECHNICAL DATA

STANDARDS:

IAW REFERENCES

ACTIVITIES:

A DEVELOP PLANS
A BUILD FRAME
A FABRICATE WIRING, OR CABLES
A INSTALL SHOP STANDARDS

SKILLS:

S ASSEMBLE SOLDERLESS COAXIAL CONNECTORS
S ASSEMBLE SOLDERLESS CRIMP CONNECTORS
S ASSEMBLE SOLDERLESS MULTIPIN CONNECTORS
S CONNECT CABLES
S SOLDER OR DESOLDER COAXIAL CONNECTORS
S SOLDER OR DESOLDER MULTIPIN CONNECTORS
S SOLDER OR DESOLDER PC BOARDS
S SOLDER OR DESOLDER TERMINAL CONNECTIONS
S USE BUILDING SUPPLIES TO FABRICATE FRAME
S USE COMMON HANDTOOLS
S USE POWER TOOLS

KNOWLEDGE:

K APPLY ESD PRECAUTIONS
K APPLY SHOP SAFETY PROCEDURES
K APPLY TECHNICAL DATA
K DETERMINE EXTERNAL EQUIPMENT REQUIRED
K DETERMINE POWER REQUIREMENTS
K TRACE SIGNALS THROUGH INTERCONNECTS (TASK NUMBER: 61350)
K UTILIZE SCHEMATIC DIAGRAMS (TASK NUMBER: 61340)

RELATED OCCUPATIONAL SURVEY DATA:

AFSC	DUTY/ TASK	TNG EMP	1ST JOB	1ST ENL	5 LVL	7 LVL	TSK DIF	ATI
451X6A	F 218		8	7	10	10	6.33	
451X6B	F 218		19	14	14	10	6.33	
451X6	F 218		12	10	12	10	6.33	

USAF JOB INVENTORY TASK STATEMENTS:

F 218 FABRICATE TEST EQUIPMENT, SIMULATORS, OR MOCKUPS

APPENDIX A
LRU AND EQUIPMENT LIST

1. TASK NUMBER: 60010 through 60050 - AUTOMATIC TEST STATIONS

- a. ATTITUDE and RATE
- b. ELECTRONIC SYSTEMS
- c. INDICATORS and MODULES
- d. INDICATORS and SENSORS
- e. COMPUTER (6803)
- f. CONVERTER and FLIGHT CONTROLS
- g. NAVIGATION and FLIGHT CONTROLS
- h. RADAR ALTIMETER (6836)
- i. VIDEO (6815, 6875, 6885)
- j. RECEIVER-TRANSMITTER-MODULATOR (6802, 6872, 6882)
- k. SERVOS (6895) and INDICATORS (6825)
- l. DIGITAL NAVIGATION and WEAPONS DELIVERY (6863)
- m. DISPLAYS

2. TASK NUMBER: 60150 through 60220 - AIS/R TEST STATIONS

- a. COMPUTER
- b. ELECTRONIC WARFARE (EW)
- c. VIDEO
- d. RADIO FREQUENCY (RF)

3. TASK NUMBER: 60290 through 60310
CORE 1 (ANY AIS/R TEST STATION)

- a. AUTO PILOT DAMPER PANEL
- b. CENTER AUXILIARY FLIGHT CONTROL PANEL
- c. AUXILIARY FLIGHT CONTROL PANEL
- d. FORWARD AUXILIARY FLIGHT CONTROL PANEL
- e. AUXILIARY FLIGHT CONTROL TEST PANEL
- f. GENERATOR CONTROL PANEL
- g. STALL WARNING RELAY ASSEMBLY
- h. HORIZONTAL SITUATION INDICATOR
- i. ATTITUDE REMOTE STANDBY INDICATOR
- j. AIR SPEED MACH AMPLIFIER
- k. ALTITUDE VERTICAL SPEED
- l. MODE SELECT INSTRUMENT SET
- m. COMPASS SYSTEM CONTROLLER
- n. MAXIMUM SAFE MACH ASSEMBLY
- o. ANTENNA COUPLER CONTROL
- p. INTERCOM SET CONTROL
- q. INTERCOM SET STATION
- r. RECEIVER CONTROL
- s. AMPLIFIER RELAY ASSEMBLY
- t. ELECTRONIC CONTROL AMPLIFIER
- u. TRANSPONDER CONTROL
- v. ANTENNA ASSEMBLY
- w. ANTENNA PEDESTAL
- x. ANTENNA INDICATOR CONTROL

CORE 1 (ANY AIS/R TEST STATION) (continued)

- y. ANTENNA INDICATOR CONTROL POWER SWITCH ASSEMBLY
- z. LARA MULTIPLEXER UNIT
- aa. RADAR SET CONTROL
- ab. RELAY ASSEMBLY (TFR)
- ac. AMPLIFIER POWER SUPPLY
- ad. POWER SWITCHING ASSEMBLY
- ae. ELECTRICAL EQUIPMENT RACK
- af. BOMB NAVIGATION/TIME INDICATOR
- ag. BATTERY CONTROL POWER SUPPLY
- ah. TERRAIN FOLLOWING COMPUTER
- ai. LOW VOLTAGE POWER SUPPLY
- aj. ANTENNA UNIT
- ak. CURSOR CONTROL INDICATOR
- al. DIGITAL DISPLAY INDICATOR
- am. CONTROL INDICATOR
- an. WEAPON SYSTEM MAINTENANCE CONTROL
- ao. SIGNAL DISTRIBUTION PANEL
- ap. LASER CONTROL PANEL
- aq. PAVE TACK CONTROL PANEL
- ar. DATA LINK POD
- as. LEAD/LAUNCH COMPUTER AMPLIFIER
- at. CONTROL AMPLIFIER POWER SUPPLY
- au. ELECTRONIC COUNTERMEASURES INTERFERENCE BLANKER

CORE 2 (COMPUTER OR VIDEO TEST STATION)

- a. FEEL AND TRIM ASSEMBLY
- b. PRIMARY AIR DATA COMPUTER
- c. STALL INHIBITOR COMPUTER
- d. ANTENNA CONTROL UNIT
- e. COMPUTER CONTROL UNIT
- f. NAVIGATION DISPLAY UNIT
- g. ANTENNA CONTROL
- h. ANTENNA
- i. ANTENNA PEDESTAL
- j. ELECTRONIC EQUIPMENT RACK

COMPUTER TEST STATION

- a. ATTITUDE INDICATOR
- b. DISPLACEMENT GYRO
- c. ELECTRONIC CONTROL AMPLIFIER
- d. PHASE MONITOR
- e. FLIGHT CONTROL ROLL COMPUTER
- f. RATE GYROSCOPE ASSEMBLY
- g. FLIGHT CONTROL PITCH COMPUTER
- h. NORMAL LINEAR ACCELEROMETER ASSEMBLY
- i. FLIGHT CONTROL YAW COMPUTER
- j. LATERAL LINEAR ACCELEROMETER ASSEMBLY
- k. STABILIZATION PLATFORM
- l. NAVIGATIONAL COMPUTER
- m. BURST UNIT PANEL

COMPUTER TEST STATION (continued)

- n. BALLISTIC COMPUTER
- o. NAVSET MUX CONVERTER
- r. COMPUTER CONTROL
- s. LEAD COMPUTING GYRO ASSEMBLY
- t. INERTIAL BATTERY UNIT

RF TEST STATION

- a. ANTENNA COUPLER
- b. LOCALIZER RECEIVER
- c. GLIDE SLOPE/MARKER BEACON
- d. ANTENNA ASSEMBLY
- e. RECEIVER-TRANSMITTER
- f. SYNCHRONIZER-TRANSMITTER
- g. RECEIVER-TRANSMITTER-MODULE
- h. ANTENNA RECEIVER
- i. SYNCHRONIZER-TRANSMITTER
- j. ELECTRONIC PROCESSOR
- k. TRANSMITTER
- l. RADAR RECEIVER
- m. REFERENCE SIGNAL GENERATOR
- n. RADAR ELECTRONIC UNIT

EW TEST STATION

- a. CONTROL INDICATOR
- b. INDICATOR PANEL-MARK I
- c. INDICATOR PANEL-MARK II
- d. AFT RADAR RECEIVER
- e. FORWARD RADAR RECEIVER
- f. INDICATOR CONTROL
- g. ELECTRIC EQUIPMENT RACK
- h. RF AMPLIFIER (LOW-BAND)
- i. COUNTERMEASURES RECEIVER (LOW-BAND)
- k. RF AMPLIFIER (MID-BAND)
- l. COUNTERMEASURES RECEIVER (MID-BAND)
- m. RF AMPLIFIER
- n. COUNTERMEASURES RECEIVER (HIGH-BAND)
- o. VIDEO SIGNAL PROCESSOR
- p. COUNTERMEASURES SET CONTROLLER
- q. MULTI-CHANNEL RECEIVER
- r. DUAL CHANNEL RECEIVER
- s. DIGITAL PROCESSOR
- t. ANTENNA SWITCHING UNIT
- u. INDICATOR CONTROL

VIDEO TEST STATION

- a. INDICATOR RECORDER
- b. SYNCHRONIZER
- c. TFR INDICATOR
- d. INDICATOR RECORDER

VIDEO TEST STATION (continued)

- e. SYNCHRONIZER
- f. TERRAIN FOLLOWING COMPUTER
- g. TERRAIN FOLLOWING INDICATOR
- h. LOW ALTITUDE MONITOR
- i. SIGNAL DATA CONVERTER
- j. LEFT HAND OPTICAL DISPLAY SIGHT
- k. RIGHT HAND OPTICAL DISPLAY SIGHT
- l. RADAR DATA CONVERTER
- m. DIGITAL DATA INDICATOR
- n. ANALOG DISPLAY INDICATOR
- o. OPTICAL DISPLAY SIGHT
- p. ECM INTERFERENCE BLANKER

TASK NUMBER: 60320 through 60340 - RF TYPE LRUs

- a. TRANSMITTER
- b. ELECTRONIC PROCESSING UNIT
- c. TFR ANTENNA RECEIVER
- d. MICROWAVE RECEIVER UNIT
- e. MASTER FREQUENCY GENERATOR
- f. F-111D ATTACK RADAR SYSTEM ANTENNA
- g. LOW ALTITUDE RADAR ALTIMETER RECEIVER/TRANSMITTER
- h. MODULATOR-RECEIVER-TRANSMITTER
- i. TFR TRANSMITTER-SYNCHRONIZER
- j. RADAR RECEIVER TRANSMITTER
- k. DOPPLER ELECTRICAL UNIT
- l. DOPPLER ANTENNA UNIT

TASK NUMBER: 60350 through 60370 - DIGITAL TYPE LRUs

- a. ARS ELECTRICAL SYNCHRONIZER
- b. FEEL AND TRIM ASSEMBLY
- c. TERRAIN FOLLOWING COMPUTER
- d. DIGITAL DOPPLER PROCESSING UNIT (DDPU)
- e. ATTACK RADAR SYSTEM ANTENNA
- f. GENERAL PURPOSE COMPUTER
- g. F-111D TERRAIN FOLLOWING AMPLIFIER POWER SUPPLY
- h. FLIGHT DIRECTOR COMPUTER
- i. INTERFERENCE BLANKER
- j. MAINTENANCE CONTROL UNIT
- k. SIGNAL DATA CONVERTER
- l. STALL INHIBITOR SYSTEM COMPUTER
- m. NAVIGATION COMPUTER UNIT
- n. BALLISTIC COMPUTER UNIT
- o. FLIGHT CONTROL COMPUTERS (ROLL, PITCH, YAW)
- p. NAVIGATION DISPLAY UNIT
- q. RADAR INDICATOR
- r. WEAPONS NAVIGATION COMPUTER/MISSION COMPUTER
- s. HORIZONTAL SITUATION DISPLAY PROCESSOR

6. TASK NUMBER: 60380 through 60400 - ANALOG TYPE LRUs

- a. TERRAIN FOLLOWING AMPLIFIER POWER SUPPLY
- b. NAVIGATION COMPUTER UNIT
- c. VELOCITY METER
- d. INERTIAL REFERENCE UNIT
- e. STABILIZED PLATFORM UNIT
- f. DISPLACEMENT GYROSCOPE
- g. RATE GYROSCOPE
- h. LATERAL ACCELEROMETER
- i. LINEAR ACCELEROMETER
- j. NORMAL ACCELEROMETER

7. TASK NUMBER: 60410 through 60430 - DISPLAY TYPE LRUs

- a. HEAD UP DISPLAY
- b. LEAD COMPUTING OPTICAL SIGHT SYSTEM OPTICAL DISPLAY SIGHT
- c. VIRTUAL IMAGE DISPLAY
- d. MULTISENSOR DISPLAY
- e. RADAR DISPLAY CONTROL
- f. VIDEO SIGNAL DISPLAY
- g. HORIZONTAL SITUATION DISPLAY INDICATOR
- h. INDICATOR RECORDER
- i. TERRAIN FOLLOWING INDICATOR

8. TASK NUMBER: 60440 through 60460 - MISCELLANEOUS TYPE LRUs

- a. AUXILIARY FLIGHT REFERENCE SYSTEM ELECTRONIC CONTROL AMPLIFIER
- b. COUNTERMEASURES DISPENSING SYSTEM CONTROLS
- c. ATTACK RADAR SYSTEM RADAR SET CONTROL BOX
- d. INSTRUMENT SET COUPLER
- e. INTERFERENCE BLANKER POWER SUPPLIES
- f. LEAD COMPUTING OPTICAL SIGHT SYSTEM AMPLIFIER
- g. TERRAIN FOLLOWING RADAR AMPLIFIER POWER SUPPLY
- h. F-111D ATTACK RADAR SYSTEM LOW VOLTAGE POWER SUPPLY
- i. AIRSPEED MACH INDICATOR ELECTRONIC CONTROL AMPLIFIER
- j. ALTITUDE VERTICAL VELOCITY INDICATOR ELECTRONIC CONTROL AMPLIFIER
- k. AUTOPILOT DAMPER PANELS
- l. COMPUTER CONTROL UNIT
- m. INERTIAL BATTERY UNITS
- n. LOW ALTITUDE MONITOR
- o. TERRAIN FOLLOWING RADAR SET CONTROL
- p. ATTACK RADAR SYSTEM ANTENNA CONTROL UNIT
- q. ATTACK RADAR SYSTEM ANTENNA INDICATOR CONTROL
- r. ATTITUDE DIRECTOR INDICATOR
- s. BEARING DISTANCE HEADING INDICATOR
- t. HORIZONTAL DISPLAY INDICATOR
- u. NAVIGATION DATA DISPLAY CONTROL (D MODEL)
- v. AIRSPEED MACH INDICATOR
- w. ALTITUDE VERTICAL VELOCITY INDICATOR
- x. HORIZONTAL SITUATION INDICATOR

9. TASK NUMBER: 60520 through 60540 - CADC STATION LRUs

- a. CENTRAL AIR DATA COMPUTER
- b. MAXIMUM SAFE MACH ASSEMBLY
- c. SUBSYSTEM TIE-IN TEST SET
- d. TERRAIN FOLLOWING RADAR TEST SET
- e. ICE DETECTOR
- f. PRESSURE SENSOR INDICATOR
- g. ENGINE PRESSURE RATIO TRANSMITTER
- h. STANDBY ALTIMETER
- i. STANDBY VERTICAL VELOCITY INDICATOR

10. TASK NUMBER: 60560 through 60580 - APX-64 IFF LRUs

- a. RECEIVER-TRANSMITTER
- b. RADIO SET CONTROL
- c. TRANSPONDER TEST SET
- d. SELF-TEST BOX

11. TASK NUMBER: 60590 - MODE IV COMPUTERS

- a. KIT
- b. KIR

12. TASK NUMBER: 606000 - APX-64 IFF TEST SETS

- a. APM-239A
- b. APM-245
- c. UPM-137
- d. UPM-137A

13. TASK NUMBER: 60620 through 60640 - ARC-164 IFF LRUs

- a. RECEIVER-TRANSMITTER
- b. FREQUENCY INDICATOR
- c. BLADE ANTENNA
- d. TEST ADAPTER
- e. RADAR SET CONTROL

14. TASK NUMBER: 60650 - ARC-164 TEST SET

- a. ARM-173
- b. ARM-164

15. TASK NUMBER: 60670 through 60690 - ARC-190 LRUs

- a. RADIO SET CONTROL
- b. RADIO SET CONTROL MOUNTS
- c. ANTENNA COUPLER
- d. RECEIVER-TRANSMITTER

16. TASK NUMBER: 60700 - ARC-190 TEST SETS

- a. ANTENNA SIMULATOR TEST SET
- b. HF TEST SET
- c. COUPLER TEST SET

17. TASK NUMBER: 60710 through 60730 - ILS LRUs

- a. GLIDE SLOPE MARKER BEACON RECEIVER
- b. LOCALIZER RECEIVER

18. TASK NUMBER: 60740 through 60760 - ARN-118 LRUs

- a. RECEIVER-TRANSMITTER
- b. RADIO SET CONTROL
- c. CONVERTER-ADAPTER
- d. ELECTRICAL EQUIPMENT MOUNTING BASE

19. TASK NUMBER: 60770 - TACAN TEST SETS

- a. 972V-1
- b. APM-135
- c. APM-135A

20. TASK NUMBER: 60780 - APX-78 LRUs

- a. RECEIVER-TRANSMITTER
- b. RADIO SET CONTROL

21. TASK NUMBER: 60790 through 60810 - AN/ALR-62 TEST STATIONS

- a. COUNTERMEASURES RECEIVER SET
- b. DIGITAL PROCESSOR TEST SET

22. TASK NUMBER: 60880 through 60900 - PEN AIDS LRUs

- a. LOW BAND POWER AMPLIFIERS
- b. LOW BAND POWER RECEIVER
- c. MID BAND POWER AMPLIFIERS
- d. MID BAND POWER RECEIVER
- e. HIGH BAND POWER AMPLIFIERS
- f. HIGH BAND POWER RECEIVER

23. TASK NUMBER: 60910 through 60930 - CRS LRUs

- a. AFT RADAR RECEIVER
- b. AFT FORWARD RADAR RECEIVER
- c. ANTENNA SWITCHING UNITS
- d. DUAL CHANNEL RECEIVER
- e. MULTICHANNEL RECEIVER

24. TASK NUMBER: 60940 through 60960 - DPTS LRUs

- a. CONTROL INDICATORS
- b. DIGITAL PROCESSORS
- c. INDICATOR PANEL

25. TASK NUMBER: 61130 through 61150 - AN/ALM-204 LRUs

- a. RADAR INFRARED INDICATOR
- b. DIGITAL DISPLAY INDICATOR
- c. DIGITAL DISPLAY INDICATOR CONTROL
- d. CONVERTER SYNCHRONIZER
- e. COMPUTER INTERFACE ADAPTER
- f. BAND 1 RECEIVER
- g. BAND 2 RECEIVER
- h. BAND 4 RECEIVER
- i. BAND 5/6 RECEIVER
- j. BAND 7 RECEIVER
- k. BAND 8/9A RECEIVER
- l. BAND 8/9B RECEIVER
- m. BAND 8/9 RECEIVER
- n. ENCODER
- o. AFT POWER SUPPLY
- p. COMPUTER
- q. BAND 1 TRANSMITTER
- r. BAND 2 TRANSMITTER
- s. BAND 4 TRANSMITTER
- t. BAND 5/6 TRANSMITTER
- u. BAND 7 TRANSMITTER
- v. BAND 8 TRANSMITTER
- w. BAND 9 TRANSMITTER
- x. MID BAND EXCITER
- y. SIGNAL DATA CONVERTER

26. TASK NUMBER: 61200 through 61220 - GACT LRUs

- a. AIR CONDITIONING CONTROL PANEL
- b. THERMAL TRANSPORT TEST
- c. THERMAL TRANSPORT RELAY
- d. MAINLINE CONTACTOR
- e. JAMMING SUB-SYSTEM POWER RELAY ASSEMBLY
- f. GENERATOR CONTROL PANEL
- g. LIGHTING CONTROL PANEL
- h. DIM AND TEST
- i. CAUTION INDICATOR
- j. AUXILIARY CAUTION INDICATOR
- k. DISPOSABLES CONTROL PANEL
- l. TRASIENT SUPPLY NETWORK
- m. JAMMER STATUS PANEL
- n. MODE SELECT PANEL
- o. RECEIVER CONTROL PANEL
- p. JAMMING SUB-SYSTEM CAUTION PANEL
- q. RF CALIBRATOR
- r. JAMMER CONTROL PANEL

27. TASK NUMBER: 61260 through 61280 - AN/ALQ-131 POD TEST SETS

- a. AN/ALM-186
- b. AN/ALM-187
- c. AN/ALM-192
- d. AN/ALM-188

28. TASK NUMBER: 61420 through 61430

- a. ATTACK RADAR SYSTEM ANTENNA PEDESTAL
- b. ATTACK RADAR SYSTEM RACK
- c. DIGITAL COMPUTER COMPLEX RACK
- d. ATTACK RADAR SYSTEM ROLL PEDESTAL
- e. LOW ALTITUDE RADAR ALTIMETER RACK
- f. TERRAIN FOLLOWING RADAR RACK
- g. RACK

APPENDIX B **ACRONYM LIST**

ACRONYM	DEFINITION
A/D	ANALOG TO DIGITAL
AAI	AIR-TO-AIR INTERROGATOR
AC	ALTERNATION CURRENT
ACU	ANTENNA CONTROL UNIT
ADI	ATTITUDE DIRECTOR INDICATOR
AFRS	AUXILIARY FLIGHT REFERENCE SYSTEM
AIC	ANTENNA INDICATOR CONTROL
AIS/R	AVIONIC INTERMEDIATE/SHOP REPLACEMENT
AM	AMPLITUDE MODULATION
AMC	ADVANCED MICROELECTRONIC CONVERTER
AMI	AIRSPEED MACH INDICATOR
AMP	AMPLIFIER
AMP/DET	AMPLIFIER/DETECTOR
APDP	AUTOPILOT DAMPER PANEL
API	ANGLE POSITION INDICATOR
ARS	ATTACK RADAR SYSTEM
ASU	ANTENNA SELECTOR UNIT
ATE	AUTOMATIC TEST EQUIPMENT
ATSCS	AVIONICS TEST SET CALIBRATOR SET
AVVI	ALTITUDE VERTICAL VELOCITY INDICATOR
BCU	BALLISTIC COMPUTER UNIT
BDHI	BEARING DISTANCE HEADING INDICATOR
BIT	BUILT-IN TEST
CADC	CENTRAL AIR DATA COMPUTER
CAMS	CORE AUTOMATED MAINTENANCE SYSTEM
CCA	CIRCUIT CAD ASSEMBLIES
CDU	CONTROL DISPLAY UNIT
CENPAC	CENTRAL PROCESSOR AND CONTROLLER
CETP	COMPUTER EXERCISE TEST PANEL
CI	CONTROL INDICATOR
CIIL	CONTROL INTERFACE INTERMEDIATE LANGUAGE
CIU	CONTROL INTERFACE UNIT
CMDS	COUNTERMEASURES DISPENSING SYSTEM
CMOS	COMPLEMENTARY METAL OXIDE SEMICONDUCTOR
CP	CONTROL PANEL
CPIN	COMPUTER PROGRAM IDENTIFICATION NUMBER
CRS	COUNTERMEASURE RECEIVER SET
CRT	CATHODE-RAY TUBE
CTK	CONSOLIDATED TOOL KIT
CW	CONTINUOUS WAVE
D/A	DIGITAL TO ANALOG
DAC	DIGITAL ANALOG CONVERSION
DATA C	BINARY DATA REGISTER-ROUTER
DAU	DOPPLER ANTENNA UNIT
DB	DEBICEL
DC	DIRECT CURRENT
DCC	DIGITAL COMPUTER COMPLEX
DCR	DUAL CHANNEL RECEIVER
DDI	DIGITAL DISPLAY INDICATOR
DDPU	DIGITAL DOPPLER PROCESSING UNIT

ACRONYM	DEFINITION
DET	DETECTOR
DEU	DOPPLER ELECTRICAL UNIT
DIP	DUAL IN-LINE PROCESSOR
DMM	DIGITAL MULTIMETER
DP	DIGITAL PROCESSOR
DPTS	DIGITAL PROCESSOR TEST STATION
DTS	DYNAMIC TEST SET
DVM	DIGITAL VOLTMETER
ECA	ELECTRONIC CONTROL AMPLIFIER
ECM	ELECTRONIC COUNTERMEASURE
EPU	ELECTRONICS PROCESSOR UNITS
ESD	ELECTROSTATIC SENSITIVE DEVICE
ESS	ELECTRICAL STANDARD SET
EW	ELECTRONIC WARFARE
FDC	FLIGHT DIRECTOR COMPUTER
FDR	FLIGHT DATA RECORDER
FM	FREQUENCY MODULATION
FRTS	FREQUENCY RESPONSE TEST SET
GACT	GRUMMAN AUTOMATIC CABLE TESTER
GATS	GRUMMAN AUTOMATIC TEST SET
GSU	GIMBAL SUPPORT UNIT
HBPA	HIGH BAND POWER AMPLIFIER
HBR	HIGH BAND RECEIVER
HDI	HORIZONTAL DISPLAY INDICATOR
HF	HIGH FREQUENCY
HFPA	HIGH FREQUENCY POWER AMPLIFIER
HPMA	HIGH POWER MICROWAVE ASSEMBLY
HPRFC	HIGH POWER RADIO FREQUENCY CONSOLE
HSDI	HORIZONTAL SITUATION DISPLAY INDICATOR
HSDP	HORIZONTAL SITUATION DISPLAY PROCESSOR
HSI	HORIZONTAL SITUATION INDICATOR
HUD	HEAD UP DISPLAY
HVL	HIGH VOLTAGE LOAD
HVPS	HIGH VOLTAGE POWER SUPPLY
I/O	INPUT/OUTPUT
IBNS	INERTIAL BOMB NAVIGATION SYSTEM
IC	INTEGRATED CIRCUIT
ID	INTERFACE DEVICE
IDA	INTERFACE DEVICE ADAPTER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IF	INTERMEDIATE FREQUENCY
IFF	IDENTIFICATION FRIEND OR FOE
ILS	INSTRUMENT LANDING SYSTEM
INS	INERTIAL NAVIGATION SYSTEM
IP	INDICATOR PANEL
IPB	ILLUSTRATED PARTS BREAKDOWN
IREP	INTERMEDIATE REPAIR ENHANCEMENT PROGRAM
IRU	INERTIAL REFERENCE UNIT
ISC	INSTRUMENT SET COUPLERS
ITA	INTERFACE TEST ADAPTER
ITS	INERTIAL TEST SET
JFET	JUNCTION FIELD EFFECT TRANSISTOR
JSS	JAMMING SUB-SYSTEM

ACRONYM**DEFINITION**

LAM	LOW ALTITUDE MONITOR
LARA	LOW ALTITUDE RADAR ALTIMETER
LBPA	LOW BAND POWER AMPLIFIER
LBR	LOW BAND RECEIVER
LCD	LIQUID CRYSTAL DIODE
LCOS	LEAD COMPUTING OPTICAL SIGHT
LCU	LIQUID COOLING UNIT
LED	LIGHT EMITTING DIODE
LRU	LINE REPLACEABLE UNIT
LVPS	LOW VOLTAGE POWER SUPPLY
MBPA	MID-BAND POWER AMPLIFIER
MBR	MID-BAND RECEIVER
MC	MISSION COMPUTER
MCC	MISSION COMPUTER COMPLEX
MCR	MULTICHANNEL RECEIVER
MCU	MAINTENANCE CONTROL UNIT
MDC	MAINTENANCE DATA COLLECTION
MDL	MISSION DATA LOADER
MDT	MISSION DATA TERMINAL
MFG	MASTER FREQUENCY GENERATOR
MLV	MEMORY LOADER/VERIFIER
MMS	MULTIPLE MATRIX SWITCHES
MODEM	MODULATOR AND DEMODULATOR
MOSFET	METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR
MRT	MODULATOR RECEIVER-TRANSMITTER
MRU	MICROWAVE RECEIVER UNIT
MSD	MULTISENSOR DISPLAY
MSMA	MAXIMUM SAFE MACH ASSEMBLY
MTU	MAGNETIC TAPE UNIT
NCU	NAVIGATION COMPUTER UNIT
NDDP	NAVIGATION DATA DISPLAY PANELS
NDI	NONDESTRUCTIVE INSPECTION
NDU	NAVIGATION DISPLAY UNIT
OA/FI	OPERATIONAL ASSURANCE/FAULT ISOLATION
ODS	OPTICAL DISPLAY SIGHT
OPS	OPERATION
PATEC	PORTABLE AUTOMATIC TEST EQUIPMENT CALIBRATOR
PC	PRINTED CIRCUIT
PCLC	POD COLDPLATE LIQUID COOLER
PCM	POWER CONTROL MONITOR
PE	PHASED INSPECTION
PEN AIDS	PENETRATION AIDS
PI	PERIODIC INSPECTION
PMI	PHASED MAINTENANCE INSPECTION
PPG	PROGRAMMABLE PULSE GENERATOR
PROM	PROGRAMMABLE READ ONLY MEMORY
PS	POWER SUPPLY
PSVM	PHASE SENSITIVE VOLTMETER
R/T	RECEIVE/TRANSMITTER
RCL	RESISTIVE/CAPACITIVE/INDUCTIVE
RDC	RADAR DISPLAY CONTROL
RF	RADIO FREQUENCY
RI	RADAR INDICATOR

ACRONYM	DEFINITION
RMS	RADAR MODULATION SIMULATOR
RRT	RADAR RECEIVER-TRANSMITTER
RSC	RADAR SET CONTROL
RT	RECEIVER-TRANSMITTER
SASE	SEMI-AUTOMATIC SUPPORT EQUIPMENT
SCA	SILICON CONTROLLED AMPLIFIER
SCR	SILICON CONTROLLED RECTIFIER
SDC	SIGNAL DATA CONVERTER
SEL	SYSTEM ENGINEERING LABORATORY
SIA	SWITCHING INTERFACE ASSEMBLY
SIS	STALL INHIBITOR SYSTEM
SPU	STABILIZED PLATFORM UNIT
SRU	SHOP REPLACEABLE UNIT
SST	SUB-SYSTEM TESTER
SWR	STANDING WAVE RATIO
T AND I	TEST AND INSPECTION
TACAN	TACTICAL AIR NAVIGATION
TASU	TEST ADAPTER SWITCHING UNIT
TCTO	TIME COMPLIANCE TECHNICAL ORDER
TDR	TIME DOMAIN REFLECTOMETER
TF	TERRAIN FOLLOWING
TF AMP	TERRAIN FOLLOWING AMPLIFIER
TFR	TERRAIN FOLLOWING RADAR
TO	TECHNICAL ORDER
TRU	TESTER REPLACEABLE UNIT
TSLVC	TEST SET LOADER/VERIFIER COMPUTER
TTL	TRANSISTOR TRANSISTOR LOGIC
TWT	TRAVELING WAVE TUBE
UHF	ULTRA HIGH FREQUENCY
UJT	UNI-JUNCTION TRANSISTOR
UUT	UNIT UNDER TEST
VCO	VOLTAGE CONTROLLED OSCILLATOR
VD	VOLTAGE DETECTOR
VDVC	VARIABLE DIELECTRIC VACUUM CAPACITOR
VID	VIRTUAL IMAGE DISPLAY
VSD	VIDEO SIGNALS DISPLAY
WNC	WEAPONS NAVIGATION COMPUTER

APPENDIX C
LIST OF COMMON HANDTOOLS

1. **WRENCHES**
 - OPEN END
 - BOX END
 - CRESCENT
 - ALLEN
2. **SOCKET SET**
 - 1/4" DRIVE
 - 3/8" DRIVE
3. **SCREWDRIVERS**
 - COMMON
 - PHILLIPS
 - JEWELERS
4. **PLIERS**
 - NEEDLE NOSE
 - SLIP JOINT
 - DIAGONAL CUT
 - CANNON PLUG
 - WISE GRIP
5. **HAMMER**
6. **NUT DRIVERS**
7. **FLASHLIGHT**
8. **RULER**
9. **FILE SET**
10. **INSPECTION MIRROR**

APPENDIX D
LIST OF FORMS USED IN AFSC 451X6

AF FORMS

1. AF Form 127 - Traffic Transfer Receipt
2. AF Form 145 - Certificate of Destruction of Material
3. AF Form 198 - Report of Survey for Air Force Property
4. AF Form 264 - MMICS Job/Status Document
5. AF Form 332 - BCE Work Request
6. AF Form 457 - USAF Hazard Report
7. AF Form 601 - Equipment Action Request
8. AF Form 979 - DANGER TAG
9. AF Form 1118 - Notice of Hazard
10. AF Form 1297 - Temporary Issue Receipt
11. AF Form 1530 - Punch Card Transcript
12. AF Form 1996 - Adjusted Stock Level
13. AF Form 2005 - Issue/Turn In Request
14. AF Form 2405 - Personnel Availability Forecast
15. AF Form 2406 - Maintenance Preplan
16. AF Form 2413 - Supply Control Log
17. AF Form 2414 - Verification Worksheet
18. AF Form 2419 - Routing and Review of Quality Control Reports
19. AF Form 2420 - Quality Control Inspection Summary
20. AF Form 2421 - Equipment Discrepancies
21. AF Form 2426 - Training Request and Completion Notification
22. AF Form 2520 - Repair Cycle Control Log

AFTO FORMS

1. AFTO Form 20 - Caution and Inspection Record
2. AFTO Form 95 - Significant Historical Data
3. AFTO Form 99 - Limited/Special TMDE Certification
4. AFTO Form 108 - TMDE Certification
5. AFTO Form 163 - Request for Limited/Special Calibration (TMDE)
6. AFTO Form 244 and 245 - Industrial/Support Equipment Record
7. AFTO Form 349 - Maintenance Data Collection Record
8. AFTO Form 349-3 - Maintenance Data Collection Record
(Automated)
9. AFTO Form 350 - Reparable Item Processing Tag

DD FORMS

1. DD Form 362 - Statement of Charges for Government Property,
Lost, Damaged or Destroyed
2. DD Form 1149 - Requisition and Invoice/Shipping Document
3. DD Form 1348-1 - DOD Single Line Item Release/Receipt Document
4. DD Form 1348-6 - DOD Single Line Item Requisition System
Document
5. DD Form 1387 - Military Shipment Label
6. DD Form 1387-2 - Special Handling Data/Certification
7. DD Form 1574 - Serviceable Tag - (Materiel)

SF FORMS

1. SF Form 700 - Security Container Information
2. SF Form 701 - Activity Security Checklist
3. SF Form 702 - Security Container Check Sheet