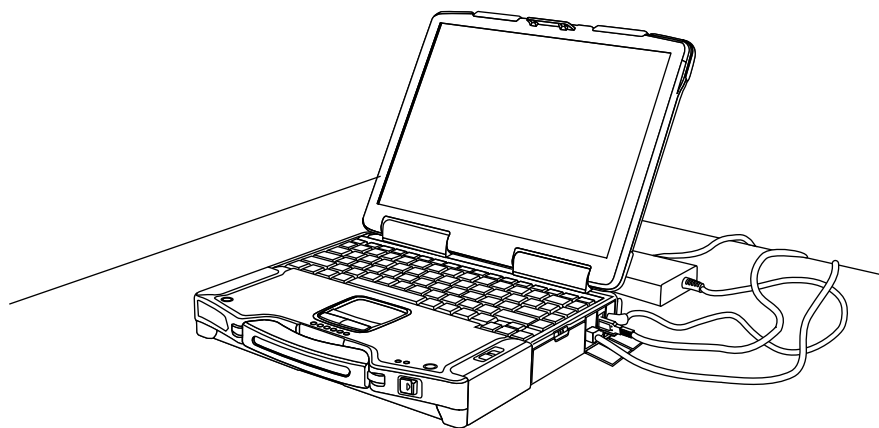


TECHNICAL MANUAL

**OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR
PARTS AND SPECIAL TOOLS LIST**

FOR

**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2)
AN/GYK-55 CREATE DEVICE (NSN: 7010-01-500-2271)**



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01 AUGUST 2008

WARNING SUMMARY

SAFETY SUMMARY GENERAL SAFETY PRECAUTIONS

For general and emergency first aid procedures, see FM 4-25.11, First Aid for Soldiers.

For safety precautions during the maintenance of electrical/electronic equipment, see TB 385-4 (Army), Safety Requirements for Maintenance of Electrical and Electronic Equipment.



SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK:

1. DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL WITH BARE HANDS.
2. IF POSSIBLE, TURN OFF THE ELECTRICAL POWER.
3. IF YOU CAN NOT TURN OFF THE ELECTRICAL POWER, USE A DRY WOODEN POLE, DRY ROPE, OR SOME OTHER INSULATING MATERIAL TO PULL, PUSH, OR LIFT THE PERSON TO SAFETY.
4. SEND FOR HELP AS SOON AS POSSIBLE.
5. AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF THE ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START CARDIOPULMONARY RESUSCITATION (CPR).



WARNING



The Create Device lithium battery pack is hazardous if mishandled or abused. Strictly observe the following precautions to prevent injury to personnel or damage to equipment.

- DO NOT heat, short circuit, incinerate, crush, puncture, disassemble, or otherwise mutilate the battery pack.
- DO NOT store battery in equipment during long periods of non-use.
- TURN OFF equipment immediately if you feel battery case becoming very hot, hear battery venting (hissing or burping), or smell irritating gas (such as sulfur dioxide). Remove battery only after it cools to the touch; then return it to supply for disposal.



WARNING



If battery contents or electrolyte come in contact with the eyes, IMMEDIATELY flush the affected area for at least 15 minutes with clean WATER and have someone else summon medical attention for you. Unaffected personnel should assist the affected individual in the vital first flushing of the eyes. Such assistance is necessary for effective irrigation, as the eyelids go into spasm and remain shut, making it difficult for a person to flush the eyes without assistance. Failure to comply could cause injury to personnel.

WARNING SUMMARY - Continued



WARNING



If battery contents or electrolyte are spilled and come in contact with the skin, IMMEDIATELY flush the affected area for at least 15 minutes with clean WATER and seek medical attention promptly. Failure to comply could cause injury to personnel.



WARNING



If the Create Device internal lithium battery pack leaks, remove the battery pack and clean out the battery compartment with a clean damp cloth, then dry thoroughly. Dispose of the lithium battery pack IAW your local servicing Defense Reutilization Material Office (DRMO). Failure to comply could result in injury to personnel and/or damage to equipment.



WARNING

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only. Report damaged equipment to maintenance personnel. Failure to comply may result in injury to personnel.



WARNING



The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

**ARMY TM 11-7010-346-13&P
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TECHNICAL MANUAL
**OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR
PARTS AND SPECIAL TOOLS LIST**

**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW(FBCB2)
AN/GYK-55 CREATE DEVICE
NSN:7010-01-500-2271**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter and/or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander: US Army Communications-Electronics Life Cycle Command, ATTN: AMSEL-LC-LEO-E-ED-P, Fort Monmouth, New Jersey 07703-5000. The fax number is 732-532-1413, DSN 992-1413. You may also e-mail your recommendations to: **AMSELLEOPUBSCHG@conus.army.mil**. In either case, a reply will be furnished to you.

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HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

This Operator and Field Maintenance Technical Manual is designed to assist personnel in operating, troubleshooting, and maintaining the FBCB2 Create Device Digital Computer Set. It is written in accordance with MIL-STD-40051-2 Change 1.

It is important to become familiar with this manual and with the overall functions of the FBCB2 Create Device before attempting any maintenance tasks.

Chapter 1. Provides general information about the FBCB2 Create Device and a detailed description of the major components and their locations. The chapter provides the theory of operation of the FBCB2 Create Device and the way it functions within the FBCB2 system. A list of abbreviations and acronyms is included to aid the reader.

Chapter 2. Provides a detailed description of the controls and indicators of the FBCB2 Create Device Ruggedized Laptop Computer. It provides startup and shutdown procedures for the system and also provides operator level instructions for configuring and maintaining the FBCB2 Create Device under usual conditions. These operating instructions include operations under usual and unusual conditions, and emergency operating procedures.

Chapter 3. Provides operator-level troubleshooting procedures and guidelines.

Chapter 4. Provides operator-level maintenance instructions in the form of Preventive Maintenance Checks and Services (PMCS) and configuration procedures.

Chapter 5. Provides field-level maintenance instructions such as service upon receipt, configuration and component replacement procedures.

Chapter 6. Provides parts information for the AN/GYK-55 Create Device Digital Computer Set in the form of the RPSTL introduction, Repair Parts list(s), Special Tool list, National Stock Number (NSN) index and Part Number (PN) index.

Chapter 7. Provides support information including the Maintenance Allocation Chart (MAC), Service Upon Receipt (SUR) information, the Repair Parts Lists and Special Tools List, the Components of End Item (COEI) list, the Basic Issue Items list, the Additional Authorization List (AAL) and the Expendable and Durable Items list. It also includes a list of reference documents referred to in the manual and used in the FBCB2 system.

Rear Matter. Provides a Glossary of Terms which defines and explains uncommon terms used in this manual. There are also blank DA 2028 forms which can be cut out and mailed in to call attention to deficiencies found in this manual. A filled out sample form is also provided. At the very end of the manual is an English/Metric conversion chart.

FEATURES OF THIS MANUAL

- A table of contents is provided for all work packages included in this manual.
- Warnings, cautions, notes, subject headings, and other important information are highlighted in bold print as a visual aid.
- Statements and words of particular importance are printed in capital letters to create emphasis.
- Instructions are located together with figures to illustrate the specific maintenance tasks.
- Technical instructions include metric in addition to standard units. A metric conversion chart is provided on the inside back cover.

FOLLOW THESE GUIDELINES TO USE THE MANUAL

- Read through this manual and become familiar with its contents before proceeding to specific maintenance tasks.

- A warning summary is provided at the beginning of this manual and should be read before performing any maintenance tasks.
- In the actual maintenance tasks, follow all WARNINGS, CAUTIONS and NOTES immediately preceding the procedural steps to which they apply. If these instructions are not followed or care is not taken, injury to personnel or equipment damage may result.
- The headings for each work package help group the material and assist in quickly finding tasks. Read all preliminary information found at the beginning of each task. After completing a task, ALWAYS perform the follow-on maintenance at the end of the task.

ACCESS THE PM FBCB2 KNOWLEDGE CENTER

For the latest information on FBCB2 equipment and documentation, visit the FBCB2 Knowledge Center at **<https://fcb2.army.mil>**. You will need to register with the site to gain access to the information. You can also access the FBCB2 Knowledge Center through your **Army Knowledge Online (AKO)** account.

CHAPTER 1
OPERATOR GENERAL INFORMATION
FOR
AN/GYK-55 CREATE DEVICE

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION

WORK PACKAGE INDEX

<u>Title</u>	<u>WP Sequence No.</u>
GENERAL INFORMATION	0001
EQUIPMENT DESCRIPTION AND DATA.	0002
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OPERATOR MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****GENERAL INFORMATION****SCOPE**

This technical manual contains operating instructions, troubleshooting procedures, and maintenance instructions for the FBCB2 Force XXI Battle Command Brigade-and-Below (FBCB2) AN/GYK-55 Create Device Digital Computer Set. In keeping with the two-level maintenance concept, work packages are designated either as Operator or Field level of maintenance. Procedures are given for configuring or adjusting system performance utilizing appropriate software applications, troubleshooting the system to identify faulty components, and removing and replacing hardware components.



Paragraphs in this manual may apply only to Army or to Marine Corps personnel. These paragraphs have prefixes (A) for Army and (MC) for Marine Corps to indicate the appropriate military service branch. Paragraphs without prefixes apply to both services.

MAINTENANCE FORMS, RECORDS, AND REPORTS

(A) Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751, Functional Users Manual for The Army Maintenance Management Systems - Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

(MC) Maintenance forms and records used by Marine Corps personnel are prescribed by TM 4700-15/1.

Reporting of Item and Packaging Discrepancies

(A) For damage to equipment incurred during shipment, report the damage on SF 361, Transportation Discrepancy Report (TDR).

(A) For item and packaging discrepancies, fill out and forward SF 364 Report Of Discrepancy (ROD) as prescribed in AR 735-11-2/DLAR 4140.55.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATION (EIR)

(A) If your FBCB2 Create Device needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. If you have Internet access, the easiest and fastest way to report problems or suggestions is to go to <https://aeps.ria.army.mil/aepspublic.cfm> (scroll down and choose the Submit Quality Deficiency Report bar). The Internet form lets you choose to submit an Equipment Improvement Recommendation (EIR), a Product Quality Deficiency Report (PQDR) or a Warranty Claim Action (WCA). You may also submit your information using an SF 368 (Product Quality Deficiency Report). You can send your SF 368 via e-mail, regular mail, or facsimile using the addresses/facsimile numbers specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. We will send you a reply.

(MC) For Marine Corps users: Quality deficiency reports (QDR) shall be submitted on SF 368 in accordance with MCO 4855.10. A reply will be furnished to you. PQDRs can be submitted online at www.logcom.usmc.mil/pqdr/default.asp.

CORROSION PREVENTION AND CONTROL (CPC)

Army materiel CPC is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items. Corrosion specifically occurs with metals. It is an electrochemical process that causes the degradation of metals. It is commonly caused by exposure to moisture, acids, bases, or salts. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking.

Plastics, composites, and rubbers can also degrade. Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically Ultraviolet (UV)) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking.

(A) Form SF 368, the PQDR should be submitted to the address specified in DA PAM 750-8, TAMMS Users Manual.

(MC) Refer to TM 4700-15.1-3. CPC. Submit form SF 368, for recording and transmitting equipment failure data. Marine Corps Order (MCO) 4855.10 applies. Online PQDRs can be submitted at www.logcom.usmc.mil/pqdr/default.asp.

OZONE DEPLETION SUBSTANCES (ODS)

The continued use of ODS has been prohibited by Executive Order 12856 of 3 August 1993. There are no ozone-depleting substances within the AN/GYK-55 Create Device Digital Computer Set components.

DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

Destruction of Army/Marine electronics materiel to prevent enemy use shall be in accordance with Technical Manual 750-244-2.

PREPARATION FOR STORAGE OR SHIPMENT

Prior to the storage and shipment of equipment, the equipment shall be checked for condition and completeness. After shipment, the equipment shall be checked for condition, completeness, cleanliness, and operational readiness before storing.

Storage

For long term storage, or for storage at temperatures above specified operating temperatures, remove the Ruggedized Laptop Computer main battery pack and store separately.

The storage temperature range for the complete AN/GYK-55 Create Device Digital Computer Set, packed in its computer case, shall not exceed -4°F to +140°F (-20°C to +60°C). See Table 2, for individual component storage temperatures.

Shipment

Packaging for shipment shall be in accordance with best commercial practice and in accordance with the American Society for Testing Materials (ASTM) Standard Practice for Commercial Packaging D3951-90.

Ruggedized Laptop Computer. Before shipping the AN/GYK-55 Create Device Ruggedized Laptop Computer, remove the battery pack and the hard disk drive and wrap them separately in bubble wrap or suitable cushioning material. Pack them in the same container as the laptop.

NOMENCLATURE CROSS REFERENCE LIST

Table 1. Nomenclature and Definitions.

COMMON NAME	OFFICIAL NOMENCLATURE	DEFINITION OF TERMINOLOGY
FBCB2 Create Device	Computer, Digital, AN/GYK-55	Refers to the Ruggedized Laptop Computer that is the operating component of the AN/GYK-55 Digital Computer Set.
Stylus	Computer Unit Pen	A non-metallic pen that allows the soldier to select a precise point on the touchscreen. The stylus allows the operator to access the touchscreen while wearing Mission-Oriented Protective Posture (MOPP) gloves.

LIST OF ABBREVIATIONS AND ACRONYMS

This is a list of abbreviations and acronyms used in the FBCB2 system. Not all of the acronyms and abbreviations on this list are relevant to the Create Device.

Table 2. Abbreviations/Acronyms List.

ACRONYM	DESCRIPTION
AAL	Additional Authorization List
ABCS	Army Battle Command System
AC	Alternating Current
ACADA	Automatic Chemical Agent Detector and Alarm
ADC	AC/DC Input Control
AFATDS	Advanced Field Artillery Tactical Data System
AIC	ABCS Interoperability Client
AKO	Army Knowledge Online
AMDWS	Air and Missile Defense Workstation
ANCD	Automated Net Control Device
AO	Area of Operation
AOI	Area Of Interest
AOR	Area Of Responsibility
AR	Army Regulation
ASAS	All Source Analysis System
ASIP	Advanced System Improvement Program
B2	Brigade and Below
BAS	Battlefield Automation System
BCOP	Battle Command Operations
BCS	Battle Command Server
BCS3	Battle Command Sustainment Support System
BDE	Brigade
BFA	Battlefield Functional Area
BFT	Blue Force Tracking
BFT-A	Blue Force Tracking - Army
BGN	Blue Force Tracking Global Network Operation Center
BII	Basic Issue Item

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
BIOS	Basic Input/Output System
BIT	Built-In-Test
BLOS	Beyond Line Of Sight
BN	Battalion
BOI	Basis Of Issue
BOS	Battlefield Operating System
BPS	Black Power Supply
C2	Command and Control
C2PC	Command and Control for the Personal Computer
CADRG	Compressed Arc Digital Raster Graphic
CAGEC	Commercial and Government Entity Code
CCS1	Communication Control Server
CD	Compact Disc
CD-ROM	Compact Disc-Read Only Memory
CHAS	Chassis
CIP	Control Indicator Panel
CLOS	Circular Line Of Sight
CMOS	Complementary Metal-Oxide Semiconductor
CNR	Combat Net Radio
COEI	Components Of End Item
COMSEC	Communications Security
COP	Common Operational Picture
COTS	Commercial Off-The-Shelf
CPC	Corrosion Prevention and Control
CPR	Cardiopulmonary Resuscitation
CPU	Central Processing Unit
CR	Change Request
CRM	Client Registration Message
CRT	Cathode Ray Tube
CSMA	Carrier Sense Multiple Access
CSS	Combat Service Support

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
CTA	Common Table of Allowance
CTIL	Commanders Tracking Item List
CV	Crypto Variable
DA	Department of the Army
DAGR	Defense Advanced Global Positioning System Receiver
DB	Database
dC	Diagnostic Code
DC	Direct Current
DECON	Decontamination
DISP	Display
DoD	Department of Defense
DRMO	Defense Reutilization Marketing Office
DS	Direct Support
DSP	Digital Signal Processor
DU	Display Unit
EAC	Echelon Above Corps
ECM	Electronic Countermeasures
ECWS	Extreme Cold Weather System
EDIL	Expendable and Durable Items List
EIAD	Expansion Interface Adapter Device
EIC	End Item Code
EIR	Equipment Improvement Recommendation
EIS	Enhanced Information System
EMP	Electromagnetic Pulse
ENM	EPLRS Network Manager
EPLRS	Enhanced Position Location Reporting System
ESD	Electrostatic Discharge
ESDS	Electrostatic Discharge Sensitive
FAT	File Allocation Table

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
FBCB2	Force XXI Battle Command Brigade-and-Below
FDMA	Frequency Division Multiple Access
FIPR	Flash/Immediate/Priority/Routine Message Precedence
FLIR	Forward Looking Infrared
FMTV	Family of Medium Tactical Vehicles
FOUO	For Official Use Only
FOV	Field Of View
FP	Fault At Post
FRAGO	Fragmentary Order
FSCM	Fire Support Control Measures
GB	Gigabyte
GCCS-A	Global Command and Control System-Army
GFCI	Ground Fault Circuit Interrupter
GFE	Government Furnished Equipment
GPS	Global Positioning System
HDD	Hard Disk Drive
HDR	High Data Rate
HEMTT/PLS	Heavy Expanded Mobility Tactical Truck/Palletized Loading System
HICON	Highest Configurable Role
HMMWV	High Mobility Multi-purpose Wheeled Vehicle
I/O	Input/Output
IAW	In Accordance With
IBS	Inter-Brigade Server
IDE	Integrated Drive Electronics
IETM	Interactive Electronic Technical Manual
IEW	Intelligence and Electronic Warfare
INC	Internet Controller
IP	Input Power
IP	Internet Protocol

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
JNN	Joint Network Node
JNTC	Joint Network Transport Capability
JTA	Joint Table of Allowance
KU	Keyboard Unit
LAN	Local Area Network
LCD	Liquid Crystal Display
LCN	Logical Channel Number
LDR	Low Data Rate
LED	Light Emitting Diode
LMTV	Light Medium Tactical Vehicles
LOGSA	Logistics Support Activity
LOS	Line Of Sight
LRAS3	Long-Range Advanced Scout Surveillance System
LRU	Line Replaceable Unit
LSD	Large Screen Display
LTI	Lower Tactical Internet
MAC	Maintenance Allocation Chart
MAGTF	Marine Air-Ground Task Forces
MB	Megabyte
MCS	Maneuver Control System
MDL	Mission Data Loader
MDS	Mission Data Sets
MGRS	Military Grid Reference System
MIB	Management Information Base
MICAD	Multipurpose Integrated Chemical Agent Detector
MILSATCOM	Military Satellite Communication
MIS	Management Informational Systems
MOPP	Mission Oriented Protective Posture

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
MOS	Military Occupational Specialty
MPD	Multimedia Pocket Device
MSG	Multiple-Source Group
MTOE	Modified Table of Organization and Equipment
NBC	Nuclear, Biological, and Chemical
NHA	Next Higher Authority
NICAD	Nickel Cadmium
NIIN	National Item Identification Number
NiMH	Nickel Metal Hydride
NMWR	National Maintenance Work Requirement
NSA	National Security Agency
NSN	National Stock Number
NTDR	Near Term Digital Radio
ODS	Ozone Depleting Substance
OEF	Operation Enduring Freedom
OPORD	Operations Order
OTA	Over-The-Air
OTAR	Over-The-Air Re-keying
OTAZ	Over-The-Air Zeroize
OTH	Over The Horizon
P/N	Part Number
PASS	Publish and Subscribe Services
PC	Personal Computer
PCB	Printed Circuit Board
PDSD	Portable Data Storage Device
PKI	Private Key
PLGR	Precision Lightweight Global Positioning System Receiver
PMA	Power Module Assembly
PMC	Preventive Maintenance Checklist

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
PMCS	Preventive Maintenance Checks and Services
PMI	Phased Maintenance Inspection
POC	Point Of Contact
POST	Power-On-Self-Test
PPP	Point-to-Point Protocol
PQDR	Product Quality Deficiency Report
PU	Processor Unit
PVNT	Position, Velocity, Navigation, and Timing
PWR	Power
QA	Quality Assurance
QTY	Quantity
R/T	Receiver/Transmitter
RA	Remote Antenna
RADIAC	Radiation Detection, Identification, and Computation
RAM	Random Access Memory
RHDDC	Removable Hard Disk Drive Cartridge
RM	Radiant Mercury
ROD	Report Of Discrepancy
RPSTL	Repair Parts and Special Tools List
RS	Radio Set
SA	Situational Awareness
SATCOM	Satellite Communication
SBU	Sensitive But Unclassified
SCB	System Configuration Baseline
SCM	Server Coordination Message
SEP	System Enhancement Program
SIAD	Serial Interface Adapter Device
SINCGARS	Single Channel Ground and Airborne Radio System
SIPRNET	Secret Internet Protocol Router Network

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
SITREP	Situation Report
SMI	Soldier-Machine Interface
SMR	Source, Maintenance and Recoverability
SO	Security Officer
SOP	Standard Operating Procedures
SPA	Selectable Power Adapter
SUM	Software User's Manual
SVGA	Super Video Graphics Array
TAMMS	The Army Maintenance Management System
TB	Technical Bulletin
TDA	Tables of Distribution and Allowance
TDMA	Time Division Multiple Access
TDR	Transportation Discrepancy Report
TFT	Thin Film Transistor (LCD Display)
TI	Tactical Internet
TM	Technical Manual
TMDE	Test, Measurement and Diagnostic Equipment
TMT	Transceiver Management Tool
TOC	Tactical Operations Center
TOE	Table Of Equipment
TR	Trusted Relationship
U/I	Unit of Issue
UAL	User Access Level
UAV	Unmanned Aerial Vehicles
UOC	Usable On Code
UPS	Uninterruptible Power Source
URO	User Read-Out
USB	Universal Serial Bus
UTI	Upper Tactical Internet
UTM	Universal Transverse Mercator

Table 2. Abbreviations/Acronyms List. - Continued

ACRONYM	DESCRIPTION
UTO	Unit Task Organization
VAA	Vehicular Amplifier Adapter
VHSIC	Very High Speed Integrated Circuit
VMF	Variable Message Format
VPN	Virtual Private Network
VSAT	Very Small Aperture Terminal
WAN	Wide Area Network
WCA	Warranty Claim Action
WP	Work Package
WWMCCS	World Wide Military Command and Control

QUALITY ASSURANCE INFORMATION

Refer to the latest issue of DA PAM 25-30 to determine if there are new editions, changes or additional publications pertaining to the equipment.

SAFETY, CARE, AND HANDLING

Warnings, cautions, and notes are used throughout this manual and will immediately precede the description or procedure to which they apply.

- Warnings are used when serious injury or loss of life could occur.
- Cautions are used when damage to equipment could result from improper handling or maintenance.
- Notes are provided for information purposes only.

Always practice safety and observe all warnings and cautions. A summary list of warnings that apply to the AN/GYK-55 Create Device is included inside the front of this manual.

For safety precautions during the maintenance of electrical/electronic equipment, Army personnel should refer to TB 385-4.

For care and handling of electronics equipment, Army personnel should refer to TM 43-0158.

**CAUTION**

The following procedures should be observed when handling all electronic components and units. Failure to observe these precautions can cause permanent damage to the electronic equipment.

1. Turn off power or disconnect all power prior to removing or installing a component.
2. Inspect all cables for damaged connectors and terminal ends or damage to the cable jacket before connecting to the equipment.
3. Do not handle electronic devices unnecessarily or remove them from their packages until ready to install.
4. When handling electronic devices, even when not connected, avoid touching connector pins or contacts as this could cause static electricity in your body to discharge and damage internal circuits.
5. If components must be left in a wet or dusty environment, cover all connectors and contacts to prevent contamination.
6. Do not place electronic components near magnetic field generators such as audio speakers, vehicle engines, or electric motors.

Table 3 lists safety, care, and handling information for the AN/GYK-55 Create Device Digital Computer Set.

Table 3. Safety, Care, Handling Information for the AN/GYK-55 Create Device.

Type of Equipment	Safety, Care and Handling Information
Mechanical	The only line replaceable unit (LRU) is the Ruggedized Laptop Computer which is 7.98 pounds (3.62 kg) with the HDD, CD/DVD drive and battery pack installed.
Acoustical	The noise level generated by the internal drives is insignificant.
Electrical	The highest voltage inside the laptop is +15 VDC, which is produced by the external DC power supply.
Ionizing Radiations	No x-ray or other ionizing radiation is present in the Create Device.
Radioactive Materials	No radioactive materials are used.
Toxic Materials	The lithium-ion backup battery pack contains enough lithium material to pose a hazard if the battery leaks. The laptop motherboard also contains a small clock battery. The lithium content of this battery is well below the amounts permitted by Federal Regulations for use in a confined area.

SECURITY MEASURES FOR ELECTRONIC DATA

The FBCB2 Create Device Ruggedized Laptop Computer is accredited to store and transfer classified information up to and including Secret. Personnel who handle, store, or transport the Create Device should be familiar with AR 380-5 and AR 25-2.

Information Assurance

AR 25-2 establishes responsibilities, policies, and procedures for assuring information security across the FBCB2-BFT and FBCB2-EPLRS networks.

Personnel Responsibilities. Operator and maintenance personnel who are properly cleared and trained are required to safeguard all classified information during operations. Personnel with the proper security clearances as specified in AR 380-5 are responsible for controlling access to and safeguarding sensitive and classified information available over the FBCB2 networks.

Information Security

AR 380-5 establishes the policy for classification, downgrading, declassification, and safeguarding of information requiring protection in the interest of national security.

Personnel Responsibilities. Accountability of classified documents and media must be systematic and continuous. Users and maintainers of the FBCB2 Create Device are accountable for all system components and should immediately report any missing or destroyed system components to the Chain of Command. BDE and BN S2 must verify that users of Secret mission data have appropriate security clearances and are authorized to access the classified information IAW AR 380-5.

Screen Lock. The operator should activate the screen lock function whenever the Create Device is left unattended to protect any displayed classified information. Refer to WP 0019 for the procedure to activate the screen lock.

Classification Banners. It is the responsibility of Operator and Field Signal Maintenance personnel to ensure the proper classification banner is displayed for the level of classification of the FBCB2 software. Refer to WP 0064 for the procedure to change the system classification and the classification banner displayed.

Storage and Marking of Classified Media. Containers that satisfy the requirements of AR 380-5 should be used for movement and storage of classified media. The media containing the classified information remains classified until properly purged or destroyed in accordance with the procedures contained in AR 380-5.

If the FBCB2 Create Device Ruggedized Laptop Computer contains classified information, it must be marked IAW AR 380-5 to indicate the classification level of the stored material. If the FBCB2 Create Device Ruggedized Laptop Computer does not contain classified material, it does not require special storage.

An FBCB2 Create Device Ruggedized Laptop Computer marked in accordance with AR 380-5 as Secret will remain as classified media until the hard disk drive is declassified using an approved purging station or is destroyed in accordance with AR 380-5. Proper safeguards must be taken IAW AR 380-5 when storing and transporting the Ruggedized Laptop Computer to prevent unauthorized access to the stored material.

An FBCB2 Create Device Ruggedized Laptop Computer containing only unclassified information must be handled as For Official Use Only (FOUO) IAW AR 380-5.

Encryption Keys. Public and private encryption keys are installed in the Create Device. The private key allows the Security Officer to gain access to remote systems to transmit a challenge or authentication request or to disable a platform remotely. Encryption key media should be handled and stored IAW AR 380-5 and AR 25-2.

Remote Disable. The FBCB2 Create Device enables the Security Officer to remotely challenge and disable an FBCB2 platform if it is suspected of being compromised. A private key must be installed in order to perform the disable function.

Local Destroy. The FBCB2 Create Device software contains menu options to allow the operator to destroy the hard disk drive to prevent the system from being compromised. This function is accessed from the F6 ADMIN option on the Operations screen.

Personnel Security

Personnel security issues are addressed in AR 25-2 and AR 380-5. Personnel responsible for accessing and handling sensitive or classified information must be properly cleared, trained, and briefed on their responsibilities for safeguarding such information. This applies to all software media, printed media, and data and information that is accessed or transmitted over a network.

Passwords. The Security Officer is responsible for assigning and distributing individual and unit passwords for access to sensitive FBCB2 information. The Create Device is used to generate and load passwords into password mission data set (MDSs) for distribution to units. Refer to WP 0020 for procedures to create a password mission data set.

PM FBCB2 KNOWLEDGE CENTER

For the latest up-to-date information on all FBCB2 equipment and documentation, visit the FBCB2 Knowledge Center at <https://fbc2.army.mil>. You will need to register with the site to gain access to the information. Click on the "Register for Access" link to register with the site. You can also access the FBCB2 Knowledge Center through your **Army Knowledge Online (AKO)** account.

END OF WORK PACKAGE

OPERATOR GENERAL INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****EQUIPMENT DESCRIPTION AND DATA****EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES****Characteristics**

The AN/GYK-55 Create Device Digital Computer Set consists of a Ruggedized Laptop Computer running Force XXI Battle Command Brigade-and-Below (FBCB2) software, a Universal Serial Bus (USB) cable for connecting a mission data load (MDL) storage device to the laptop, and a computer transit case for storage of the laptop (with its DC power supply) and the USB cable. The complete AN/GYK-55 Create Device Digital Computer Set is shown in Figure 1. The Ruggedized Laptop Computer is also referred to as the "FBCB2 Create Device" or simply as the "Create Device."

The Create Device allows the commander and staff to create mission data loads consisting of databases, digital maps or map overlays, unit task organization (UTO) data, software patches, security passwords and C2 messages. The Security Officer can also use the Create Device to challenge (authenticate) or disable a remote system.

Capabilities

A private encryption key must be loaded in order for the Security Officer to challenge or disable a remote platform.



The AN/GYK-55 Create Device Digital Computer Set does not automatically transmit its own position since it is not equipped with a GPS receiver.

The Create Device allows the Commander or staff to:

1. Create mission data loads consisting of databases, digital maps or map overlays, unit task organization (UTO) data, software patches, security passwords and C2 messages.
2. Transfer data from a CD-ROM disk to an MDL device.
3. Send and Receive FBCB2 SA and C2 data via a Local Area Network (LAN).
4. Challenge and/or disable a remote FBCB2 platform.
5. Download mission data loads to an MDL Device.

Figure 1. AN/GYK-55 Create Device Digital Computer Set.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

The following paragraphs and accompanying figures provide a description and location of the major components of the AN/GYK-55 Create Device Digital Computer Set.

FBCB2 Create Device Ruggedized Laptop Computer



All references to left and right or front and rear views of the Create Device are relative to the front or face-on view.



The Ruggedized Laptop Computer Types I and II are designations used in this manual. Type I references the Ruggedized Laptop Computer (NSN 7021-01-556-9062.) Type II references the Ruggedized Laptop Computer (NSN .)

The Create Device is a notebook-size laptop that has been ruggedized to resist harsh conditions and rough handling. The laptop has a magnesium alloy casing and the display, keyboard and ports are sealed against dirt and liquids. Critical internal devices including the hard disk drive are shock mounted. The laptop can withstand severe temperature extremes and sudden temperature changes. The Ruggedized Laptop Computer is equipped with a 1.4 GHz Intel Pentium 4 processor and 512 MB of RAM memory. The operating system is Linux Red Hat. The FBCB2 software is stored in an 80 GB hard disk drive (HDD).

The Type II version of the Ruggedized Laptop Computer is equipped with a 1.6 GHz Intel Duo Core processor and 2 GB of RAM memory.

Figure 2 shows left and right front views of the Create Device with key features and components indicated.

Figure 3 shows the right side of the Type II version of the Ruggedized Laptop Computer.

Figure 2. Create Device Ruggedized Laptop Computer Left and Right Front Views.

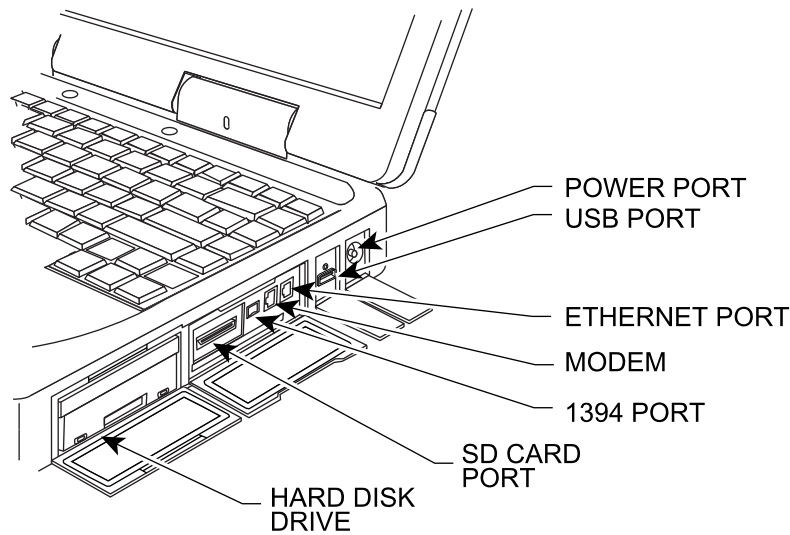


Figure 3. Type II Ruggedized Laptop Computer Right Side View.

Touchscreen Display. A touch-sensitive Liquid Crystal Display (LCD) mounted to the inside cover allows the operator to select menu options by pressing directly on the screen membrane. The screen resists cuts and scratches and can be operated by a soldier using a fingertip or the provided stylus pen. A keyboard and a touch-sensitive pad are located on the bottom half of the laptop and sealed against liquids and dirt.

Keyboard Keys and Touch Pad Buttons. These features are described in detail in WP 0004, Description and Use of Operator Controls and Indicators.

Ethernet and USB Ports. An Ethernet port and a USB port are located on the right side of the Create Device as shown in Figure 4.

The Ethernet port is used to connect the Create Device to a Local Area Network (LAN) or to a stand-alone network printer. The USB port is located on the right side of the Ruggedized Laptop Computer next to the Ethernet port and is used to connect an MDL device or a local USB printer. Figure 3 shows the location of the Type II version of Ruggedized Laptop Computer Ethernet port.

DC IN Jack. The Create Device is powered by a +15 VDC external DC power supply that plugs into the DC IN jack located on the right side of the laptop behind the Ethernet and USB ports, as shown in Figure 4 and Figure 5.

Figure 4. Type I Create Device Ruggedized Laptop Computer Ethernet and USB Ports.

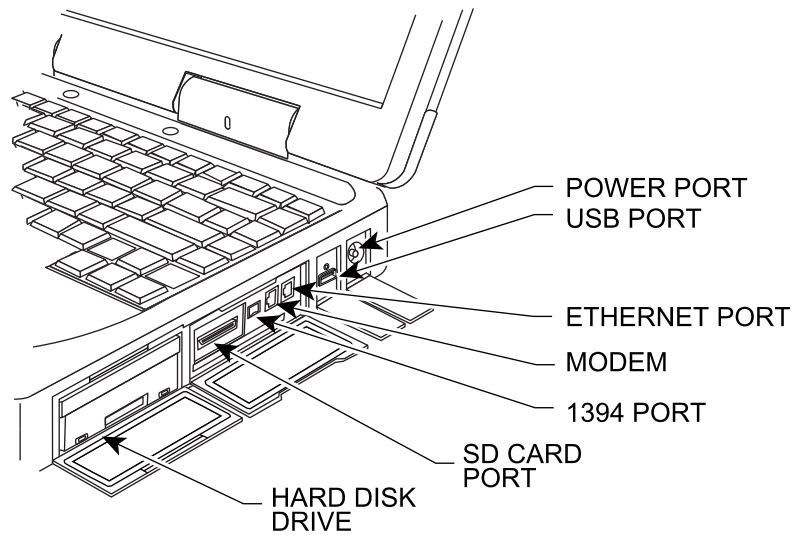


Figure 5. Type II Create Device Ruggedized Laptop Computer Ethernet and USB Ports.

Ruggedized Laptop Computer Rear Connectors. The rear connectors of the Create Device are shown in Figure 6 or Figure 7. These connectors are accessed by opening a hinged rear cover.

Serial Port Connector. A 9-pin RS-232 serial port connector is located on the right rear side of the laptop.

External Display Port. This SVGA port allows an external display to be connected to the laptop.



Some older models of the Ruggedized Laptop Computer have a standard keyboard/mouse connector instead of a USB port.

External USB Keyboard/Mouse Port. This USB port allows an external keyboard or mouse to be used with the Create Device. It can also be used as a second USB port for a USB printer or to access an MDL device.

Headphone and Microphone Jacks. These jacks permit the connection of a headset and a microphone to the internal sound card. These functions are not currently used in the Create Device.

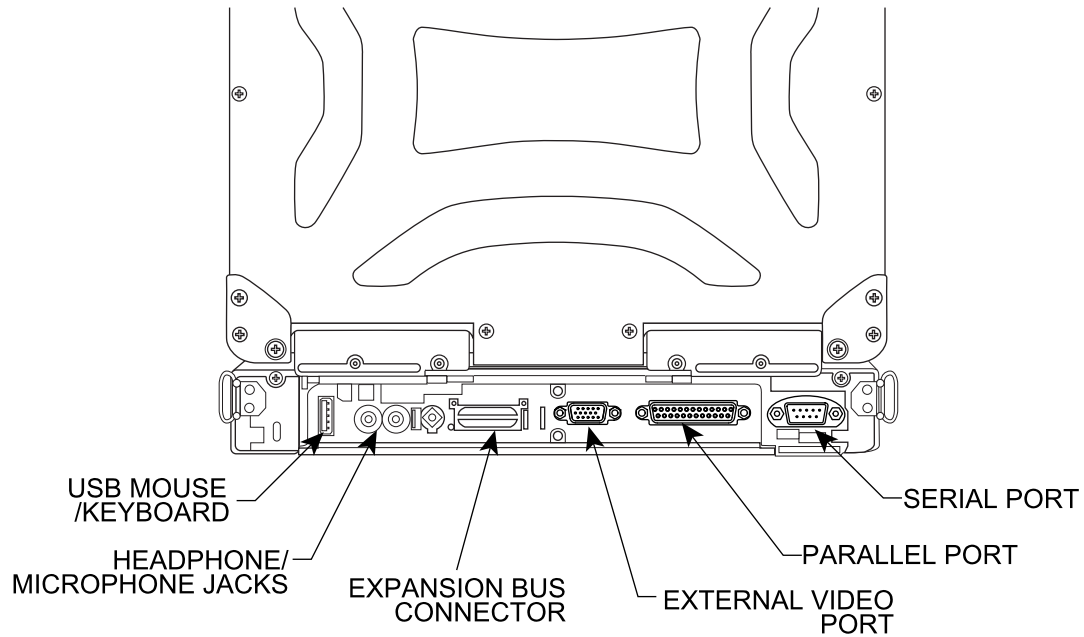


Figure 6. Type I Create Device Ruggedized Laptop Computer Rear Connectors.

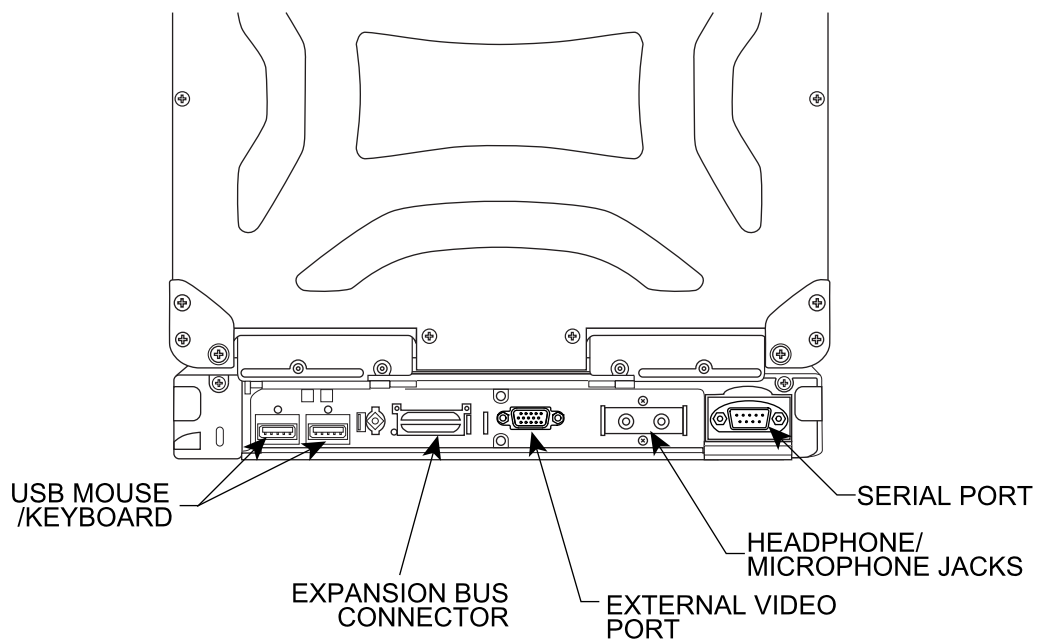


Figure 7. Type II Create Device Ruggedized Laptop Computer Rear Connectors.

Hard Disk Drive (HDD)

A removable 80 GB HDD is located in a compartment on the right side of the Ruggedized Laptop Computer, as shown in Figure 2.

CD/DVD Drive

On the left side of the Ruggedized Laptop Computer is a compartment for the removable CD/DVD-RW drive, as shown in Figure 2. This compartment is referred to as the Multimedia Pocket (MP), and the device installed in the compartment is referred to as the Multimedia Pocket Device (MPD). Figure 8 shows the two types of removable drives used in the Create Device.

Battery Pack

The Create Device has a removable backup battery that, when fully charged, can power the laptop up to 8 hours depending on the processing load. The average time is about 7 hours. The battery begins charging when the DC power supply is connected and should reach full charge (battery status LED steady green) in approximately 4 hours. Figure 2 shows the location of the battery pack compartment and Figure 8 shows an illustration of the battery pack.

PC/PCMCIA Card compartments

Type II version of Ruggedized Laptop Computer has no PC/PCMCIA Card slot.

A compartment is located on the right side of the Ruggedized Laptop Computer with two slots that will accept PC/PCMCIA cards, as shown in Figure 2. These slots can be used for special cards such as modem cards or an additional memory card. These slots are not currently used.

DC Power Supply

The DC power supply is an external power supply with a removable AC power cable that plugs into an available 120 VAC outlet. The other end of the AC power cable plugs into a connector in the DC power supply. The power supply converts 120 VAC to +15 VDC. The DC output cable is attached to the power supply and plugs into the DC IN jack on the right side of the Ruggedized Laptop Computer. The DC power supply and its cables are shown in Figure 8.

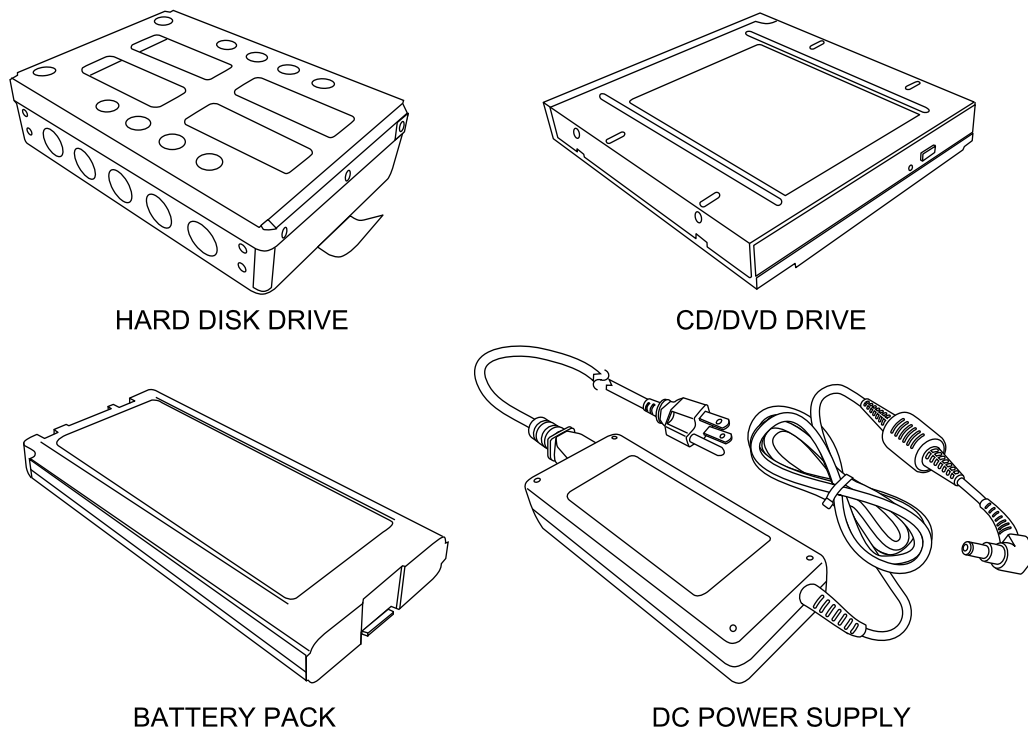


Figure 8. Create Device Ruggedized Laptop Computer Components.

USB Cable

The AN/GYK-55 Create Device Digital Computer Set is supplied with a USB cable that has a military connector on one end and a standard USB connector on the other, as shown in Figure 9. This cable is used to connect an MDL device to the Create Device.

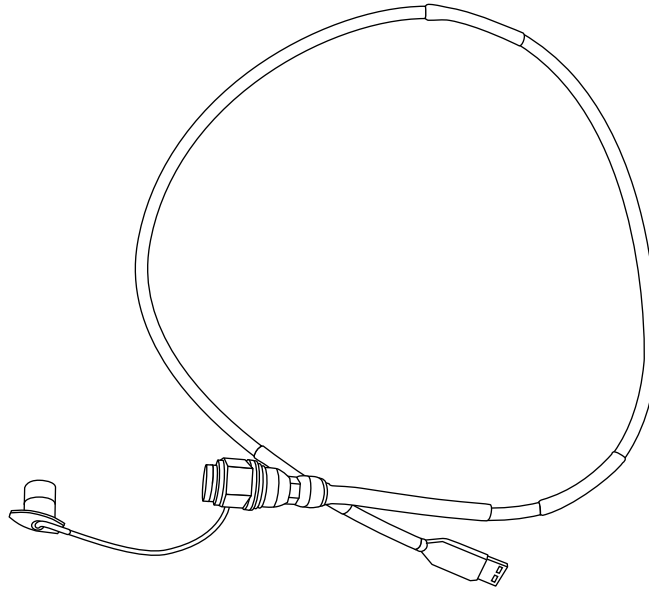


Figure 9. AN/GYK-55 Create Device USB Cable.

Computer Transit Case

The Create Device Ruggedized Laptop Computer, DC power supply and USB cable are stored in a computer transit case, as shown in Figure 10. Additional pockets are provided in the case lid for CD/DVD disks and documentation.



Figure 10. Create Device Computer Transit Case with Stored Components.

EQUIPMENT DATA**Dimension Data**

Table 1 lists the physical dimensions for the AN/GYK-55 Create Device Digital Computer Set components.

Table 1. AN/GYK-55 Create Device Component Dimensions.

COMPONENT	DIMENSIONS (HxWxL in inches)	WEIGHT (in pounds)
Ruggedized Laptop Computer	2.6 x 11.9 x 10.7	8.0
USB Cable	1.0 x 36.0	1.0
Computer Transit Case (empty)	3 x 16.0 x 11.5	9.7

Environmental Data

Table 2 lists the environmental data for the AN/GYK-55 Create Device Digital Computer Set.

Table 2. AN/GYK-55 Environmental Specifications.

COMPONENT	TEMPERATURE	ALTITUDE	RELATIVE HUMIDITY
Ruggedized Laptop Computer	Operate: -41°F to +95 °F (-5°C to +35° C) Store: -4°F to +140°F (-20°C to +60°C)	Operate and Store: 15,000 Ft	30% to 90% (No condensation)
USB Cable	Operate: -41° F to +95°F (-40°C to +35°C) Store: -4°F to +140°F (-20°C to +60°C)	Not specified	30% to 80%

END OF WORK PACKAGE

OPERATOR GENERAL INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****THEORY OF OPERATION****INTRODUCTION**

The AN/GYK-55 Force XXI Battle Command Brigade-and-Below (FBCB2) Create Device Digital Computer Set enables commanders to create and disseminate operational data such as National Geospatial Intelligence Agency (NGA) digital terrain data, Unit Task Organization (UTO) data, security passwords, private keys, messages, operational orders, map overlays, and large data files in support of the AN/UYK-128(V)1 FBCB2-EPLRS systems. This is the primary function of the FBCB2 Create Device. Data is downloaded to a CA-131/P Mission Data Loader (MDL) device vial a USB cable connected to the Create Device, as shown in Figure 1.

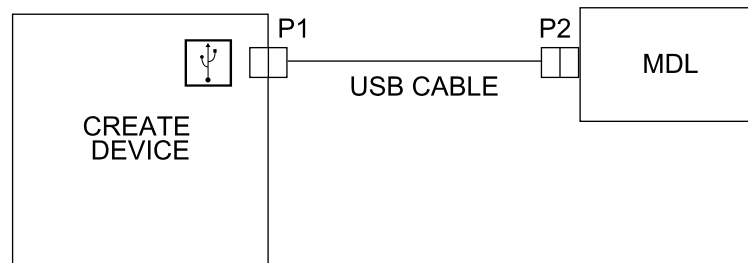


Figure 1. AN/GYK-55 Create Device Connected to a CA-131/P MDL Device.

In addition to its primary function, the FBCB2 Create Device is also be used to monitor other FBCB2 platforms and to challenge and disable them if they become compromised. The Create Device is connected to a network switch in the Tactical LAN, as shown in Figure 2, and receives FBCB2 SA data and C2 messages from the Inter-Brigade Server. It can be used to challenge remote FBCB2 platforms and require them to authenticate. If the remote platform is suspected of being compromised, the Create Device can be used to disable the remote platform. The AN/GYK-55 Create Device Digital Computer Set is not connected equipped with a GPS receiver so the operator must manually set the time and date, and must manually post the system's location.

The AN/GYK-55 Create Device Digital Computer Set is deployed only with terrestrial units.

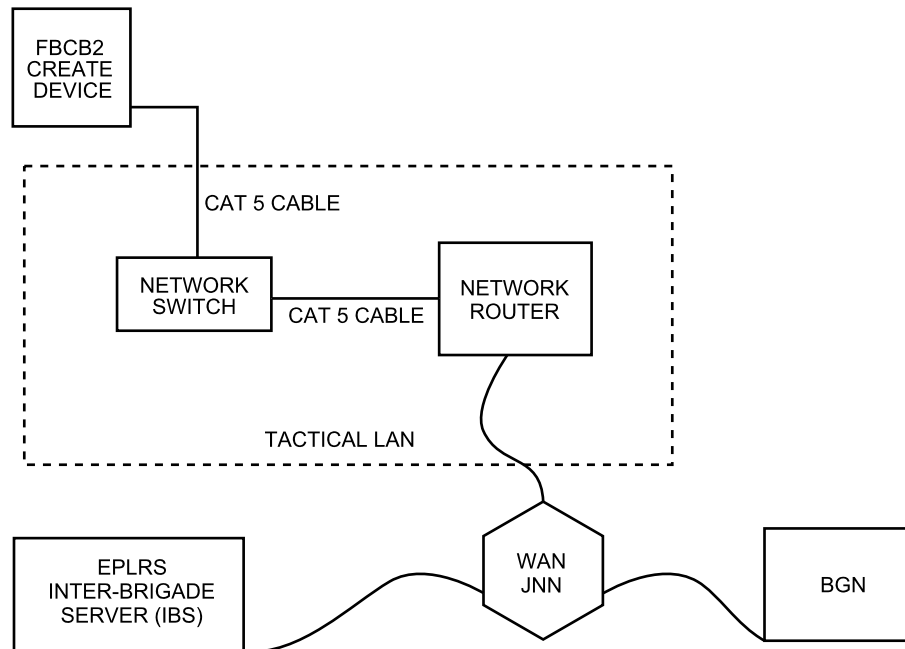


Figure 2. FBCB2 Create Device Connected to the Tactical LAN.

FBCB2 CREATE DEVICE RUGGEDIZED LAPTOP COMPUTER

The Create Device Ruggedized Laptop Computer is the operating component of the AN/GYK-55 Create Device Digital Computer Set and is shown in Figure 3 in its operating configuration. It hosts the LINUX operating system and the FBCB2 software in an 80 GB hard disk drive (HDD). The FBCB2 software is version 6.4.4.2 or higher.

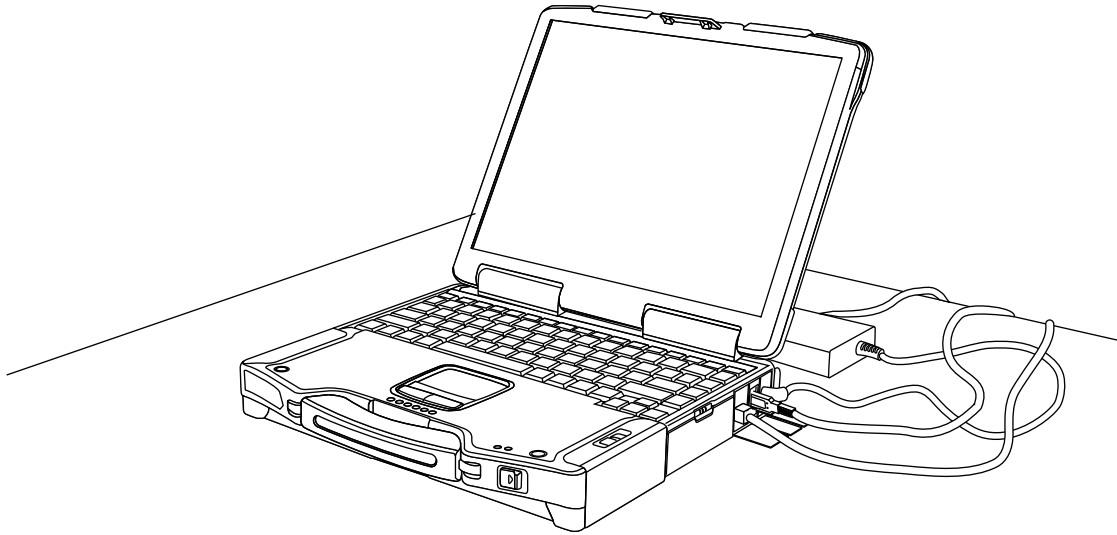


Figure 3. FBCB2 Create Device.

FBCB2 CREATE DEVICE AND THE CA-131/P MISSION DATA LOADER (MDL)

The Create Device with the CA-131/P MDL storage device enables the operator to create and distribute mission data loads (MDLs). Mission data loads are created and transferred from the Create Device to the CA-131/P MDL using a universal serial bus (USB) cable, as illustrated in Figure 4.

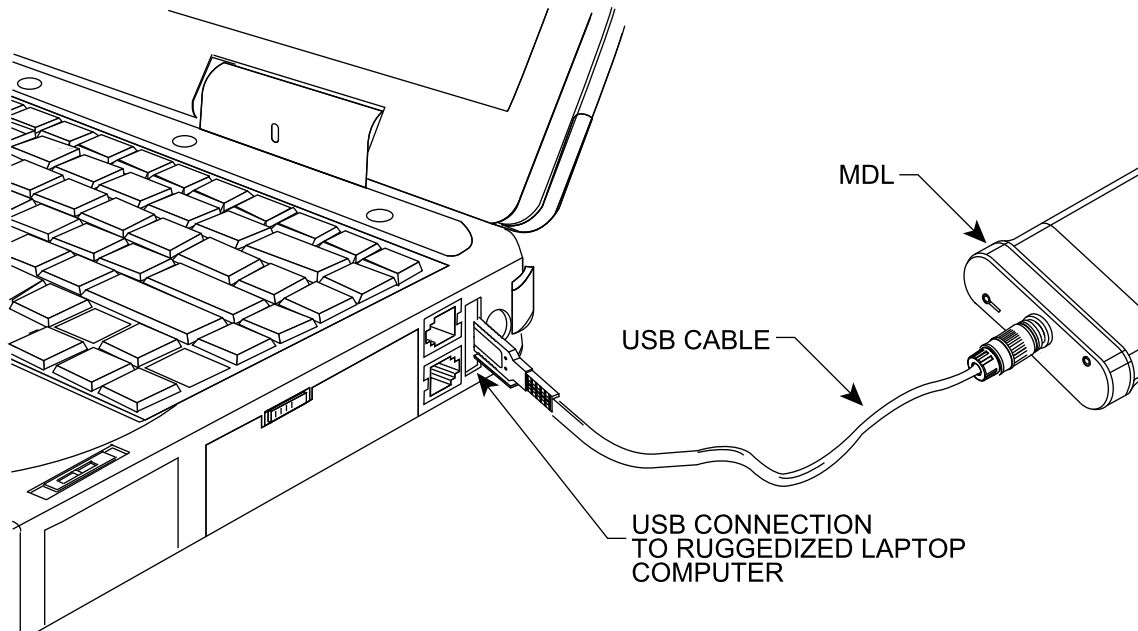


Figure 4. MDL Connected to the Create Device.

PASSWORD GENERATION AND DISSEMINATION

The Create Device is used by the Security Officer to generate both unit and individual passwords and to add them to a password mission data set for inclusion in an MDL. The Security Officer can implement a number of secure password controls including setting the effective start date and the effective end (expiration) date. Once passwords are generated, the Security Officer can print the passwords and distribute them to the units.

MAP AND MAP OVERLAY DISSEMINATION

The Map Manager function of the Create Device software allows the operator to create and store various types of maps data on either an MDL device or on a CD-ROM disk. Map data may also be imported (uploaded) from an MDL or CD-ROM into the Create Device. The operator can import all four types of map data supported by the FBCB2 system: Compressed Arc Digital Raster Graphic (CADRG), Vector Product Format (VPF), Digitized Terrain Elevation Data (DTED) and Imagery.

LARGE MESSAGES, FIELD REPORTS, AND FIELD ORDER DISSEMINATION

The Create Device can also create and download to the MDL large operational files such as messages, field orders and operations orders (OPORDs) when distribution of that information over the LTI or L-Band network is not feasible or practical.

Some examples of large operational files include:

- Control measures graphic (e.g., Operational Overlay).
- Fire control measures graphic (e.g., Fires Overlay).
- Logistics control graphic (e.g., Log Overlay).
- Maneuver control graphic (e.g., TIRs Overlay).
- Obstacle/barrier graphic (e.g., Obstacle Overlay).
- Various threat templates (e.g., SITREP, R&S, etc.).
- OPOORDs with annexes.
- Compressed screen captures.

PATCH DISSEMINATION FROM AN MDL OR CD-ROM

The Create Device is used to upload patches to the FBCB2 software in support of the FBCB2-EPLRS system. Patches are uploaded from a CD-ROM disk and then downloaded to MDLs for distribution to FBCB2 platforms.

DATABASE DISSEMINATION FROM AN MDL OR CD-ROM

The Create Device provides the ability to create, save and export large and small database and files in support of the FBCB2-EPLRS system.

END OF WORK PACKAGE

CHAPTER 2
OPERATOR INSTRUCTIONS
FOR
AN/GYK-55 CREATE DEVICE

CHAPTER 2

OPERATOR INSTRUCTIONS

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OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****DESCRIPTION AND USE OF OPERATOR CONTROLS AND INDICATORS****Create Device Ruggedized Laptop Computer Controls and Indicators**

The Create Device Ruggedized Laptop Computer controls and indicators include the touchscreen display, the keyboard keys, the touch pad , left and right touch pad buttons, and the LED status indicators, as illustrated in Figure 1.

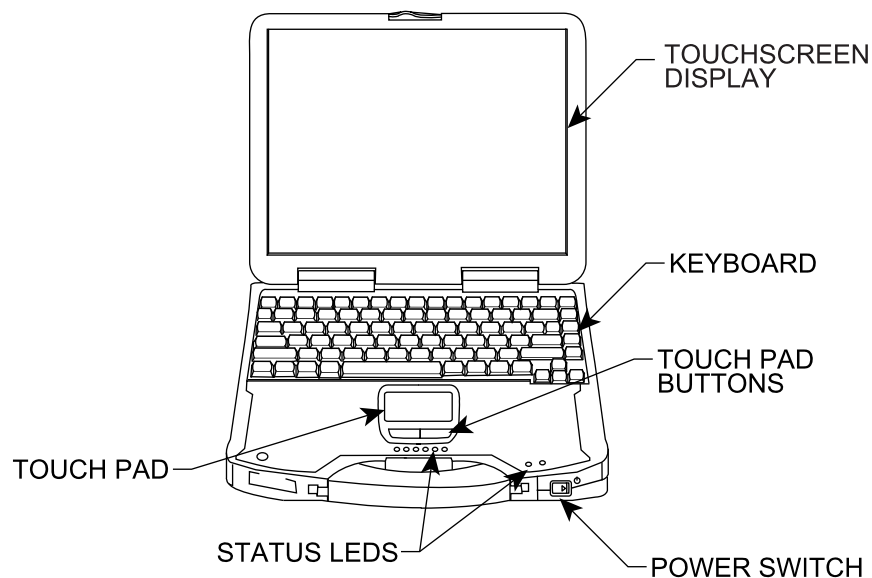


Figure 1. Create Device Ruggedized Laptop Computer Controls and Indicators.

Touchscreen Display

The Ruggedized Laptop Computer display has a touch-sensitive layer that covers the flat panel display and allows the operator to directly select buttons and options on the screen without having to use the keyboard or touch pad. The operator uses a fingertip or the special stylus provided with the Ruggedized Laptop Computer to select objects and areas. They can also press and drag to define, or "hook," an area or object on the screen to select it or enlarge it. Tapping the menu buttons and options with the stylus or a fingertip will activate the option.

Keyboard

The Ruggedized Laptop Computer keyboard is a compressed and rearranged version of a desktop computer keyboard. The function keys are arranged around the outside of the keyboard, while the number and alphabet

keys are placed in the middle in standard keyboard layout.

Special Function Key Combinations. Many control functions for the Ruggedized Laptop Computer have been assigned to keyboard key combinations rather than physical buttons, knobs and switches. The blue Function (Fn) key (located at the lower left of the keyboard) is used in combination with keys F1 through F10 to control various functions such as LCD display brightness, speaker volume and power off. To activate one of the special functions, hold down the Fn key and press F1-F10. Table 1 is a list of the key combinations and their control functions.

Table 1. Special Function Key Combinations.

KEY COMBINATION	FUNCTION
Fn+F1	Adjust LCD display (touchscreen) brightness down.
Fn+F2	Adjust LCD display (touchscreen) brightness up.
Fn+F3	Change display to external display or send video to both external and LCD.
Fn+F4	Turn audio from the internal speaker and headphone jack on/off.
Fn+F5	Adjust internal speaker and headphone volume down.
Fn+F6	Adjust internal speaker and headphone volume up.
Fn+F7	Save the current status of the computer in flash memory and place the computer in standby mode. Press any key on the keyboard, move the cursor on the touch pad, or tap the display with a fingertip or stylus to return to normal operation.
Fn+F8	(Not Functional).
Fn+F9	Display the remaining battery capacity on the touchscreen.
Fn+F10	Save the current status of the computer to the hard disk and place the computer in hibernation mode. Press any key on the keyboard, move the cursor on the touch pad, or tap the display with a fingertip or stylus to return to normal operation.

Touch Pad



CAUTION

Do not use anything other than a fingertip on the touch pad surface or possible damage to the touch pad could result.

The touch pad duplicates the functions of an external computer mouse. It is a rectangular pressure-sensitive surface approximately 2 inches by 1.5 inches in area, located just below the keyboard. The operator uses a fingertip on the surface of the touch pad to perform the same movement functions as an external mouse. Two buttons below the touch pad membrane duplicate the left and right buttons of an external mouse.

Moving a fingertip on the touch pad surface will move the cursor on the screen, just as with an external mouse. Tap the touch pad once to select an object, or press the left touch pad button. Tap the touch pad twice rapidly to double-click on an object and activate the function.

Status Indicators

There are a total of 8 LED status indicators. An indicator can be on steady, blink at a regular rate, or flash intermittently to indicate activity in response to the computer software or operating system. These indicators are located below the touch pad and to the right just above the power switch as shown in Figure 2. Table 2 lists the status indicators and their functions in order from left to right in Figure 2.

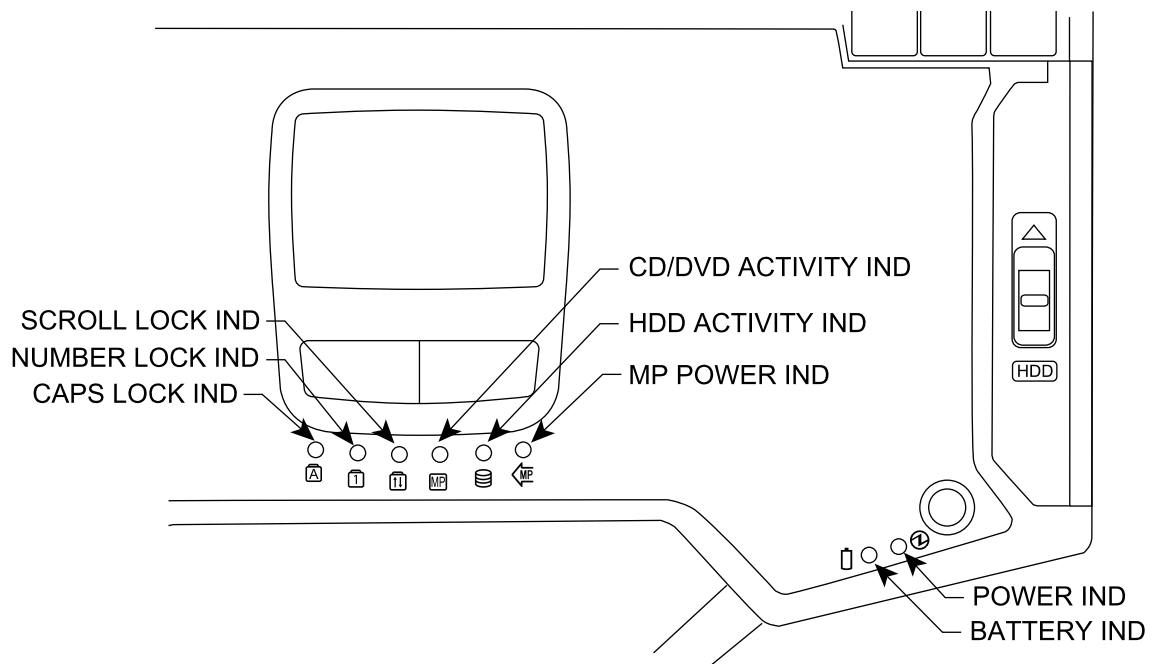


Figure 2. Ruggedized Laptop Computer Status LED Indicators.

Table 2. Ruggedized Laptop Computer Activity and Status Indicators.











KEY INDICATOR	FUNCTION
 Caps lock status	<p>This status indicator is on steady green when the CAPS LOCK key is pressed. The CAPS LOCK key is used to switch from typing in capital letters to typing in lowercase.</p>
 Number lock status	<p>This status indicator lights steady green when the NUMLK key is pressed. This causes a portion of the keyboard (indicated by blue numbers and mathematical symbols) to function as a numeric keypad.</p>
 Scroll lock status	<p>This status indicator lights steady green when the SCRLK key is pressed.</p>
 MPD status	<p>This status indicator flashes green intermittantly when the CD/DVD (multimedia pocket device or MPD) is accessed by the computer software. This indicator can also be on steady to show the status of a second battery pack, if one is installed in the MP compartment.</p>
 Hard disk drive status	<p>This status indicator flashes green intermittantly when the hard disk drive is accessed.</p>
 MP power status	<p>This status indicator is on steady green when power is supplied to a device in the CD/DVD drive compartment (also called the multimedia pocket (MP)). This indicator is not lit when a second battery pack is installed in the multimedia compartment. You can confirm the status of the second battery pack with the MPD status indicator.</p>

Table 2. Ruggedized Laptop Computer Activity and Status Indicators. - Continued

KEY INDICATOR	FUNCTION
 Battery status	 CAUTION <div data-bbox="605 468 1518 636" style="border: 1px solid black; padding: 5px;"> <p>In high temperature conditions, the battery will discharge to the level that corresponds to an 80% charge for normal temperature mode. While this is occurring, the green battery indicator will blink. Do not remove the battery pack while the battery indicator is blinking green or the power will shut off resulting in lost data or damage to the Ruggedized Laptop Computer.</p> </div> <p>This status indicator has the following states:</p> <p>This status indicator has the following states:</p> <p>Not lit - Battery pack is not connected or charging is not being performed.</p> <p>Steady Green - Battery is fully charged.</p> <p>Blinking Green - Battery is in high temperature mode and is discharging to the level that corresponds to an 80% charge at normal temperature. Do not remove the battery pack while the battery indicator is blinking green.</p> <p>Steady Orange - Charging in progress.</p> <p>Blinking Orange - Battery temporarily cannot be recharged because the internal temperature of the battery pack is outside of the acceptable temperature range (too hot or too cold) for recharging. Once the allowable range requirement is satisfied, charging begins automatically. Your computer can be used normally in this state.</p> <p>Steady Red - The battery level is very low (the charge is approx. 9% or less). Connect the DC power supply. You can use the computer when the battery indicator light is orange. If you do not have a DC power supply, save your data and power off your computer. After replacing the battery pack with a fully charged one, turn your computer on.</p> <p>Blinking red - Battery pack or charging may not be working properly. Quickly save your data and power off your computer. Remove the battery pack and disconnect the AC adaptor, then connect them again. Possible failure in the battery pack or charging circuit.</p>
 Power status	 NOTE <div data-bbox="605 1476 1518 1556" style="border: 1px solid black; padding: 5px;"> <p>Press any keyboard key or move the cursor with the touch pad to exit from Hibernation or Standby modes.</p> </div> <p>This status indicator has the following states:</p> <p>This status indicator has the following states:</p> <p>Not lit - Power is off or the Ruggedized Laptop Computer is in hibernation mode. Press any key on the keyboard, move the cursor on the touch pad, or tap the display with a fingertip or stylus to return to normal operation.</p> <p>Steady Green - Full power is on to the Ruggedized Laptop Computer.</p> <p>Blinking Green - The Ruggedized Laptop Computer is in Standby mode. Press any key on the keyboard, move the cursor on the touch pad, or tap the display with a fingertip or stylus to return to normal operation.</p>

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - ASSEMBLE THE AN/GYK-55
CREATE DEVICE DIGITAL COMPUTER SET****INITIAL SETUP:****Personnel Required**

Signal Support System Specialist

Equipment Condition

CAT-5 cable long enough to reach the network switch.

Port on the network switch has been assigned to the Create Device.

ASSEMBLY AND PREPARATION FOR USE**Table 1. Assemble the AN/GYK-55 Create Device Digital Computer Set.**

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Remove the Create Device Ruggedized Laptop Computer from the transit case (shown in Figure 1) and place it in its assigned operating position.	
2.	Press the release latch on the Ruggedized Laptop Computer cover and open it to its fully open position, as shown in Figure 2.	
3.	Ensure the correct HDD is installed in the Ruggedized Laptop Computer.	
4.	Remove the DC power supply from the transit case and position it behind or near the Ruggedized Laptop Computer.	
5.	Ensure that the female end of the power supply AC power cord is securely plugged into the power supply case.	
6.	Open the small dust cover on the right side of the Ruggedized Laptop Computer to expose the DC IN jack and connect the DC input cable from the DC power supply, as shown in Figure 3.	
7.	Plug the Cat 5 (Ethernet) cable into the Ethernet port on the right side of the Ruggedized Laptop Computer, as indicated in Figure 4 or Figure 5 for Type II version of Ruggedized Laptop Computer.	
8.	If a USB printer is to be connected, plug the printer cable into the USB port on the right side	

Table 1. Assemble the AN/GYK-55 Create Device Digital Computer Set. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	of the Create Device.	
9.	Have the Information Technology Specialist plug the other end of the CAT-5 cable into the assigned port on the network switch.	
10.	Plug the male end of the power supply AC power cord into the 120 VAC power source.	The fully configured Create Device is shown in Figure 6 and is ready for operation.

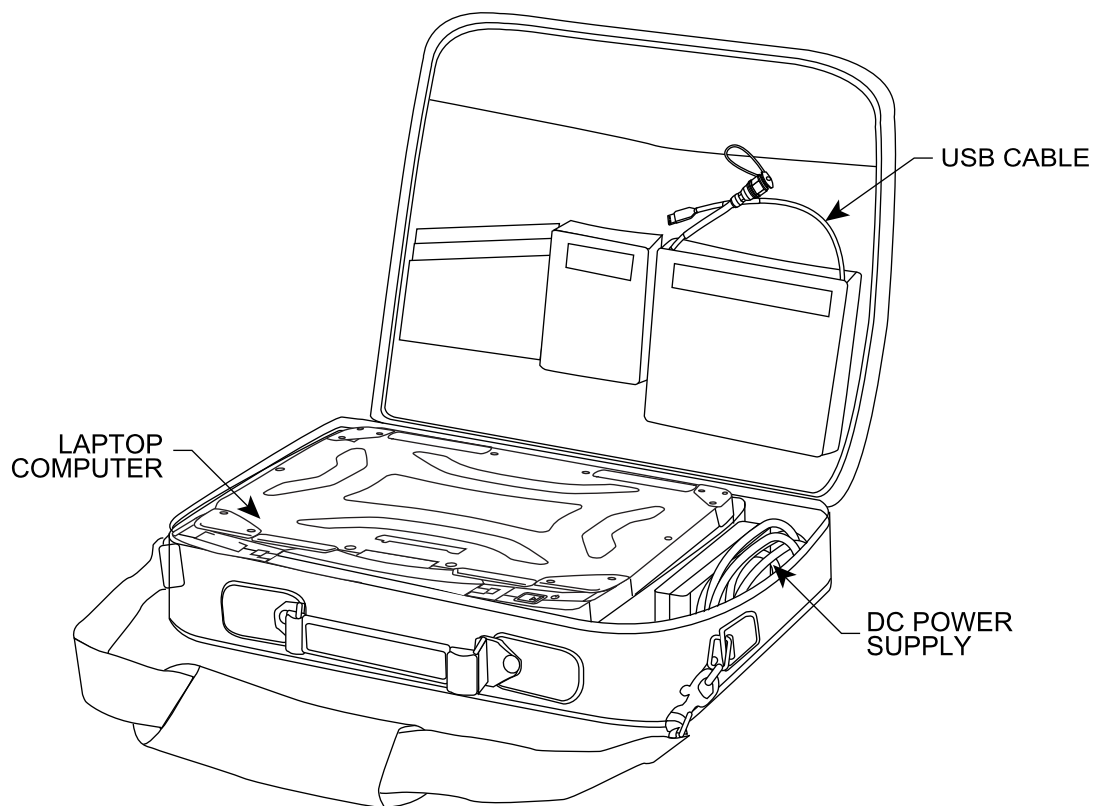


Figure 1. AN/GYK-55 Create Device Digital Computer Set in its Transit Case.

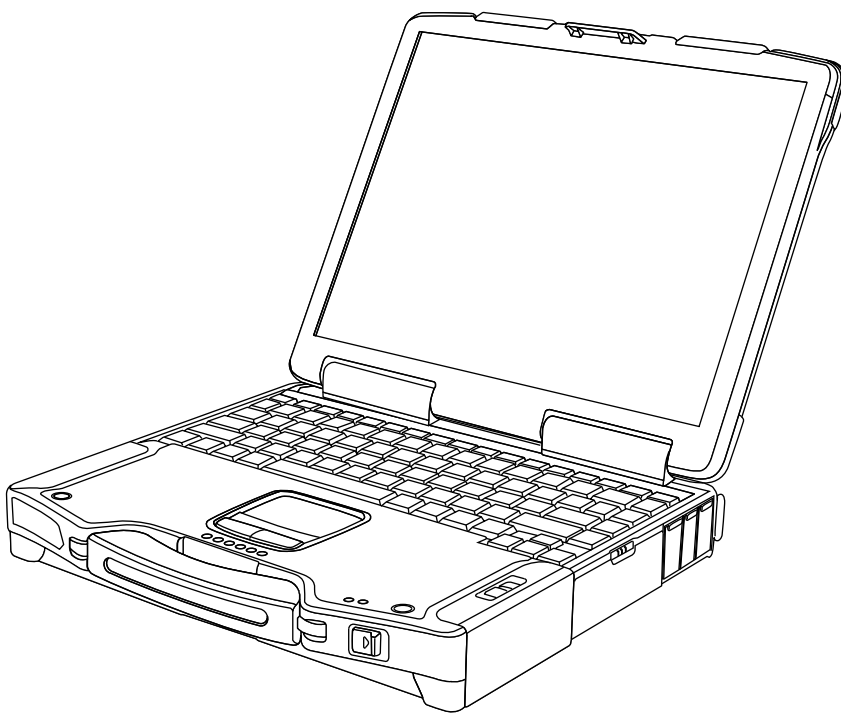


Figure 2. Create Device Positioned for Operation.

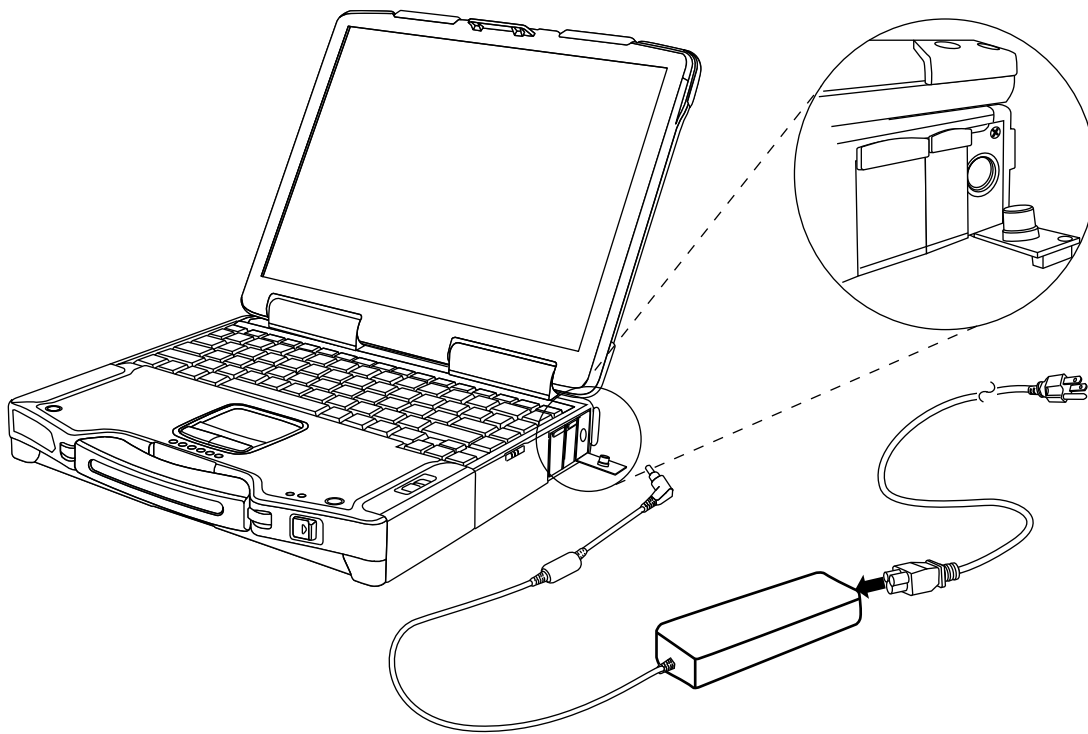


Figure 3. Connect the DC Power Supply to the Ruggedized Laptop Computer DC IN Jack.

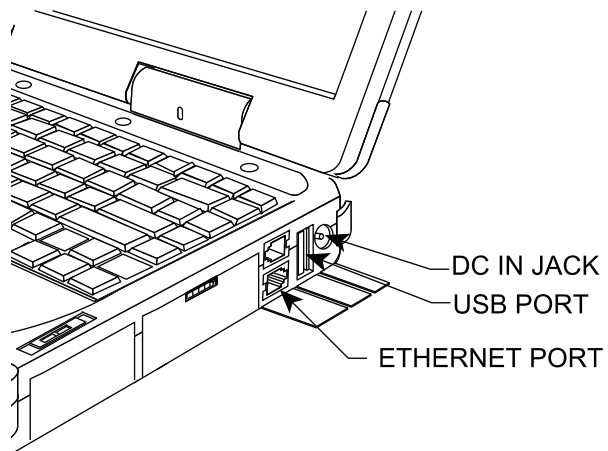


Figure 4. Create Device Right Side Ports.

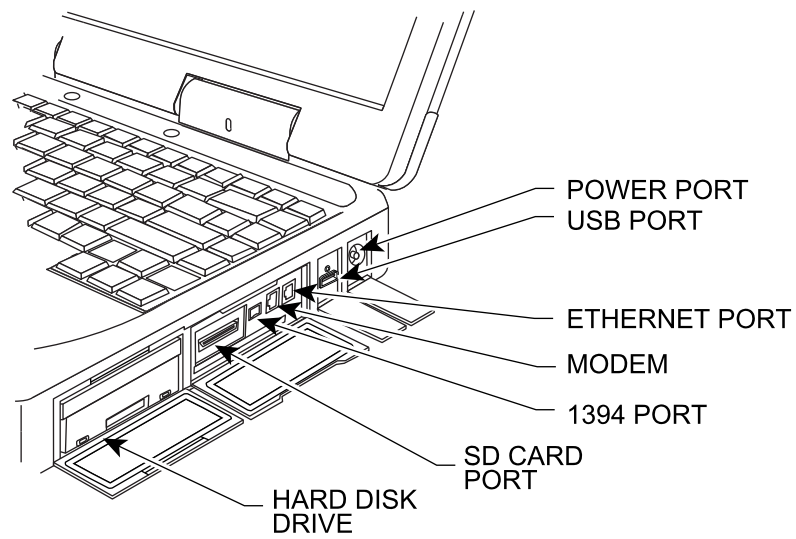


Figure 5. Type II Create Device Right Side Ports.

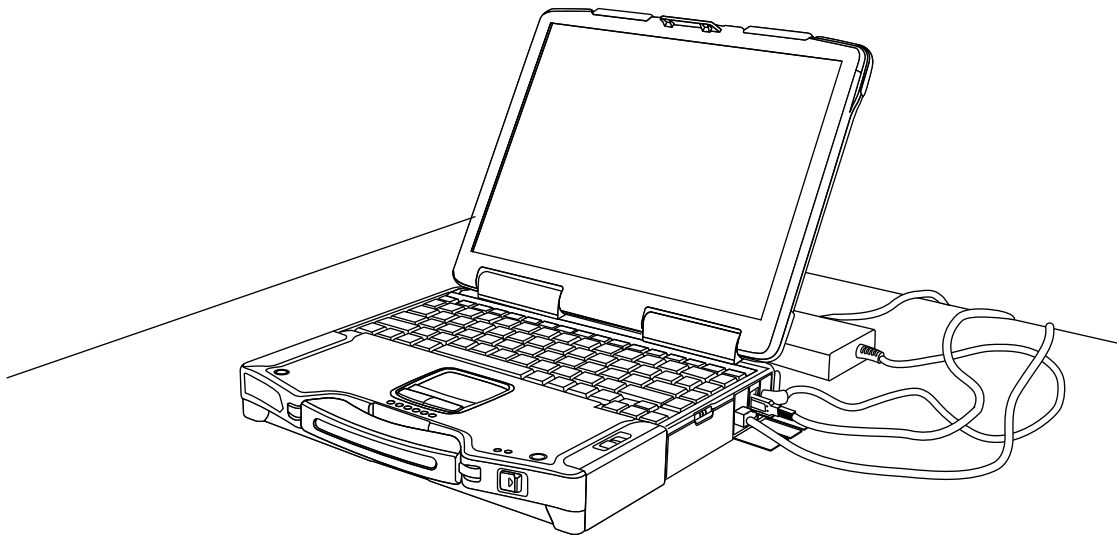


Figure 6. Create Device Ready for Operation.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - START UP THE FBCB2 CREATE DEVICE

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered off.



The system must be in the SECRET classification mode prior to connecting to the Tactical LAN.



If the Battery Status LED remains amber for more than 4 hours of continuous operation, notify Field Signal Maintenance.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Start the FBCB2 Create Device.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Conduct "Before/Weekly Mission" PMCS before starting the Create Device. Refer to PMCS procedures in WP 0056.	
2.	<p>Do not hold the POWER switch to the right for more than 4 seconds. This will cause the Ruggedized Laptop Computer to shut down.</p>	The power status indicator is on steady green, the battery status indicator is on steady green (battery charged) or on steady orange (battery charging), and the Ruggedized Laptop Computer is booting up. After approximately 3 minutes, the Session Manager screen appears and the OPS Auto-Login dialog box opens with a countdown timer that indicates the time left before the system will attempt to go online.

Table 1. Start the FBCB2 Create Device. - Continued







STEP	OPERATOR ACTION	INDICATION or CONDITION
	 NOTE If the Auto-Login dialog box does not appear, the role is not configured. Perform the procedure in WP 0014 and return to this procedure after the system reboots and you verify that the new role is correct. Select and hold the Ruggedized Laptop Computer POWER switch to the right for approximately 1 second, then release it.	
3.	 NOTE The classification banner shown in Figure 1 is Unclassified for this manual. The actual screen should show the SECRET banner. Select CANCEL .	The Auto-Login dialog box closes and the Session Manager screen displays, as shown in Figure 1.
4.	Select START/LOGIN .	The Ops Login dialog box opens.
5.	Enter the password and select CONTINUE .	The Ops Login dialog box closes. The Anti-virus scan dialog box opens.
6.	Select Yes or No according to local SOP.	Anti-virus scan dialog box closes.
7.	Verify that the "Secret" banner is displayed. If not, Perform the procedure in WP 0064 to change the classification to Secret.	
8.	 NOTE A GPS initialization dialog box and a COMMS initialization dialog box will open in the lower left corner of the screen. These functions will eventually go red and indicate that initialization failed. This is not a problem since these functions are not used by the Create Device and have no effect on system operation. Verify that the role displayed in the Session Manager dialog box is correct. If not, perform the procedure in WP 0014 to configure the role. Continue with Step 7 after the system reboots to the Session Manager screen and you verify that the correct role is displayed.	

Table 1. Start the FBCB2 Create Device. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
9.	Perform the procedure WP 0015 to obtain the IP address of the Create Device, then return to this procedure.	
10.	Provide the Create Device IP Address to the Information Technology Specialist.	The IP address enables the Create Device to access the Tactical LAN.
11.	<p> NOTE</p> <p>When the Create Device goes online, the GPS and COMM gumballs at the top left of the Ops screen will be red. This is normal for a Create Device.</p> <p> NOTE</p> <p>The Create Device will be automatically logged into the Tactical LAN when it goes online.</p> <p> NOTE</p> <p>The classification banner shown in Figure 2 is Unclassified for this manual. The actual screen should show the SECRET banner.</p> <p>Select OPS.</p>	An alert window indicates that the system is going online. After approximately 2-3 minutes, the Ops screen appears as shown in Figure 2.
12.	Post own location IAW WP 0012.	An icon representing the Create Device appears on the Ops screen at the coordinates entered in the procedure.
13.	Send a Free Text message to an FBCB2 system outside the Tactical LAN to confirm that the Create Device is operating properly.	A Free text message is received from a platform outside the Tactical LAN.

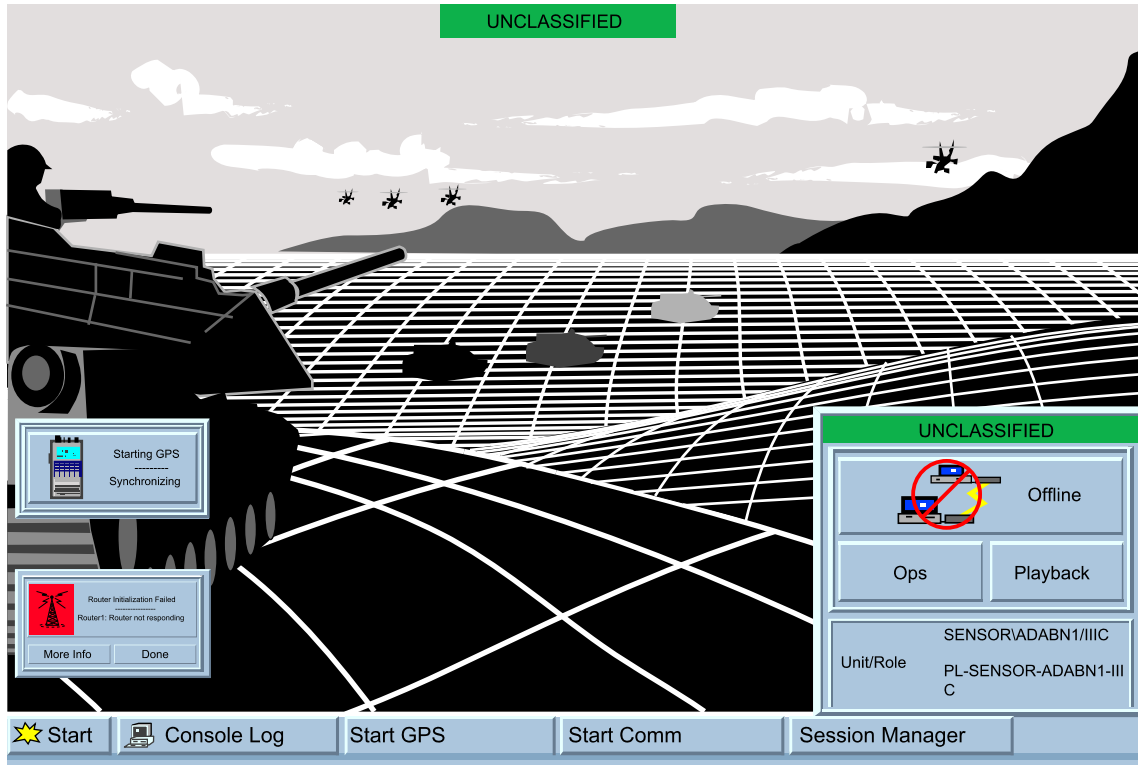


Figure 1. FBCB2 Create Device Session Manager Screen.

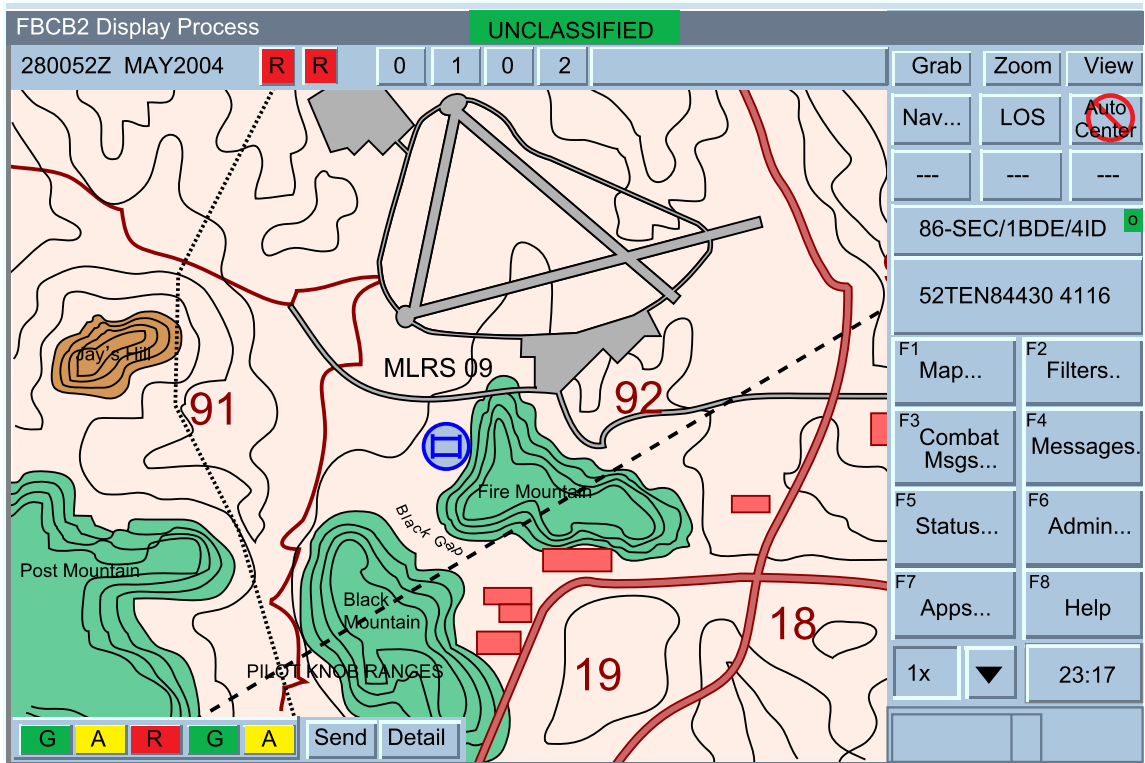


Figure 2. FBCB2 Create Device Operations Screen.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - SHUT DOWN THE FBCB2
CREATE DEVICE****INITIAL SETUP:**

Personnel Required
Operator

Equipment Condition
System is powered on.
System is online



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Shut Down the FBCB2 Create Device.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select F6 .	The F6 Admin dialog box opens.
2.	Select EXIT OPS .	A timeout alert dialog box opens.
3.	Select CANCEL on the timeout dialog box.	The timeout dialog box closes.
4.	Select START/SHUT DOWN/SHUTDOWN	An alert dialog box opens asking "Do you really want to shut down the computer?".
5.	Select YES .	The current screen closes and a series of text messages scrolls down the screen indicating the progress of the laptop shutdown sequence.
6.	When the text "System Halted" appears at the bottom of the screen, push the POWER switch to the right momentarily to shut down power to the laptop.	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - CAPTURE A SCREEN****INITIAL SETUP:****Personnel Required**

Operator

Equipment Condition

System is powered up.

System can be online or offline.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Capture a Screen.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	 This procedure captures the entire display including any open screens, windows, and dialog boxes. If you only want to capture a single window or dialog box, refer to the procedure in WP 0009. Open the desired screen for capture.	
2.	Select START/FBCB2/SCREEN IMAGE UTILITY/CAPTURE SCREEN .	Two (2) beeps will be heard and the screen capture will be saved to a .tmp file in the "Others" folder.
3.	Perform the procedure in WP 0025 to copy the mission with the screen capture file to an MDL.	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - CAPTURE A WINDOW

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition


System is powered up.

System is online or offline.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Capture a Window.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Open the desired window for capture.	
2.	Select START/FBCB2/SCREEN IMAGE UTILITY/CAPTURE WINDOW .	
3.	<div style="text-align: center;">  CAUTION </div> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Use only the fingertip on the touch pad surface and press lightly when steering the cursor. Do not use sharp/pointed objects like the stylus, a pencil or pen, or a fingernail. The use of sharp/pointed objects can damage the touch pad.</p> </div> <p>Use the TOUCH PAD to steer the cursor over the selected window.</p>	
4.	Select the LEFT TOUCH PAD button to select the window.	One beep will be heard and the captured window will be saved to a .tmp file in the "Others" folder.
5.	Perform the procedure in WP 0025 to load the mission to an MDL device.	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - PRINT A MESSAGE, REPORT OR ORDER

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered up.
System is online.

Table 1. Print a Message, Report or Order.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Open the message, report or order.	
2.	Select the PRINT button on the document.	The document is printed.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - PRINT SCREEN AND WINDOW CAPTURES****INITIAL SETUP:**

Personnel Required
Operator

Equipment Condition
System is powered up.



The capture will be sent to the printer currently configured for the FBCB2 Create Device.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Print Screen and Window Captures.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	To print a window, go to Step 3. To print a screen, open the desired screen.	The Configure Role dialog box opens.
2.	Select START/FBCB2/SCREEN IMAGE UTILITY/PRINT SCREEN .	Two (2) beeps are heard and the screen is sent to the printer.
3.	To print a window, open the desired window.	
4.	Use the TOUCH PAD cross-hairs to select the desired window and then select the LEFT TOUCH PAD button.	Two (2) beeps are heard and the window is sent to the printer.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - POST OWN LOCATION

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

System is powered up.

System is online and the Ops screen is displayed.

The 10-digit MGRS grid coordinates for your current location has been obtained.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Post Own Location.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select F6 ADMIN .	The Admin dialog box opens.
2.	Select the LOCATION tab.	
3.	Select inside the LOCATION field to highlight it.	
4.	Select the down arrow and select one of the following coordinate entry options: 1. Map - Select your location on the map to automatically enter the coordinates in the LOCATION field. 2. LRF - Obtain the coordinates from a Laser Range Finder (Not used). 3. Kbd - Manually enter the coordinates using the physical keyboard. 4. Vkb - Manually enter the coordinates using the virtual keyboard. 5. Name - Select a pre-defined location from the Named Location dialog box.	The desired 10-digit coordinates appear in the LOCATION field.
5.	Select OK .	The coordinates are entered into the Create Device software and posted to the FBCB2 system.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - SELECTIVELY CLEAR LOGS AND QUEUES

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered up.
System is offline.

This procedure is used to selectively delete accumulated logs, SA snapshot data, messages, threaded message data and use- defined settings that may be taking up needed hard disk space and causing a slow-down in data processing.



CAUTION

This procedure will permanently delete all items selected. Use caution in selecting items to delete.



NOTE

This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Selectively Clear Logs and Queues.


STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Press START/FBCB2/CLEAR LOGS AND QUEUES .	
2.	<div style="text-align: center;">  CAUTION </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> Selecting the Reset System box will permanently delete ALL accumulated items. </div> Select the selection box for each item to be cleared.	
3.	Select APPLY to delete the selected items.	A Clear Logs and Queues Status dialog box

Table 1. Selectively Clear Logs and Queues. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
		opens, detailing the status of the clearing operation. When the process is complete, the message "Completed Clear Logs & Queues Operation" is displayed.
4.	Select CLOSE .	The Clear Logs and Queues Status dialog box closes.
5.	Select CLOSE .	The Clear Logs and Queues dialog box closes.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - CONFIGURE THE ROLE

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

System is powered up.

System is offline.

Correct database is installed.




This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Configure the Role.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/CONFIGURE ROLE .	The Configure Role dialog box opens.
2.	<p>The Create Device is configured with an MDL-EPLRS role. If the desired MDL role is not listed, notify Field Signal Maintenance.</p> <p>Select the role in one of three ways:</p> <ol style="list-style-type: none"> 1. Select the role from a list - Select the desired Corps, Division, Brigade, Battalion, Company, and Platoon fields using the drop-down menus and then scroll through the Matching Roles list to find the desired role. 2. Search for a role - Enter "MDL" or a partial MDL role name in the search field and select SEARCH to display a list of all available MDL roles in the Matching Roles list. 3. Manually enter the role name - Type the exact MDL role name in the search field. 	The desired MDL role or a list of available matching MDL roles appear in the Matching Roles field.
3.	Highlight the desired MDL role in the Matching Roles list and select CONFIGURE .	A Verification dialog box opens, displaying the following message: "This system will be

Table 1. Configure the Role. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
		configured as the following: Role Name: xxxxxxxx, Platform Type: xxxxxxxx, URN: xxxxxxx. Continue with configuration?"
4.	 NOTE The role configuration process can take up to 15 minutes to complete. Select YES to continue.	The Role Configuration Progress dialog box opens, showing the status of the configuration process. After the configuration process completes, the SITREP Configuration dialog box opens.
5.	Verify that the Equipment Type field reads "GROUND DATA TERMINAL". If not, use the drop-down arrow and select this option from the menu.	"Ground Data Terminal" appears in the Equipment Type field.
6.	Select OK to save the role configuration.	The SITREP Configuration dialog box closes.
7.	Select START/SHUT DOWN/REBOOT .	The system reboots and the new role displays on the Session Manager dialog box.
8.	Verify that the new role displayed in the Session Manager dialog box is correct.	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - OBTAIN THE CREATE DEVICE IP ADDRESS****INITIAL SETUP:**

Personnel Required
Operator

Equipment Condition
System is powered up.
System is offline.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Obtain the Create Device IP Address.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/TOOLS/HOST INFORMATION.	The Host information dialog box opens.
2.	Select ENTER.	The message "Run the report on this node?" appears.
3.	Select ENTER.	The message "Processing..." is displayed. When processing is complete, the node information is displayed.
4.	Obtain the IP Address from the listing under the heading " '/etc/hosts' FILE DATA."	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - INSTALL A PATCH

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered up.
System is offline.

This procedure is valid only for FBCB2 software version 6.4.4.2.



Figure 2 shows the Type II version Create Device MDL connection.

Table 1. Install a Patch.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.
2.	Press the down arrow to the right of the Select User Name: window and select the " fbcadmin " user name.	The word fbcadmin appears in the SELECT USER window.
3.	Enter the password and press the CONTINUE button.	the System Administration dialog window opens.
4.	If the patch is to be installed from a CD-ROM disk or Floppy disk, insert the disk into the drive. If it is to be installed from an MDL device, connect the MDL device cable to the Laptop USB port, as shown in Figure 1.	
5.	Press INSTALL PATCH .	The Patch dialog box opens.
6.	Use the keyboard to enter the number for the type of drive or MDL device to load from: To install the patch from a Floppy Drive, type "1" and press the ENTER button. To install the patch from a USB (MDL) device,	A confirmation dialog box opens asking if you want to proceed with installing the patch.

Table 1. Install a Patch. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	type "2" and press the ENTER button. To install the patch from a CD-ROM Drive, type "3" and press the ENTER button. To install the patch from the local HDD, type "4" and press the ENTER button.	
7.	Type Y and press ENTER .	When the patch is installed , the message: "Patch installed successfully" is displayed.
8.	Type Q and press ENTER to exit the Patch dialog box.	
9.	Reboot the system to activate the patch.	

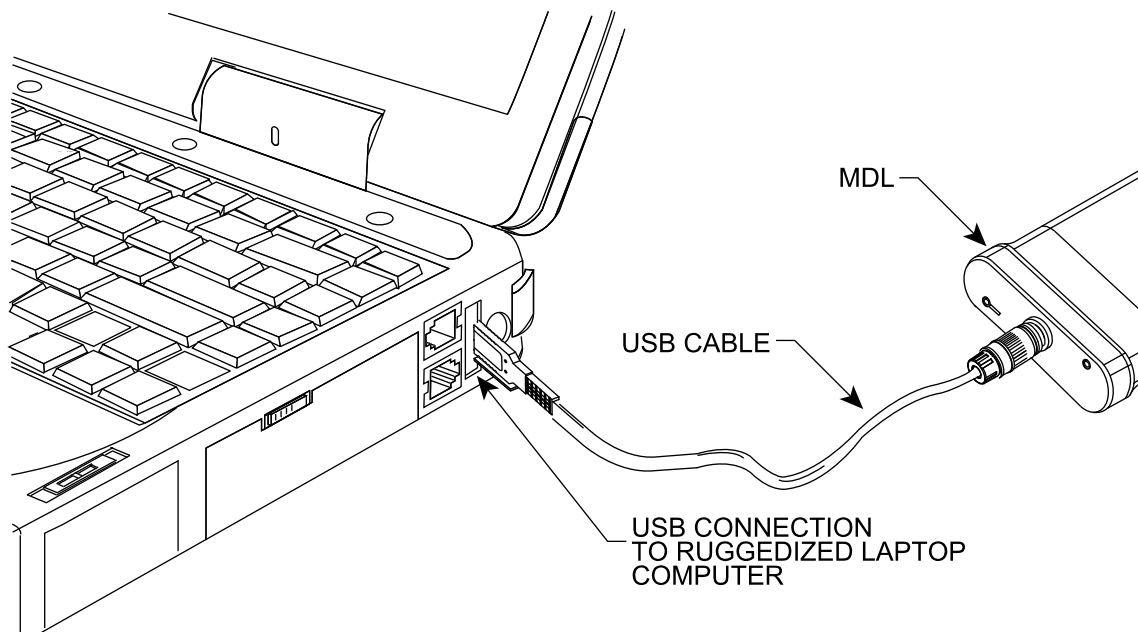


Figure 1. Connect an MDL Device.

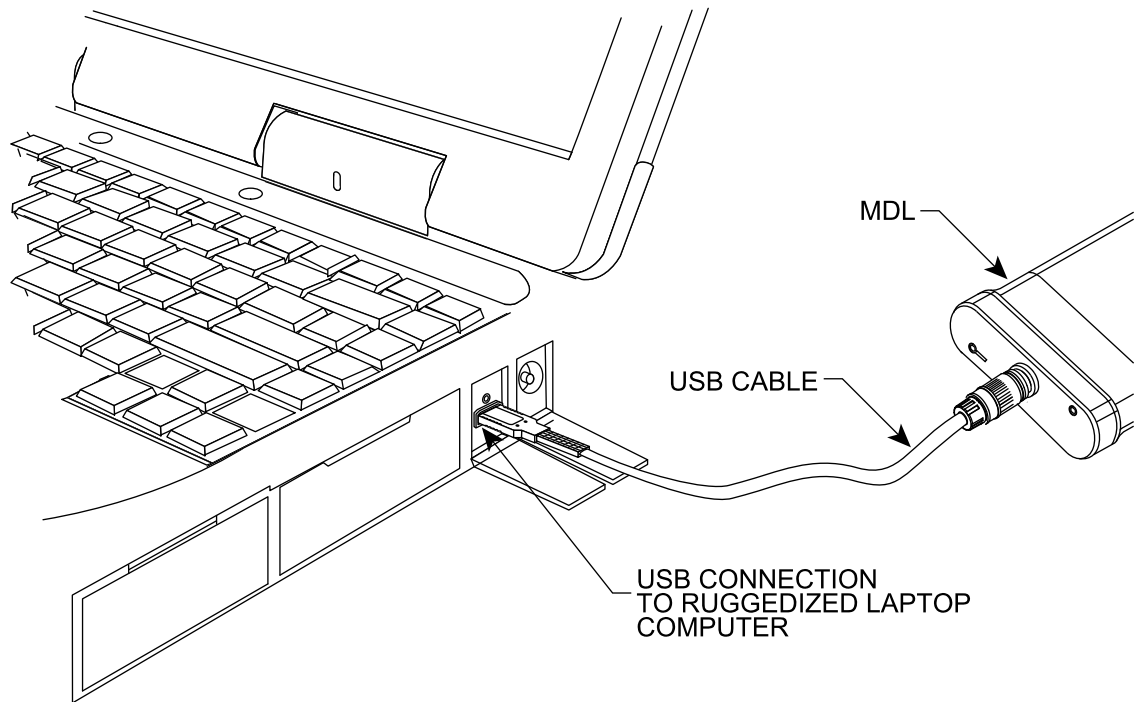


Figure 2. Connect an MDL Device to Type II Create Device.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - CALIBRATE THE TOUCHSCREEN

INITIAL SETUP:

Tools and Special Tools

Stylus Pen

Personnel Required

Operator

Equipment Condition

System is powered up.

System is offline.

The following procedure describes how to calibrate the Ruggedized Laptop Computer touchscreen to align selected points on the display with the buttons and options in the BFT screens.

Table 1. Calibrate the Touchscreen.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/SETTINGS .	A list of Settings options displays.
2.	Use the touch pad to place the cursor over the TOUCHSCREEN option and press the left mouse touch pad.	A warning window opens that states the following: "To calibrate the touchscreen, the window manager will be killed. All programs running on the screen will be killed. Are you sure you wish to continue?".
3.	Select YES to continue with the calibration.	
4.	Follow the instructions on the calibration screen.	
5.	At the end of the calibration routine, select ENTER to save the new settings and exit the calibration screen.	A message: "Do you want to install the new touchscreen configuration? Y/N" is displayed.
6.	Type Y and press ENTER .	
7.	Select OK to take the system online.	The Ops Screen opens.
8.	Using the stylus, touch available screen options to verify the system responds to each selection. If any response point is off, perform the calibration procedure again.	

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - LOAD PKI CERTIFICATES

INITIAL SETUP:

Personnel Required

Security Officer

Equipment Condition

System is powered on.
System is offline.



To load a private key, refer to WP 0026.



This procedure is valid only for FBCB2 software version 6.4.4.2.



Figure 9 shows the Type II version Create Device MDL connection.

Table 1. Load PKI Certificates.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer login dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcsecur" user name.	The word fbcsecur appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The Security Officer Applications dialog box opens with the PASSWORD/LOGIN tab selected.
4.	Select the CERTIFICATES MGMT tab.	The Certificates Management tab is displayed, as shown in Figure 1.
5.	Select MANAGE CERTIFICATES .	The Certificate Management dialog box opens, as shown in Figure 2.


Table 1. Load PKI Certificates. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
6.	Select ACQUIRE KEYS .	An alert dialog box opens instructing you to insert the disk containing the key(s).
7.	Insert the CD-ROM disk with the keys into the drive.	
8.	Select OK .	The Key Installed dialog box opens indicating that the keys were successfully installed.
9.	Select the currently active public key to highlight it. If a current key is not loaded, go on to Step 11.	
10.	Select SET DEACTIVATION END DTG and enter the effective date and time for the current key to deactivate.	
11.	Highlight the new public key and select SET ACTIVATION DTG .	The DTG keypad dialog box opens.
12.	Set the activation year, month and day using the + and - keys.	
13.	Select OK .	The DTG keypad dialog box closes and the Activation Data Entry dialog box opens.
14.	Select OK .	The Activation Data Entry dialog box closes.
15.	Select CREATE KEY FILES .	An alert dialog box opens indicating that the key files were created.
16.	Select OK to close the alert dialog box.	The new key file is downloaded to a temporary folder and also creates an MDL load file.
17.	Select CLOSE .	The Quit dialog box opens.
18.	Select YES .	The Security Officer Applications dialog box closes.
19.	Select CLOSE .	The Security Management dialog box closes.
20.	Select START/FBCB2/MISSION DATA LOADER/CREATE MDL option.	The Mission Data Create dialog box opens, as shown in Figure 3.
21.	In the left-hand box, scroll down and select the KEYS folder to highlight it.	
22.	Select REFRESH DATA FILES .	The new key appears under previous keys in the KEYS folder.
23.	Select NEW MISSION .	The New Mission dialog box opens.
24.	Enter " public key " in the NAME field.	
25.	Select OK .	The New Mission dialog box closes.
26.	Select NEW MISSION .	The New Mission dialog box opens, as shown in Figure 4.
27.	Enter " private key " in the NAME field.	

Table 1. Load PKI Certificates. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
28.	Select OK .	The New Mission dialog box closes.
29.	Select the Private Key folder in the Current Missions folder.	
30.	From the Available Data Files pane, select the " private key " file.	
31.	Select ADD DATA FILE .	The private key file is added to the private key folder in the Current Missions pane.
32.	Select the public key folder in the Current Missions folder.	
33.	From the Available Data Files pane, select the " public key " file.	
34.	Select ADD DATA FILE .	The public key file is added to the public key folder in the Current Missions pane.
35.	Select CALCULATE MISSION ZIPPED SIZE .	The Mission Size Processing Dialog box opens (may not display if the file is small), as shown in Figure 6, indicating the compressed size is being calculated. When the file size is calculated, the Processing Dialog box closes and the total compressed size is displayed to the right of the CALCULATE MISSION ZIP SIZE button, as shown in Figure 7.
36.	Highlight the desired key folder (public or private) in the right pane and select WRITE MISSION TO MDL .	The Write Mission dialog box opens, as shown in Figure 5.
37.	Verify that the total compressed size calculated in Step 35 is does not exceed the Available Space indicated in the Write Mission dialog box.	
38.	If the public key is to be loaded to the MDL device, attach the USB cable to the MDL device using the military plug. Tighten the plug until the red ring on the MDL connector does not show. If the private key is to be loaded to the Create Device, the MDL device does not need to be connected.	
39.	Insert the USB plug into the USB port on the right side of the Ruggedized Laptop Computer (see Figure 8) or into the USB port on the back of the laptop.	
40.		The words "Portable Media" or "Local Drive" are displayed in the field and the amount of available space on the MDL device is displayed just below them.

Table 1. Load PKI Certificates. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	 NOTE <p>The public key must be loaded to an MDL device using the PORTABLE MEDIA option for distribution to FBCB2 platforms. The private key is loaded directly to the Create Device using the LOCAL DRIVE option.</p> <p>Select the drop-down arrow to the right of the entry field in the Write Mission dialog box and select PORTABLE MEDIA if the public key MDS is to be loaded to the MDL device, or LOCAL DRIVE if the private key MDS is to be loaded to the Create Device.</p>	
41.	Select OK .	A Processing dialog box opens with a clock symbol indicating that writing is in progress. When the processing is complete, an alert dialog box opens with the message: "The mission was successfully written".
42.	Select OK .	The alert dialog box closes.
43.	Select CLOSE .	The Mission Data Create dialog box closes.
44.	Select CLOSE to exit the Mission Data Create dialog box.	
45.	To install the private key to the Create Device, perform the procedure in WP 0026, selecting the "private key" folder in the Missions on MDL pane.	
46.	If the MDL device was connected, disconnect the USB cable from the Create Device and remove the cable from the MDL device.	

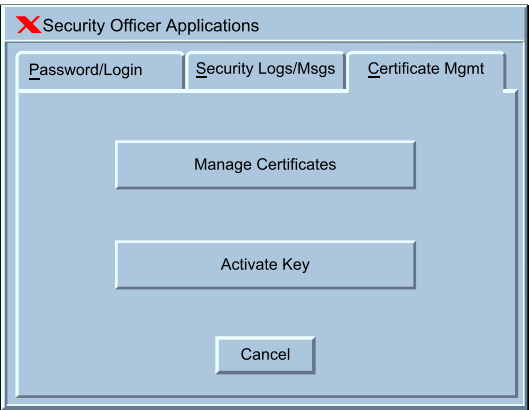


Figure 1. Security Officer Applications - Certificates Management Tab.

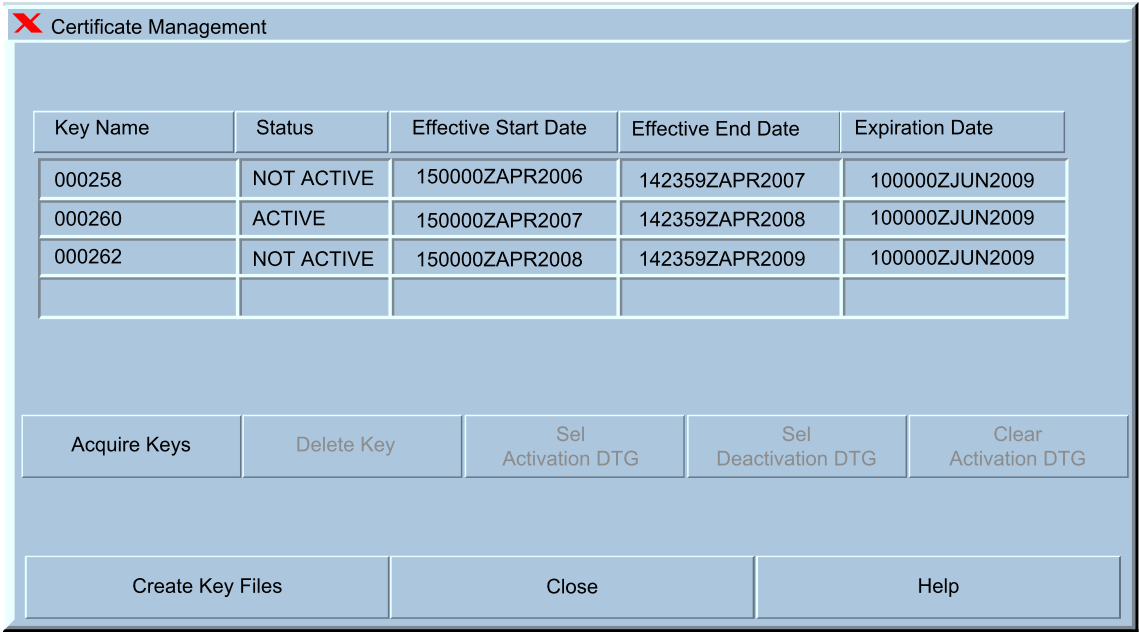


Figure 2. Certificates Management Dialog Box.

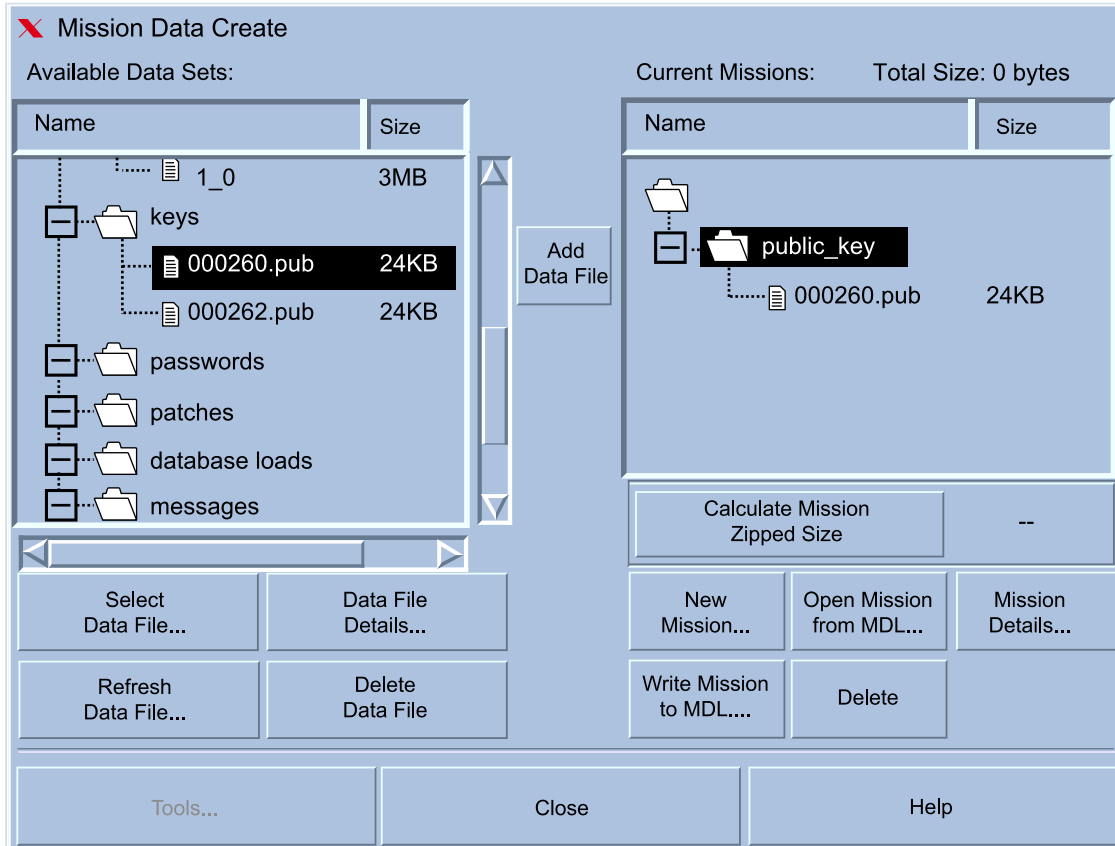


Figure 3. Mission Data Create Dialog Box.

New Mission

Name:

POC:

Description:

Instructions:

Classification:

Ok

Cancel

Help

Figure 4. New Mission Dialog Box.

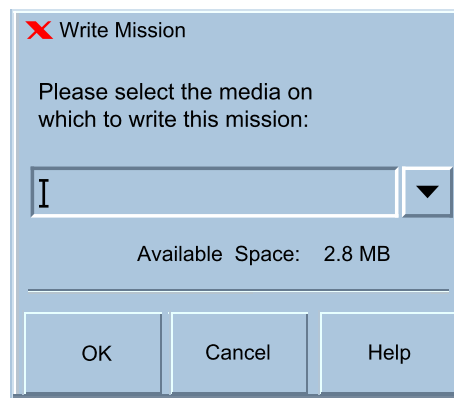


Figure 5. Write Mission Dialog Box.

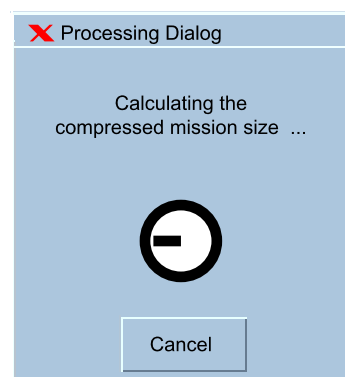


Figure 6. Mission Size Processing Dialog Box.

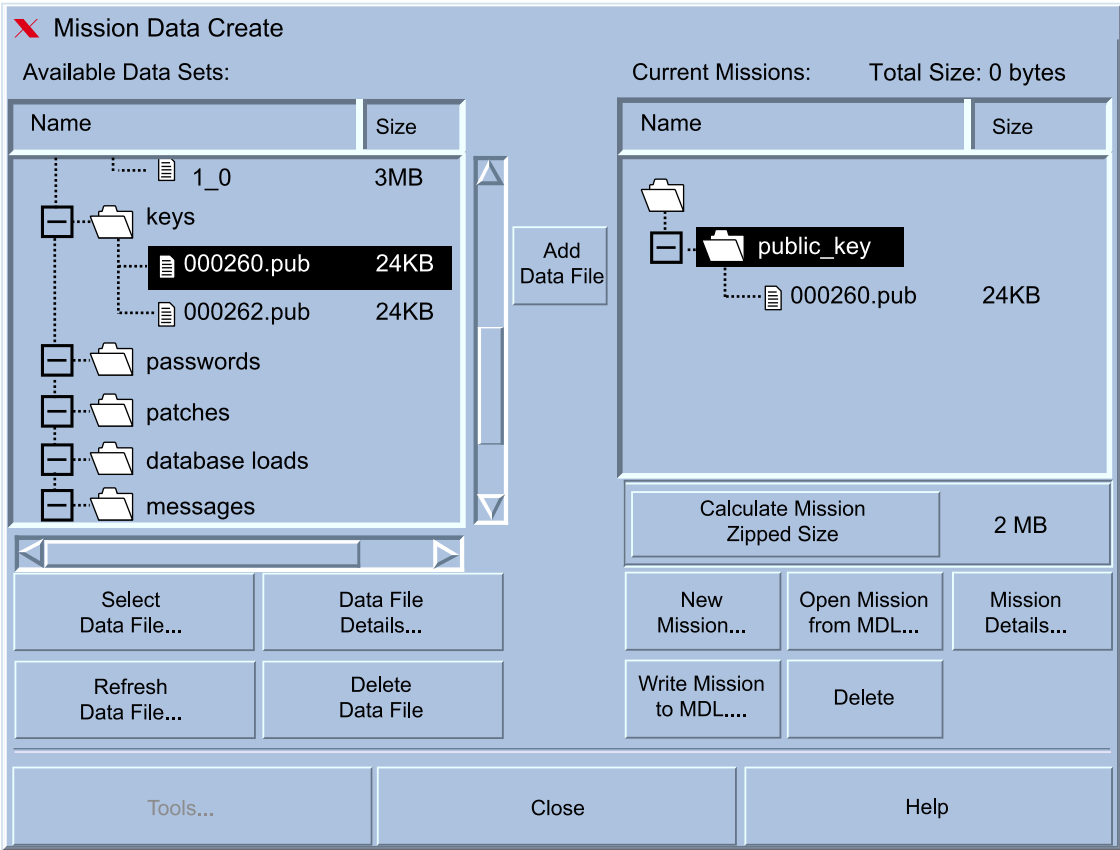


Figure 7. Mission Data Create Dialog Box with Calculated Mission Size.

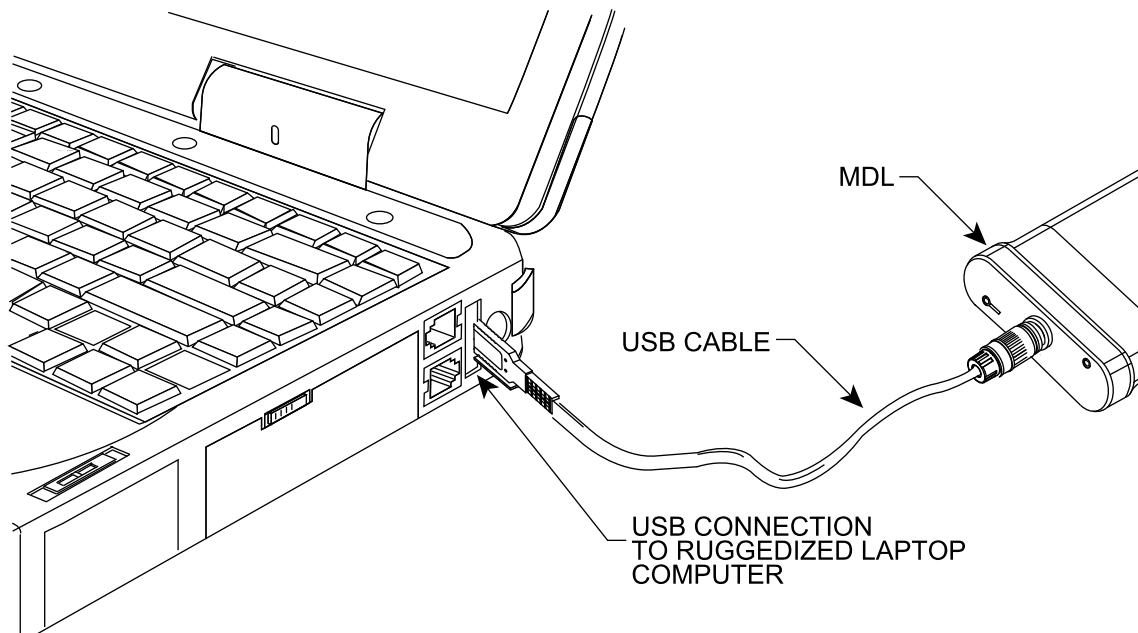


Figure 8. MDL Connected to Ruggedized Laptop Computer.

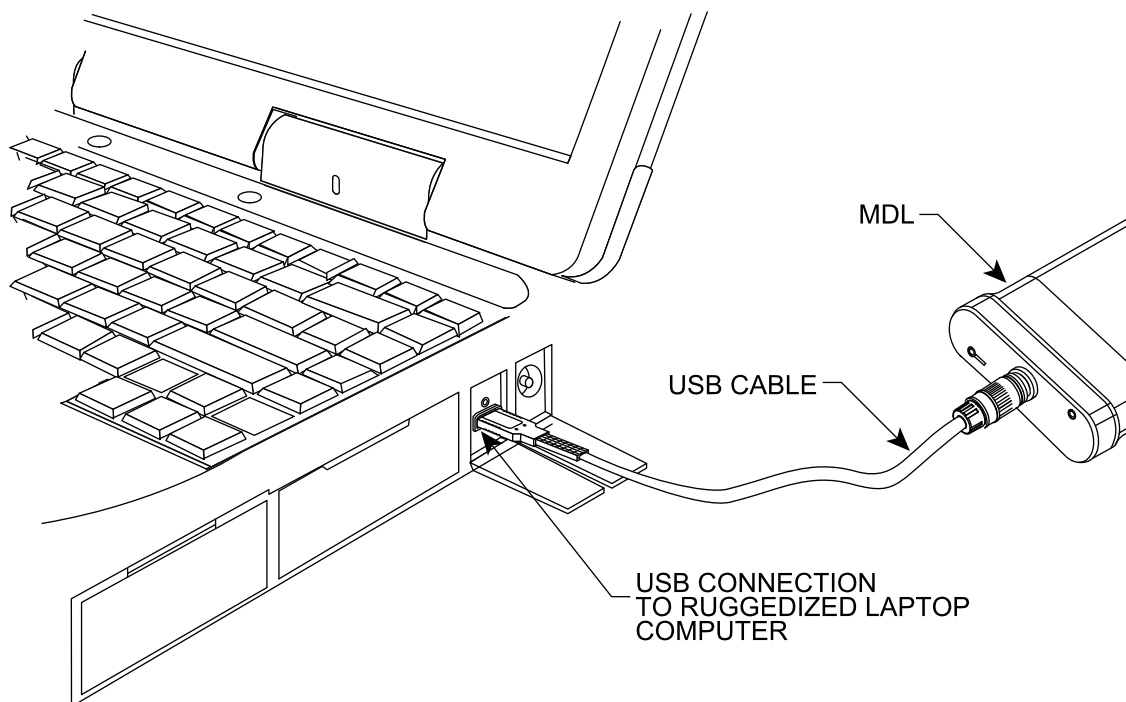


Figure 9. Connect an MDL Device to Type II Create Device.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - ACTIVATE THE SCREEN LOCK****INITIAL SETUP:****Personnel Required**

Operator

Equipment Condition

System is powered up.

System may be online or offline.

This procedure provides instructions on activating the screen lock function that protects the contents of the operating screen while the operator is away.



The screen lock should be activated any time the Create Device operator needs to leave the immediate area and will be out of sight of the laptop. It can be activated from any screen.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Activate the Screen Lock.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/SCREEN LOCK .	The screen lock login dialog box appears and covers the entire display as shown in Figure 1.
2.	To deactivate the screen lock, enter the FBCB2 login ID and password and select ENTER on the keyboard.	The screen lock dialog box disappears.


FBCB2 Display Process										UNCLASSIFIED	
271529ZSEP2007		R	G	0	0	0	0		Grab	Zoom	View
<h2>Screen Lock</h2>											
<div>Login ID: <input type="text"/></div> <div>Password: <input type="password"/> </div>											
<input type="button" value="Authenticate"/>						<input type="button" value="Logout"/>					

Figure 1. Screen Lock Window.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - CREATE A PASSWORD MISSION DATA SET

INITIAL SETUP:

Personnel Required
Security Officer

Equipment Condition
System is powered up.
System is offline.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Create a Password Mission Data Set.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcsecur" user name.	The word fbcsecur appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The Security Officer Applications dialog box opens with the PASSWORD/LOGIN tab selected, as shown in Figure 1.
4.	Select GENERATE PASSWORDS .	The Security dialog box opens.
5.	<p>It is not necessary to enter a pass phrase when creating a new password file.</p> <p>If this is a new password file, select OK. If this is a previously-created password file, enter the pass phrase and select OK.</p>	The Password Management dialog box opens with the Personnel Data tab selected, as illustrated in Figure 2.
6.	Select NEW to generate a new personnel entry.	The Edit Personnel Entry dialog box opens, as shown in Figure 3.

Table 1. Create a Password Mission Data Set. - Continued



STEP	OPERATOR ACTION	INDICATION or CONDITION
7.	Enter the required information and select APPLY .	The information is displayed in the Personnel Data tab on the Password Management dialog box.
8.	Repeat Step 7 to enter another person's information or select OK .	The Edit Personnel Entry dialog box closes.
9.	Select the PASSWORDS tab in the Password Management dialog box.	The Passwords tab opens, as shown in Figure 4.
10.	Select GENERATE FOR ALL in the Change Passwords panel and then select NEXT .	The Multiple Password Generation dialog box opens, as shown in Figure 5.
11.	 NOTE <p>There are two panes in the Multiple Password Generation dialog box. The Available Units pane on the left side lists all the units for which a password may be generated. The Selected Units pane on the right side displays the name of previously selected units.</p> <p>The ADD and ADD ALL buttons allow the operator to add one unit or an entire Division from the Available Units pane to the Selected Units pane. The REMOVE and REMOVE ALL buttons allow the deletion of one unit or all the units listed in the Selected Units pane. Once the unit has been selected, the operator selects the option Assign all companies the same Password or Assign each company a unique Password. The system defaults to Assign all companies the same Password.</p>  NOTE <p>Individual passwords cannot be created without generating a unit password.</p> <p>Select REMOVE ALL to clear the Selected Units pane on right side of the Multiple Password Generation dialog box before proceeding to the next step.</p>	The right pane is empty.
12.		The desired units appear in the right pane.

Table 1. Create a Password Mission Data Set. - Continued




STEP	OPERATOR ACTION	INDICATION or CONDITION
	 CAUTION <div> <p>Ensure that only the necessary units are selected before selecting the ADD ALL button. Failure to do so will generate excessive numbers of passwords.</p> </div> <p>Select the desired units from Available Units pane and move them to the Selected Units pane using the ADD or ADD ALL buttons.</p>	
13.	 NOTE <p>When the method of assigning passwords is selected in this step, an alert message displays just above the bottom row of buttons that states: "Existing passwords will be removed. Continue?"</p> <p>Select ASSIGN ALL COMPANIES THE SAME PASSWORD or ASSIGN EACH COMPANY A UNIQUE PASSWORD.</p>	
14.	Select YES to begin password generation.	A Password Generation Progress dialog box opens, indicating the progress of the password generation.
15.	Select DISPLAY ALL in the Show Passwords panel.	The new passwords are listed in the Passwords column of the Passwords tab in the Password Management dialog box, as shown in Figure 6.
16.	Select SAVE .	The passwords are saved to a passwords file.
17.	 <u>WARNING</u> <div> <p>Passwords are SECRET. Take appropriate precautions to safeguard this information. Failure to comply could compromise the mission and lead to personnel injury or fatality.</p> </div>	

Table 1. Create a Password Mission Data Set. - Continued





STEP	OPERATOR ACTION	INDICATION or CONDITION
	 CAUTION <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> Failure to print or write down the passwords could result in being locked out of the system when the new passwords are activated. </div>  NOTE The print function is not allowed unless the system is in the Secret classification mode. Print the passwords IAW WP 0021.	
18.	Select the MDL tab.	The MDL tab opens, as shown in Figure 7.
19.	Select DTG .	The DTG Keypad opens, as shown in Figure 8.
20.	Use the + and - buttons to enter the effective start date.	The date is displayed in the year, month, and day fields.
21.	Select OK .	The DTG keypad closes and the date is displayed in the Effective Start Date field of the MDL tab.
22.	Use the + or - virtual keys on the MDL tab to enter the number of days before expiration.	The number of days before expiration appears in the Days Before Expiration field, and the Expiration Date is automatically calculated and displayed, as shown in Figure 7.
23.	Select CREATE .	The Data Has Not Been Saved alert dialog box opens with the following message: "Changes must be saved in order to create the Password Management and MDL password files. Save these changes and continue?"
24.	Select Yes .	The alert dialog box closes and the pass phrase Security dialog box opens, as shown in Figure 9.
25.	 NOTE A Pass Phrase must be at least eight characters long with NO spaces and is case sensitive. It is important to record the Pass Phrase at this point.	The Security dialog box closes and a confirmation dialog box opens stating: "The Personnel Management and MDL password files have been created."

Table 1. Create a Password Mission Data Set. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	 NOTE It is important to record the pass phrase at this point. Enter a pass phrase and select OK .	
26.	Select OK .	The confirmation dialog box closes.
27.	Select EXIT to close the Password Management dialog box.	
28.	Select CANCEL to close the Security Officer Applications dialog box.	
29.	To load the password MDS to an MDL, refer to WP 0025.	

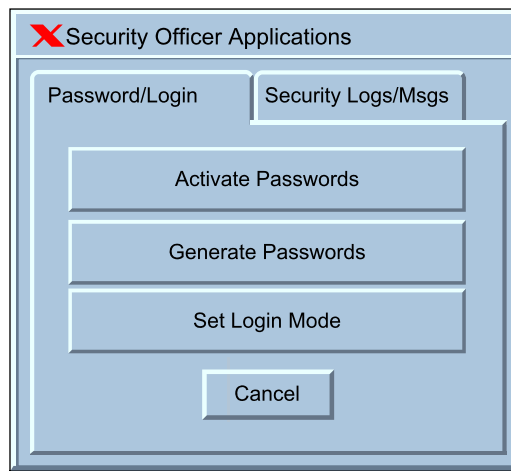




Figure 1. Security Officer Applications Dialog Box.



✖ Password Management

Personnel Data			Passwords		MDL
Last Name	First Name	MI	PIN	User Access Level	Organization

✖ Edit Personnel Entry

First Name:  User Access Level: ▼

Middle Initial:  Organization: ▼


Last Name:  Last 4 Digits of SSN: 


OK Apply Cancel Help



New... Modify.. Delete

Figure 2. Password Management Dialog Box - Personnel Data Tab.

✖ Edit Personnel Entry

First Name:  User Access Level: ▼

Middle Initial:  Organization: ▼

Last Name:  Last 4 Digits of SSN: 

OK Apply Cancel Help

Figure 3. Edit Personnel Entry Dialog Box.

✖ Password Management

Personnel Data

Passwords

MDL

Name	User Access Level	User ID	Assigned
TI Manager		timgr	01146ZOCT2004
MAYFIELD, CURTISS M	Unclassified	cmm3421	01146ZOCT2004
IVER, MACK	Unclassified	mi4542	01150ZOCT2004
HHC1BDE, Spare 9 (U)	Unclassified	spare9u	01146ZOCT2004
HHC1BDE, Spare 9 (S)	Secret	spare9s	01146ZOCT2004

Change Passwords

◆ Generate for All

◆ Change Selected

Next...

Show Passwords

☒ Display All

Display One

Search

Search By

Name

Save...

Print...

Exit

Help

Figure 4. Password Management Dialog Box - Passwords Tab.

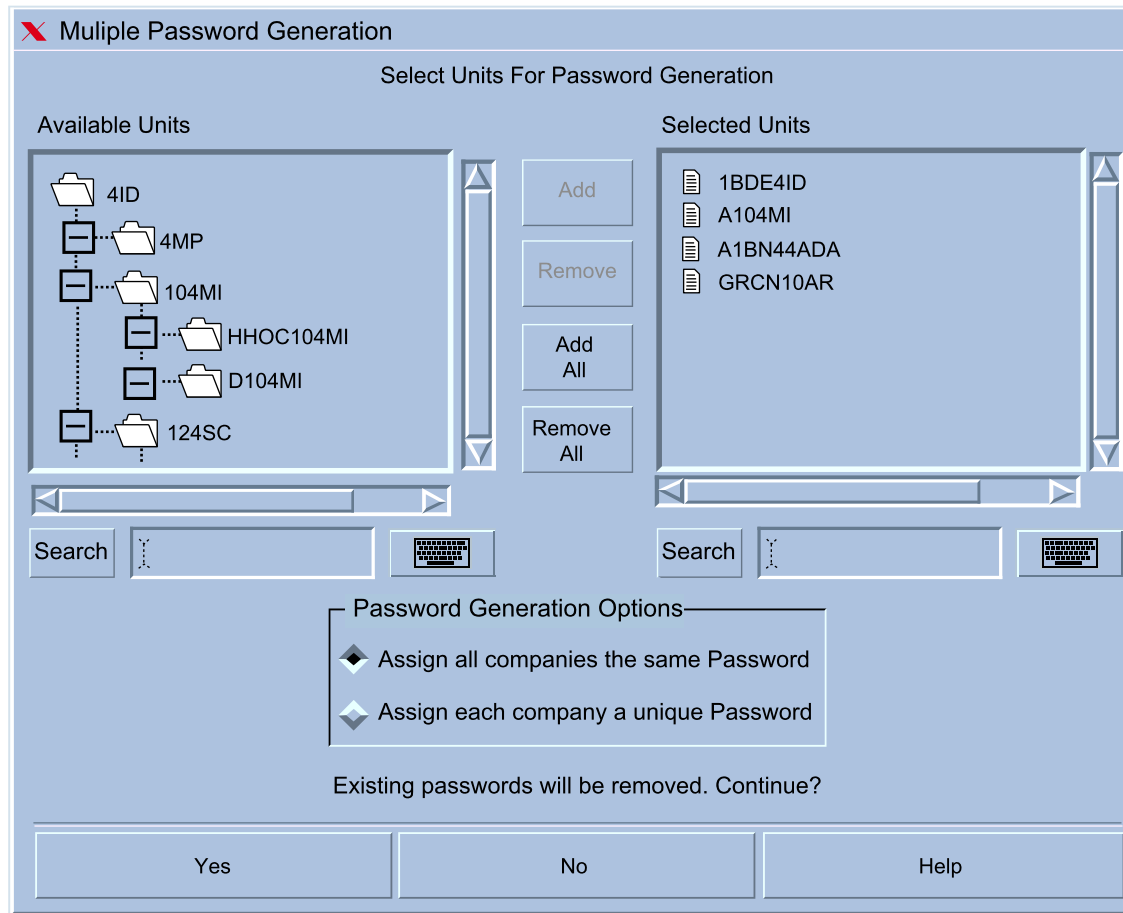


Figure 5. Multiple Password Generation Dialog Box.

Password Management

Personnel Data Passwords MDL

Name	User Access Level	User ID	Assigned
TI Manager		timgr	01146ZOCT2004
MAYFIELD, CURTIS	Unclassified	cmm3421	01146ZOCT2004
IVER, MACK	Unclassified	mi4542	01150ZOCT2004
HHC1BDE, Spare 9 (U)	Unclassified	spare9u	01146ZOCT2004
HHC1BDE, Spare 9 (S)	Secret	spare9s	01146ZOCT2004

Change Passwords Show Passwords

☐ Generate for All ☒ Display All

☐ Change Selected Display One

Next...

Search Search By Name

Save... Print... Exit Help

Figure 6. Password Tab with Passwords Displayed.

The screenshot shows a software window titled "Password Management" with a red 'X' icon in the top-left corner. The window has three tabs: "Personnel Data", "Passwords", and "MDL". The "MDL" tab is currently selected. The window is divided into two main sections. The left section, titled "Password Management Files", contains a large empty rectangular area with a vertical scrollbar on its right side and a horizontal scrollbar at its bottom. Below this area are three buttons: "Load.", "Display", and "Delete". The right section, titled "Create New MDL Password File", contains the following elements: a label "Effective Start Date:" followed by a text box containing "01-----ZOCT2004" and a "DTG" button; a label "Days Before Expiration" followed by a text box containing "90" and two buttons, "+" and "-"; a label "Expiration Date:" followed by a text box containing "30---- ZDEC2004"; a text box containing "An Expiration Warning Will Occur within 7 days of Password Expiration"; and a text box containing "Create an MDL file based on the information in the Passwords Tab." with a "Create..." button below it. At the bottom of the window is a row of four buttons: "Save...", "Print...", "Exit", and "Help".

Figure 7. Password Management Dialog Box - MDL Tab.

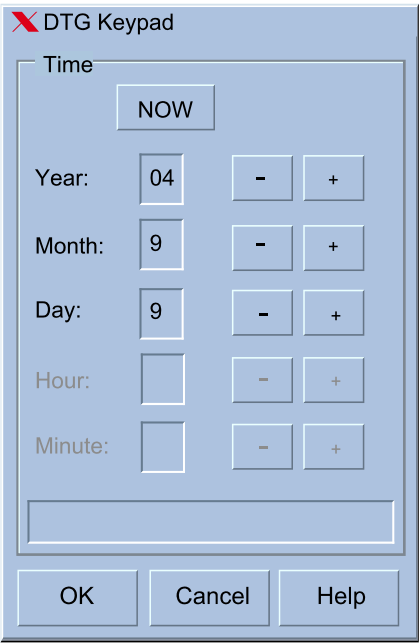


Figure 8. DTG Keypad.

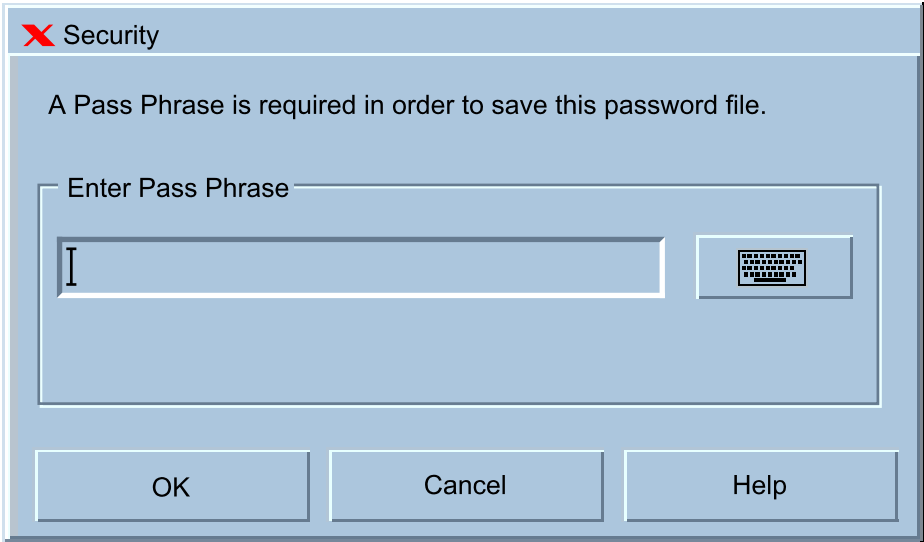


Figure 9. Pass Phrase Security Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - PRINT PASSWORDS

INITIAL SETUP:

Personnel Required

Security Officer

Equipment Condition

System is powered up.
System is offline.

To print passwords, the system classification must be set to SECRET.






This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Print Passwords.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcsecur" user name.	The word fbcsecur appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The Security Officer Applications dialog box opens with the PASSWORD/LOGIN tab selected, as shown in Figure 1.
4.	Select GENERATE PASSWORDS .	The Security dialog box opens.
5.	Enter the pass phrase that was used to generate the passwords and select OK .	The Password Management dialog box opens with the Personnel Data tab selected, as illustrated in Figure 2.
6.	Select DISPLAY ALL in the Show Passwords panel.	The current passwords are listed in the Passwords column of the Passwords tab in the Password Management dialog box.
7.		The Print Unit Passwords dialog box opens

Table 1. Print Passwords. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	 WARNING <div> <p>Passwords are SECRET. Take appropriate precautions to safeguard this information. Failure to comply could compromise the mission and lead to personnel injury or fatality.</p> </div>  CAUTION <div> <p>Failure to print or write down the passwords could result in being locked out of the system when the new passwords are activated.</p> </div>  NOTE <p>The print function is not allowed unless the system is in the Secret classification mode.</p> <p>Select PRINT.</p>	with the available unit passwords listed in the left pane, as shown in Figure 3.
8.	Select ADD ALL .	All of the unit passwords are listed in the right pane.
9.	Select Ok .	The Print Status dialog box opens with the message "Print job has been sent to the print queue. Document size x page(s).", as shown in Figure 4 and the document is printed.
10.	Select EXIT .	The Password Management dialog box closes.

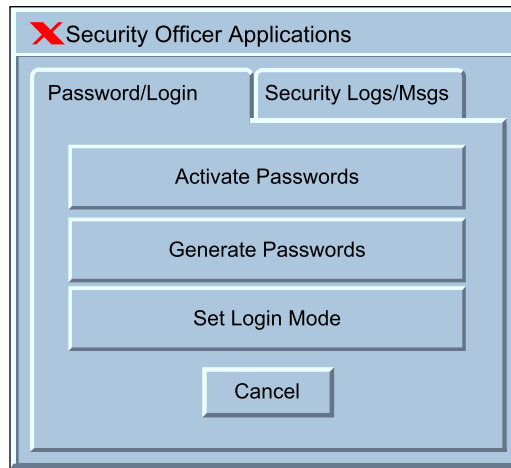


Figure 1. Security Officer Applications Dialog box.

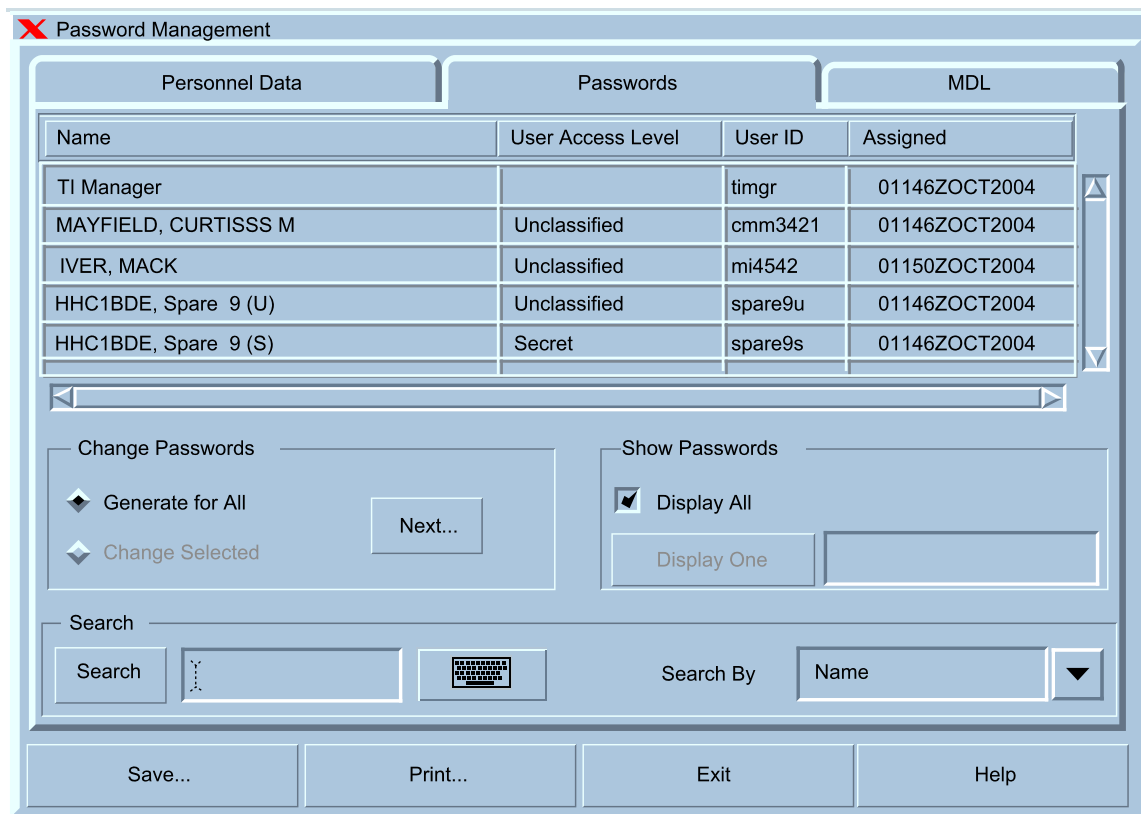


Figure 2. Password Management Dialog Box - Passwords Tab Displayed.

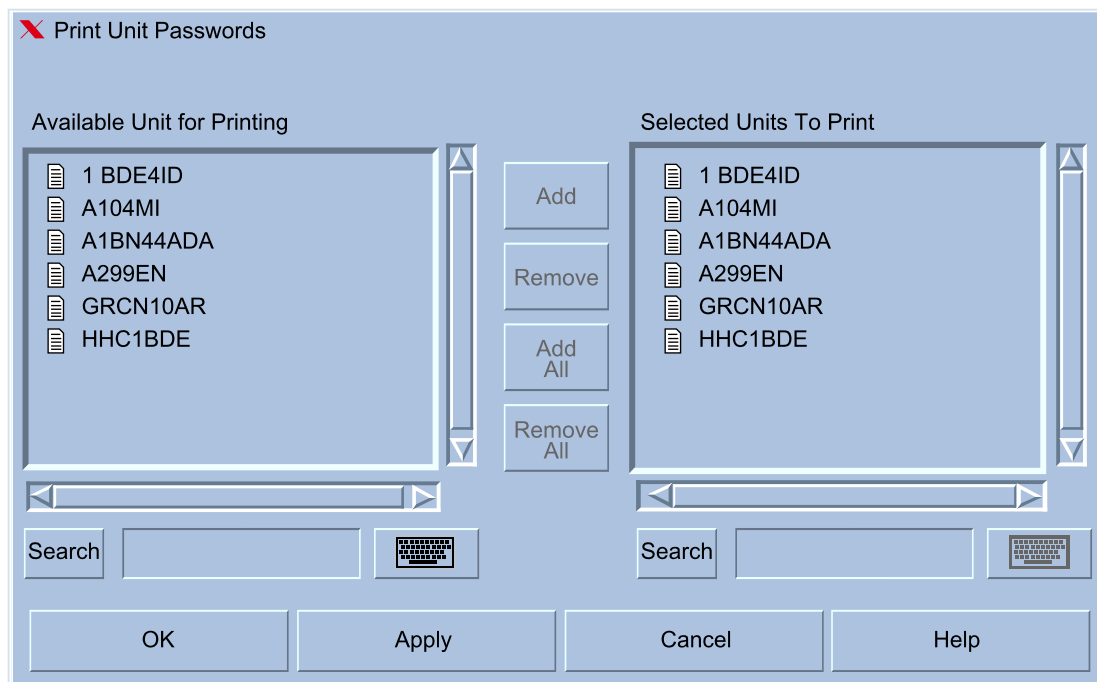


Figure 3. Print Unit Passwords Dialog Box.

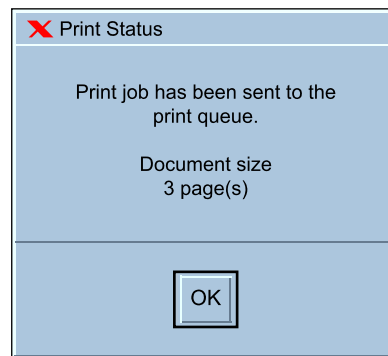


Figure 4. Print Status Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - MANUALLY ACTIVATE PASSWORDS

INITIAL SETUP:

Personnel Required

Security Officer

Equipment Condition

System is powered up.

System is offline.



After passwords are loaded and the system is rebooted, the passwords will normally be activated automatically according to the activation date-time group (DTG). Manual activation may be required to activate passwords sooner than the activation date and time.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Manually Activate Passwords.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcsecur" user name.	The word fbcsecur appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The Security Officer Applications dialog box opens with the PASSWORD/LOGIN tab selected, as shown in Figure 1.
4.	Select ACTIVATE PASSWORDS .	The Select A File dialog box opens, as shown in Figure 2.
5.	Highlight the Security folder in the left pane.	A list of password files appears in the right pane.
6.	Select the desired password file to highlight it, and then select OK .	An alert dialog box opens with the message "Preparing to activate passwords from file

Table 1. Manually Activate Passwords. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
		usr/applique/shared/data/security/[file name].pwd".
7.	Select OK .	The Activate Password progress window opens, as shown in Figure 4, and displays the progress of the activation. The process is complete when the final line reads "Press Enter to continue."
8.	Select ENTER .	The Activate Password progress window closes.
9.	Select CANCEL .	The Security Officer Applications dialog box closes.
10.	Select START/SHUT DOWN/REBOOT .	The Create Device reboots and the new passwords are activated.

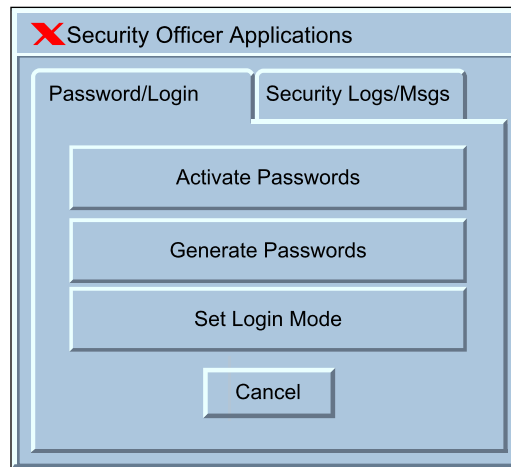


Figure 1. Security Officer Applications Dialog box.

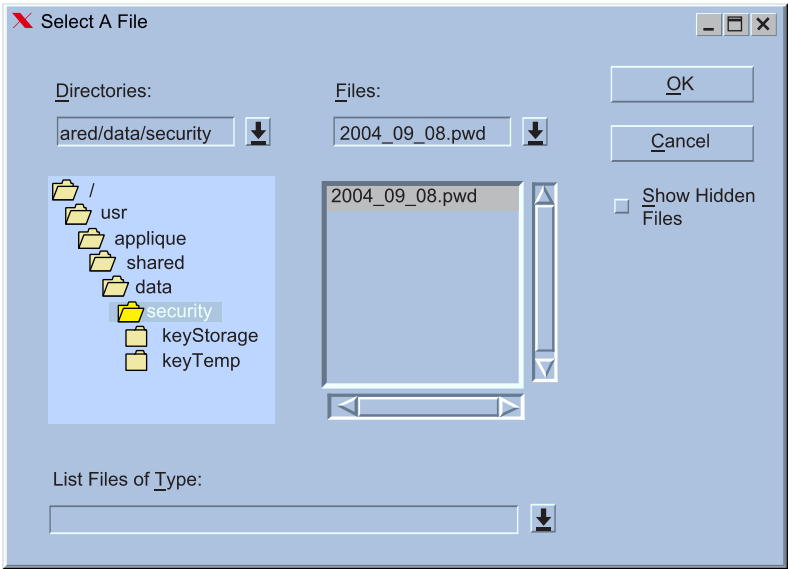


Figure 2. Select A File Dialog Box.

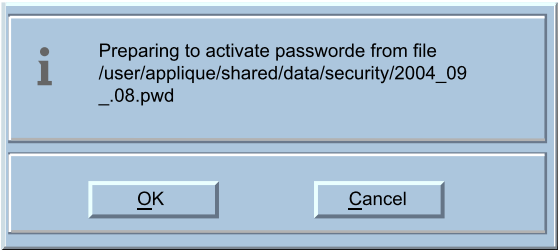


Figure 3. Print Status Dialog Box.

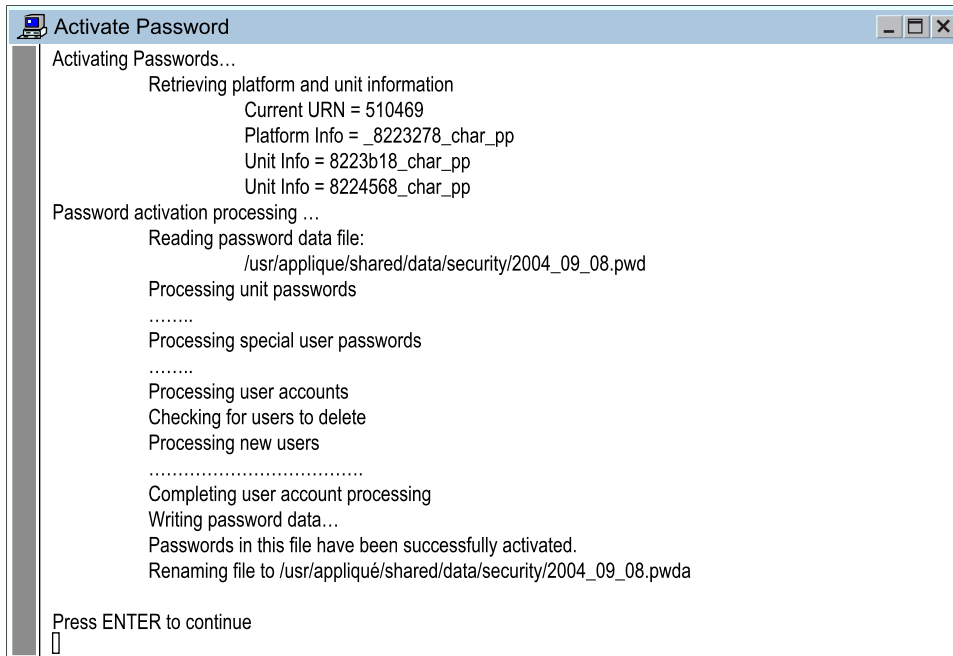


Figure 4. Password Activation Complete Alert Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - SECURITY PROCEDURES - SET THE FBCB2 LOGIN MODE

INITIAL SETUP:

Personnel Required

Security Officer

Equipment Condition

System is powered up.
System is offline.

This procedure determines if the login to FBCB2 will be by a unit password or by individual passwords.



NOTE

The default login mode is Unit Login mode.



NOTE

This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Set the FBCB2 Login Mode.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcsecur" user name.	The word fbcsecur appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The Security Officer Applications dialog box opens with the PASSWORD/LOGIN tab selected, as shown in Figure 1.
4.	Select SET LOGIN MODE .	The Select Login/Password Mode dialog box opens, as shown in Figure 2.
5.	Select the appropriate login mode, then select CONTINUE .	The login mode is set and the Select Login/Password Mode dialog box closes.
6.	Select CANCEL .	The Security Officer Applications dialog box closes.

Table 1. Set the FBCB2 Login Mode. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
7.	Select START/SHUT DOWN/REBOOT .	The system reboots and the new login mode is activated.

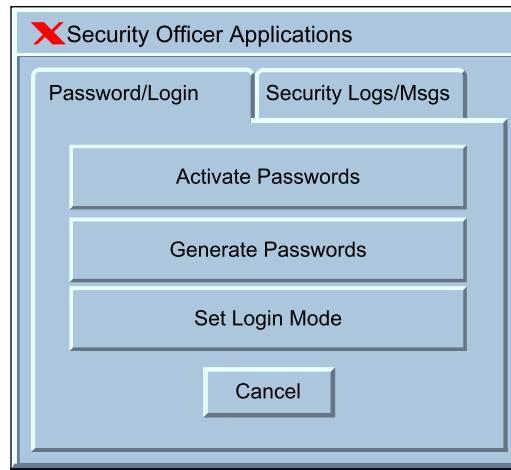


Figure 1. Security Officer Applications Dialog Box.

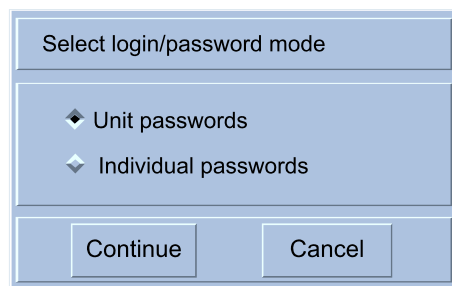


Figure 2. Select Login/Password Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - CREATE DEVICE PROCEDURES - CREATE A MESSAGE MISSION DATA SET

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is online.
Messages have been created and saved to a file.

This procedure allows the operator to group messages and create an MDS, which can then be included in a Mission Data Load.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Create a Message MDS.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/MISSION DATA LOAD/MESSAGE MANAGER .	The Message Manager dialog box displays, as shown in Figure 1.
2.	Select NEW GROUP .	The Name dialog box opens.
3.	Type a name for the new message group and select OK .	The new group appears in the right pane.
4.	Highlight the new group folder in the right pane.	
5.	<p>Files must be selected and added one at a time.</p> <p>Open the desired message folder in the left pane and select the first file to be added to the new group.</p>	
6.	Select ADD MESSAGE TO MDL .	The file appears under the new group folder in the right pane.

Table 1. Create a Message MDS. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
7.	Repeat the above steps until all desired files are added to the new group folder.	
8.	Select CLOSE .	

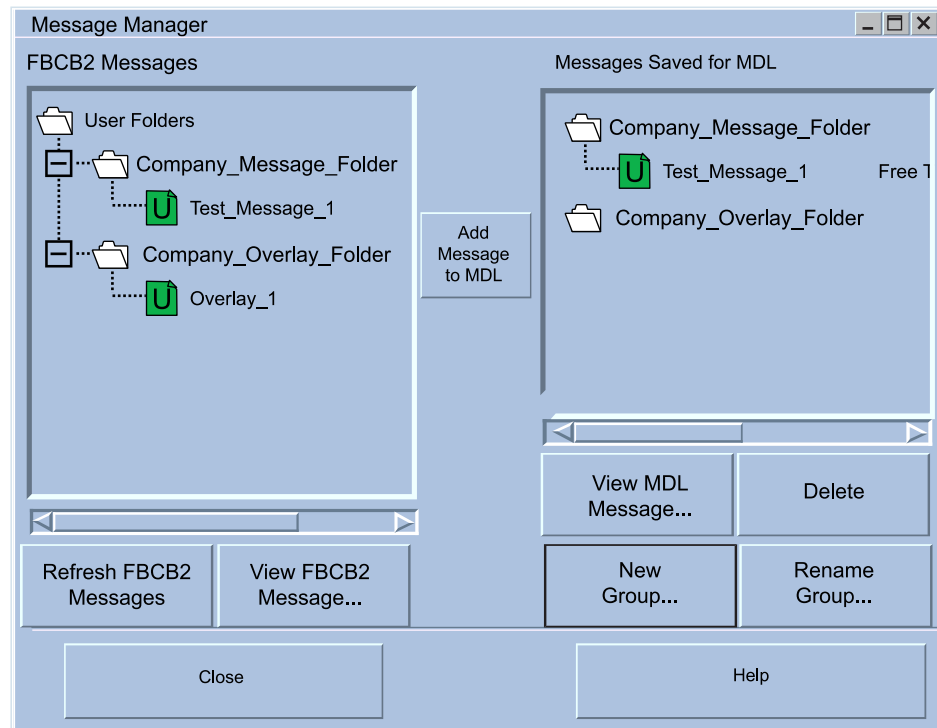


Figure 1. Message Manager Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - CREATE A MISSION DATA LOAD****INITIAL SETUP:**

Personnel Required
Operator

Equipment Condition
System is offline.



Mission Data Sets (MDSs) to include overlays, map sets, and any other files to be included in the MDL load should be created prior to performing this procedure. MDSs can include passwords, messages, and other types of files that are bundled into sets prior to being included in a mission data load.



This procedure is valid only for FBCB2 software version 6.4.4.2.



Figure 2 shows the Type II version Create Device MDL connection.



The CA-131/P MDL device does not need to be connected if an MDS, such as passwords, is to be loaded to the Create Device directly from the HDD.

Table 1. Create a Mission Data Load.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Attach the USB cable to the MDL device using the military plug. Tighten the plug until the red ring on the MDL connector does not show.	

Table 1. Create a Mission Data Load. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
2.	Insert the USB plug into the USB port on the right side of the Ruggedized Laptop Computer or into the USB port on the back of the laptop. Figure 1 illustrates the connection of the MDL to the Ruggedized Laptop Computer.	
3.	Select START/FBCB2/MISSION DATA LOAD/CREATE MDL .	The Mission Data Create dialog box displays, as shown in Figure 3.
4.	Select NEW MISSION .	The New Mission dialog box displays, as shown in Figure 4.
5.	Enter a name for the new mission, a point of contact (POC), and description of files in the appropriate fields provided.	
6.	Select OK .	The New Mission dialog box closes and the created mission folder appears in the right pane of the Mission Data Create dialog box.
7.	Highlight the new mission folder in the right pane.	
8.	Highlight an MDS folder containing files to be added to the MDL from the Available Data Sets in the left pane.	The selected folder is indicated in the left pane and the individual file names within the MDS appear under the folder name.
9.	Select ADD DATA FILE .	The selected files and folders will be copied to the Current Missions folder in the right pane.
10.	If the desired files are not displayed, select SELECT DATA FILES .	A New Data File dialog box opens with a list of files contained in the highlighted folder.
11.	Select the desired file and select ADD .	The Name/Comment dialog box opens with the selected file entered in the Name field.
12.	Select OK .	The Name/Comment dialog box closes and the selected file appears in the Available Data Files pane under the selected folder.
13.	Highlight the file and select ADD DATA FILE .	
14.	Repeat steps 7-13 until all MDSs, folders, and files are added to the Current Missions folder.	
15.	Select CALCULATE MISSION ZIPPED SIZE .	The Mission Size Processing Dialog box opens (may not display if the file is small), as shown in Figure 5, indicating the compressed size is being calculated. When the file size is calculated, the Processing Dialog box closes and the total compressed size is displayed to the right of the CALCULATE MISSION ZIP SIZE button, as shown in Figure 6.
16.	Highlight the mission folder in the right pane and select WRITE MISSION TO MDL .	The Write Mission dialog box opens, as shown in Figure 7.
17.	Verify that the total compressed size calculated	

Table 1. Create a Mission Data Load. - Continued



STEP	OPERATOR ACTION	INDICATION or CONDITION
	in Step 15 is does not exceed the Available Space indicated in the Write Mission dialog box.	
18.	 NOTE The LOCAL DRIVE option is selected if the mission is to be loaded directly to the Create Device instead of to the MDL. Select the drop-down arrow to the right of the entry field in the Write Mission dialog box and select PORTABLE MEDIA if the MDS is to be loaded to the MDL device, or LOCAL DRIVE if the MDS is to be loaded directly to the Create Device.	The words "Portable Media" or "Local Drive" are displayed in the field and the amount of available space on the MDL device is displayed just below them.
19.	Select OK .	A Processing dialog box opens with a clock symbol indicating that writing is in progress. When the processing is complete, an alert dialog box opens with the message: "The mission was successfully written".
20.	Select OK .	The alert dialog box closes.
21.	If the MDL was written to the MDL device, select CLOSE to close the Mission Data Create dialog box. If the MDL is to be loaded directly to the Create Device, go on to Step 22.	The Mission Data Create dialog box closes.
22.	 NOTE This portion of the procedure should only be performed if the MDL is to be loaded directly to the Create Device. Select START/FBCB2/MISSION DATA LOAD/INSTALL MDL .	
23.	Select the desired folder to extract from the MISSIONS ON MDL pane.	The selected folder is highlighted, as shown in Figure 3.
24.	Select EXTRACT .	The system copies the selected folder from the Missions on MDL pane to the Mission Extracted pane. When the extraction is complete, an Extract Successful dialog box opens with the message "The mission was successfully extracted from the media".
25.	Select OK .	The Extract Successful dialog box closes.

Table 1. Create a Mission Data Load. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
26.	Highlight the desired mission folder in the Missions Extracted pane to be installed in the Create Device.	
27.	Select INSTALL .	The Install alert dialog box opens with the message "Do you want to install this mission (xxxxxxx)?"
28.	Select YES .	An Install Complete dialog box opens with the message "Mission installation is complete."
29.	Select OK .	The Install Complete dialog box closes.
30.	Repeat steps 9-12 to install each additional mission.	
31.	Select CLOSE .	The Mission Extractor/Installer dialog box closes.

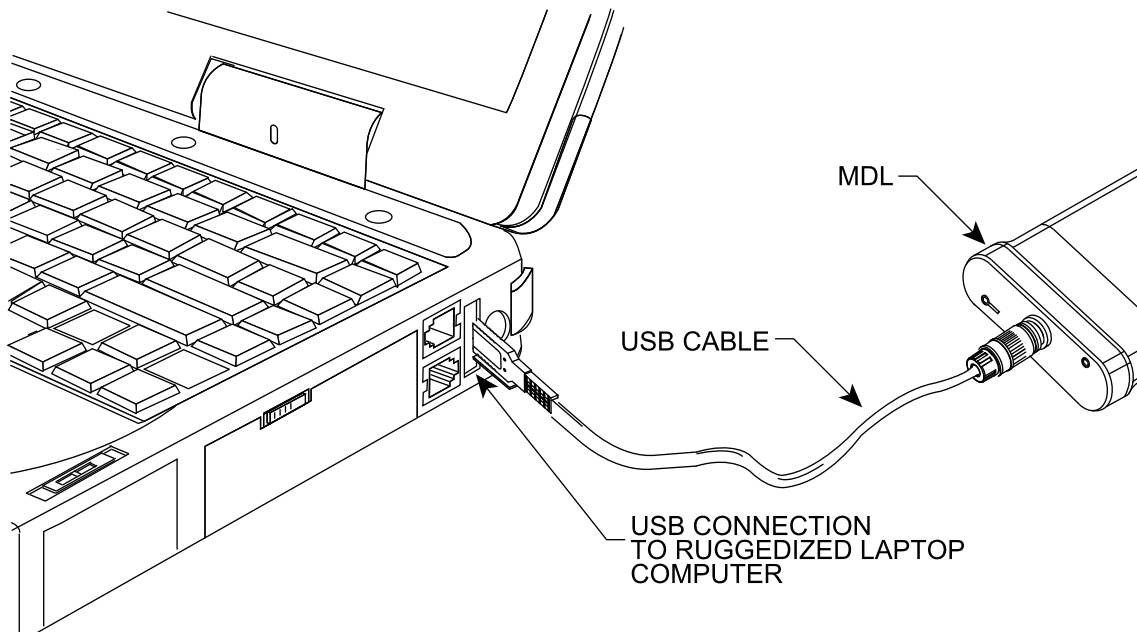


Figure 1. MDL Connected to Ruggedized Laptop Computer.

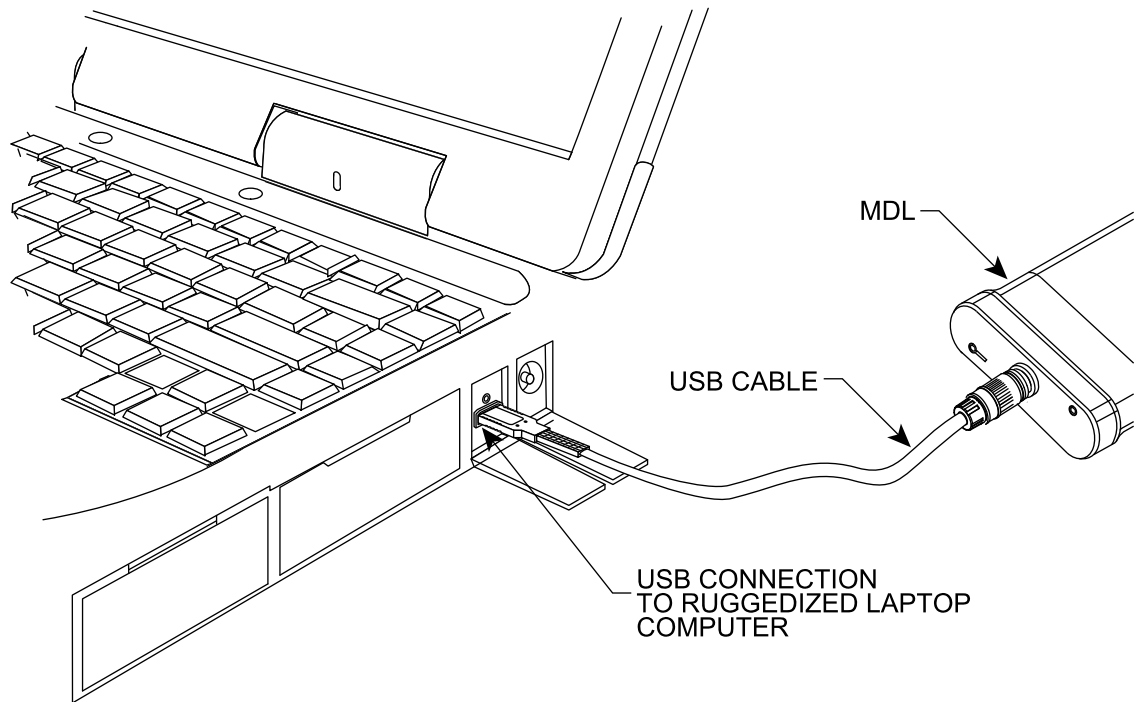


Figure 2. MDL Connected to Type II Ruggedized Laptop Computer.

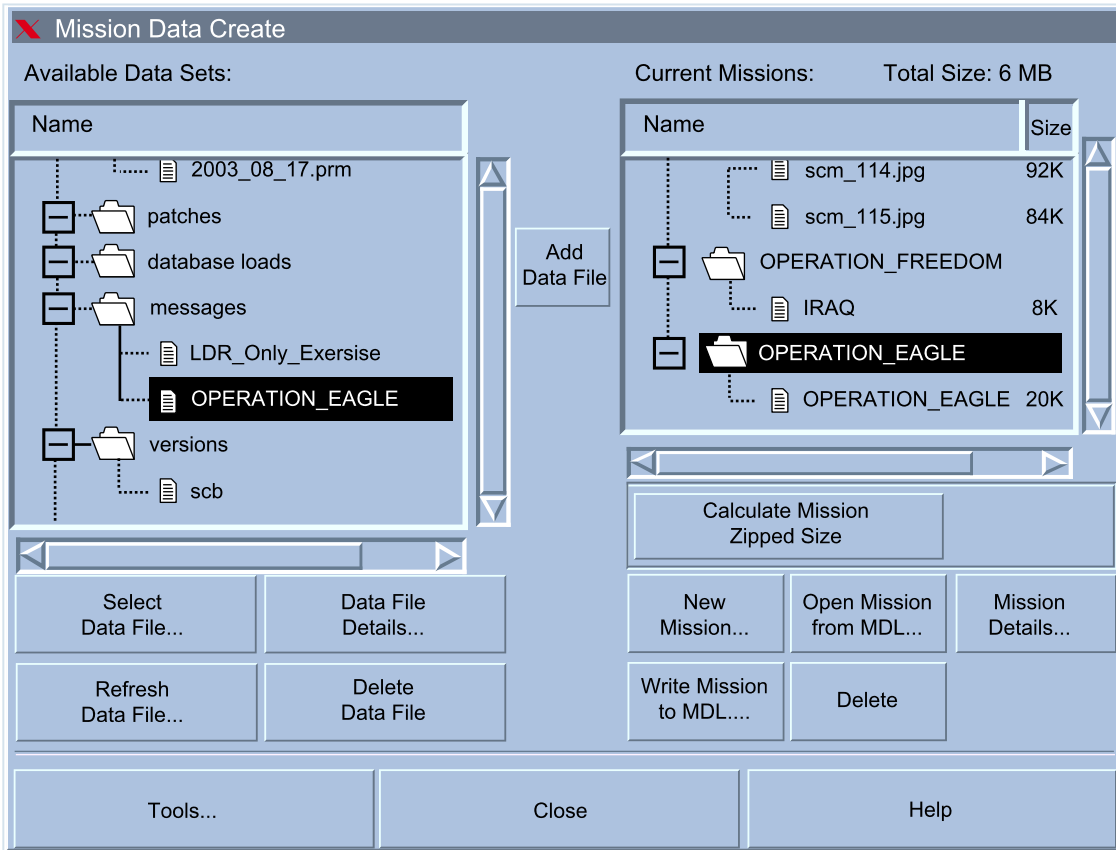


Figure 3. Mission Data Create Dialog Box.

New Mission

Name:

POC:

Description:

Instructions:

Classification:

Ok

Cancel

Help

Figure 4. New Mission Dialog Box.

Processing Dialog

Calculating the
compressed mission size ...

Cancel

Figure 5. Mission Size Processing Dialog Box.

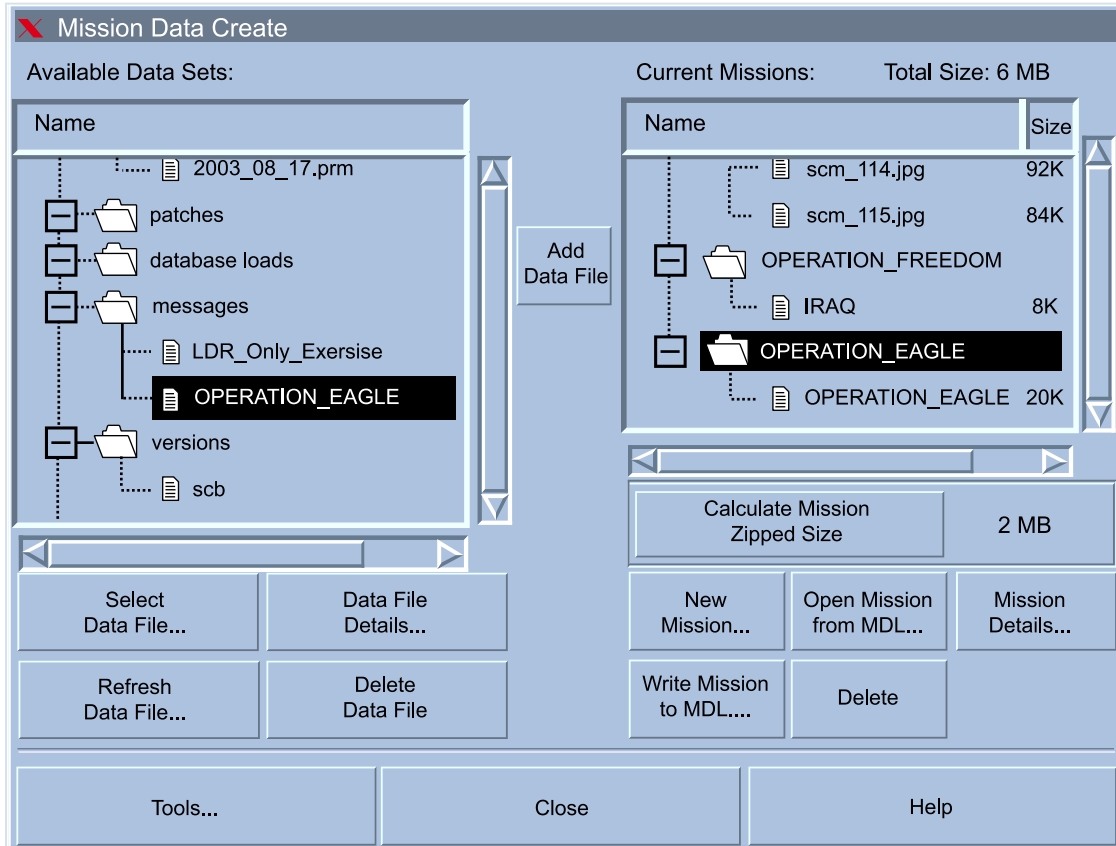


Figure 6. Mission Data Create Dialog Box with Calculated Mission Size.

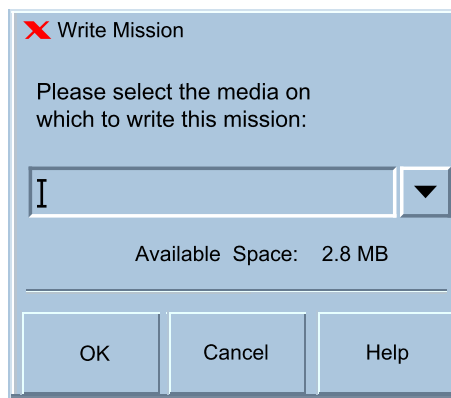


Figure 7. Write Mission Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - INSTALL A MISSION DATA LOAD

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is offline.



This procedure is valid only for FBCB2 software version 6.4.4.2.



If the MDL is to be loaded to the Create Device directly from the HDD, the CA-131/P MDL device does not need to be connected.



Figure 2 shows the Type II version Create Device MDL connection.

Table 1. Install a Mission Data Load.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Connect the USB cable military plug to the input connector on the MDL device, as shown in Figure 1.	
2.	Connect the USB connector to the USB port on the right side of the FBCB2 Create Device Ruggedized Laptop Computer.	
3.	Select START/FBCB2/MISSION DATA LOAD/INSTALL MDL.	The Mission Data Extractor/Installer dialog box opens, as shown in Figure 3.
4.	Select the MEDIA drop-down arrow.	The Media option list displays.
5.	Select PORTABLE MEDIA.	The Missions on MDL pane is populated with

Table 1. Install a Mission Data Load. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
		the missions installed in the MDL.
6.	Select the desired folder to extract from the MISSIONS ON MDL pane.	The selected folder is highlighted, as shown in Figure 3.
7.	Select EXTRACT .	The system copies the selected folder from the Missions on MDL pane to the Mission Extracted pane. When the extraction is complete, an Extract Successful dialog box opens with the message "The mission was successfully extracted from the media".
8.	Select OK .	The Extract Successful dialog box closes.
9.	Highlight the desired mission folder in the Missions Extracted pane to be installed in the Create Device.	
10.	Select INSTALL .	The Install alert dialog box opens with the message "Do you want to install this mission (xxxxxxx)?"
11.	Select YES .	An Install Complete dialog box opens with the message "Mission installation is complete."
12.	Select OK .	The Install Complete dialog box closes.
13.	Repeat steps 9-12 to install each additional mission.	
14.	Select CLOSE .	The Mission Extractor/Installer dialog box closes.

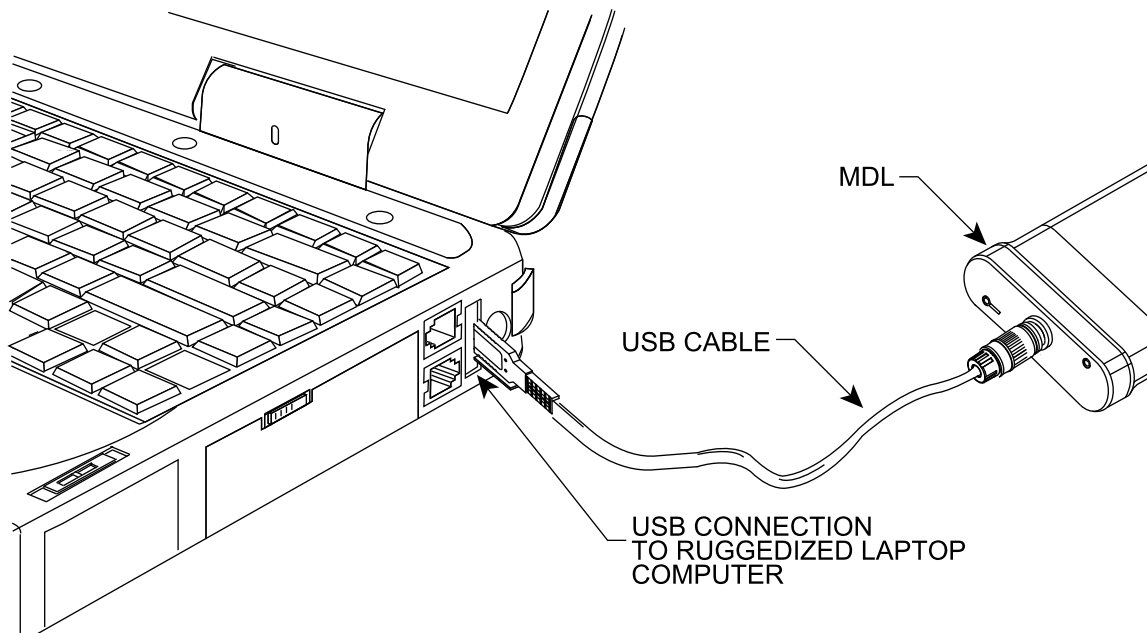


Figure 1. MDL Connected to Ruggedized Laptop Computer.

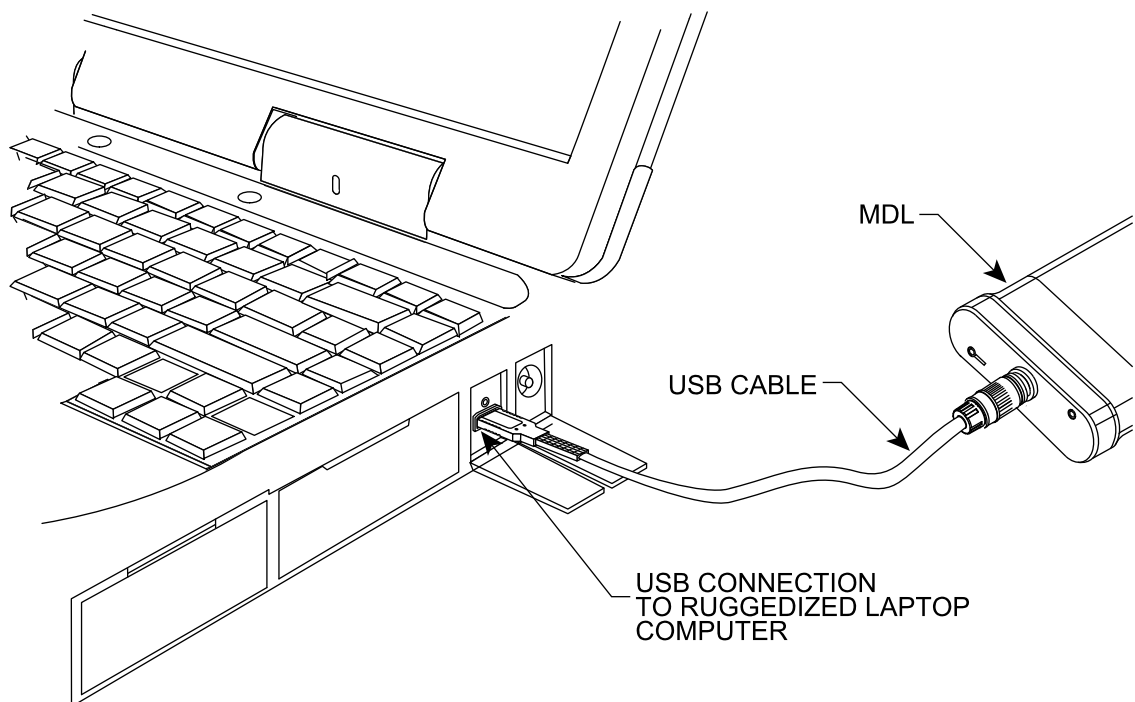


Figure 2. MDL Connected to Type II Ruggedized Laptop Computer.

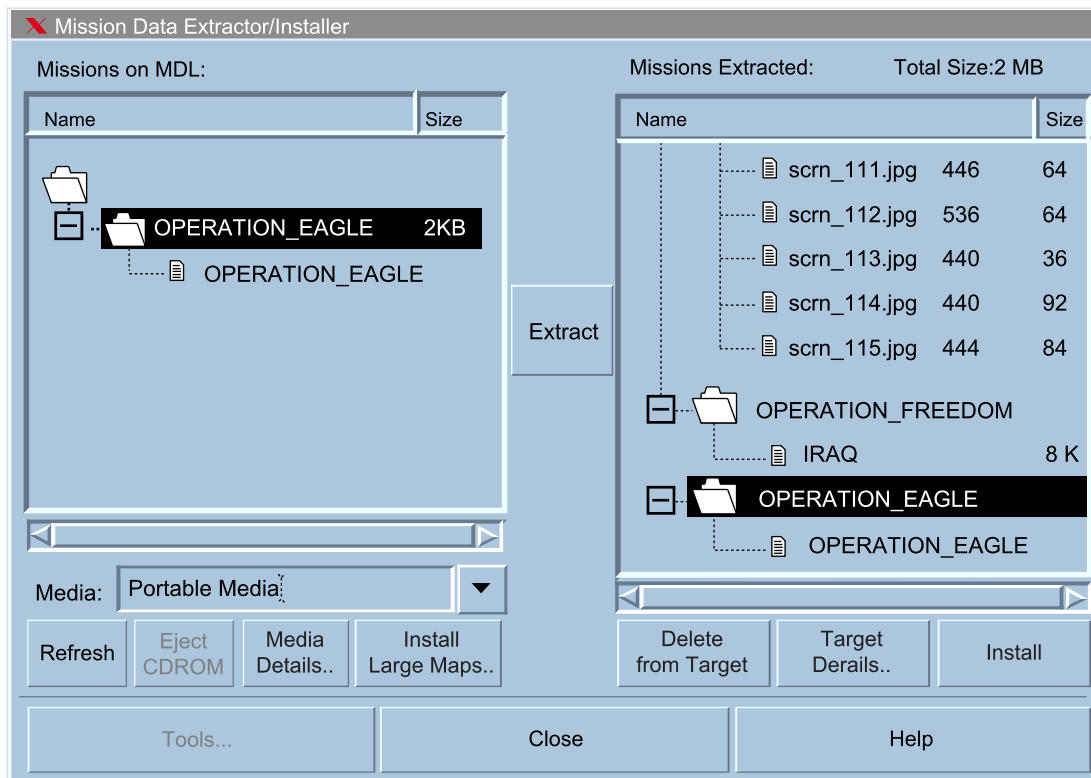


Figure 3. Mission Data Extractor/Installer Dialog Box.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - IMPORT MAPS FROM A CD-ROM

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

System is powered on.

System is offline.

The following procedure provides steps to import map data from a CD-ROM disk using the Map Manager function.



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 1. Import Maps from a CD-ROM.


STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Insert the CD-ROM disk containing the map data files into the CD/DVD drive.	
2.	Select START/FBCB2/MISSION DATA LOAD/MAP MANAGER .	The Map Manager dialog box opens, as shown in Figure 1. A colored oval icon with the label CDROM appears over each area covered by the CD-ROM map files. The color of the oval corresponds to the type of digital map format: Yellow = ADRG, VPF Orange = DTED Purple = Imagery
3.	Select MANAGE MAPSETS .	The Manage Mapsets dialog box opens, as shown in Figure 2.
4.	 Do not use spaces to separate parts of the file name. Use underscores or dashes. Select inside the NAME field to highlight it and	

Table 1. Import Maps from a CD-ROM. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	enter a file name for the new mapset IAW unit SOP.	
5.	Select NEW .	The Create Mapset dialog box appears with the entered mapset name displayed..
6.	Select OK .	The mapset folder appears in the Manage Mapsets window under User Mapsets, as shown in Figure 3.
7.	Select CLOSE .	The Manage Mapsets dialog box closes.
8.	Click on the down-arrow next to the Current Mapsets field and highlight your new mapset folder.	
9.	Select IMPORT FROM CDROM .	The Import Map Data from Import Device dialog box opens with a list of map data types. Those types that are present on the CD-ROM disk will be in black text; those not available will be grayed out, as shown in Figure 4.
10.	Select MAP .	Refer to context-sensitive help for additional selection options.
11.	Select SELECT .	The Map Selection dialog box opens with a series of map scale options. The map scale available on the disk is in black text; those scales that are not available are grayed out.
12.	Select ON in the Select All Cells panel.	This selects all available map cells on the CD.
13.	Select IMPORT .	A confirmation dialog box opens with the message: "You are about to import xxx [map format] map cells. Continue with this action?", as shown in Figure 5.
14.	Select OK to continue.	The message: "Successfully imported map files" is displayed in the Default Loc Info field of the Map Manager dialog box when the maps are loaded onto the hard drive.
15.	Select OK .	The message disappears.
16.	Select EXIT .	The Map Manager dialog box closes.

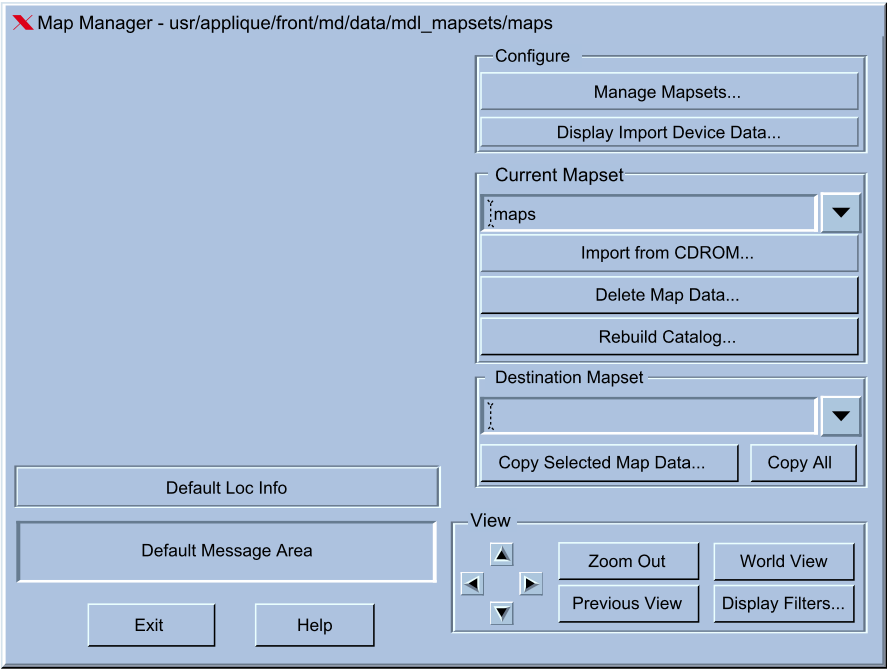


Figure 1. Map Manager Dialog Box.

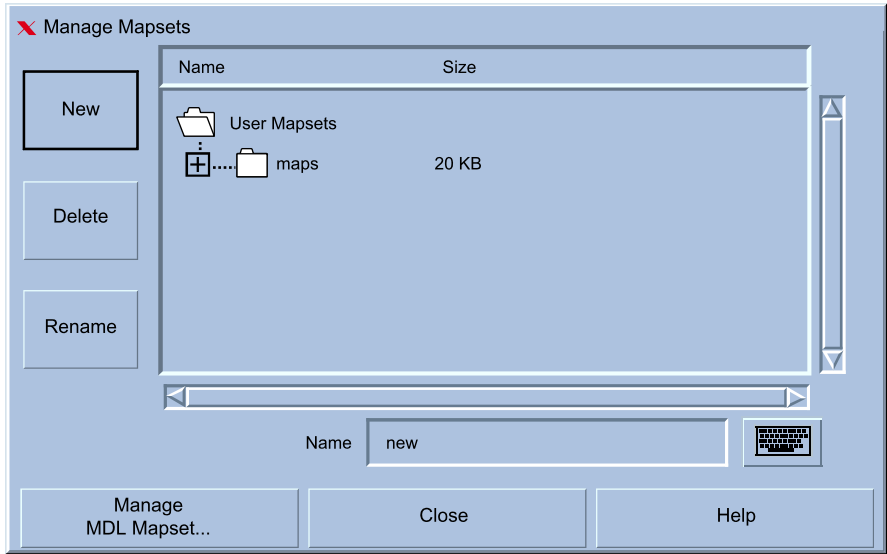


Figure 2. Manage Mapsets Dialog Box.

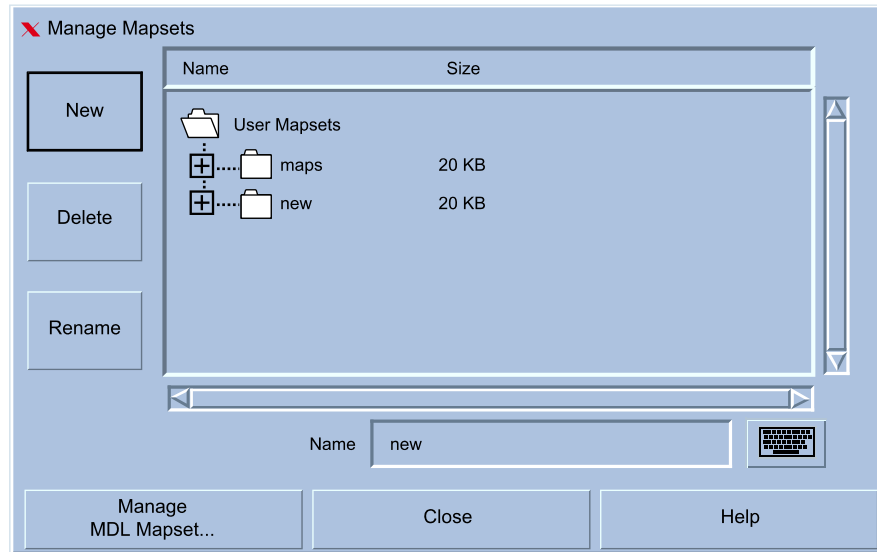


Figure 3. Manage Mapsets Dialog Box with New Mapset Folder.

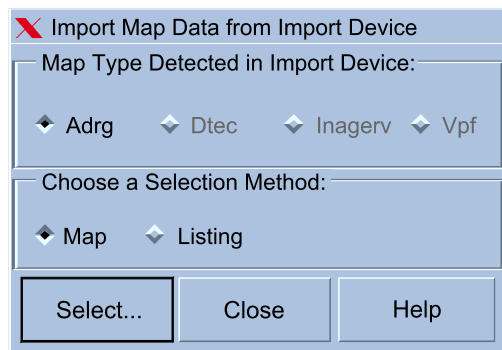


Figure 4. Import Map Data from Import Device Dialog Box.

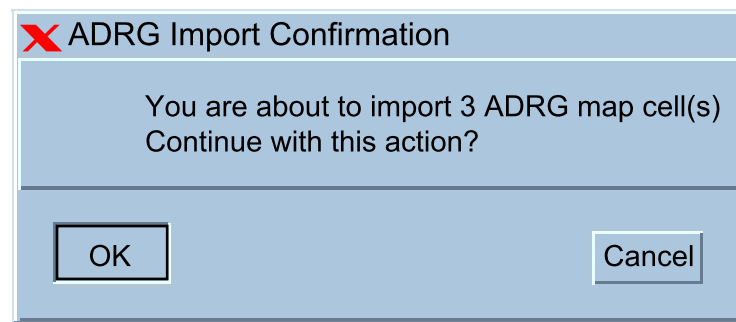


Figure 5. Map Import Confirmation.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

OPERATION UNDER USUAL CONDITIONS - OPERATING PROCEDURES - RESTORE THE AN/GYK-55 CREATE DEVICE TO ITS TRANSIT CONFIGURATION

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered off.

PREPARATION FOR MOVEMENT



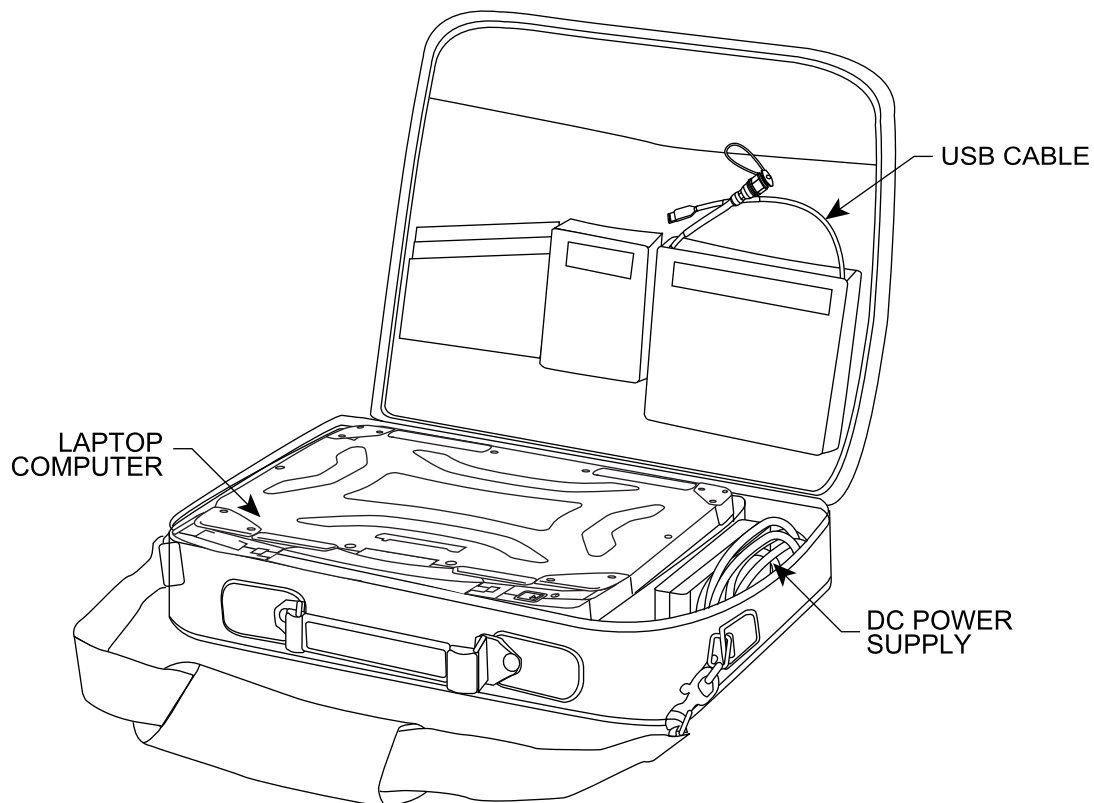
Refer to Figure 1 while restoring the Create Device to its transit condition.

Table 1. Restore the AN/GYK-55 Create Device to its Transit Configuration.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC power supply input cable from the DC IN jack on the right side of the Ruggedized Laptop Computer.	
2.	Disconnect the DC power supply from the AC source. Fold the cables and place the power supply in the slot to the right of the Ruggedized Laptop Computer, as shown in Figure 1.	
3.	If a stand-alone network printer is used, disconnect the ethernet cable from the connector on the right side of the Ruggedized Laptop Computer.	
4.	If the USB cable is connected to an MDL, disconnect the USB cable from the MDL device and from the Ruggedized Laptop Computer. Close the dust cover on the USB cable military connector.	
5.	Coil and place the USB cable in the larger pouch in the cover of the transit case, as shown in Figure 1.	
6.	Disconnect the CAT-5 cable from the Ethernet port on the Create Device.	
7.	Close and latch all port covers and any open	

Table 1. Restore the AN/GYK-55 Create Device to its Transit Configuration. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	compartment doors.	
8.	Close the Ruggedized Laptop Computer display cover and press down on the front edge until it latches.	
9.	Lift the two securing straps in the large slot of the transit case and insert the Ruggedized Laptop Computer into the slot with the handle facing toward the front, as shown in Figure 1.	
10.	Secure the Ruggedized Laptop Computer with the straps.	
11.	Close the transit case cover and secure it by pulling the two zippers (one on either side) from the back to the front until they meet in the center of the case front.	

**Figure 1. AN/GYK-55 Create Device Stored in its Transit Case.**

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

OPERATION UNDER UNUSUAL CONDITIONS

This work package describes the tasks performed by the equipment operator under unusual conditions. Unusual conditions are operating a fully mission capable FBCB2 Create Device in extremes of temperature and humidity or in the presence of nuclear, biological, or chemical agents. The equipment operator must apply special care as described.

UNUSUAL ENVIRONMENT AND WEATHER**Operate in Extreme Cold Weather**

When cold conditions approach operational limits, use additional methods of warming the air around the Create Device such as portable heaters or thermal covers.

Operate in Extreme Hot Weather

The Create Device has a maximum operating temperature (ambient plus internal) of 95°F (35°C). The computer portion of the Ruggedized Laptop Computer can function at these temperatures, but the LCD touchscreen may overheat and cause the display to fade out or lose resolution.

When the ambient temperature of the operating facility exceeds 90°F (32°C), move the Create Device to a cooler location. If this is not possible, use a fan or some other method to circulate the air around the Ruggedized Laptop Computer.

Operate in High-Velocity Sand, Dust, and Rain

Do not expose the Create Device Ruggedized Laptop Computer to direct wind-blown rain, sleet or snow while the display cover is open. Place a protective partition around the Ruggedized Laptop Computer to prevent the sand or dust from damaging the touchscreen display or from getting inside the computer. Place a protective cover over the Ruggedized Laptop Computer to protect it from rain or snow but monitor the temperature inside the cover to ensure it does not exceed the maximum operating temperature of the Ruggedized Laptop Computer.

Chemical, Biological, Radiological, Nuclear (CBRN) Decontamination Procedures**Operate in the Presence of Chemical and Biological Decontamination**

The Create Device can continue to operate in the presence of biological or chemical decontaminating agents. Certain agents such as chlorine may damage exposed surfaces of the open Ruggedized Laptop Computer.

**CAUTION**

The Ruggedized Laptop Computer has plastic, metallic, and painted surfaces that may be affected by some decontaminating agents. Use the mildest agents recommended by FM 3-5 and MIL-HDBK-783 in the first attempt to clear any biological or chemical agents, and then use a stronger agent if required.

Decontaminate the Create Device Ruggedized Laptop Computer in accordance with FM 3-5 and MIL-HDBK-783. This handbook describes the chemical decontaminating solutions that are used on military equipment. FM 3-5, Table C-1, lists the recommended decontaminating solutions for specific types of materials.

Operate in the Presence of Nuclear Effects

The Create Device Ruggedized Laptop Computer is subject to nuclear Electromagnetic Pulse (EMP) damage. The effects of EMP on the Ruggedized Laptop Computer can be reduced if it is powered down and all cables are disconnected. Place the laptop inside an all-metal container to further reduce or prevent EMP damage.

Jamming and Electronic Countermeasures (ECM) Procedures**Jamming and Interference**

The Create Device is not affected by jamming or radio frequency interference. However, it can be affected by strong magnetic fields. Keep the Create Device Ruggedized Laptop Computer away from strong magnetic devices, operating machinery, or high-current devices.

END OF WORK PACKAGE

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OPERATOR INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

EMERGENCY PROCEDURES

INITIAL SETUP:

Personnel Required
Operator

RESPOND TO AN AUTHENTICATION REQUEST WITHOUT LOCKOUT

When an authentication request message without lockout is received, a pulsating alert tone will sound and a RE-AUTHENTICATION REQUIRED alert dialog opens and covers the entire screen. An entry field for a user name and one for a password covers the entire screen, and two buttons are available at the bottom of the dialog box: AUTHENTICATE and CANCEL. If the operator is in the middle of a battle or cannot authenticate for some other reason, he can select CANCEL. To authenticate, the operator must enter a valid password, and select AUTHENTICATE. An authentication success message is sent back to the TOC.

Table 1. Respond to an Authentication Request Without Lockout.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	To authenticate, the operator must enter a valid password, and select AUTHENTICATE .	The RE-AUTHENTICATION REQUIRED dialog box closes. An authentication success or cancel message is sent back to the TOC.
2.	To cancel the authentication, select CANCEL .	The RE-AUTHENTICATION REQUIRED alert dialog box closes.

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RESPOND TO AN AUTHENTICATION REQUEST WITH LOCKOUT

When an authentication request message with lockout is received, a pulsating alert tone will sound and a RE-AUTHENTICATION REQUIRED alert dialog box will cover the screen. An entry field for a user name and one for a password are presented, and two buttons are displayed at the bottom of the window: AUTHENTICATE and CANCEL. The CANCEL button is grayed out. To authenticate, the operator must enter a valid password, and select AUTHENTICATE. An authentication success message is sent back to the TOC.

Table 2. Respond to an Authentication Request With Lockout.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	To authenticate, the operator must enter a valid password, and select AUTHENTICATE .	The RE-AUTHENTICATION REQUIRED alert dialog box closes. An authentication success message is sent back to the TOC.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

X
X
X
X
X
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INITIATE AN AUTHENTICATION REQUEST WITHOUT LOCKOUT



This procedure requires that a Private Key (PKI) be loaded on the Create Device and a public key must be loaded on the remote platform. Refer to WP 0026 for the procedure to load private or public keys.



The challenged system must be ONLINE in order for the authentication alerts to display and for the operator to respond.



A pass phrase is required for this procedure.

The S6 or Security Officer may send an authentication request without lockout to each FBCB2 platform. At the unit platform, an alert screen will open requesting the operator to respond to the authentication request. The screen has two response buttons: AUTHENTICATE and CANCEL. If the operator is in the middle of a battle or cannot authenticate for some other reason, he/she can select the CANCEL button. This sends a message back to the TOC that the authentication request was cancelled.

Table 3. Initiate an Authentication Request Without Lockout.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Enter the password and select CONTINUE .	The Security Officer Applications dialog box opens.
3.	Select the SECURITY LOGS/MSGS tab.	The Security Logs/Msgs tab is shown in Figure 1

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Table 3. Initiate an Authentication Request Without Lockout. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
4.	Select AUTHENTICATION/DISABLE .	The Remote Access Security Event Types dialog box opens, as shown in Figure 2.
5.	Select RE-AUTHENTICATION WITHOUT LOCKOUT .	A black diamond appears in the option box, as shown in Figure 2.
6.	In the SELECT A RECIPIENT panel, select to highlight the remote unit to be challenged.	The unit selected appears in the RECIPIENT window.
7.	Enter the pre-established passphrase in the ENTER PASSPHRASE window and touch the SEND button.	A Message Status dialog box opens with the message "The message was sent successfully. At the remote platform, the recipient receives a pulsating alert tone and a re-authentication dialog box covers the entire screen. The operator can elect to re-authenticate or cancel the re-authentication. To authenticate, the operator must enter a valid password, and select AUTHENTICATE . An authentication success message is sent back to the TOC.
8.	Select OK .	The Message Status dialog box closes.
9.	Select CLOSE .	The Remote Access Security Event Types dialog box closes.

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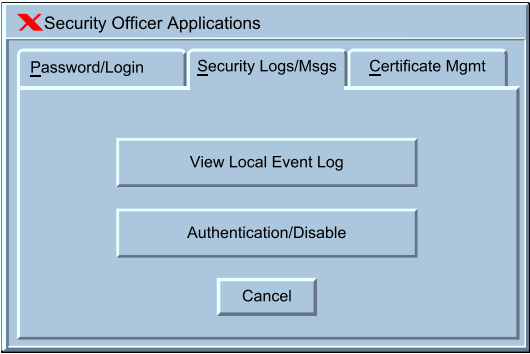


Figure 1. Security Officer Applications - Security Logs/Msgs Tab.

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INITIATE AN AUTHENTICATION REQUEST WITH LOCKOUT



This procedure requires that a Private Key (PKI) be loaded on the Create Device and a public key be loaded on the remote platform. Refer to WP 0026 for the procedure to load the certificates containing the private and public keys.



The challenged system must be ONLINE in order for the authentication alerts to display and for the operator to respond.



A pass phrase is required for this procedure.

Table 4. Initiate an Authentication Request With Lockout.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login box opens.
2.	Enter the password and select CONTINUE .	The Security Officer Applications dialog box opens.
3.	Select the SECURITY LOGS/MSGS tab.	The Security Logs/Msgs tab is shown in Figure 3
4.	Select AUTHENTICATION/DISABLE .	The Remote Access Security Event Types dialog box opens, as shown in Figure 4.
5.	Select RE-AUTHENTICATION WITH	A black diamond appears in the option box,

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Table 4. Initiate an Authentication Request With Lockout. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	LOCKOUT.	as shown in Figure 4.
6.	In the SELECT A RECIPIENT panel, select to highlight the remote unit to be challenged.	The unit selected appears in the RECIPIENT window.
7.	Enter the pre-established passphrase in the ENTER PASSPHRASE window and select SEND .	A Message Status dialog box opens with the message "The message was sent successfully. At the remote platform, the recipient receives a pulsating alert tone and a re-authentication dialog box covers the entire screen. The CANCEL button will be grayed out. To authenticate, the operator must enter a valid password, and select AUTHENTICATE . An authentication success message is sent back to the TOC. If the operator fails to re-authenticate, the platform will be locked out of the FBCB2 system.
8.	Select OK .	The Message Status dialog box closes.
9.	Select CLOSE .	The Remote Access Security Event Types dialog box closes.

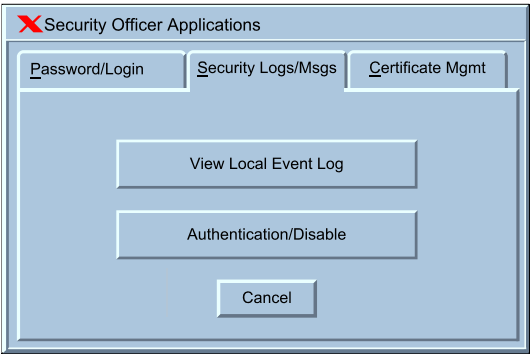


Figure 3. Security Officer Applications - Security Logs/Msgs Tab.

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DISABLE A REMOTE PLATFORM WITHOUT AUTHENTICATING

This procedure is used by the S6 or Security Officer to disable a remote platform's hard disk drive and transceiver without alerting the operator or waiting for a response.



The Create Device must be ONLINE to execute this procedure.



This procedure requires that a Private Key (PKI) be loaded on the Create Device and a public key must be loaded on the remote platform. Refer to WP 0026 for the procedure to load the certificates containing the private and public keys.



A pass phrase is required for this procedure.

Table 5. Disable a Remote Platform Without Authenticating.


STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SECURITY .	The Security Officer Applications login dialog box opens.
2.	Enter the password and select CONTINUE .	The Security Officer Applications dialog box opens.
3.	Select the SECURITY LOGS/MSGS tab.	The Security Logs/Msgs tab is shown in Figure 5
4.	Select AUTHENTICATION/DISABLE .	The Remote Access Security Event Types dialog box opens, as shown in Figure 6.

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Table 5. Disable a Remote Platform Without Authenticating. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
5.	Select REMOTELY DISABLE A USER .	A black diamond appears in the option box, as shown in Figure 6.
6.	In the SELECT A RECIPIENT panel, select to highlight the remote unit to be disabled.	The unit selected appears in the RECIPIENT window.
7.	Enter the pre-established passphrase in the ENTER PASSPHRASE window and select SEND .	A SEND REMOTE DISABLE? alert dialog box pops up asking: "Are you sure you want to send a Remote Disable message?".
8.	<div> NOTE</div> <p>The Flash tab in the FIPR will display the message "Remote disable initiated."</p> <p>Select YES.</p>	A Message Sent dialog box opens that says "The message was sent successfully."
9.	Select OK	The Message Sent dialog box closes.

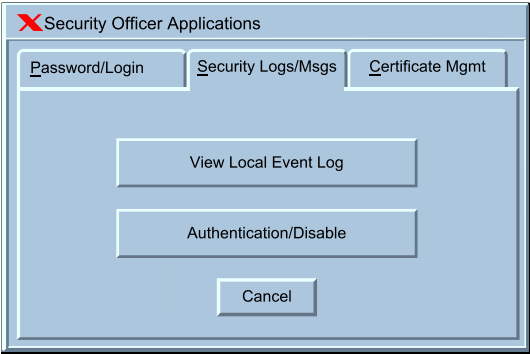


Figure 5. Security Officer Applications - Security Logs/Msgs Tab.

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DESTROY THE FBCB2 CREATE DEVICE SOFTWARE USING THE F6 DESTROY FBCB2 COMMAND



This procedure is valid only for FBCB2 software version 6.4.4.2.

Table 6. Destroy the FBCB2 Create Device Software Using the F6 DESTROY FBCB2 Command.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	At the Ops screen, select F6 ADMIN .	The F6 Admin dialog box opens as shown in Figure 7.
2.	Select DESTROY FBCB2 .	A countdown dialog box opens with a warning that the local system will be destroyed in 15 seconds. The operator has the option to select NOW and destroy the system immediately, or select CANCEL and stop the destruct process.
3.	Select NOW or allow the countdown to proceed to the end.	The screen goes blank and the remote operator is locked out of the system. The remote computer operating system begins reformatting the disk drive. However, the disk drive is already unusable.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

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Platform SettingsLocal SettingsSA Settings

Location

Misc

Location

10TET559242 68473Map▼

Quality

<= 25▼m

Course:20Deg

Speed:45kph

Evaluation:25ft

Altitude:ft

Exit Ops...

Destroy FCB2

OkApplyCloseHelp

Figure 7. Destroy FCB2 Option - F6 Admin Dialog Box.

0030-14

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PHYSICALLY DESTROY THE FBCB2 CREATE DEVICE

The following procedure is to be used if the Create Device is in danger of being captured by the enemy and there is time to physically destroy the system components.



If time is too short to remove the HDD and a possible DVD disk from the Ruggedized Laptop Computer, smash the Ruggedized Laptop Computer with any available heavy object. Ensure you crush the area of the HDD and of the multimedia (DVD) drive.

Table 7. Physically Destroy the FBCB2 Create Device.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	At the Ops screen, select F6 ADMIN .	The F6 Admin dialog box opens as shown in Figure 2.
2.	Select DESTROY FBCB2 .	A countdown dialog box opens with a warning that the local system will be destroyed in 15 seconds. The operator has the option to select NOW button and destroy the disk drive and transceiver immediately, or select CANCEL and stop the destruct process.
3.	Select NOW or allow the countdown to proceed to the end.	The screen goes blank and the operator is locked out of the system. The transceiver is disabled immediately and the computer operating system begins formatting the disk drive. However, the disk drive is already unusable.
4.	Remove and destroy the Ruggedized Laptop Computer hard disk drive.	
5.	Remove and destroy any DVD/CD disk in the multimedia disk drive. If power is off to the Ruggedized Laptop Computer, it will be necessary to force the drive open or remove	

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Table 7. Physically Destroy the FBCB2 Create Device. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	the drive module and smash it with the disk inside.	
6.	Turn the Ruggedized Laptop Computer over and remove the four screws securing the RAM module compartment cover.	
7.	Remove the RAM module and destroy it.	
8.	If time permits, destroy any technical manuals, operator handbooks, and any other technical documentation.	

END OF WORK PACKAGE

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CHAPTER 3

OPERATOR TROUBLESHOOTING PROCEDURES

FOR

AN/GYK-55 CREATE DEVICE

CHAPTER 3

OPERATOR TROUBLESHOOTING PROCEDURES

WORK PACKAGE INDEX

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AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND	0033
AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF.	0034
AN/GYK-55 CREATE DEVICE BATTERY STATUS LED OFF OR FLASHING.	0035
AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM	0036
AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO NETWORK PRINTER	0037
AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER	0038
AN/GYK-55 CREATE DISPLAYS ERROR MOUNTING MEDIA.	0039
AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL	0040
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AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP	0042
AN/GYK-55 COMMS GUMBALL RED.	0043

OPERATOR TROUBLESHOOTING PROCEDURES

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE







OPERATOR TROUBLESHOOTING PROCEDURES INDEX

Introduction

This index provides a list of common AN/GYK-55 Create Device faults or indications and references the appropriate troubleshooting work package for each fault. Each work package contains a troubleshooting flow chart that provides a logical sequence of steps to isolate the problem to a single line-replaceable unit (LRU), a cable or a corrective procedure.

Table 1 lists and explains the symbols used in the troubleshooting flowcharts.

Table 1. Troubleshooting Flowchart Symbols.

Symbol	Name	Definition
	Start/Exit Point	Indicates the entry (start) point or exit (stop) point of the troubleshooting process.
	Instruction Box	Indicates an instructions or clarification. Also indicates warnings, cautions or notes.
	Direction Arrows	Depicts the direction of the troubleshooting process flow.
	Decision Point	Indicates the point at which the user must chose one of two paths to follow depending on the current indication, display, or condition as a result of the troubleshooting process.
	Connector - On-Page Reference	Indicates a link to a continuation of the troubleshooting process on the same page.
	Connector - Off-Page Reference	Indicates a link to a continuation of the troubleshooting process on another page.

Malfunction/Symptom**Workpackage****CREATE DEVICE**

AN/GYK-55 Create Device Laptop Fails to Boot Up	0032-1
AN/GYK-55 Create Device Displays Operating System Not Found	0033-1
AN/GYK-55 Create Device Power Status LED Off	0034-1
AN/GYK-55 Create Device Battery Status LED Off or Flashing	0035-1
AN/GYK-55 Create Device Display Off or Dim	0036-1
AN/GYK-55 Create Device Fails to Print to Network Printer	0037-1
AN/GYK-55 Create Device Fails to Print to Local Printer	0038-1
AN/GYK-55 Create Device Displays Error Mounting Media	0039-1
AN/GYK-55 Create Device Fails to Load to MDL	0040-1
AN/GYK-55 Create Device Displays Incorrect Time/Date	0041-1
AN/GYK-55 Create Device Displays PCG Process Crash on Startup	0042-1
AN/GYK-55 Comm Gumball Red	0043-1

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****AN/GYK-55 CREATE DEVICE FAILS TO BOOT UP****INITIAL SETUP:****Personnel Required**

Operator

Equipment Condition

System is powered on.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO BOOT UP

Figure 1. AN/GYK-55 Create Device Fails to Boot Up.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND****INITIAL SETUP:****Personnel Required**

Operator

Equipment Condition

System is powered on.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

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**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

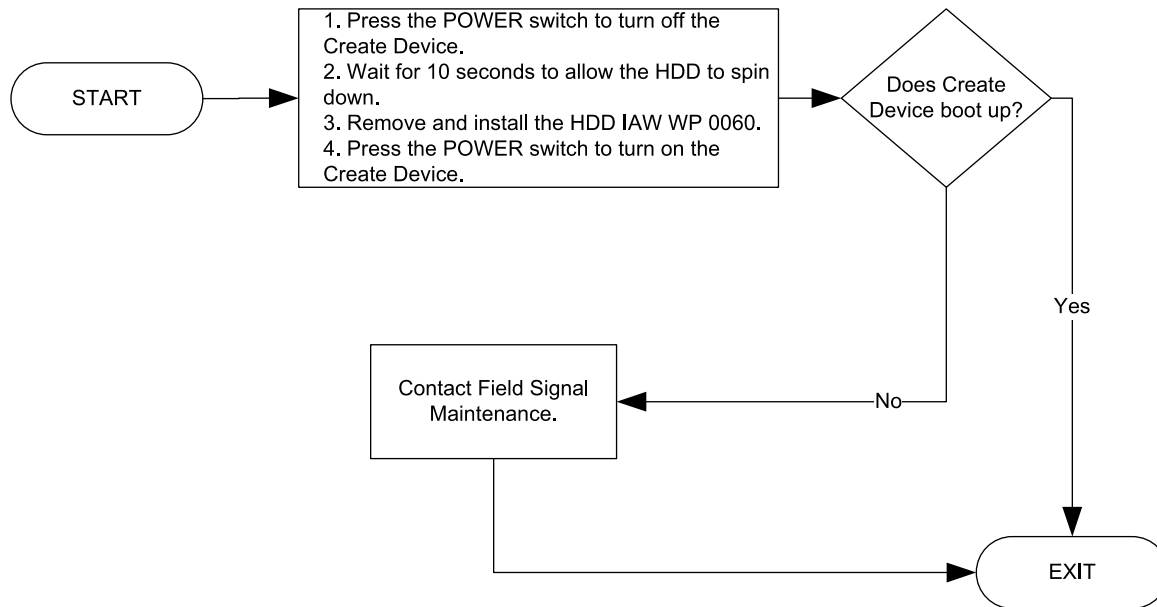
AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND

Figure 1. AN/GYK-55 Create Device Displays Operating System Not Found.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is powered off.

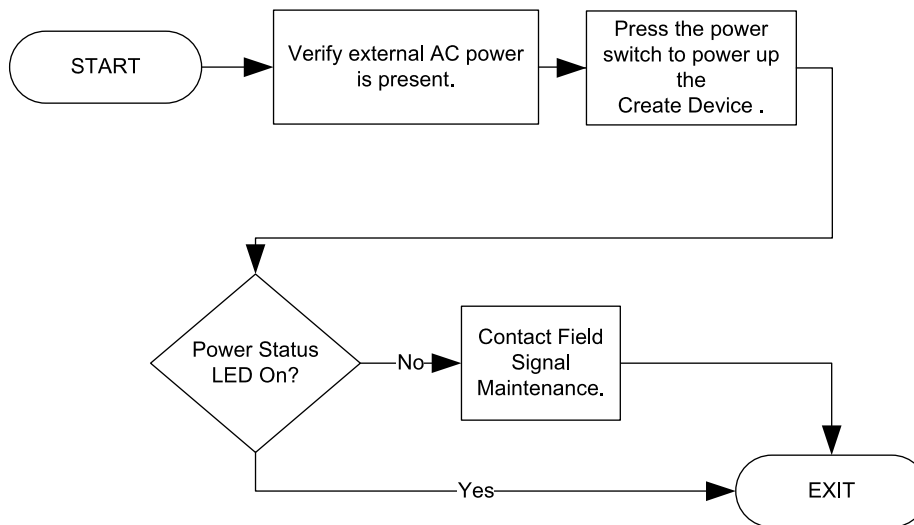
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF**Figure 1. AN/GYK-55 Create Device Power Status LED Off.****END OF WORK PACKAGE**

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE BATTERY STATUS LED OFF OR FLASHING

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is powered on.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

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AN/GYK-55 CREATE DEVICE BATTERY STATUS LED OFF OR FLASHING

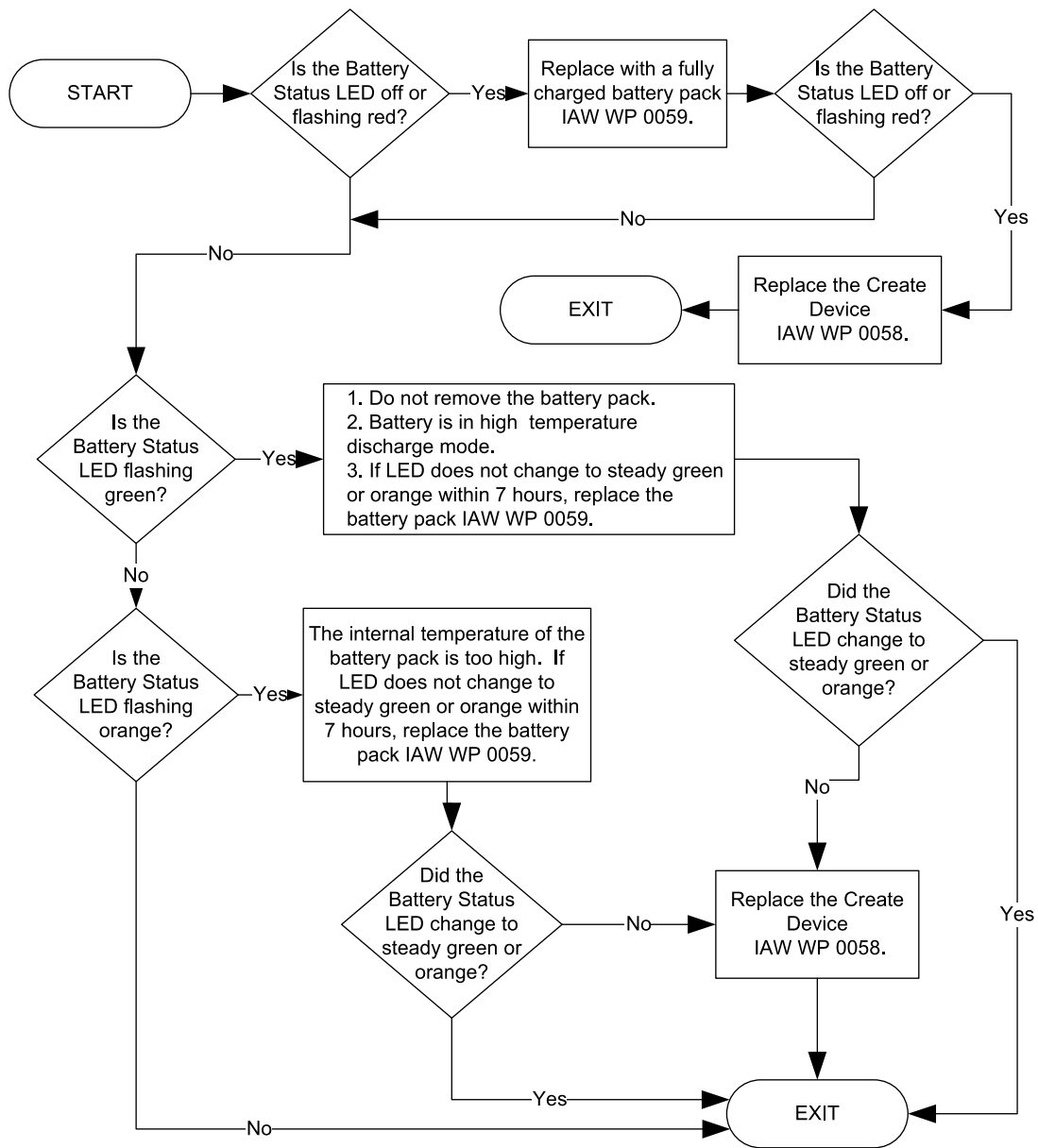


Figure 1. AN/GYK-55 Create Device Battery Status LED Off or Flashing.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is powered on.

System is offline or online.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM

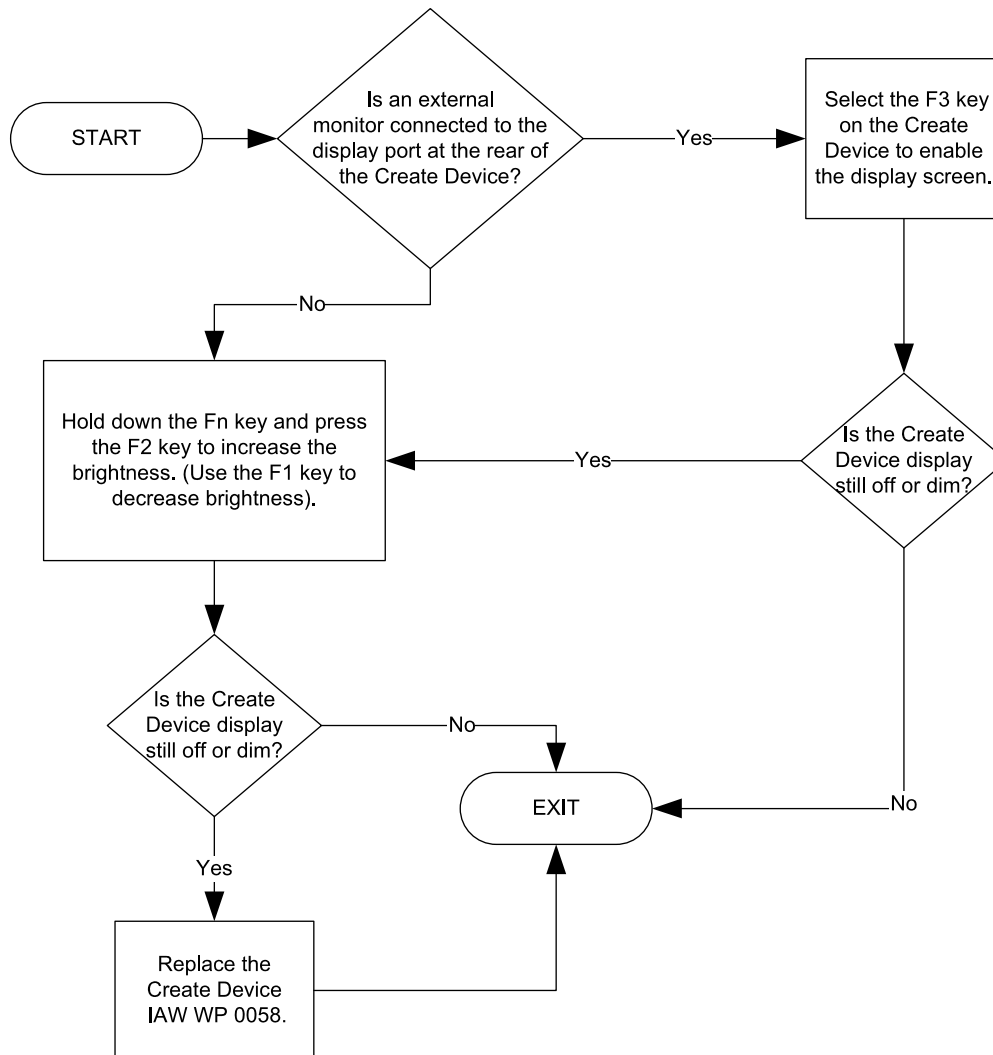


Figure 1. AN/GYK-55 Create Device Display Off or Dim.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO NETWORK PRINTER

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is online.

The Ops screen is displayed.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO NETWORK PRINTER

Figure 1. AN/GYK-55 Create Device Fails to Print to Network Printer.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is online.

The Ops screen is displayed.

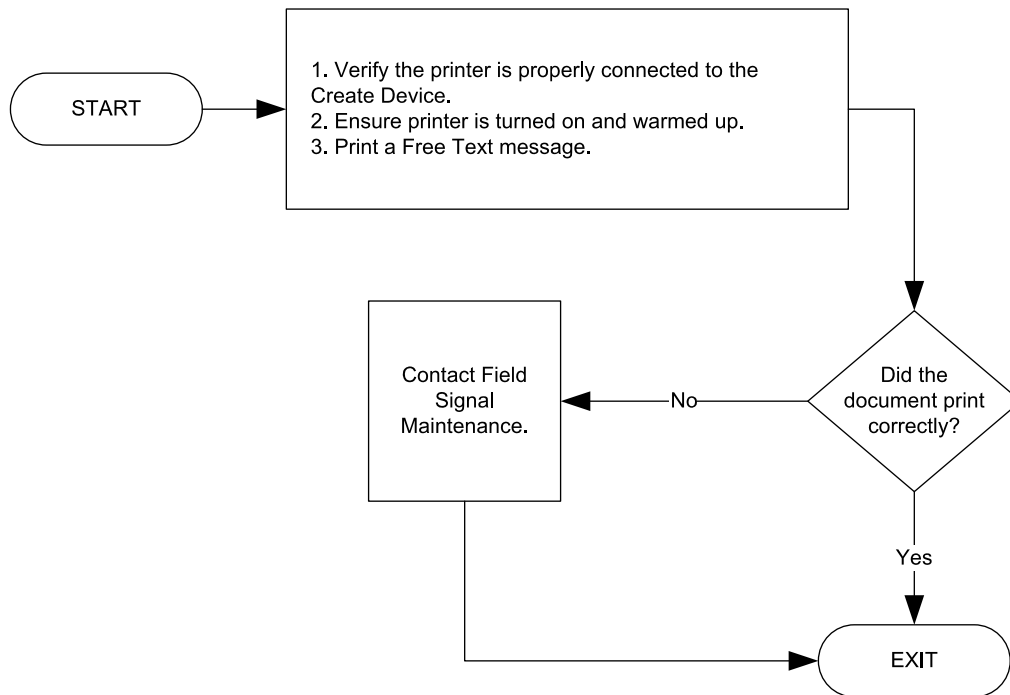
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER**Figure 1. AN/GYK-55 Create Device Fails to Print to Local Printer.****END OF WORK PACKAGE**

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS ERROR MOUNTING MEDIA

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

The system is online.

The Ops screen is displayed.

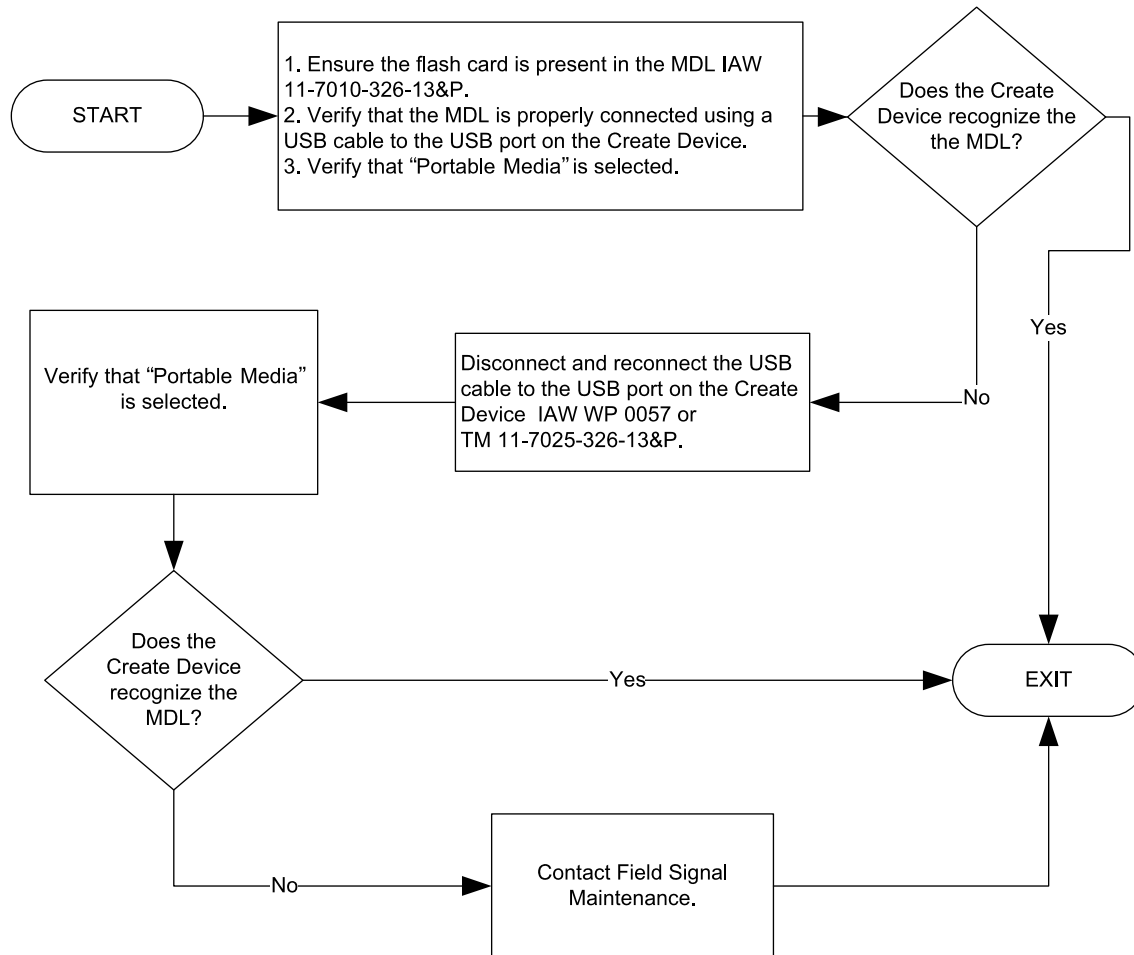
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS ERROR MOUNTING MEDIA**Figure 1. AN/GYK-55 Create Device Displays Error Mounting Media.****END OF WORK PACKAGE**

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

The system is online.

The Ops screen is displayed.

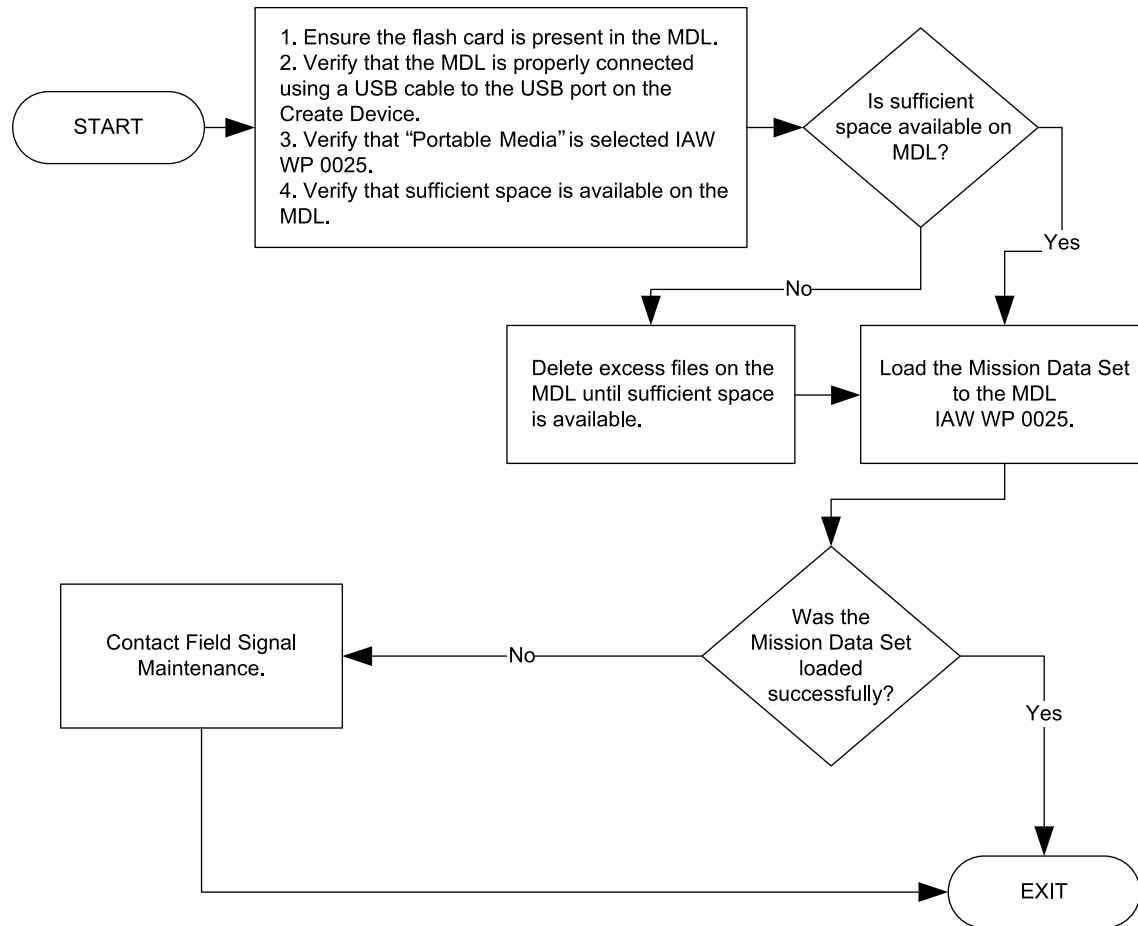
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL**Figure 1. AN/GYK-55 Create Device Fails to Load to MDL.****END OF WORK PACKAGE**

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS INCORRECT TIME/DATE

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

The system is online.

The Ops screen is displayed.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

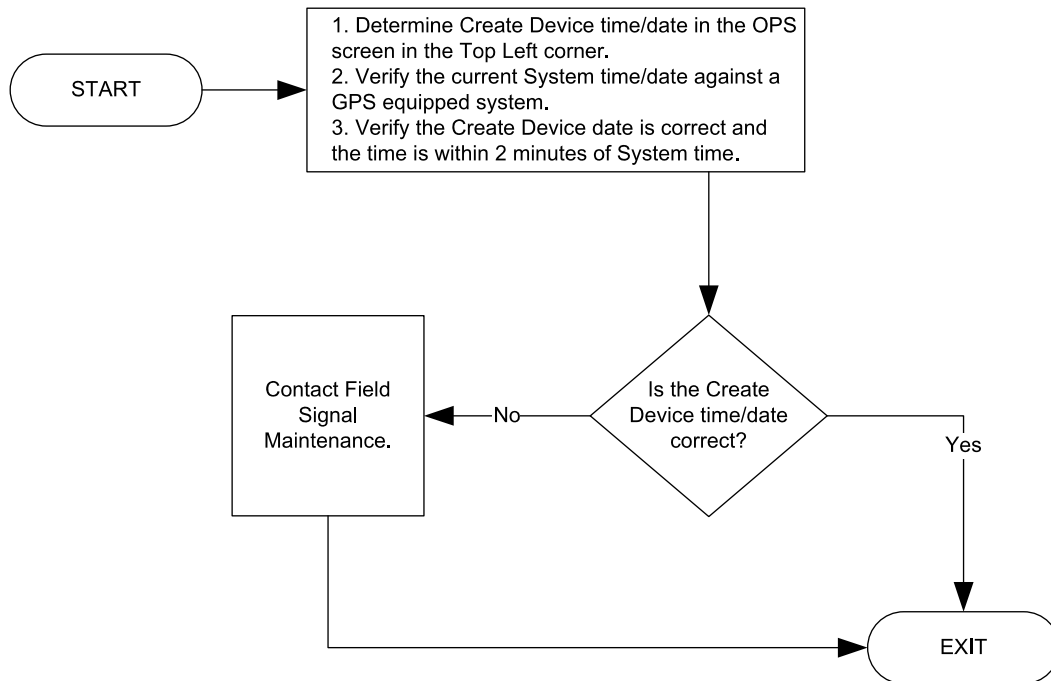
AN/GYK-55 CREATE DEVICE DISPLAYS INCORRECT TIME/DATE

Figure 1. AN/GYK-55 Create Device Displays Incorrect Time/Date.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is offline.

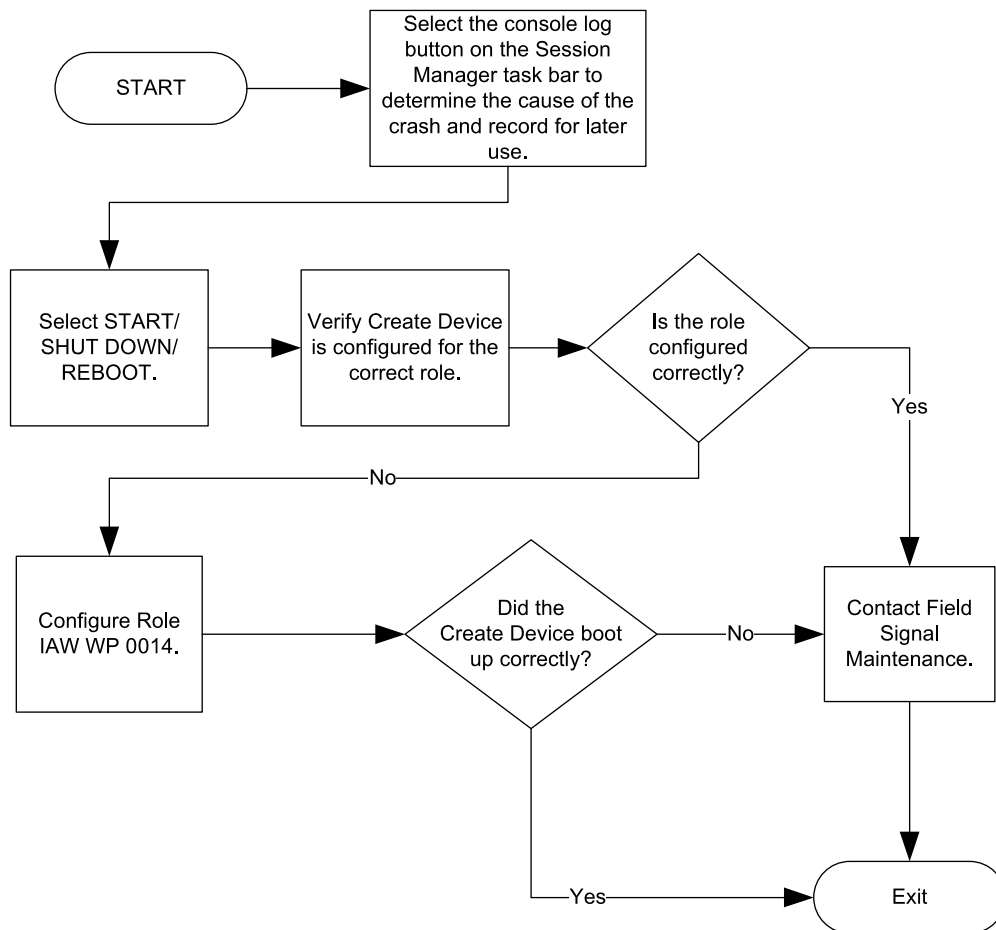
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

Operators should not perform any unauthorized modifications or maintenance. Maintenance is to be conducted by authorized personnel only as specified by the work package level of maintenance (Operator or Field). Report damaged equipment to Field Signal Maintenance. Failure to comply may result in injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP**Figure 1. AN/GYK-55 Create Device Displays PCG Process Crash on Startup.****END OF WORK PACKAGE**

OPERATOR TROUBLESHOOTING PROCEDURES

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

AN/GYK-55 COMMS GUMBALL RED

INITIAL SETUP:

Personnel Required

Operator

COMMS GUMBALL RED

This is normal operation for the Create Device.

END OF WORK PACKAGE

CHAPTER 4

FIELD TROUBLESHOOTING PROCEDURES

FOR

AN/GYK-55 CREATE DEVICE

CHAPTER 4
FIELD TROUBLESHOOTING PROCEDURES

WORK PACKAGE INDEX

<u>Title</u>	<u>WP Sequence No.</u>
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AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND - FIELD MAINTENANCE	0046
AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF - FIELD MAINTENANCE	0047
AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM - FIELD MAINTENANCE	0048
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AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER - FIELD MAINTENANCE	0050
AN/GYK-55 CREATE DISPLAYS ERROR MOUNTING MEDIA - FIELD MAINTENANCE.	0051
AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL - FIELD MAINTENANCE.	0052
AN/GYK-55 CREATE DEVICE DISPLAYS INCORRECT TIME/DATE - FIELD MAINTENANCE	0053
AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP - FIELD MAINTENANCE	0054

FIELD TROUBLESHOOTING PROCEDURES

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

FIELD TROUBLESHOOTING PROCEDURES INDEX

Introduction



These troubleshooting procedures should only be performed by Field Signal Maintenance personnel.

This index provides a list of common AN/GYK-55 Create Device faults or indications and references the appropriate troubleshooting work package for each fault. Each work package contains a troubleshooting flow chart that provides a logical sequence of steps to isolate the problem to a single line-replaceable unit (LRU), a cable or a corrective procedure.

Table 1 lists and explains the symbols used in the troubleshooting flowcharts.

Table 1. Troubleshooting Flowchart Symbols.

Symbol	Name	Definition
	Start/Exit Point	Indicates the entry (start) point or exit (stop) point of the troubleshooting process.
	Instruction Box	Indicates an instruction or clarification. Also indicates warnings, cautions or notes.
	Direction Arrows	Depicts the direction of the troubleshooting process flow.
	Decision Point	Indicates the point at which the user must choose one of two paths to follow depending on the current indication, display, or condition as a result of the troubleshooting process.
	Connector - On-Page Reference	Indicates a link to a continuation of the troubleshooting process on the same page.
	Connector - Off-Page Reference	Indicates a link to a continuation of the troubleshooting process on another page.

Malfunction/Symptom**Workpackage****CREATE DEVICE**

AN/GYK-55 Create Device Fails to Boot Up - Field Maintenance	0045-1
AN/GYK-55 Create Device Displays Operating System Not Found - Field Maintenance	0046-1
AN/GYK-55 Create Device Power Status LED Off - Field Maintenance	0047-1
AN/GYK-55 Create Device Display Off or Dim - Field Maintenance	0048-1
AN/GYK-55 Create Device Fails to Print to Network Printer - Field Maintenance	0049-1
AN/GYK-55 Create Device Fails to Print to Local Printer - Field Maintenance	0050-1
AN/GYK-55 Create Device Displays Error Mounting Media - Field Maintenance	0051-1
AN/GYK-55 Create Device Fails to Load to MDL - Field Maintenance.	0052-1
AN/GYK-55 Create Device Displays Incorrect Time/Date - Field Maintenance	0053-1
AN/GYK-55 Create Device Displays PCG Process Crash on Startup - Field Maintenance.	0054-1

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO BOOT UP - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is powered on.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO BOOT UP - FIELD MAINTENANCE

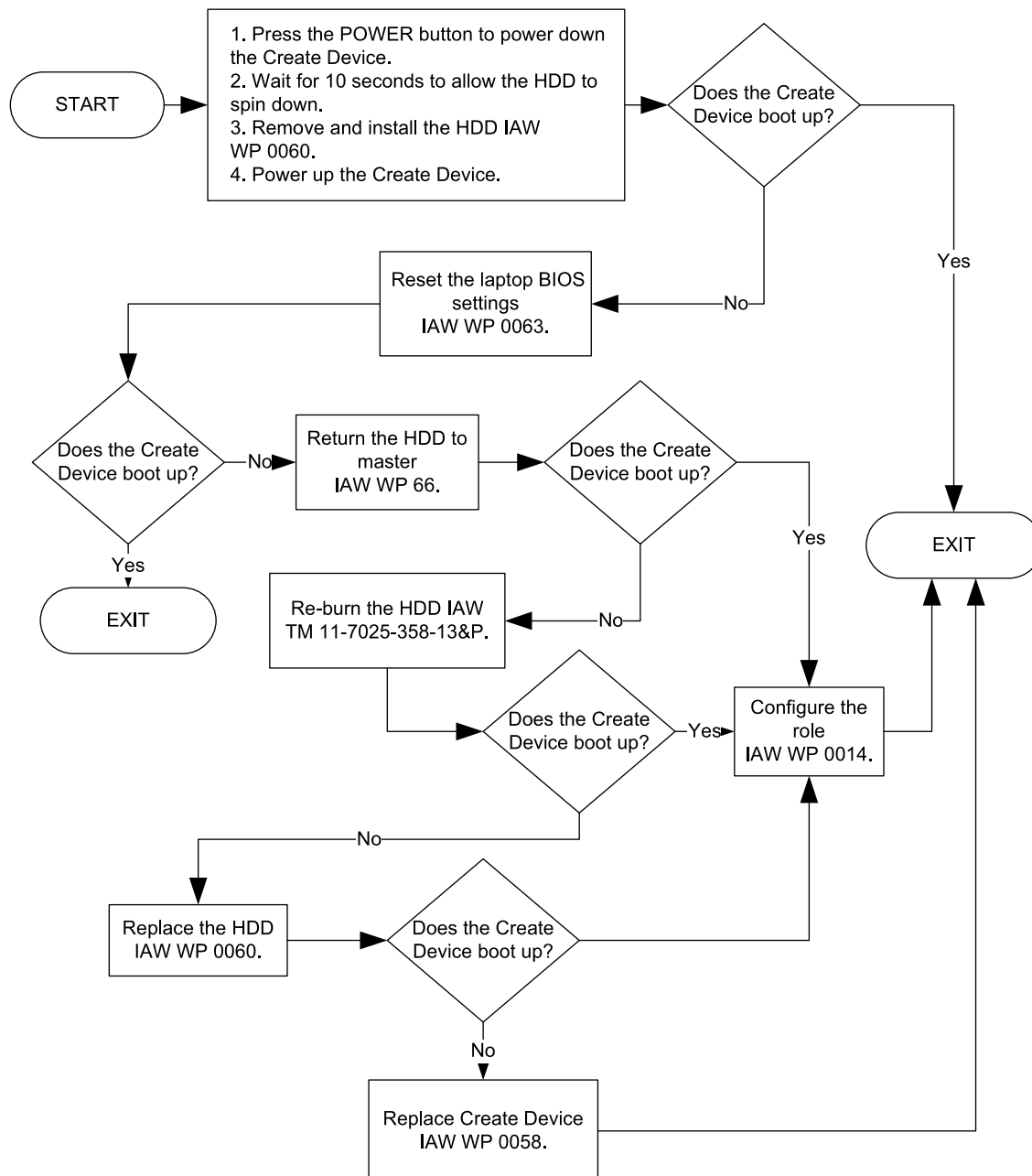


Figure 1. AN/GYK-55 Create Device Fails to Boot Up - Field Maintenance.

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is powered on.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS OPERATING SYSTEM NOT FOUND - FIELD MAINTENANCE

Figure 1. AN/GYK-55 Create Device Displays Operating System Not Found - Field Maintenance.

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF - FIELD MAINTENANCE

INITIAL SETUP:**Tools and Special Tools**

An/PSM-45A Multimeter or Equivalent

Personnel Required

Operator

Equipment Condition

The system is powered off.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

AN/GYK-55 CREATE DEVICE POWER STATUS LED OFF - FIELD MAINTENANCE

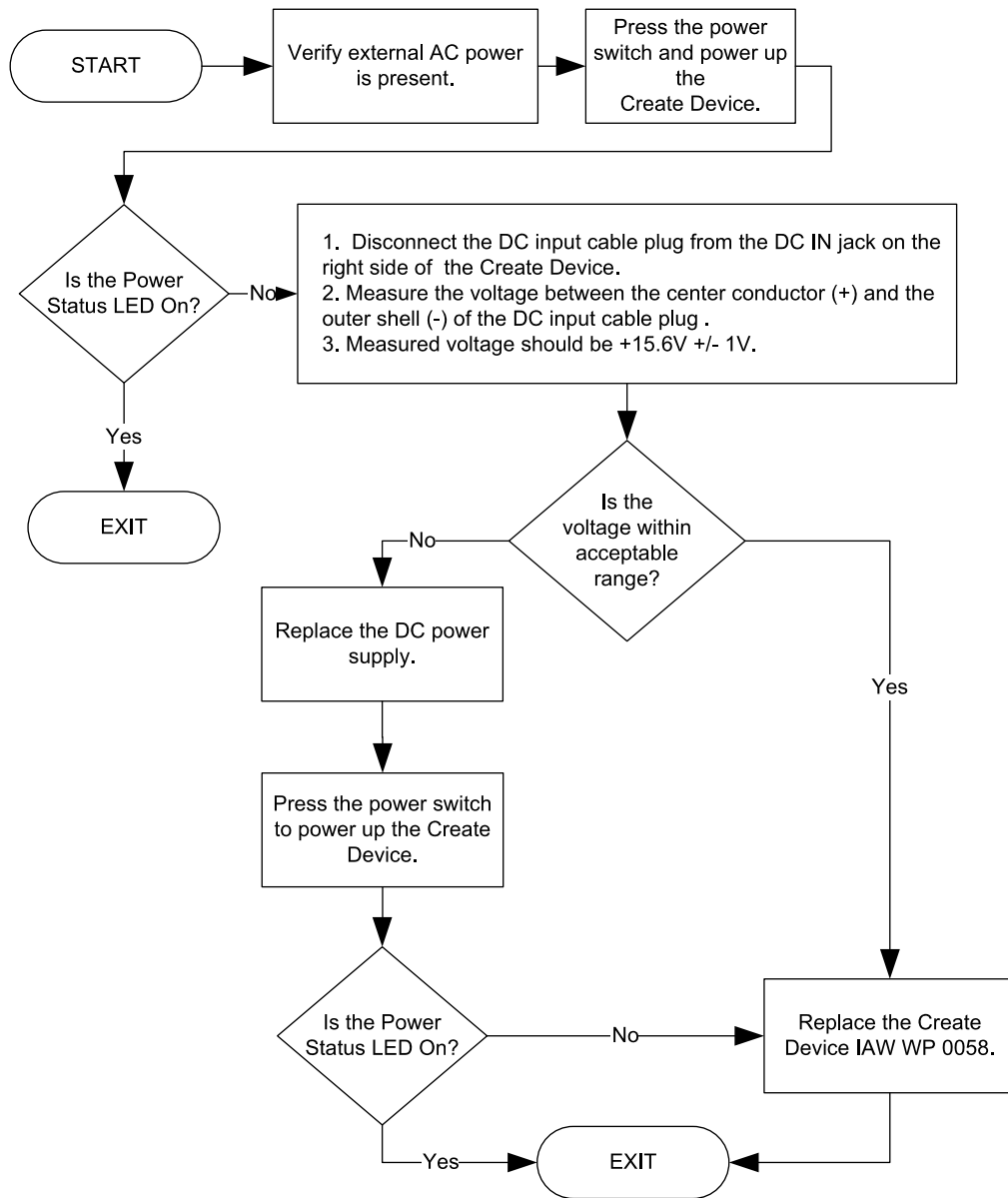


Figure 1. AN/GYK-55 Create Device Power Status LED Off - Field Maintenance.

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

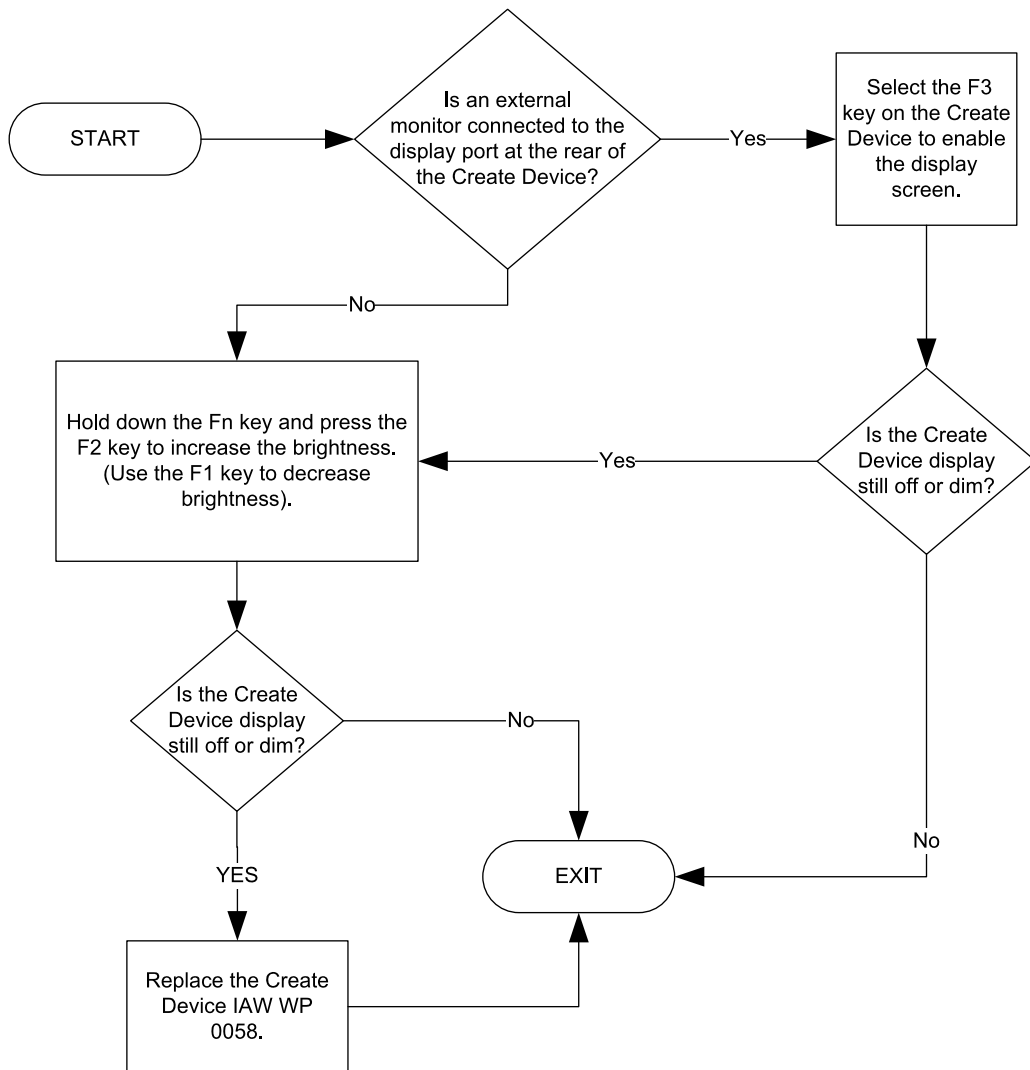
Signal Support System Specialist

Equipment ConditionSystem is powered up.
The system is online.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

AN/GYK-55 CREATE DEVICE DISPLAY OFF OR DIM - FIELD MAINTENANCE**Figure 1. AN/GYK-55 Create Device Display Off or Dim - Field Maintenance.****END OF WORK PACKAGE**

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO NETWORK PRINTER - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is online.

The Ops screen is displayed.

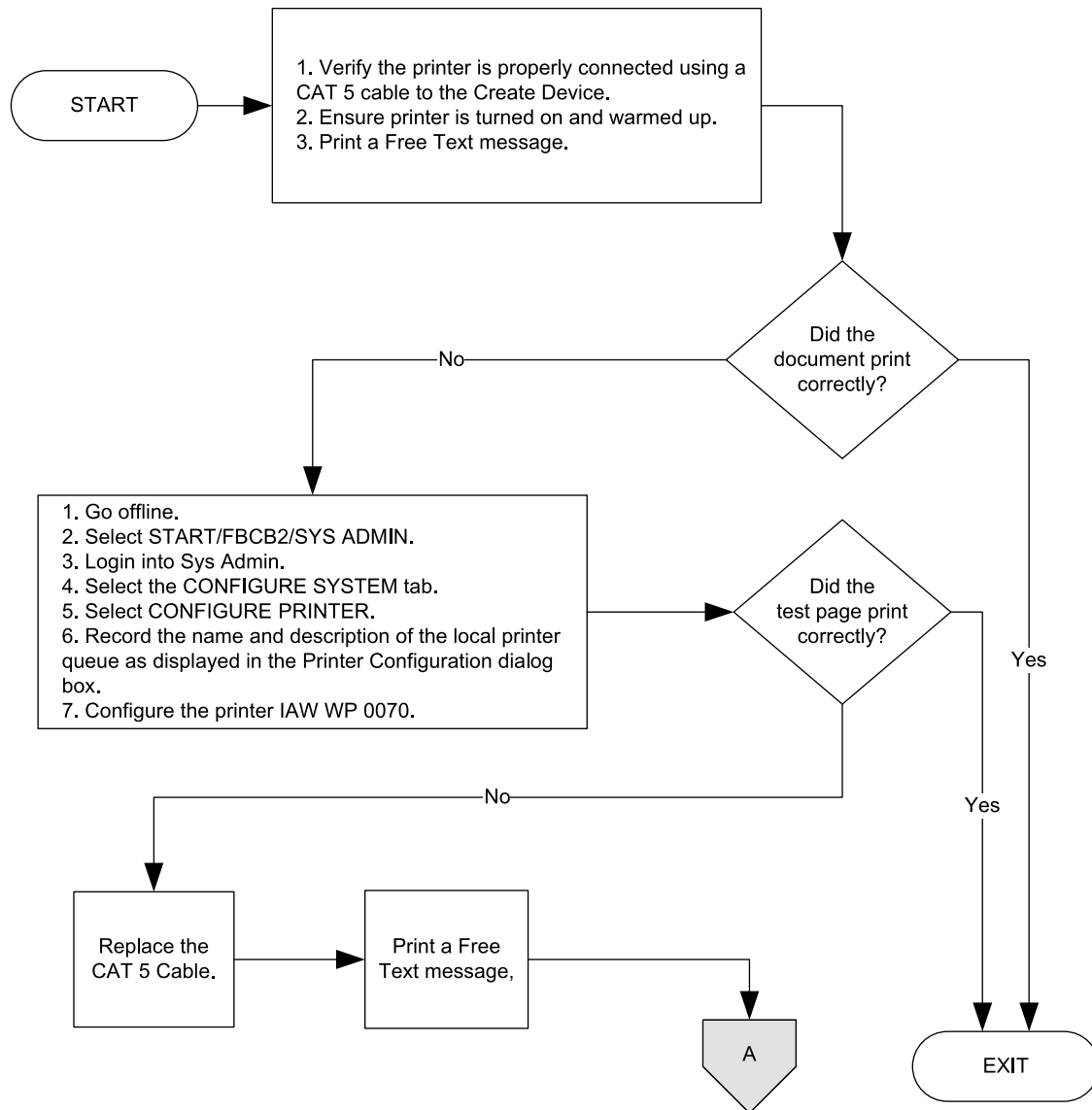
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO NETWORK PRINTER - FIELD MAINTENANCE**Figure 1. AN/GYK-55 Create Device Fails to Print to Network Printer - Field Maintenance. (Sheet 1 of 2)**

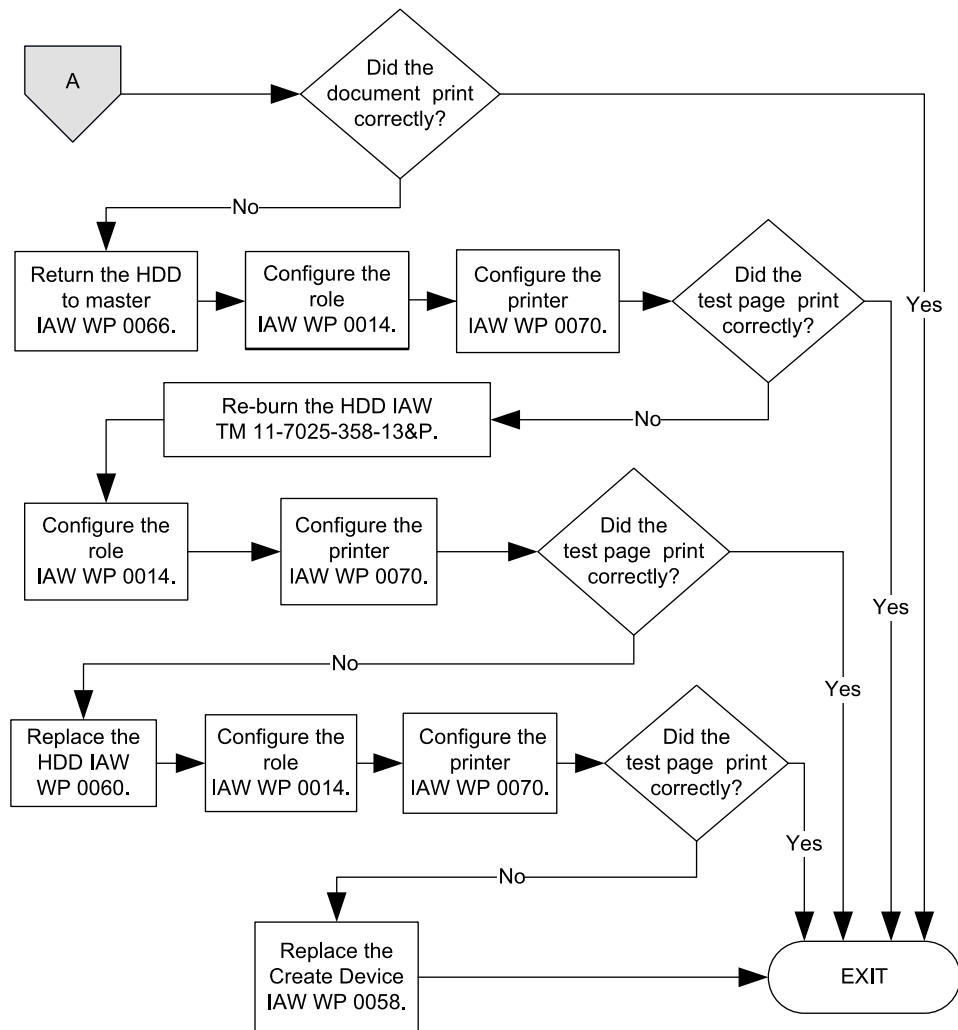


Figure 1. AN/GYK-55 Create Device Fails to Print to Network Printer - Field Maintenance. (Sheet 2 of 2)

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

System is online.

The Ops screen is displayed.

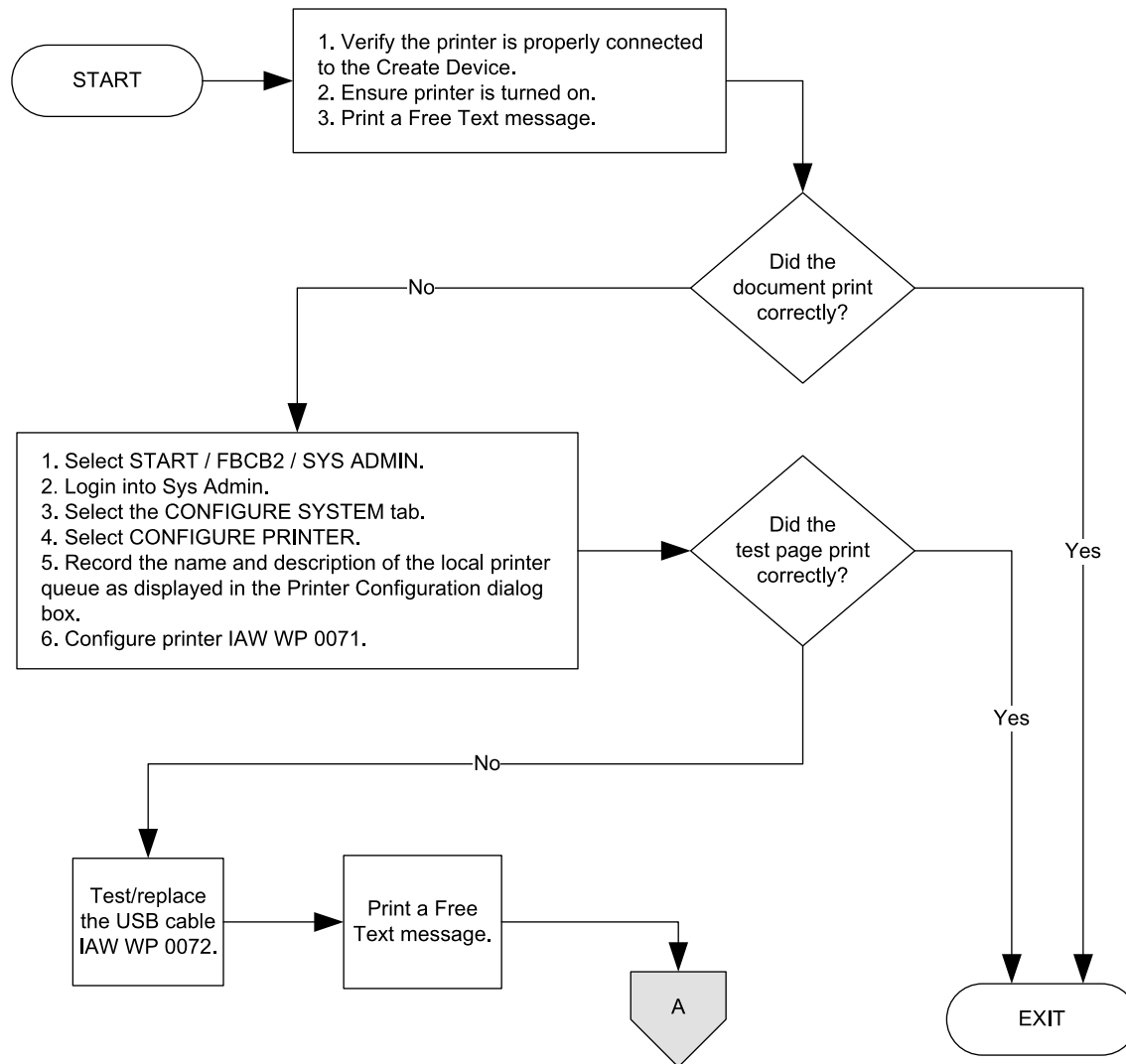
TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO PRINT TO LOCAL PRINTER - FIELD MAINTENANCE**Figure 1. AN/GYK-55 Create Device Fails to Print to Local Printer - Field Maintenance. (Sheet 1 of 2)****Figure 1. AN/GYK-55 Create Device Fails to Print to Local Printer - Field Maintenance. (Sheet 2 of 2)**

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS ERROR MOUNTING MEDIA - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is online.

The Ops screen is displayed.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS ERROR MOUNTING MEDIA - FIELD MAINTENANCE

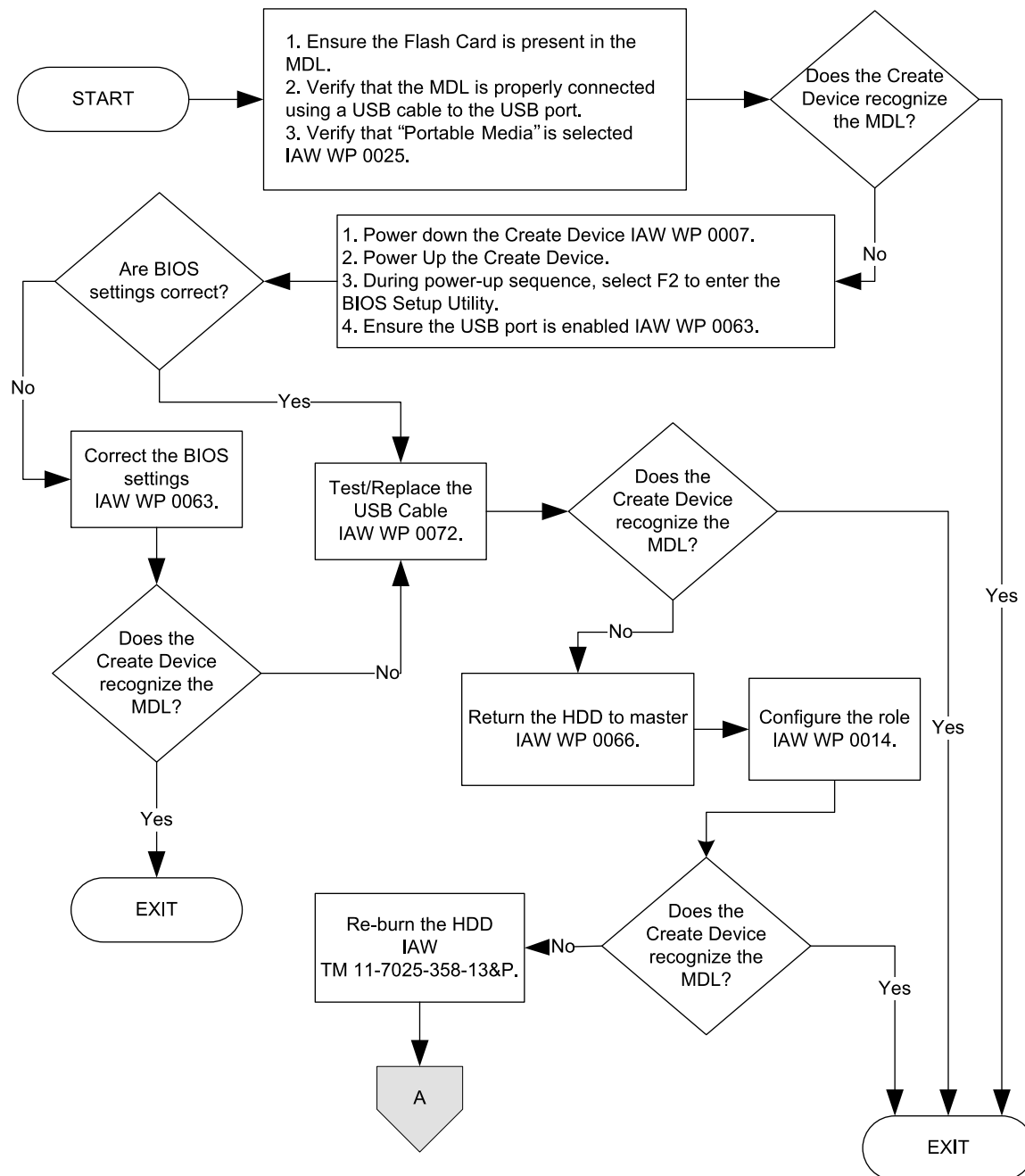


Figure 1. AN/GYK-55 Create Device Displays Error Mounting Media - Field Maintenance. (Sheet 1 of 2)

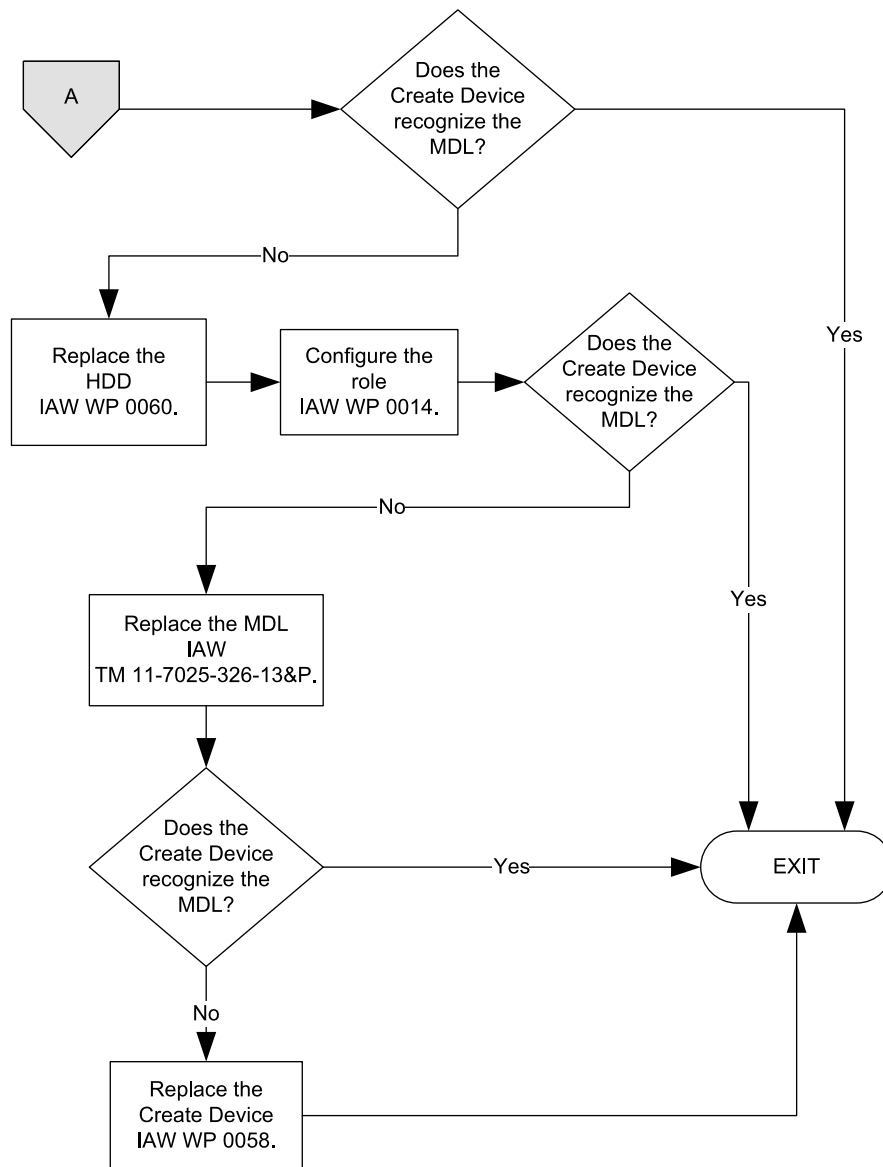


Figure 1. AN/GYK-55 Create Device Displays Error Mounting Media - Field Maintenance. (Sheet 2 of 2)

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is online.

The Ops screen is displayed.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE FAILS TO LOAD TO MDL - FIELD MAINTENANCE

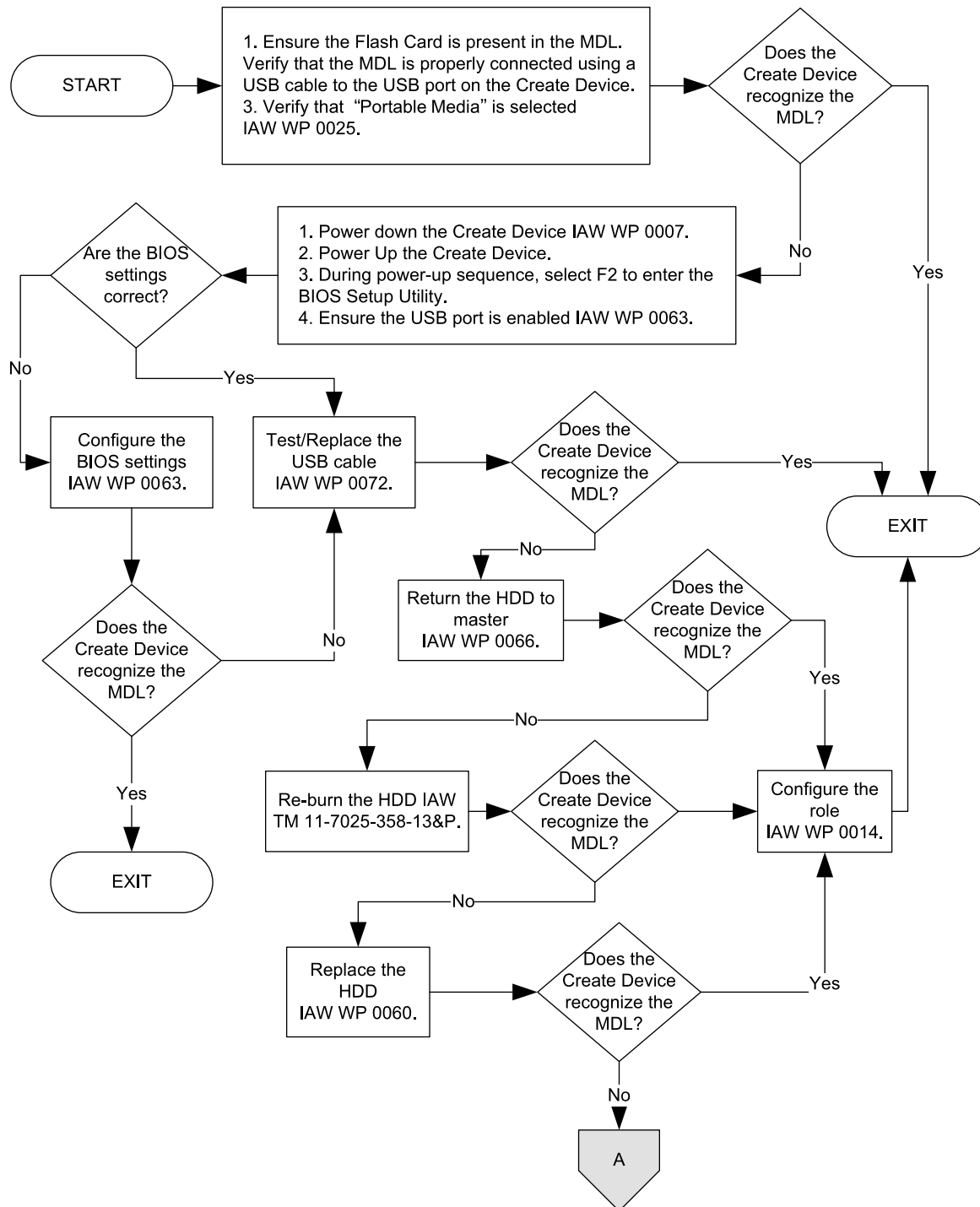
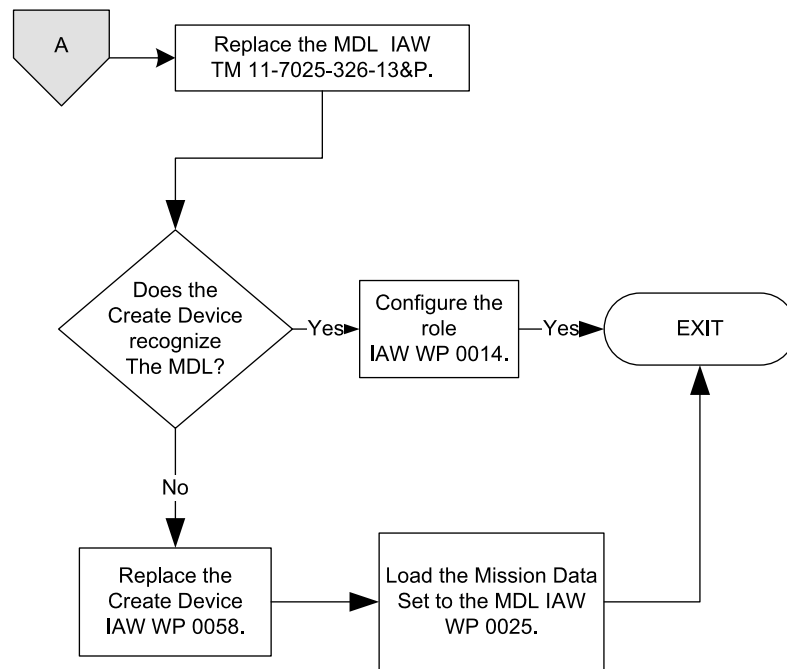


Figure 1. AN/GYK-55 Create Device Fails to Load to MDL - Field Maintenance. (Sheet 1 of 2)**Figure 1. AN/GYK-55 Create Device Fails to Load to MDL - Field Maintenance. (Sheet 2 of 2)**

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS INCORRECT TIME/DATE - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is online.

The Ops screen is displayed.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS INCORRECT TIME/DATE - FIELD MAINTENANCE

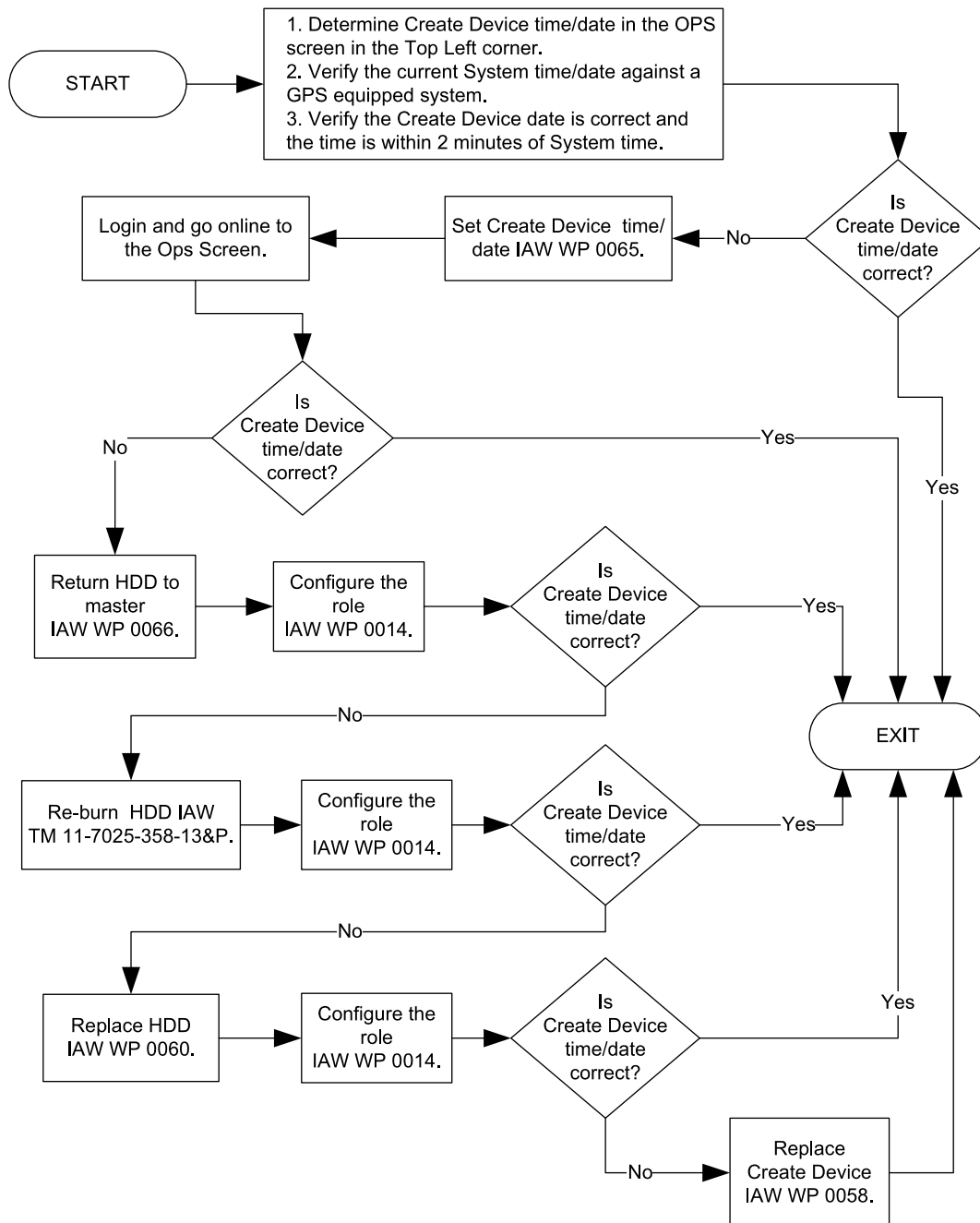


Figure 1. AN/GYK-55 Create Device Displays Incorrect Time/Date - Field Maintenance.

END OF WORK PACKAGE

FIELD TROUBLESHOOTING PROCEDURES**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP - FIELD MAINTENANCE

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is offline.

TROUBLESHOOTING PROCEDURE INTRODUCTION

The purpose of this troubleshooting procedure is to isolate the indicated fault to a system component or to the FBCB2 software, and then perform steps to correct the fault. Isolating the fault to hardware or software will help to expedite repairs and reduce the time the AN/GYK-55 Create Device Digital Computer Set is non-operational.

Each procedure is arranged as a flowchart, with the first step indicated by the START bubble. Follow the arrows to progress through the procedure until you reach the EXIT bubble. If the malfunction cannot be located and corrected by this troubleshooting procedure, notify Field Signal Maintenance.

**WARNING**

The Hard Disk Drive (HDD) can be hot. Burns may result. Allow the HDD to cool adequately or use gloves prior to removing from the Create Device Ruggedized Laptop Computer. Failure to comply could cause injury to personnel.

AN/GYK-55 CREATE DEVICE DISPLAYS PCG PROCESS CRASH ON STARTUP - FIELD MAINTENANCE

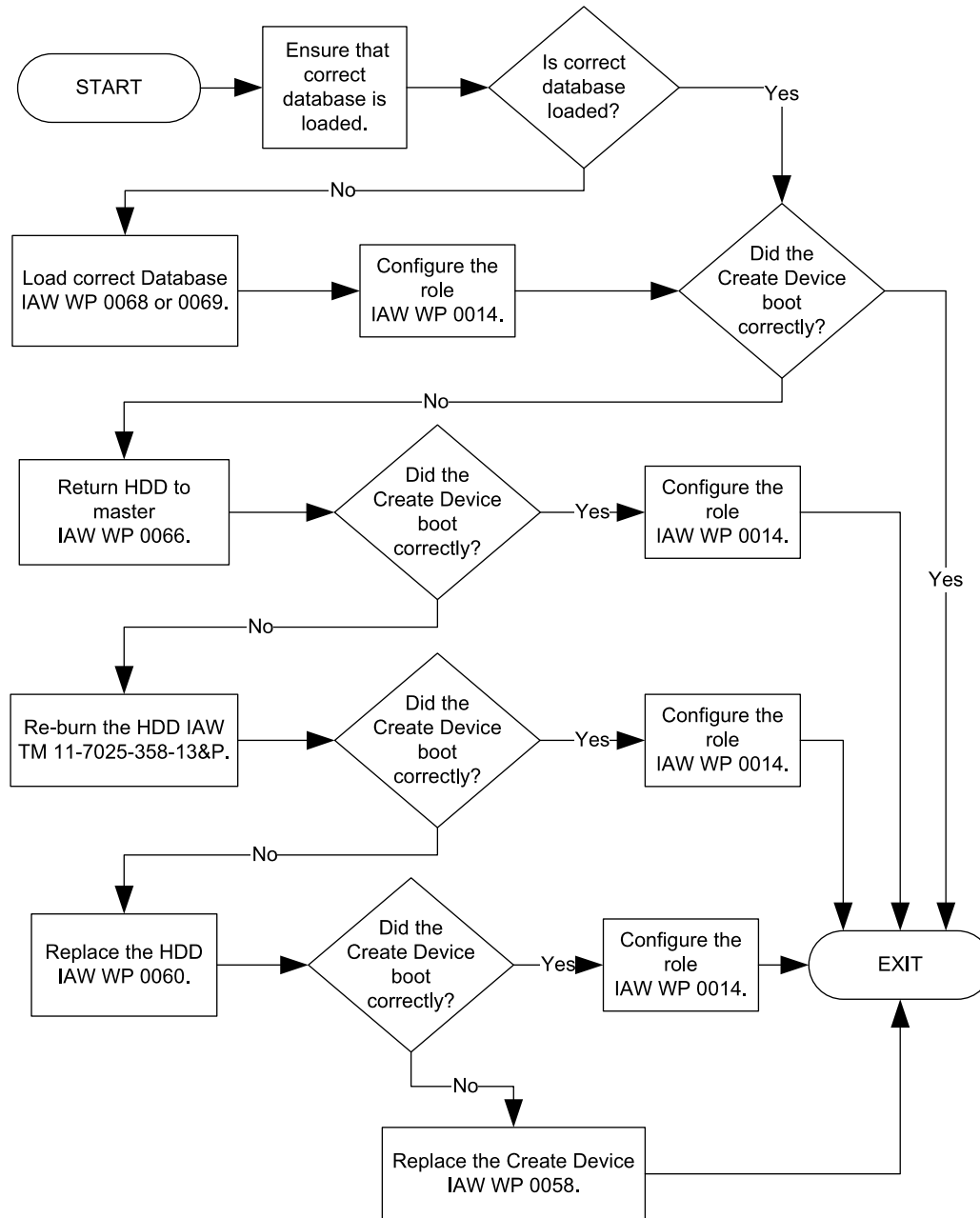


Figure 1. AN/GYK-55 Create Device Displays PCG Process Crash on Startup - Field Maintenance.

END OF WORK PACKAGE

CHAPTER 5

OPERATOR MAINTENANCE INSTRUCTIONS

FOR

AN/GYK-55 CREATE DEVICE

CHAPTER 5
OPERATOR MAINTENANCE INSTRUCTIONS

WORK PACKAGE INDEX

<u>Title</u>	<u>WP Sequence No.</u>
PMCS PROCEDURES INTRODUCTION	0055
PMCS INCLUDING LUBRICATION INSTRUCTIONS	0056
CONNECT AN MDL DEVICE	0057
REPLACE THE FBCB2 CREATE DEVICE RUGGEDIZED LAPTOP COMPUTER.	0058
REPLACE THE BATTERY PACK	0059
REPLACE THE HARD DISK DRIVE	0060
REPLACE THE CD/DVD DRIVE.	0061

OPERATOR MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

PMCS PROCEDURES INTRODUCTION

This work package is an introduction to the required Preventive Maintenance Checks and Services (PMCS) for the FBCB2 Create Device.

Purpose of PMCS

The purpose of PMCS is to discover and correct defects or potential faults before serious damage or failures occur by performing inspections and maintenance procedures at regularly scheduled intervals. The PMCS procedures include inspecting, cleaning and lubricating Create Device system components.

PMCS Item Numbers

Each PMCS procedure is assigned an Item Number, which is used when recording results on DA Form 2404, Equipment Inspection and Maintenance Worksheet. WP 0056 lists the PMCS procedures and their corresponding Item Numbers.

Lubrication Requirements

Lubricating fluids are not contained in the Create Device. However, a light lubricating oil may be required occasionally to ensure the free operation of mechanical assemblies such as the various covers, door latches and hinges.

Lubricating oils used with the Create Device should be selected in accordance with MIL-HDBK-113C, Guide for the Selection of Lubricants, Functional Fluids, Preservatives and Specialty Products for Use in Ground Equipment Systems.

Corrosion Prevention and Control (CPC)

(A) For suspected corrosion or degradation problems, notify Field Signal Maintenance.

(A) The handling of corrosion and degradation problems should be done in accordance with Army Regulation AR 750-59, Army Corrosion Prevention and Control Program.

(A) For suspected cases of corrosion or degradation, Field Signal Maintenance personnel should fill out SF Form 368, Product Quality Deficiency Report, and submit it to the address specified in DA PAM 738-750, Functional Users Manual for The Army Maintenance Management System (TAMMS).

(MC) Refer to TM-3080.12, Corrosion Control of Ground Equipment.

Responsibilities

The operator is responsible to:

1. Perform each task item as specified in WP 0056.
2. Enter the results on a DA Form 2404 if a problem is found that cannot be corrected by the operator.
3. Notify Field Signal Maintenance if a problem is found.

System Not Ready

Certain conditions can degrade the operation of the system and prevent it from being fully mission capable. These conditions, where they apply, are listed in column 6 of WP 0056, under the heading of "Not Fully Mission Capable If:".

**CAUTION**

Operators must not put a degraded piece of equipment into operation unless the equipment has been authorized to operate under the specific limitations by higher authority or as prescribed locally.

If such a condition is found during a PMCS procedure, report the condition to Field Signal Maintenance immediately and enter a "X" status symbol in the DA Form 2404.

Be Prepared

Review the procedure to ensure that you have the required publications, necessary materials and access to Field Signal Maintenance assistance as required when conducting the PMCS procedures.

If You Find a Problem

If a problem with the Create Device is found while performing the PMCS, use the troubleshooting procedures in the Troubleshooting Work Packages to isolate the problem.

If the problem or malfunction cannot be corrected, record the deficiency or fault on DA Form 2404. Remember only record non-correctable deficiencies or faults on DA Form 2404; **DO NOT** record corrected equipment faults. For more information on how to use DA Form 2404, refer to DA PAM 738-750.

After completing the PMCS procedures, forward the DA Form 2404 to Field Signal Maintenance according to established procedures. Report any "Equipment Is Not Ready" condition immediately to Field Signal Maintenance using SOP.

Safety

THINK SAFETY! Follow all safety procedures and practices as stated in this manual. Keep the warnings and cautions in mind as you perform the PMCS. A warning alerts you to danger. It means that you or a crew member can be injured if the warning is not followed. A caution means that your equipment can become damaged if the caution is not followed.

**WARNING**

Do not disconnect or connect cables without first powering down the system. Failure to comply may cause injury to personnel or damage to equipment.

**WARNING**

Inspect cables to ensure that they are properly dressed and stowed to prevent trip and snag hazards or damage to the equipment. Failure to comply may cause injury to personnel or equipment damage.

**CAUTION**

Inspect all hardware for cracks, deformation or loose attachment hardware. Ensure that removable components are securely stowed. Report damaged equipment to authorized maintenance personnel. Failure to comply may cause equipment damage.

**CAUTION**

Inspect cables and connectors to ensure that there is no damage to the equipment. Inspect all connections (including ground) to ensure that connectors are properly mated and secure. Failure to comply may cause equipment damage.

**CAUTION**

Operators should not perform unauthorized modifications or maintenance to the equipment. Maintenance is to be conducted by authorized personnel only. Failure to comply may cause equipment damage.

Recommended Materials

The following materials are recommended to carry out the PMCS procedures:

- Compressed air or vacuum cleaner
- Soft bristle brush
- Liquid dish soap or other mild detergent
- Absorbant cloth or paper towels
- Touchscreen soft cloth (provided with Ruggedized Laptop Computer)
- Light general-purpose lubricating oil (per MIL-HDBK-113C)
- Long-stem cotton swabs

Routine Checks

Routine checks (such as cleaning, washing with soft water, checking for frayed cables, tightening loose nuts, bolts, and screws, correct seating of connectors, and completeness of equipment, etc.) are not listed as PMCS. These tasks should be done anytime you see they are needed.



If you find any damage such as dents, cracks, and damage to the exterior of the Ruggedized Laptop Computer or to the USB cable during PMCS, notify Field Signal Maintenance.

Use the number in the ITEM column of the PMCS chart for the TM ITEM NO. on DA Form 2404 (Equipment Inspection and Maintenance Worksheet).

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

PMCS INCLUDING LUBRICATION INSTRUCTIONS

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered off.

Table 1. Operator PMCS for the FBCB2 Create Device.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1	Before/Weekly	AN/GYK-55 Create Device Digital Computer Set	Inventory in accordance with COEI and BII lists. Refer to WP 0082 .	If hard drive is missing.
2	Before/Weekly	FBCB2 Create Device External Surfaces	Inspect for dents, inoperable/missing latches or covers to compartment doors, cracks, or other severe damage to the display. Degraded if: Case is cracked or has severe dents.	Damage prevents operation.
3	Before/Weekly	FBCB2 Create Device Display	Inspect for deep scratches, tears, punctures or depressions in the display surface. Degraded if: Display is cracked or has severe scratches that would interfere with display operations.	Damage prevents operation.
4	Before/Weekly	FBCB2 Create Device Display	Clean display.	
5	Before/Weekly	FBCB2 Create Device Keyboard/TOUCH PAD	Inspect for inoperable, missing/sticking keys, severely scratched TOUCH PAD. Missing/sticking TOUCH PAD execute buttons. Degraded if: Keyboard alphabetic, numeric, or Enter keys do not function.	Damage prevents operation.
6	Before/Weekly	FBCB2 Create Device Removable Hard Disk Drive (HDD)	Ensure HDD is present and properly seated, and that the disk drive compartment door is properly latched. Boot up the laptop to ensure that the HDD functions properly, then power down before proceeding to the next item.	Not present or does not work.
7	Before/Weekly	FBCB2 Create Device rear connectors and side ports	Inspect for damaged, bent, broken, missing, or corroded pins.	Damage prevents operation.

Table 1. Operator PMCS for the FBCB2 Create Device. - Continued

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
8	Before/ Weekly	FBCB2 Create Device rechargeable Battery Pack	Remove and inspect battery pack exterior for cracks, connector damage, or battery fluid leakage.	Battery has leakage.
9	Before/ Weekly	Inspect for damaged USB cable pins and ensure USB port access cover is present on the laptop port.	Ensure pins and connectors are not damaged.	Damage prevents operation.
10	Weekly	Charge Battery	Power up the laptop and ensure battery status LED is amber or steady green. Ensure the LED goes steady green after 4 hours of continuous operation. Replace battery pack if LED remains amber after 4 hours.	Battery will not charge.

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

CONNECT AN MDL DEVICE

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is powered up.

System is online or offline.

ADJUSTMENT**Table 1. Connect an MDL Device to the Laptop Computer.**

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Connect the USB cable military plug to the input connector on the MDL device, as shown in Figure 1.	
2.	Connect the USB connector to the port on the right side of the Ruggedized Laptop Computer, as shown in Figure 1 or Figure 2 for Type II version Ruggedized Laptop Computer.	

Figure 1. Connect AN MDL Device.

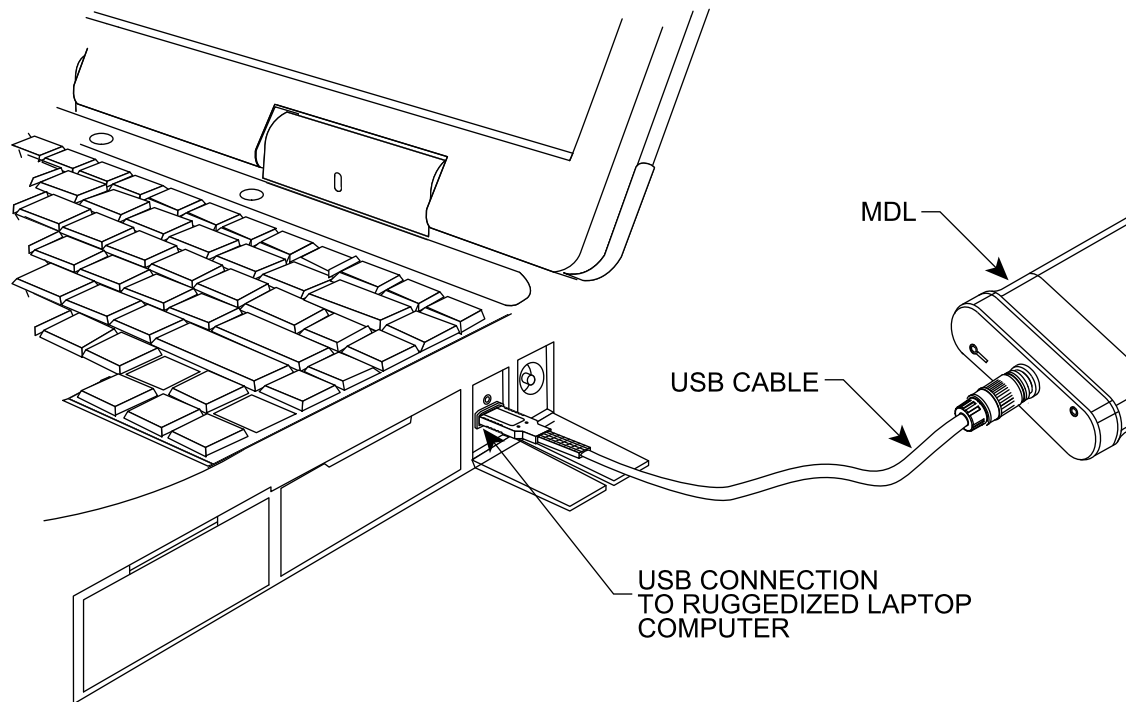


Figure 2. MDL Connected to Type II Ruggedized Laptop Computer.

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

REPLACE THE FBCB2 CREATE DEVICE LAPTOP COMPUTER

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

The system is powered off
Any CD-ROM or DVD disk has been removed from the CD/DVD drive.



CAUTION

If you are replacing the Ruggedized Laptop Computer with another laptop that has a hard disk drive previously rolled as a BFT system, contact Field Signal Maintenance to have the HDD re-burned before rolling the new laptop as an EPLRS system. Failure to comply could cause a software process PCG crash and prevent the computer from booting fully to the Ops screen.

REMOVAL

Table 1. Remove the FBCB2 Create Device Laptop Computer.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the Ruggedized Laptop Computer DC power supply from the AC source.	
2.	Disconnect the DC power cable from the DC IN jack on the back of the Ruggedized Laptop Computer computer.	
3.	Disconnect any USB or Ethernet cables.	
4.	If you will retain the CD/DVD drive for use in the replacement Ruggedized Laptop Computer, remove the CD/DVD drive IAW WP 0061..	
5.	If you will retain the hard disk drive (HDD) for use in the replacement Ruggedized Laptop Computer, remove the HDD IAW WP 0060.	
6.	If you will retain the battery pack for use in the replacement Ruggedized Laptop Computer, remove the battery pack IAW WP 0059.	
7.	Close and latch the Ruggedized Laptop	

Table 1. Remove the FBCB2 Create Device Laptop Computer. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	Computer cover.	

INSTALLATION

Table 2. Install the Ruggedized Laptop Computer.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Open the Ruggedized Laptop Computer cover to its fully open position.	
2.	Install the retained CD/DVD drive or a suitable replacement in the MPD drive compartment IAW WP 0061.	
3.	Install the HDD from the original Ruggedized Laptop Computer or a suitable replacement in the HDD drive compartment IAW WP 0060.	
4.	Install the retained battery pack or a suitable replacement in the battery compartment IAW WP 0059.	
5.	Connect the DC power supply input cable to the DC IN jack on the right side of the Ruggedized Laptop Computer.	
6.	Connect the DC power supply AC power cord to its 120 VAC power source.	The Ruggedized Laptop Computer is ready for operation.

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

REPLACE THE BATTERY PACK

INITIAL SETUP:

Personnel Required
Operator

Equipment Condition
System is powered off.

**WARNING**

Lithium batteries contain a liquid that is highly toxic and may produce a vapor that is also toxic. The battery **MUST NOT** be abused in any way that may cause the battery to rupture. **IMMEDIATELY** turn off the equipment if battery or battery compartment shows signs of overheating or becomes hot to the touch. Allow the battery to cool before removing it. If you hear a hissing sound (battery venting), or smell irritating gas, **IMMEDIATELY** turn off the equipment, and **LEAVE** the area until any smell or signs of leaking gas have been cleared from the area.

**WARNING**

Replace the battery pack only with the model specified in the Parts List. Use of a different battery could result in overheating or explosion and injury to personnel.

**CAUTION**

Disconnect the DC input cable before performing this procedure. Failure to comply could cause damage to the equipment.

**CAUTION**

Do not touch the terminals on the battery pack or the battery terminals on the laptop. Dirty or damaged terminals could cause the Ruggedized Laptop Computer not to operate correctly.

**CAUTION**

Dispose of defective and outdated batteries in accordance with U.S. Army Technical Bulletin TB 43-0134, Battery Disposition and Disposal.

**CAUTION**

Do not use the battery pack with any other device or computer. This battery pack is rechargeable and is intended only for use with the Ruggedized Laptop Computer. Use of the battery in any other computer or device could result in damage to the battery or to the device.

**CAUTION**

When the battery pack is transported, it is recommended that it be placed in a plastic bag to prevent damage to other contents due to possible leakage of the battery.

**NOTE**


This computer has a high temperature mode function that prevents the degradation of the battery in high temperature environments (> 122°F or 50°C). A level corresponding to a 100% charge for high temperature is approximately equivalent to an 80% charge level for normal temperature mode.

**NOTE**

If the battery pack will not be used for a long period of time (a month or more), discharge (use) the battery pack until the remaining battery level becomes 30% to 40% and store it in a cool, dry place.

REMOVAL

Table 1. Remove the Battery Pack.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input cable from the DC IN jack.	
2.	Open the battery compartment door by first sliding the latch forward. Then press down on the latch and without releasing it, grasp the door handle and pull it open, as illustrated in Figure 1.	
3.	 NOTE The front of the Ruggedized Laptop Computer may have to be lifted slightly to allow the battery compartment door to open enough for the battery to be removed. Grasp the plastic removal tab (may be any color) attached to the battery and pull the battery out of the compartment, as shown in Figure 2.	
4.	Inspect the battery compartment for evidence of battery liquid or corrosion. If any liquid or corrosion is found, treat it as toxic material per TB 43-0134.	
5.	If a replacement battery is not available, close the battery compartment door and slide the latch to the rear until it locks.	
6.	Reconnect the DC input cable to the DC IN jack.	

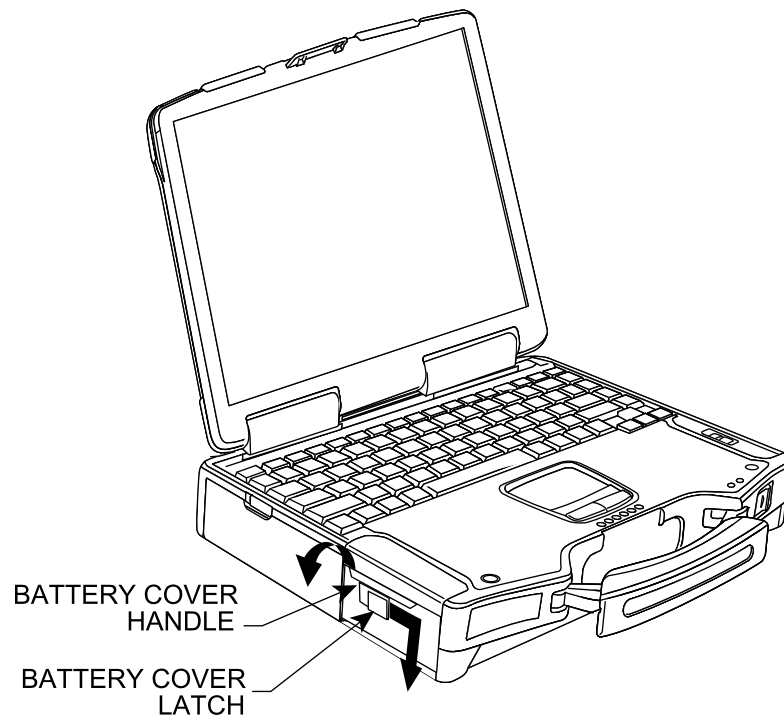


Figure 1. Open the Battery Compartment.

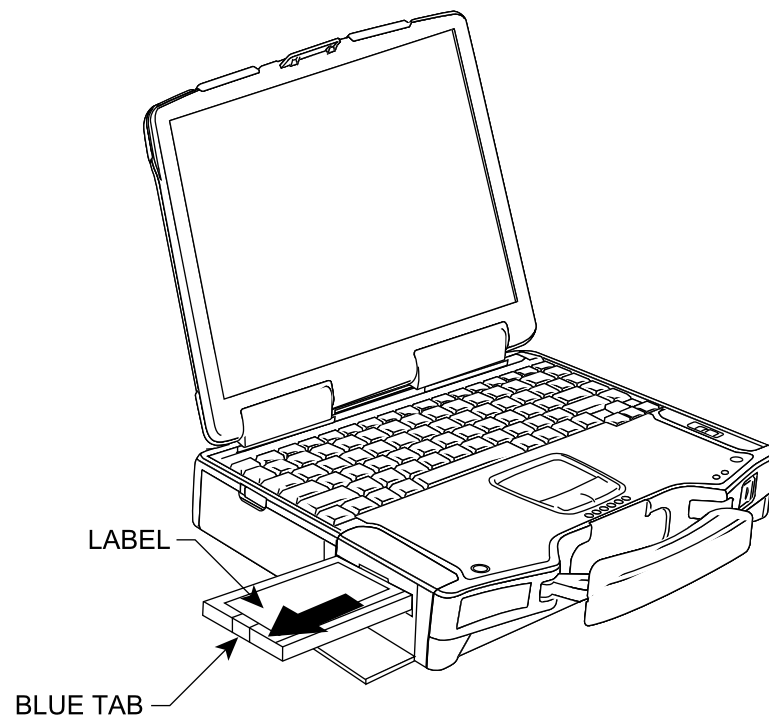


Figure 2. Remove the Battery Pack.

INSTALLATION

Table 2. Install the Battery Pack.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input cable from the DC IN jack.	
2.	Open the battery compartment by first sliding the latch forward, as shown in Figure 1. Then press down on the latch, and without releasing it, grasp the door handle and pull the compartment door open.	
3.	Slide the battery (connector end first) into the battery compartment (as shown in Figure 3 and press on it gently until it is seated.	
4.	Close the battery compartment door and slide the latch to the rear until it locks.	
5.	Reconnect the DC power cable to the DC IN jack on the right side of the Create Device.	

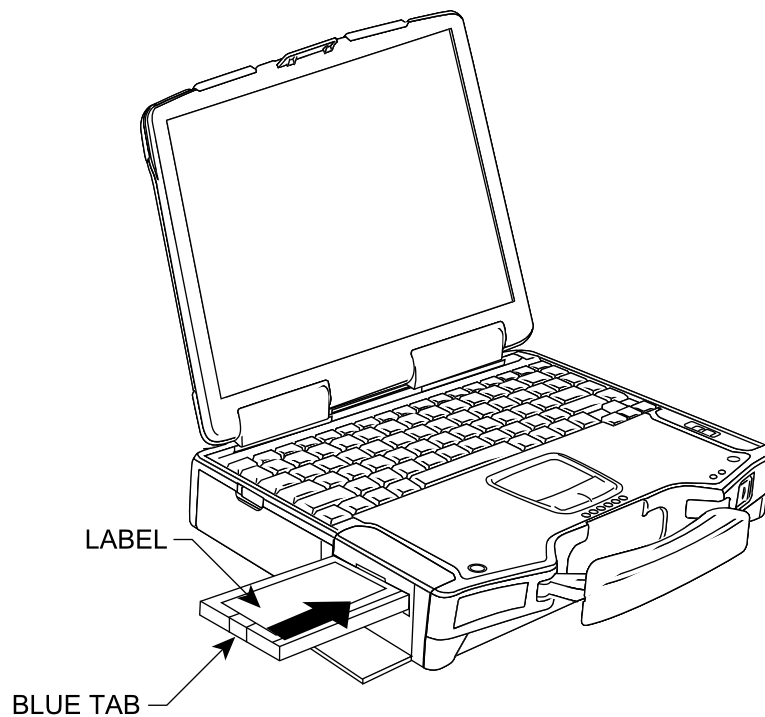


Figure 3. Install the Battery Pack.

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

REPLACE THE HARD DISK DRIVE

INITIAL SETUP:**Personnel Required**

Operator

Equipment Condition

System is powered off.

**CAUTION**

If you are replacing the hard disk drive with a hard disk drive previously rolled as a BFT system, you must re-burn the hard disk drive before rolling the Ruggedized Laptop Computer as an EPLRS system. Failure to comply could cause a software process PCG crash and prevent the computer from booting fully to the Ops screen.

**CAUTION**

Wait at least 10 seconds after powering down the Ruggedized Laptop Computer to allow the hard disk drive (HDD) to stop spinning before removing it. Failure to comply could result in equipment damage.

**CAUTION**

Not all HDD models are usable in the Create Device Ruggedized Laptop Computer. Use only the hard disk drive specified in the Parts List. Inserting the wrong HDD could result in equipment damage.

**CAUTION**

Keep the HDD away from strong magnetic fields and never bump or drop an HDD. Failure to comply could result in loss or corruption of stored data, or physical damage to the drive.

**CAUTION**

The HDD is a delicate device and must be handled carefully. Grasp the case gently to avoid deforming the thin metal frame. Mishandling the HDD could cause the connector to become misaligned, damaging the connector on insertion and rendering the drive inoperable.

**CAUTION**

When inserting the HDD, push the drive gently into the connector. If it doesn't slip into place with easy pressure, do not force it. Remove the drive and check for possible misalignment.

REMOVAL**Table 1. Remove the Hard Disk Drive.**

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input power cable from the DC IN jack on the Create Device.	
2.	On the top right front corner of the laptop, press down on the release button in the center of the HDD latch and push the latch toward the rear of the laptop to release the HDD cover, as shown in Figure 1.	The HDD compartment cover opens.
3.	Grasp the plastic tab on the front of the HDD and pull the drive from the compartment, as shown in Figure 2.	
4.	Inspect the inside of the drive compartment for damage or corrosion. If damage or corrosion is found, notify Field Signal Maintenance.	
5.	Close and latch the drive cover as illustrated in Figure 4.	
6.	Re-connect the DC input cable to the DC IN jack.	

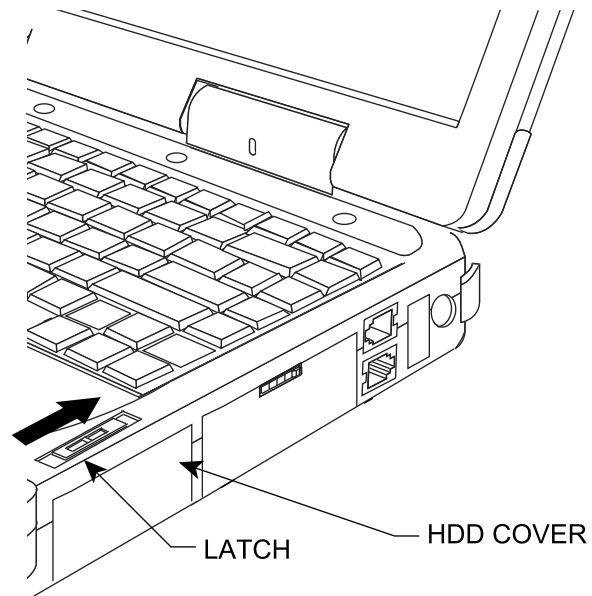


Figure 1. Open the HDD Cover.

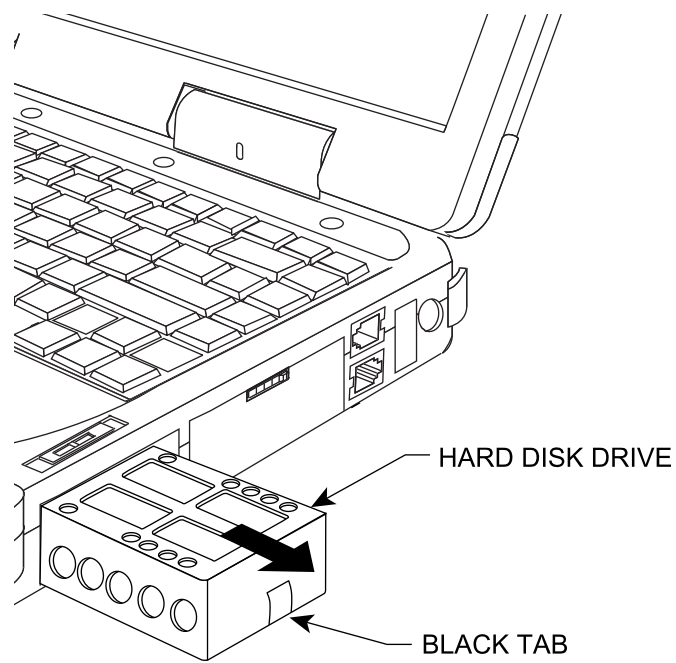
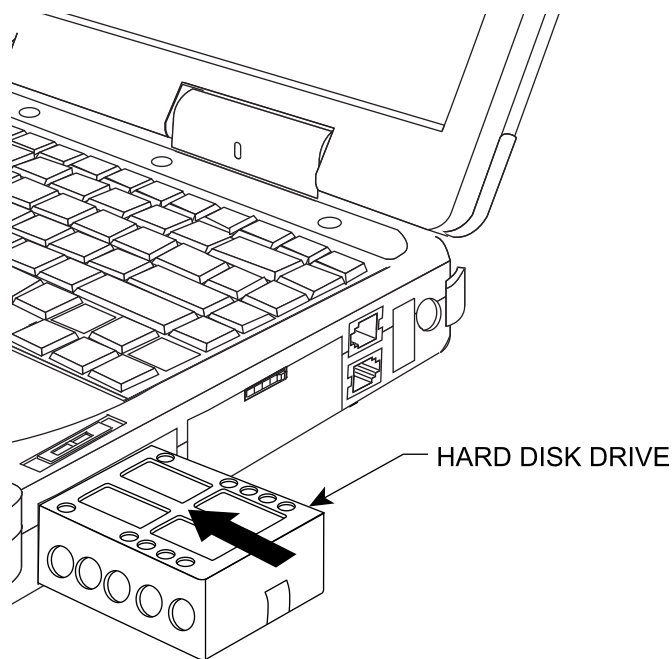


Figure 2. Remove the HDD.

INSTALLATION**Table 2. Install the Hard Disk Drive.**

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input power cable from the DC IN jack on the Create Device.	
2.	Open the HDD cover as illustrated in Figure 1.	
3.	Inspect the connector end of the HDD and the mating connector in the HDD drive compartment for possible damage or misalignment.	
4.	Carefully insert the HDD (with the tab out) into the HDD drive compartment, as shown in Figure 3, and gently press evenly on both edges of the front of the HDD until the drive seats in the connector.	
5.	Close and latch the HDD compartment door as illustrated in Figure 4.	
6.	Re-connect the DC input cable to the DC IN jack.	

**Figure 3. Insert the HDD.**

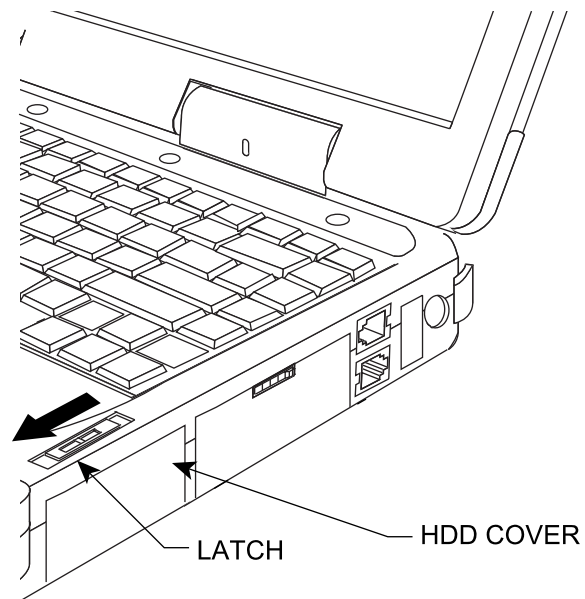


Figure 4. Close the HDD Cover.

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

REPLACE THE CD/DVD DRIVE

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

System is powered off.

Any CD-ROM or DVD disk has been removed from the CD/DVD drive.

The CD/DVD drive is a removable drive that resides in the Multimedia Pocket Device (MPD) compartment located in the left side of the laptop. The following procedures explain how to remove and replace the CD/DVD drive.

REMOVAL

Table 1. Remove the CD/DVD Drive.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input cable from the DC IN jack.	
2.	On the left side of the laptop, open the CD/DVD compartment door by pushing the latch above the door to the rear while pushing down on the door tab.	
3.	Raise the front of the laptop to reach the drive release access cover on the bottom side of the laptop, below the CD/DVD drive compartment.	
4.	Slide open the drive release access cover.	A depression with a release latch is revealed, as shown in Figure 1.
5.	Insert a finger into the depression and push the release latch toward the compartment door until the drive is released.	
6.	Carefully slide the CD/DVD drive out of the laptop, as illustrated in Figure 2.	
7.	If not immediately replacing the CD/DVD drive, close and latch the CD/DVD drive compartment door.	
8.	On the bottom side of the laptop, slide the drive release access cover closed.	
9.	Re-connect the DC input cable to the DC IN jack.	

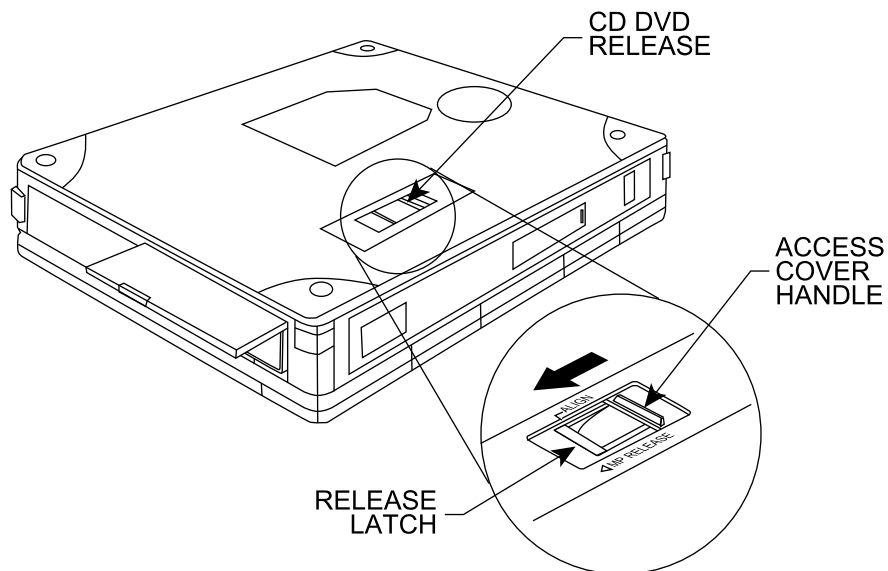


Figure 1. CD/DVD (MPD) Access Cover and Release Lever.

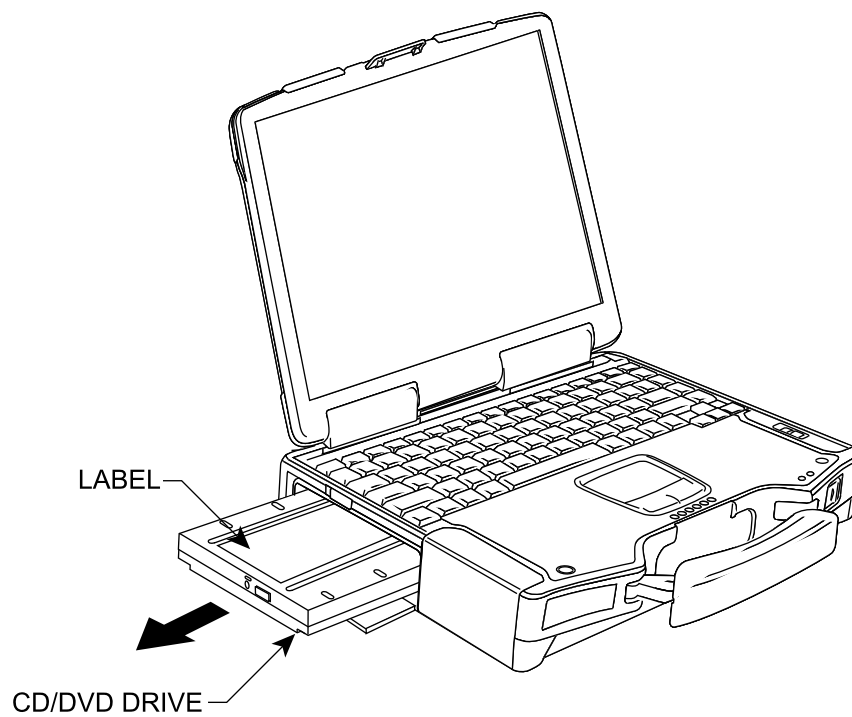
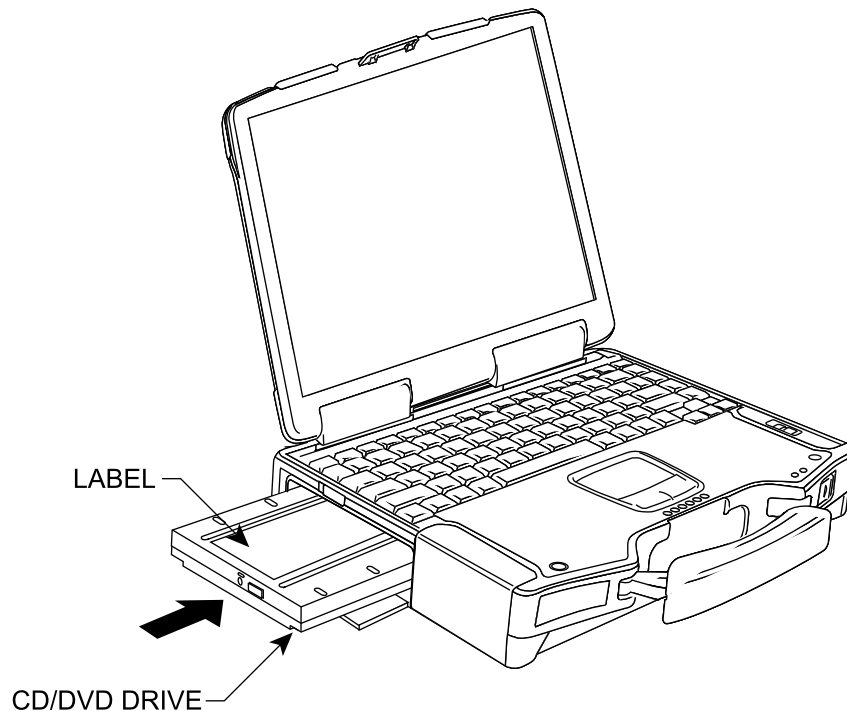


Figure 2. Remove the CD/DVD Drive.

INSTALLATION**Table 2. Install the CD/DVD Drive.**

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Disconnect the DC input cable from the DC IN jack.	
2.	Open the door to the CD/DVD compartment by sliding the latch above the door to the rear and pressing down on the door tab.	
3.	Carefully insert the CD/DVD drive into the compartment (connector end first), as shown in Figure 3 and press evenly on both sides until the drive seats in the laptop connector.	
4.	Close and latch the CD/DVD compartment door.	
5.	Re-connect the DC input cable to the DC IN jack.	

**Figure 3. Install the CD/DVD Drive.**

END OF WORK PACKAGE

CHAPTER 6
FIELD MAINTENANCE INSTRUCTIONS
FOR
AN/GYK-55 CREATE DEVICE

CHAPTER 6
FIELD MAINTENANCE INSTRUCTIONS

WORK PACKAGE INDEX

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CONFIGURE THE SYSTEM CLASSIFICATION	0064
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RETURN A HARD DISK DRIVE TO MASTER	0066
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FIELD MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

SERVICE UPON RECEIPT

SERVICE UPON RECEIPT OF MATERIEL**CHECKING UNPACKED EQUIPMENT****General Procedures**

Inspect the equipment for damage or loss incurred during shipment.

- Check the equipment against the packing slip to verify all listed components and parts are included.
- Visually check for any physical damage including dents, cracks, tears, and broken or missing parts.
- Check for signs of exposure to excessive heat, or the effects of chemical or water damage. These effects can often be seen on the packing material.
- Check to see whether the equipment has been modified.

Report Discrepancies

For damage to equipment incurred during shipment, report the damage on SF 361, Transportation Discrepancy Report (TDR).

For item and packaging discrepancies, fill out and forward SF 364, Report of Discrepancy (ROD), as prescribed in AR 735-11/DLAR 4140.55.

Process the AN/GYK-55 Create Device Ruggedized Laptop Computer

1. Verify that all dust covers and drive/card compartment doors are present and in good condition. Check that each access door latch works smoothly and holds the door closed securely.
2. Open each compartment door and check inside with a flashlight for any signs of pin damage, corrosion, or other damage.
3. Turn the Ruggedized Laptop Computer over and check that the speaker grill is in good condition.
4. Open the HDD compartment door and check for an installed hard disk drive. If an HDD was shipped with the Ruggedized Laptop Computer, remove the drive and check it for signs of damage. Check the drive connector for proper alignment and for any sign of pin damage.
5. If an HDD was included with in the shipment, ensure it is correctly marked for security purposes IAW AR 380-5.
6. Open the CD/DVD drive (multimedia) compartment door and check for an installed drive. If a drive was shipped with the Ruggedized Laptop Computer, remove the drive and check for damage or corrosion inside the compartment. Check the drive for any damage.
7. Open the rear connector access door and check each connector for signs of damage to pins or connector shells.
8. Open the Ruggedized Laptop Computer cover and check the condition of the display touchscreen. Reject the Ruggedized Laptop Computer if any punctures, tears, or severe discolorations in the touchscreen are found.
9. Check the keyboard for broken or missing keys. Press each key to ensure it operates smoothly and that no

keys are sticking.

10. Check the TOUCH PAD surface for any punctures, tears, or severe discolorations. Check each TOUCH PAD button for smooth operation.
11. To verify the operating condition of the new/replacement Ruggedized Laptop Computer, perform the AN/GYK-55 Create Device start up procedure in WP 0006.

PROCESSING UNPACKED EQUIPMENT

If the component received was a replacement item, retain the shipping container to use for returning the defective item to the repair facility.

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

CONFIGURE THE LAPTOP BIOS SETTINGS

INITIAL SETUP:**Personnel Required**

Signal Support System Specialist

Equipment Condition

The system is powered off.

The following procedure describes how to access and use the BIOS Setup Utility program to return the Ruggedized Laptop Computer BIOS settings to their default values.

Table 2 lists the default BIOS settings for the FBCB2 Create Device Ruggedized Laptop Computer. These settings are displayed by the BIOS Setup Utility, which is accessed by powering up the Ruggedized Laptop Computer and pressing the F2 key at the bottom of the blue screen when it appears.

**CAUTION**

Move carefully through the Setup Utility menus and avoid unnecessary key strokes. Make only the changes required and verify they are correct before exiting the utility. Making incorrect or accidental changes in the BIOS settings can cause the laptop to malfunction and render it inoperable.

**NOTE**

To exit without changing any settings, scroll to the Exit menu option at the top of the page, use the down arrow, and select the "Exit Without Saving Changes" option. Using the F10 key requires the operator to save the current settings before exiting the program.

ADJUSTMENT

Table 1. Configure the Laptop BIOS Settings.


STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Press the POWER switch to the right and hold for 1-2 seconds.	The boot up sequence scrolls on the touchscreen display.
2.	When the blue startup screen is displayed, select the F2 option at the bottom of the screen.	The BIOS Setup Utility screen opens.
3.	Use the left and right arrow keys to select the menu pages at the top of the screen.	Each menu page has configurable settings or options.
4.	 NOTE Refer to Table 2 for a list of the default BIOS settings for the Create Device. Compare each setting in the BIOS Setup screens to the default settings in Table 1. If a value is different, change it to match the default value.	
5.	Use the up and down arrow keys to scroll through the current settings in each page and to highlight a particular setting that you need to change.	
6.	Use the F5 and F6 keys to cycle through the available options for each setting and highlight the desired setting.	
7.	Use the arrow keys to move to the next setting or menu page.	
8.	When all changes have been made, select F10 to save the changes or scroll to the EXIT menu page and select the " Save changes and exit " option. To exit without saving any changes, select the "Exit without saving changes" option.	
9.	Select ENTER .	The BIOS Setup Utility closes and the Ruggedized Laptop Computer resumes booting up.

Table 2. Create Device Ruggedized Laptop Computer Default BIOS Settings.

FUNCTION/INFORMATION:	VALUE
Language:	[English]
Main:	
System Time:	[hh:mm:ss]
System Date:	[mm/dd/yyyy]
Touch Pad:	[Enable]
Touchscreen:	[Enable]
Microphone Jack:	[Auto]
Display:	[Simultaneous]
Display Expansion:	[Enable]
CD/DVD Drive Speed:	[High]
Environment:	[Auto]
Advanced:	
Serial Port A:	[Auto]
I/O IRQ:	
Serial Port B:	[Disable]
I/O IRQ:	
MP Serial Port:	[Disable]
Parallel Port:	[Enable]
Mode:	[Bi-directional]
CardBus Controller A:	[Disable]
Modem:	[Disable]
LAN:	[Enable]
Boot up from LAN:	[Disable]
Wireless LAN:	[Disable]
Legacy USB Support:	[Enable]
Security:	
Password on boot:	[Enable]
Set Supervisor Password:	[Enter]
Setup Utility Prompt:	[Enable]
Boot First Menu:	[Enable]
Hard Disk Lock:	[Disable]

Table 2. Create Device Ruggedized Laptop Computer Default BIOS Settings. - Continued

User Password Protection:	[No Protection]
Set User Password:	[Enter]
Floppy Operation:	[Enable]
Boot:	
The boot device priority list should be arranged in the following order:	
Hard Disk Drive	
Floppy Drive	
CD/DVD Drive	
LAN	

END OF WORK PACKAGE

OPERATOR MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

CONFIGURE THE SYSTEM CLASSIFICATION

INITIAL SETUP:

Personnel Required

Operator

Equipment Condition

System is powered up.
System is offline.



NOTE

Once the classification has been changed to Secret, it cannot be changed back to Unclassified. The only way to return the hard disk drive to an Unclassified state is to purge the data from the drive IAW an approved Purge System procedure and reload the FBCB2 software.



NOTE

This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

This procedure changes the classification label at the top of the screen and on the Session Manager window from "Unclassified" with a green background, to "Secret" with a red background.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.
2.	Select the down arrow to the right of the Select User Name window, and select the " fbcadmin " user name.	The name fbcadmin appears in the Select User Name window.
3.	Enter the appropriate password and select CONTINUE .	The System Administration dialog box opens.
4.	Select the Configure System tab, and select CONFIGURE SYSTEM CLASSIFICATION .	A System Classification selection window opens.
5.	Select the down arrow and select SECRET .	The System Classification window changes to "Secret".
6.	Select OK to change the system classification.	The classification labels on the Session Manager screen and the Ops screen change to Secret. The background colors of these labels change to Red.

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

SET THE SYSTEM TIME AND DATE

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered up.
System is offline.

The following procedure describes how to manually set the current time and date displayed on the FBCB2 Create Device.



This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

Table 1. Set the System Time and Date.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration login dialog box opens.
2.	Select the down arrow to the right of the Select User Name box, and select the "fbcadmin" user name.	The word fbcadmin appears in the SELECT USER box.
3.	Enter the password and select CONTINUE .	The System Administration - Offline dialog box opens.
4.	On the System Administration - Offline dialog box, select the TOOLS tab and select SET TIME .	The Set Time dialog box opens.
5.	<p>Set time to ZULU time, not local time.</p> <p>Change the time and date fields as required.</p>	
6.	Select OK to save the changes and exit the Set Time dialog box.	

Table 1. Set the System Time and Date. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
7.	Select CANCEL to exit the System Administration dialog box.	

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

RETURN A HARD DISK DRIVE TO MASTER

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered on.
System is offline.

CAUTION

This procedure will return the current role and system settings to their default values. The process is not reversible. Verify this is the desired course of action before proceeding.



NOTE

This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

Table 1. Return a Hard Disk Drive to Master.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.
2.	Select the down arrow to the right of the SELECT USER NAME box and select the "fbcadmin" user name.	The word fbcadmin appears in the SELECT USER box.
3.	Enter the password and then select CONTINUE .	The System Administration dialog box opens.
4.	On the System Administration - Offline dialog box, select the CONFIGURE SYSTEM tab, and select RETURN TO MASTER .	The warning message "Are you sure you want to make a master of this system?" appears.
5.	Select the Y key on the keyboard to enter a "Yes" response and then select ENTER .	A log file is displayed that lists the processes performed.
6.	Select ENTER to reboot the Ruggedized Laptop Computer and complete the process.	The system reboots to the Session Manager screen with a generic Role.
7.	Configure the role IAW WP 0014.	

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

LOAD A PRE-INSTALLED DATABASE

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered up.
System is offline.

The following procedure is performed to load a database that was preinstalled on the HDD prior to deployment.



This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

Table 1. Load a Preinstalled Database.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration login dialog box opens.
2.	Select the down arrow to the right of the Select User Name box, and select the "fbcadmin" user name.	The word fbcadmin appears in the SELECT USER box.
3.	Enter the password and select the CONTINUE button.	The System Administration - Offline dialog box opens.
4.	On the System Administration - Offline dialog box, select INSTALL DATABASE LOAD .	The Sysadmin/MDL Database Load Installer dialog box opens.
5.	Scroll to the Preinstalled_Database_Loads folder and select the desired database to highlight it.	
6.	Select INSTALL .	A confirmation dialog box opens.
7.	Select YES to install the database.	A Database Load Progress dialog box appears and displays the progress of the database installation.
8.	When the message "Database load installed successfully!!" appears at the bottom of the dialog box, select OK .	The Database Load Progress dialog box closes.
9.	On the Sysadmin/MDL Database Load	The dialog box closes.

Table 1. Load a Preinstalled Database. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	Progress dialog box, select CLOSE .	
10.	Shut down and restart the system.	Once the system has been restarted, the current Role defaults to a generic format and must be reconfigured before continuing.
11.	Configure the role IAW WP 0014 .	

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

INSTALL A DATABASE FROM AN MDL DEVICE

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered on.
System is offline.

The following procedure is performed when a database must be loaded from an MDL device to the FBCB2 Create Device Ruggedized Laptop Computer. The first part of the procedure loads the database onto the computer; the second part makes the database available to the FBCB2 software.



This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT



Table 1. Install a Database from an MDL Device.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Connect the USB cable military plug to the input connector on the MDL device, as shown in Figure 1.	
2.	<p>Figure 2 shows the Type II version Create Device MDL connection.</p> <p>Connect the USB connector to the USB port on the right side of the Ruggedized Laptop Computer.</p>	
3.	Select START/FBCB2/SYSADMIN .	The System Administration login dialog box opens.
4.	Select the down arrow to the right of the Select User Name box, and select the " fbcadmin " user name.	The word fbcadmin appears in the SELECT USER box.
5.	Enter the password and select CONTINUE .	The System Administration dialog box opens.

Table 1. Install a Database from an MDL Device. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
6.	Select START/FBCB2/MISSION DATA LOAD/INSTALL MDL .	The Mission Data Extractor/Installer dialog box opens.
7.	Select the down arrow to the right of the Media box and select PORTABLE MEDIA .	The Missions On MDL dialog box lists the database files loaded on the MDL.
8.	Select the desired database file to highlight it, and then select EXTRACT .	An Extract Successful alert dialog box displays when the database has been extracted.
9.	Select OK .	The dialog box closes and the Missions Extracted dialog box in the Mission Data Extractor/Installer dialog box displays a folder with the mission file name and a file below it labeled ftp_dbload.tar .
10.	Highlight the database folder to be installed and select INSTALL .	A confirmation dialog box opens.
11.	Select YES to install the database.	A Database Load Progress dialog box appears and displays the progress of the database installation.
12.	When the message "Database load installed successfully!!" appears at the bottom of the dialog box, select OK .	The Database Load Progress dialog box closes.
13.	On the SysAdmin/MDL Database Load Installer dialog box, select CLOSE to exit the dialog box.	The dialog box closes.
14.	Select INSTALL DATABASE LOAD .	The SYSADMIN/MDL DATABASE LOAD INSTALLER dialog box opens, showing a folder structure with one or more preinstalled databases listed.
15.	Select the desired database to highlight it and select INSTALL .	A confirmation dialog box opens.
16.	Select YES to install the database.	A DATABASE LOAD PROGRESS dialog box appears and displays the progress of the database installation.
17.	When the message "Database load installed successfully!!" appears at the bottom of the dialog box, select OK .	The DATABASE LOAD PROGRESS dialog box closes.
18.	On the SYSADMIN/MDL DATABASE LOAD INSTALLER dialog box, select CLOSE .	The dialog box closes.
19.	Select INSTALL DATABASE LOAD .	The SYSADMIN/MDL DATABASE LOAD INSTALLER box opens, showing a folder structure with one or more preinstalled databases listed.
20.		A confirmation dialog box opens.

Table 1. Install a Database from an MDL Device. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
	 NOTE Desired database is in pre-installed database loads folder. Select the desired database to highlight it and select INSTALL .	
21.	Select YES to install the database.	A Database Load Progress dialog box appears and displays the progress of the database installation.
22.	When the message "Database load installed successfully!!" appears at the bottom of the dialog box, select OK .	The Database Load Progress dialog box closes.
23.	On the SYSADMIN/MDL DATABASE LOAD INSTALLER dialog box, select CLOSE .	The dialog box closes.
24.	Select CLOSE .	
25.	 NOTE After the database has been installed and the system has been restarted, the current Role defaults to a generic format and must be reconfigured. Configure the Role IAW WP 0014.	
26.	Disconnect the MDL device from the Create Device.	

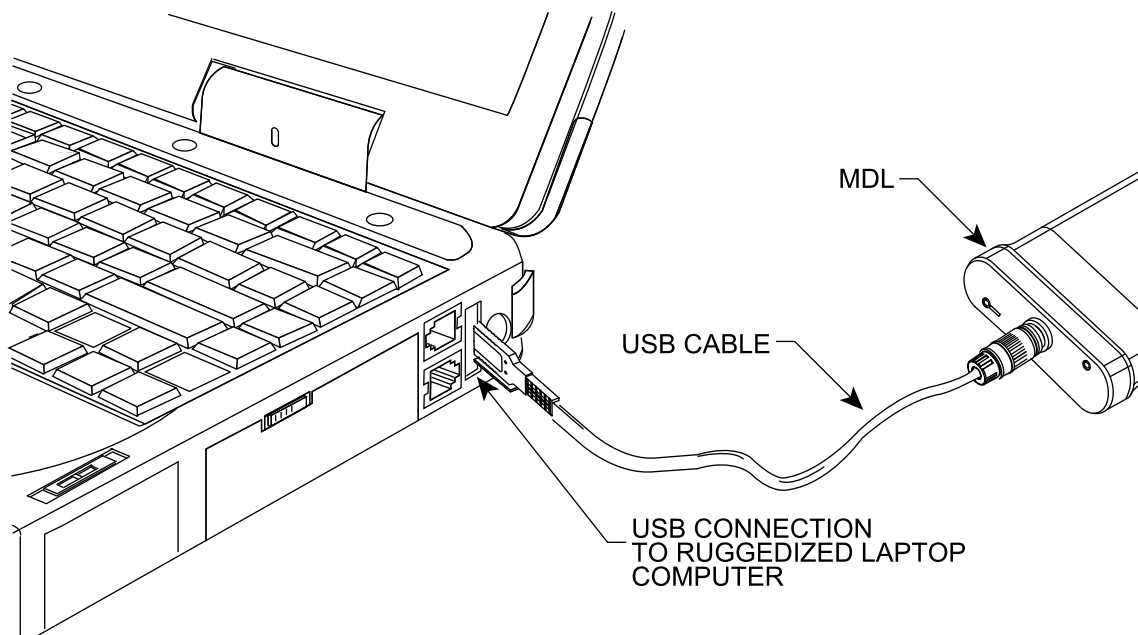


Figure 1. MDL Connected to the Ruggedized Laptop Computer.

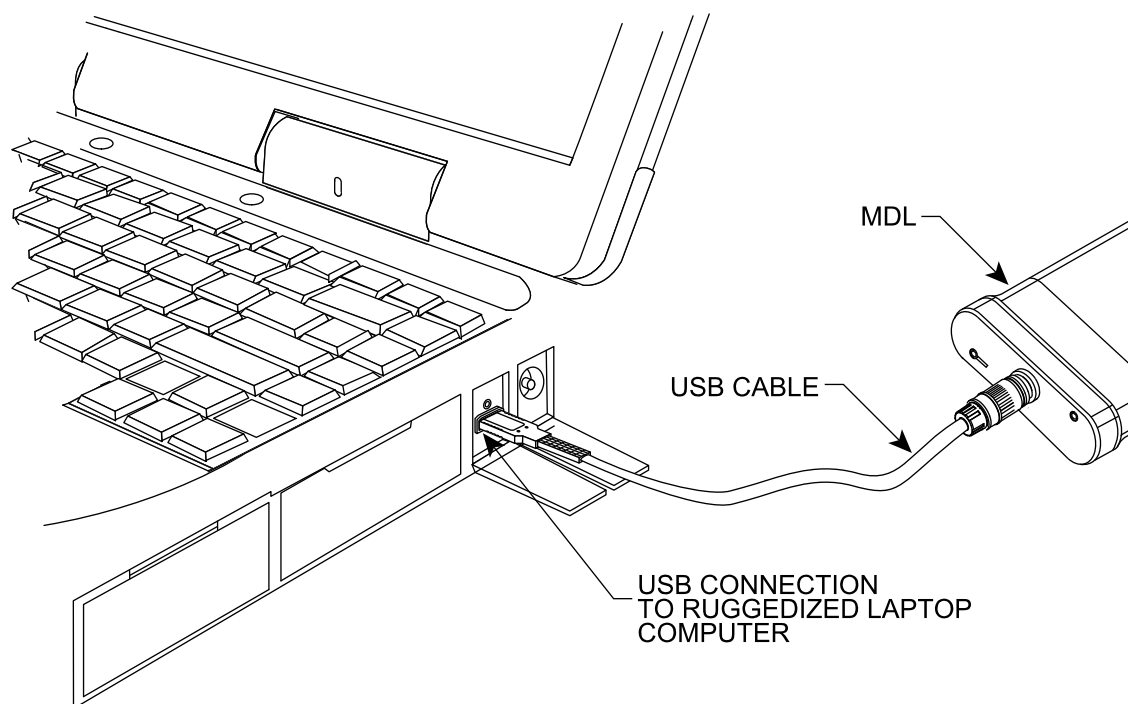


Figure 2. MDL Connected to Type II Ruggedized Laptop Computer.

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

INSTALL A DATABASE FROM A CD-ROM

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered on.
System is offline.

The following procedure is performed when a database must be loaded from a CD-ROM disk.



After the database has been installed and the system has been restarted, the current Role defaults to a generic format and must be reconfigured.



This procedure is valid only for FBCB2 software version 6.4.4.2.

INSTALLATION

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.
2.	Select the down arrow to the right of the Select User Name box, and select the "fbcadmin" user name.	The word fbcadmin appears in the SELECT USER box.
3.	Enter the password and select CONTINUE button.	The System Administration dialog box opens.
4.	Select INSTALL DATABASE LOAD .	The Sysadmin/MDL Database Load Installer dialog box opens.
5.	Select the EXTERNAL_DATABASE_LOADS folder to display its contents.	The list of External Database Loads displays.
6.	Select IMPORT FROM CD-ROM OR DISK .	The New Data File dialog box opens.
7.	Select SETUP .	The Browser Setup dialog box opens.
8.	Select CD-ROM and then select APPLY .	The New Data File dialog box displays, with a

STEP	OPERATOR ACTION	INDICATION or CONDITION
		folder labeled "/mnt/cdrom". The folder contains a default database file ftp_dbload.tar.gz.
9.	Select ADD .	The Name / Comment dialog box opens.
10.	Enter a name for the new database in the NAME entry field and select OK .	The Sysadmin/MDL Database Load Installer dialog box opens with the new database listed in the External_Database_Loads folder.
11.	Highlight the new database file and select INSTALL .	A confirmation dialog box opens.
12.	Select YES .	The Database Load Progress dialog box opens.
13.	When the SHUTDOWN AND RESTART NOW message displays in the Database Load Progress dialog box, select OK .	The Database Load Progress dialog box closes.
14.	Select CLOSE .	
15.	Select CANCEL .	The System Administration dialog box closes.
16.	Select START/SHUT DOWN/RESTART .	After the system has been restarted, the current role defaults to a generic format and must be reconfigured before continuing.
17.	Configure the role IAW WP 0014.	

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

CONFIGURE A NETWORK PRINTER

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered up.

System is offline.

Network printer is powered on.

Printer assigned name has been obtained from the Information Technology Specialist.

The following procedure describes how to configure a stand-alone network printer, or a network printer located on the Tactical Lan, to the Create Device Ruggedized Laptop Computer.



A specially-wired "crossover" Cat 5 Ethernet cable or an Ethernet switch is required to connect a stand-alone network printer to the Create Device. Neither the cable or switch are supplied with the Create Device.



This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

Table 1. Configure a Network Printer.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	For a stand-alone network printer, connect one end of the crossover Cat 5 cable or standard cable from the network switch to the printer Ethernet port and connect the other end to the Ethernet port on the right side of the Ruggedized Laptop Computer. For a printer located on the Tactical Lan, connect the standard CAT 5 cable from the network switch to the Ethernet port on the right side of the Ruggedized Laptop Computer.	
2.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.

Table 1. Configure a Network Printer. - Continued



STEP	OPERATOR ACTION	INDICATION or CONDITION
3.	Select the down arrow to the right of the Select User Name: window, and select the "fbadmin" user name.	The word fbadmin appears in the SELECT USER window.
4.	Enter the password and select CONTINUE .	The System Administration-Offline dialog box opens.
5.	On the System Administration - Offline dialog box, select the CONFIGURE SYSTEM tab and select CONFIGURE PRINTER .	The Printer Configuration window opens.
6.	Select the NEW printer icon.	The Add a New Print Queue dialog box opens.
7.	Select FORWARD to continue.	The Queue Name dialog box displays.
8.	 NOTE A printer queue is a list of print jobs that are waiting to be printed on a particular printer. This step creates an empty folder for this list, or queue, of print jobs to be sent to this printer. The name "printer" is a default name and is highlighted. Enter a new name for the Print Queue and then add a brief description (optional) to help identify the printer in the window provided.	
9.	When finished, select FORWARD .	The Queue Type dialog box displays.
10.	Select SELECT A QUEUE TYPE and select the NETWORKED JETDIRECT option.	
11.	Select FORWARD to continue.	A blank Printer window and Port entry window displays.
12.	 NOTE The printer assigned name is a descriptive name, or "alias", that represents an IP address. Enter the assigned name of the printer in the printer window.	
13.	Select FORWARD .	A list of printer manufacturers is displayed.
14.		The list closes and the GENERIC button is now labeled with the name or initials of the printer manufacturer (Example: if the printer manufacturer is Hewlett-Packard, the

Table 1. Configure a Network Printer. - Continued




STEP	OPERATOR ACTION	INDICATION or CONDITION
	 NOTE When the list of manufacturers is displays, the active up and down arrows appear at the top and bottom of the list. The up/down arrow button at the right of the manufacturer button is only used to open the list. Select the up arrow (at the top of the list) or the down arrow (at the bottom of the list) to display more manufacturers, then select the manufacturer of the network printer to select it.	GENERIC button label will change to HP). A list of available printers for that manufacturer is displayed.
15.	 NOTE If the exact printer model is not listed, select the next higher numbered model. If there is no higher numbered model in the sequence, select the closest model number below it. Use the up/down arrow keys or scroll bar to the right of the printer list to find the model of the printer, then select the model name to highlight it.	The model name is highlighted.
16.	Select FORWARD .	A message appears that states: "About to create the following queue:" with the type, queue name, and the printer name displayed. Verify that the information is correct before proceeding.
17.	Select APPLY to create the printer queue.	A Question dialog box opens, asking if you would like to print a test page.
18.	 NOTE Always print a test page when configuring a new printer to be sure the printer is connected to the print queue. Select YES to print the test page and complete the configuration.	The Printer Configuration window displays again, with a check mark next to the name of the printer queue.
19.	Select ACTION at the top of the window and select QUIT to exit the configuration window.	A Question dialog box opens with the message: "Do you want to save the changes you made to your printer configuration?".

Table 1. Configure a Network Printer. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
20.	Select SAVE to save the new printer configuration or to save changes made to a printer already configured.	The Printer Configuration window closes.

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

CONFIGURE A LOCAL PRINTER

INITIAL SETUP:

Personnel Required

Signal Support System Specialist

Equipment Condition

System is powered on.

System is offline.

Local printer is powered off.

The following procedure describes how to configure a local USB printer with the Create Device.



The USB cable between the FBCB2 Create Device and the local printer will vary in length depending on the layout of the Operations Center. This cable is not included with the Create Device and must be provided by Field Signal Maintenance.



This procedure is valid only for FBCB2 software version 6.4.4.2.

ADJUSTMENT

Table 1. Configure a Local Printer.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Connect one end of the printer USB cable to the local printer USB port.	
2.	Connect the other end of the printer USB cable to either USB port on the Ruggedized Laptop Computer.	
3.	Power up the local printer.	
4.	Select START/FBCB2/SYSADMIN .	The System Administration dialog box opens.
5.	Select the down arrow to the right of the Select User Name box, and select the "fbcadmin" user name.	The word fbcadmin appears in the SELECT USER box.
6.	Enter the password and select CONTINUE .	The System Administration dialog box opens.

Table 1. Configure a Local Printer. - Continued




STEP	OPERATOR ACTION	INDICATION or CONDITION
7.	On the System Administration - Offline dialog box, select the CONFIGURE SYSTEM tab and select CONFIGURE PRINTER .	The Printer Configuration dialog box opens.
8.	Select NEW .	The Add a New Print Queue dialog box opens.
9.	Select FORWARD to continue.	The Queue Name dialog box displays.
10.	 NOTE A printer queue is a list of print jobs that are waiting to be printed on a particular printer. This step creates an empty folder for print jobs to be sent to this printer. The name "printer" is a default name and is highlighted. Enter a new name for the Print Queue in the box and then enter a brief description (optional) to help identify the printer.	
11.	When finished, select FORWARD .	The Queue Type dialog box displays and the Select a Queue Type button is labeled "Locally-connected".
12.	Select the device name "/dev/lp0" to highlight it, then select FORWARD .	The Printer Model dialog box opens.
13.	Select GENERIC .	A list of printer manufacturers displays.
14.	Select the up arrow (at the top of the list) or the down arrow (at the bottom of the list) to display more manufacturers, then select the name of the manufacturer of the local printer to select it.	The list closes and the GENERIC button is now labeled with the name or initials of the printer manufacturer (Example: if the printer manufacturer is Hewlett-Packard, the GENERIC button label will change to HP). A list of available printers for that manufacturer displays.
15.	 NOTE If the exact printer model is not listed, select the next higher numbered model. If there is no higher numbered model in the sequence, select the closest model number below it. Use the up/down arrow keys or scroll bar to the right of the printer list to find the model of the printer, then select the model name to highlight it.	The model name is highlighted.
16.	Select FORWARD .	The message "About to create the following queue:" appears, listing the device name and

Table 1. Configure a Local Printer. - Continued

STEP	OPERATOR ACTION	INDICATION or CONDITION
		the model number.
17.	Select APPLY to create the printer queue.	A Question dialog box opens, asking if you would like to print a test page.
18.	<div> NOTE</div> <p>Always print a test page when configuring a new printer to be sure the printer is receiving data from the print queue.</p> <p>Select YES to print the test page and complete the configuration.</p>	The Printer Configuration dialog box displays again, with a check mark next to the name of the printer.
19.	Select ACTION at the top of the dialog box and select QUIT to exit the configuration dialog box.	A Question dialog box opens with the message: "Do you want to save the changes you made to your printer configuration?".
20.	Select SAVE to save the new printer configuration.	The Printer Configuration box closes.

END OF WORK PACKAGE

FIELD MAINTENANCE INSTRUCTIONS**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****TEST/REPLACE THE USB CABLE****INITIAL SETUP:****Tools and Special Tools**

An/PSM-45A Multimeter or Equivalent

Personnel Required

Signal Support System Specialist

Equipment Condition

USB cable is disconnected from the laptop and from the MDL device.

TEST AND INSPECTION

Figure 1 shows the USB Cable Assembly.

Table 1. Test/Replace the USB Cable Assembly.

STEP	OPERATOR ACTION	INDICATION or CONDITION
1.	Inspect the cable for deep nicks or cuts in the cable jacket, bent or broken pins, and damage to connector shells or cable hardware. Replace the cable if damaged.	
2.	Refer to Figure 2 and check the continuity of each wire between P1 and P2.	
3.	Replace the cable if any reading indicates an open.	

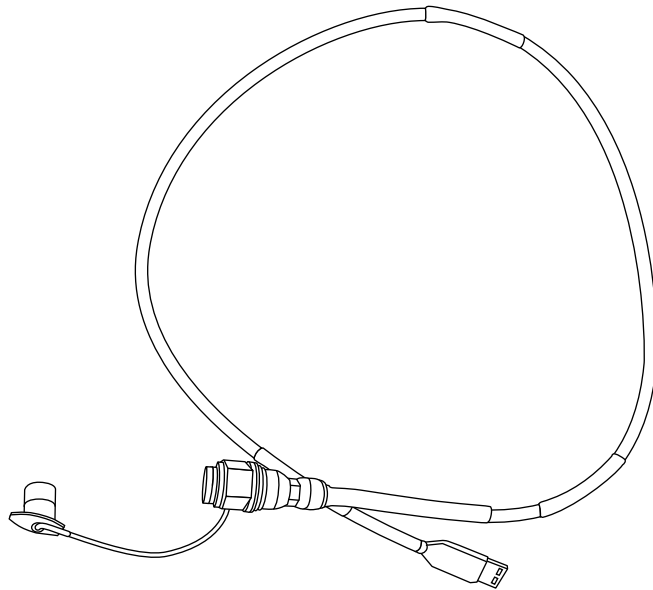


Figure 1. Create Device USB Cable Assembly.



Figure 2. USB Cable Wiring Diagram.

END OF WORK PACKAGE

CHAPTER 7
FIELD PARTS INFORMATION
FOR
AN/GYK-55 CREATE DEVICE

CHAPTER 7
PARTS INFORMATION

WORK PACKAGE INDEX

<u>Title</u>	<u>WP Sequence No.</u>
INTRODUCTION	0073
GROUP 00 COMPUTER SYSTEM, DIGITAL AN/GYK-55	0074
GROUP 01 COMPUTER SET, DIGITAL	0075
SPECIAL TOOLS LIST	0076
NATIONAL STOCK NUMBER LIST	0077
PART NUMBER INDEX	0078

FIELD PARTS INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

INTRODUCTION

Scope

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Operator and Field maintenance of the Computer System, Digital AN/GYK-55. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

GENERAL

In addition to the Introduction work package, this RPSTL work package is divided into the following sections:

1. **Repair Parts List Work Packages.** Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair part kits are listed separately in their own functional group within the Repair Parts List. Repair parts for repairable special tools are also listed in this section.
2. **Special Tools Lists.** Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
3. **Cross-Reference Indexes Work Packages.** There are two cross-reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package, and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO. (Column (1)).

Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)).

The SMR code is a five-position code containing supply/requisition information, maintenance category authorization criteria and disposition instruction, as shown in the following breakout:

Table 1. SMR Code Example.

Source Code	Maintenance Code	Maintenance Code	Recoverability Code
-------------	------------------	------------------	---------------------

Table 1. SMR Code Example. - Continued

Source Code	Maintenance Code	Maintenance Code	Recoverability Code
XX	X	X	X
1st two positions: How to get an item.	3rd position: Who can install, replace, or use the item.	4th position: Who can do complete repair* on the item.	5th position: Who determines disposition action on unserviceable items.

*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

SMR Source Code. The source code tells you how to get an item needed for maintenance, repair or overhaul of an end item/equipment. Explanations of source codes follows:

Table 2. SMR Source Code.


Source Code	Application/Explanation
PA PB PC PD PE PF PG PH PR PZ	<div style="text-align: center;">  NOTE </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Items coded PC are subject to deterioration. </div> <p>Stock items: use the applicable NSN to request/requisition items with these source codes. They are authorized to the level indicated by the code entered in the third position of the SMR code.</p>
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.
MO-Made at Unit/ AMC level MF-Made at DS/ASB level MH-Made at sustain- ment level ML-Made at SRA/ TASMG level MD-Made at Depot	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material, which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the third position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
AO-Assembled by unit/AMC level AF-Assembled by DS/ASB level AH-Assembled by sustainment level AL-Assembled by SRA/TASMG AD-Assembled by Depot	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the third position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.

Table 2. SMR Source Code. - Continued

Source Code	Application/Explanation
XA	Do not requisition an 'XA' coded item. Order its next higher assembly. (Refer to NOTE below.)
XB	If an item is not available from salvage, order it using the CAGEC and part number.
XC	Installation drawings, diagrams, instruction sheets, field service drawings, identified by manufacturer's part number.
XD	Item is not stocked. Order an XD-coded item through local purchase or normal supply channels using the CAGEC and part number given, if no NSN is available.



Cannibalization or controlled exchange, when authorized, may be used as source of supply for items with the above source codes, except for those source-coded 'XA' or those aircraft support items restricted by requirements of AR 750-1.

Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance:

Table 3. Third Position.

Mainten- ance Code	Application/Explanation
O	Unit level/AMC maintenance can remove, replace and use the item. (Refer to NOTE below.)
F	Direct support/ASB maintenance can remove, replace and use the item.
H	Sustainment maintenance can remove, replace and use the item.
L	Specialized repair activity/TASMG can remove, replace and use the item.
K	Contractor facility can remove, replace and use the item.
Z	Item is not authorized to be removed, replaced, or used at any maintenance level.
D	Depot category can remove, replace and use the item.



Army may use C in the third position. However, for joint service publications, Army will use O.

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

**NOTE**

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Table 4. Fourth Position.

Mainten- ance Code	Application/Explanation
O	Unit/AMC is the lowest level that can do complete repair of the item.
F	Direct support/ASB is the lowest level that can do complete repair of the item.
H	Sustainment is the lowest level that can do complete repair of the item.
L	Specialized repair activity/TASMG (enter specialized repair activity or TASMG designator) is the lowest level that can do complete repair of the item.
D	Depot is the lowest level that can do complete repair of the item.
K	Complete repair is done at contractor facility
Z	Nonrepairable. No repair is authorized.
B	No repair is authorized. No parts or special tools are authorized for maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

Table 5. Recoverability Code.

Recoverability Code	Application/Explanation
Z	Nonrepairable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
O	Reparable item. When uneconomically repairable, condemn and dispose of the item at the service/AMC level.
F	Reparable item. When uneconomically repairable, condemn and dispose of the item at the field level/ASB.
H	Reparable item. When uneconomically repairable, condemn and dispose of the item at the below depot sustainment level.
D	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
L	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA) or theater aviation sustainment maintenance group (TASMG).
A	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.
K	Reparable item. Condemnation and disposal to be performed at contractor facility.

NSN (Column (3)).

The NSN for the item is listed in this column.

CAGEC (Column (4)).

The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

PART NUMBER (Column (5)).

Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.



NOTE

When you use an NSN to requisition an item, the item you receive may have a different part number from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)).

This column includes the following information:

1. The federal item name and, when required, a minimum description to identify the item.
2. Part numbers of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from Electro-Magnetic Pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the Parts List and the Special Tools List.

QTY (Column (7)).

The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package. NSNs in this index are listed in National Item Identification Number (NIIN) sequence.

STOCK NUMBER Column.

This column lists the NSN in NIIN sequence. The NIIN consists of the last nine digits of the NSN. When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number. For example, if the NSN is 5385-01-574-1476, the NIIN is 01-574-1476.

FIG. Column

This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

ITEM Column

The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

2. Part Number (P/N) Index Work Package. Part numbers in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

PART NUMBER Column.

Indicates the part number assigned to the item.

FIG. Column.

This column lists the work package number and the figure number where the item is identified/located.

ITEM Column.

The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

SPECIAL INFORMATION

UOC

The UOC appears in the lower left corner of the Description Column heading. Usable on codes are shown as "UOC:..." in the Description Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOCs used in the RPSTL are:

Usable On Code

Code	Used On
88F	AN/GYK-55

Fabrication Instructions

Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers for bulk material are also referenced in the Description Column of the line item entry for the item to be manufactured/fabricated.

Index Numbers

Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN/Part Number (P/N) Index work packages and the bulk material list in the repair parts list work package.

HOW TO LOCATE SPARE PARTS

When NSNs Or Part Numbers Are Not Known

1. Using the table of contents, determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.
2. Find the figure covering the functional group or the subfunctional group to which the item belongs.
3. Identify the item on the figure and note the number(s).
4. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.

When NSN Is Known

1. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.
2. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

When Part Number (P/N) Is Known

1. If you have the part number and not the NSN, look in the PART NUMBER column of the part number index work package. Identify the figure and item number.

2. Look up the item on the figure in the applicable repair parts list work package.

END OF WORK PACKAGE

FIELD PARTS INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

GROUP 00 COMPUTER SYSTEM, DIGITAL AN/GYK-55

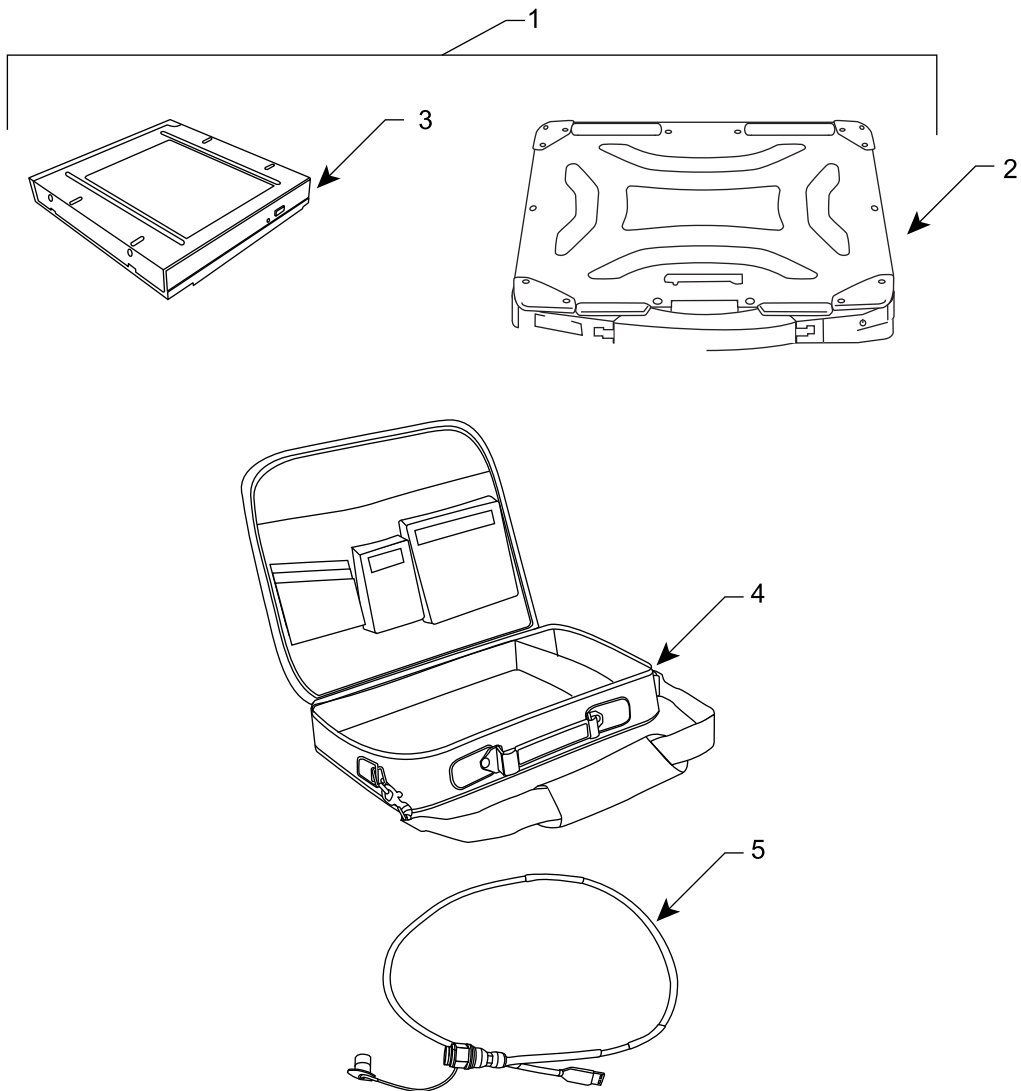


Figure 1. Computer System, Digital AN/GYK-55.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 00 COMPUTER SYSTEM, DIGITAL, AN/GYK-55	
					Figure 1	
1	PDODD	7021-01-538-4247	8Y261	000000000000848	COMPUTER, DIGITAL	1
2	PDODD	7021-01-556-9062	0J4G8	CF-29NTQGZBM	COMPUTER, DIGITAL	1
3	PAOZZ	7025-01-481-5471	54473	CF-VDR291U	DISK DRIVE UNIT	1
4	PAOZZ	7035-01-412-0004	09LB4	CN01/0CN1	CASE, COMPUTER	1
5	PAOZZ	5995-01-513-6586	0J198	889495-1	CABLE ASSEMBLY, SPEC	1

END OF FIGURE

END OF WORK PACKAGE

FIELD PARTS INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

GROUP 01 COMPUTER SET, DIGITAL

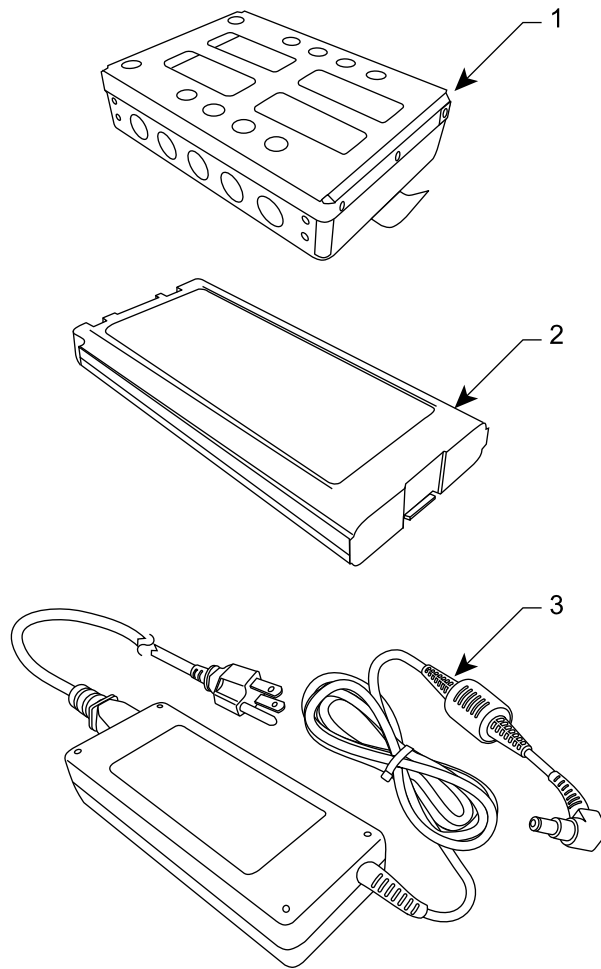


Figure 2. Computer Set, Digital.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 01 COMPUTER SET, DIGITAL	
					Figure 2	
1	PAOZZ	7025-01-556-7294	8Y261	CF-K29HD8041	DISK DRIVE UNIT	1
2	PAOZZ	6140-01-539-0599	8Y261	CF-VZSU29AU	BATTERY	1
3	PAOZZ	6130-01-519-5565	0J4G8	CF-AA1653AM	POWER SUPPLY	1

END OF FIGURE

END OF WORK PACKAGE

FIELD PARTS INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

SPECIAL TOOLS LIST (NOT APPLICABLE)

END OF WORK PACKAGE

FIELD PARTS INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
7035-01-412-0004	1	4
7025-01-481-5471	1	3
5995-01-513-6586	1	5
6130-01-519-5565	Figure 2	3
7021-01-538-4247	1	1
6140-01-539-0599	Figure 2	2
7025-01-556-7294	Figure 2	1
7021-01-556-9062	1	2

END OF WORK PACKAGE

FIELD PARTS INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

PART NUMBER INDEX

PART NUMBER	FIG.	ITEM
0000000000000848	Figure 1	1
889495-1	Figure 1	5
CF-29NTQGZBM	Figure 1	2
CF-AA1653AM	Figure 2	3
CF-K29HD8041	Figure 2	1
CF-VDR291U	Figure 1	3
CF-VZSU29AU	Figure 2	2
CN01/OCN1	1	4

END OF WORK PACKAGE

CHAPTER 8

FIELD SUPPORTING INFORMATION

FOR

AN/GYK-55 CREATE DEVICE

CHAPTER 8
SUPPORTING INFORMATION

WORK PACKAGE INDEX

<u>Title</u>	<u>WP Sequence No.</u>
REFERENCES	0079
MAINTENANCE ALLOCATION CHART (MAC) INTRODUCTION.	0080
MAINTENANCE ALLOCATION CHART (MAC).	0081
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEM (BII) LISTS	0082
ADDITIONAL AUTHORIZATION LIST (AAL)	0083
EXPENDABLE AND DURABLE ITEMS LIST	0084

FIELD SUPPORTING INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2)-BLUE FORCE TRACKING (BFT)
CREATE DEVICE COMPUTER SYSTEM, DIGITAL

REFERENCES

SCOPE

This work package lists documents referenced in this manual plus additional documents that support the FBCB2 system and its mission.

ARMY PUBLICATIONS

AR 380-5	Department of the Army Information Security Program
AR 25-2	Information Assurance
AR 190-13	The Army Information Security Program
AR 700-138	Army Logistics Readiness and Sustainability
AR 735-11-2	Reporting of Supply Discrepancies
ASTM-D3951-90	Packaging, Commercial
DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms
DA PAM 738-750	Functional Users Manual for the Army Maintenance Management System (TAMMS)
DLAR 4140.55	Reporting of Item and Packaging Discrepancies
FM 3-5	NBC Decontamination
FM 4-25.11	First Aid for Soldiers
MIL-HDBK-783 (EA)	Chemical and Biological (CB) Contamination Avoidance and Decontamination
TB 385-4	Safety Requirements for Maintenance of Electrical and Electronic Equipment
TM 11-5825-291-13	Satellite Signals Navigation Set AN/PSN-11
TM 11-5825-283-20&P	Unit Maintenance Manual- Part of Enhanced Position Location Reporting System
TM 43-0158	General Repair of Electrical Components
TM 750-244-2	Procedures for Destruction of Electronic Material to Prevent Enemy Use
TM 11-5825-299-10	Operator's Manual AN/PSQ-6D Enhanced Position Report System
TM 11-5820-890-10-3	Operator's Manual SINCGARS Ground Combat Net Radio, ICOM
TM 11-5820-1130-12&P	Radio Set AN/PSC-5 Spitfire
TM 3-6665-321-12&P	Operator's and Unit Maintenance Manual Alarm, Chemical Agent, Automatic M22
TM 11-7010-266-12&P	Computer System, Digital AN/TYQ-45(2) Maneuver Control System
TM 11-7010-336-12&P	All Source Analysis System AN/TYQ-93(V)4 ASAS Light
TM 11-7025-317-10-4	Initial Fire Support Automatic System (IFSAS) AN/GYK-37(V)1

TM 11-7010-213-12	Tactical Army Combat Service Support Computer System AN/TYQ-33 (V)
TM 3-6665-310-10	Alarm Monitor Group (MICAD) NBC Tactical vehicle/Area Warning M32
TM 11-5820-890-10-8	SINGARS GROUND COMBAT NET RADIO, ICOM - OPERATORS MANUAL FOR AN/PRC-119A/D/F, AN/VRC-87A/D/F, AN/V/R/C-87C, AN/VRC-88A/D/F, AN/VRC-89A/D/F, AN/VRC-90A/D/F, AN/VRC-91A/D/F and AN/VRC-92A/D/F

MARINE CORPS PUBLICATIONS

MCO 4855.10	Product Quality Deficiency Report (PQDR)
TM-3080.12	Corrosion Control of Ground Equipment
TM 4700-15/1	Ground Equipment Record Procedures

COMMERCIAL PUBLICATIONS

D3951-90	Standard Practice for Commercial Packaging
DataFast D-101	Handheld Disk Duplication Unit User's Manual
DataFast D-105	Desktop Disk Duplication Unit User's Manual

FORMS

DA Form 2404	Equipment Inspection and Maintenance Worksheet
DA Form 2407	Maintenance Request
DA Form 2028	Recommended Changes to Publications
DA Form 5988E	Automated Equipment Inspection and Maintenance Worksheet
SF 368	Product Quality Deficiency Report

END OF WORK PACKAGE

FIELD SUPPORTING INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE**

INTRODUCTION TO MAINTENANCE ALLOCATION CHART (MAC)

THE ARMY MAINTENANCE SYSTEM MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

This MAC (WP 0081) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field includes three subcolumns, Crew Maintenance (C), Service Maintenance (O) and Field Maintenance (F).

Sustainment includes two subcolumns, Below Depot (H) and Depot (D).

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) and support equipment required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

MAINTENANCE FUNCTIONS

Maintenance Functions are limited to and defined as follows:

- a. **Inspect.** To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes scheduled inspection and gaging and evaluation of cannon tubes.
- b. **Test.** To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, e.g. load testing of lift devices and hydrostatic testing of pressure hoses.
- c. **Service.** Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
 - a. **Unpack.** To remove from packing box for service or when required for the performance of maintenance operations.
 - b. **Repack.** To return item to packing box after service and other maintenance operations.
 - c. **Clean.** To rid the item of contamination.
 - d. **Touch up.** To spot paint scratched or blistered surfaces.
 - e. **Mark.** To restore obliterated identification.
- d. **Adjust.** To maintain or regulate, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.
- e. **Align.** To adjust specified variable elements of an item to bring about optimum or desired performance.
- f. **Calibrate.** To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the

accuracy of the instrument being compared.

- g. **Remove/Install.** To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
- h. **Paint (ammunition only).** To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
- i. **Replace.** To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and the assigned maintenance level is shown as the 3d position code of the Source Maintenance and Recoverability (SMR) code.
- j. **Repair.** The application of maintenance services including fault location/troubleshooting, removal/installation and disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.



The following definitions are applicable to the repair maintenance function:

Services - inspect, test, service, adjust, align, calibrate, and/or replace.

Fault Location/Troubleshooting - The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or unit under test (UUT).

Disassembly/Assembly - The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions - welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

- k. **Overhaul.** That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
- l. **Rebuild.** Consists of those services/actions necessary for an restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

EXPLANATION OF COLUMNS IN THE MAC

Column (1) Group Number. Column (1) lists functional group code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in Column (2). (For a detailed explanation of these functions refer to Maintenance Functions outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as man hours in whole hours or decimals) in the appropriate subcolumns. This work time figure represents the active time required to perform that

maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

Field

Term	Definition
C	Operator or Crew Maintenance
F	Field Maintenance
O	Service

Sustainment

Term	Definition
D	Depot Maintenance
H	Below Depot Maintenance
L (see NOTE below)	Specialized Repair Activity (SRA)



The L maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by work time figures in the H column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Test Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test/Measurement/Diagnostic Equipment (TMDE), and special tools, special TMDE, and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table (TOOLS AND TEST EQUIPMENT).

Column (6) Remarks. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries (Remarks).

EXPLANATION OF COLUMNS IN THE TOOLS AND TEST EQUIPMENT REQUIREMENTS

Column (1) Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) Nomenclature. Name or identification of the tool or test equipment.

Column (4) National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) Tool Number. The manufacturer's part number, model number, or type number.

EXPLANATION OF COLUMNS IN THE REMARKS

Column (1) Remarks Code. The code recorded in column (6) of the MAC(WP 0081).

Column (2) Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

END OF WORK PACKAGE

UNIT LEVEL SUPPORTING INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for Create Device.

(1)

TOOLS OR TEST EQUIPMENT	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
N/A				

REMARK CODES	REMARKS
A	REPAIR VIA FAULT ISOLATION AND REMOVAL/REPLACEMENT OF DEFECTIVE PANASONIC TOUGHBOOK, J1 CABLE, DVD ROM, OR TRANSIT BAG.
B	REPAIR VIA FAULT ISOLATION AND REMOVAL/REPLACEMENT OF DEFECTIVE HARD DRIVE, BATTERY PACK OR POWER SUPPLY.
C	THE PANASONIC TOUGHBOOK COMPUTER IS A WARRANTY REPAIR ITEM AND SHOULD BE EVACUATED TO THE REPAIR SITE NEAREST THE OWNING ORGANIZATION. (toughbook_tech_support@us.panasonic.com 'mailto:toughbook_tech_support@us.panasonic.com', or call 1-800-LAPTOP5 (1-800-527-8675), - Iraq Kuwait 965-244-9590, - Afghanistan 937-920-3534, - Europe 492-115-239-1405)

END OF WORK PACKAGE

FIELD SUPPORTING INFORMATION

FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

INTRODUCTION

Scope

This work package provides the COEI and BII lists for the AN/GYK-55 Create Device Digital Computer Set to help you inventory items for safe and efficient operation of the equipment.

Components of End Item (COEI) List. This list is for information purposes only and is not authority to requisition replacements. These items are part of the AN/GYK-55 Create Device Digital Computer Set. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII) List. These essential items are required to place the AN/GYK-55 Create Device Digital Computer Set in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the AN/GYK-55 Create Device Digital Computer Set during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns in the COEI List and BII List. The following provides an explanation of columns found in Tables 1 and 2:

Column (1) Illus Number. Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

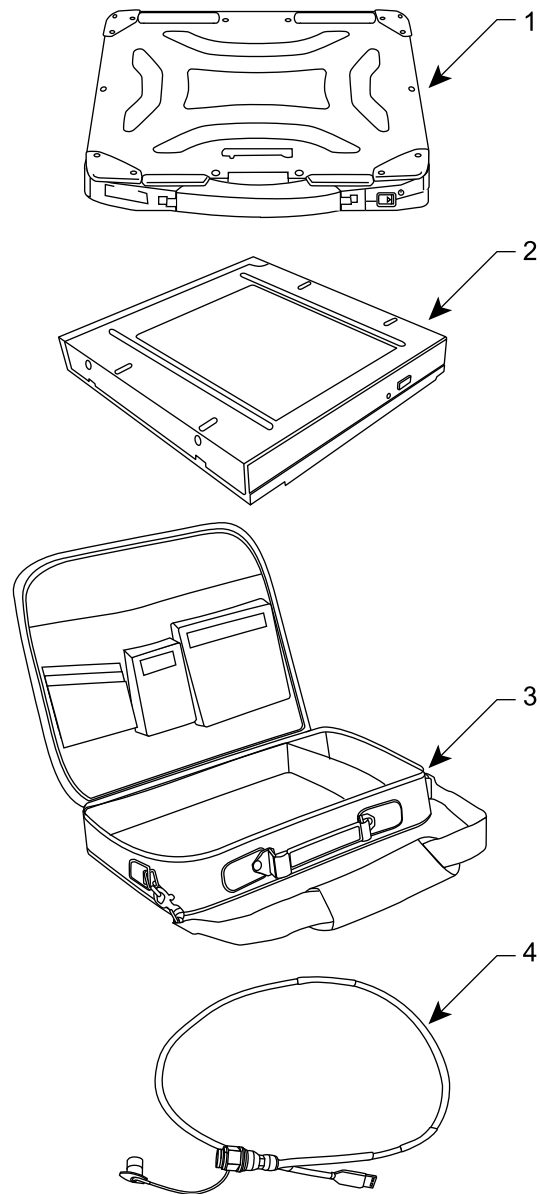
Column (3) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (4) Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. These codes are identified as follows:

CODE	USED ON
88F	AN/GYK-55 CREATE DEVICE DIGITAL COMPUTER SET

Column (5) U/I. Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr. Indicates the quantity required.



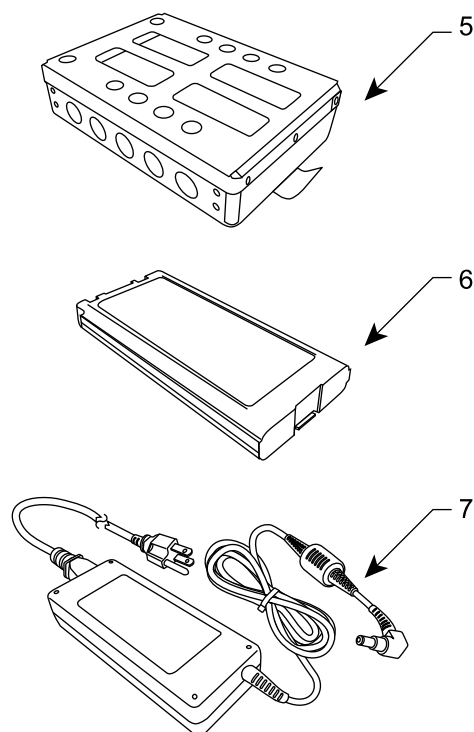


Table 1. Components of End Item List.

(1) Illus Number	(2) National Stock Number (NSN)	(3) Description, Part Number / (CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
1	7021-01-556-9062	COMPUTER, DIGITAL CF-29NTQGZBM (0J4G8)	88F	EA	1
2	7024-01-481-5471	DISK DRIVE UNIT CF-VDR291U (54473)	88F	EA	1
3	7035-01-412-0004	CASE, COMPUTER CN01/OCN1 (09LB4)	88F	EA	1
4	5995-01-513-6586	CABLE ASSEMBLY 889495-1 (0J198)	88F	EA	1
5	7025-01-534-4608	DISK DRIVE UNIT CF-K29HD6041 (8Y261)	88F	EA	1
6	6140-01-539-0599	BATTERY CF-VZSU29AU (8Y261)	88F	EA	1

Table 1. Components of End Item List. - Continued

(1) Illus Number	(2) National Stock Number (NSN)	(3) Description, Part Number / (CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
7	6130-01-519-5565	POWER SUPPLY CF-AA1653AM (0J4G8)	88F	EA	1

Table 2. Basic Issue Items List.

(1) Illus Number	(2) National Stock Number (NSN)	(3) Description, Part Number / (CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
1		NOT APPLICABLE			-

END OF WORK PACKAGE

OPERATOR SUPPORTING INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****ADDITIONAL AUTHORIZATION LIST (AAL)****INTRODUCTION****Scope**

This appendix lists additional items you are authorized for the support of the AN/GYK-55 Computer System.

General

The Additional Authorization List (AAL) identifies items that do not have to accompany the AN/GYK-55 Computer System and that do not have to be turned in with it. These items are all authorized to you by the Common Table of Allowance (CTA), Modified Table or Organization and Equipment (MTOE), Table of Distribution and Allowances (TDA), or Joint Table of Allowances (JTA).

Explanation of Columns

Column (1) - National Stock Number (NSN). Identifies the stock number, if any, of the item to be used for requisitioning purposes.

Column (2) - Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (3) - Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. These codes are identified in the following table.

Column (4) - Unit of Issue (U/I). Indicates the physical measurement or count of the item as issued per the National Stock Number (NSN) shown in column (1), if any.

Column (5) - Qty Recm. Indicates the quantity recommended.

Table 1. Additional Authorization List.

(1) National Stock Number (NSN)	(2) Description, Part Number / (CAGEC)	(3) Usable On Code	(4) U/I	(5) Qty Recm
	NOT APPLICABLE			1

END OF WORK PACKAGE

FIELD SUPPORTING INFORMATION**FORCE XXI BATTLE COMMAND BRIGADE-AND-BELOW (FBCB2) AN/GYK-55 CREATE DEVICE****EXPENDABLE AND DURABLE ITEMS LIST****INTRODUCTION****Scope**

This appendix lists expendable and durable items that you will need to operate and maintain the system. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), CTA 50-909, Field and Garrison Furnishings and Equipment or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Items List

Column (1) - Item No. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid (WP 0098, item 5)).

Column (2) - Level. This column identifies the lowest level of maintenance that requires the listed item. C = Operator/Crew, F = Field Maintenance

Column (3) - National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) - Item Name, Description, Part Number/(CAGEC). This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (5) - U/I. Unit of Issue (U/I) code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

Table 1. Expendable and Durable Items List.

(1) Item No.	(2) Level	(3) National Stock Number (NSN)	(4) Item Name, Description, Part Number / (CAGEC)	(5) U/I
1	C		Soft Cloth, Laptop Laptop touchscreen Cloth 889499-1	1 EA
2	C	7520-01-484-1219	Stylus Pen, Panasonic Stylus Pen CF-VNP002U	1 EA

END OF WORK PACKAGE

GLOSSARY

GLOSSARY OF TERMS

Term	Definition
Ancillary Equipment	Electronic equipment that connects to the primary system but is not officially part of the primary system.
Multimedia Pocket Device	The commercial designation for the removable floppy drive, CD/DVD drive or additional battery pack that is inserted into the multimedia pocket device compartment on the left side of the Ruggedized Laptop Computer.

TO: (Forward to proponent of publication or form) (Include ZIP Code)				FROM: (Activity and location) (Include ZIP Code)			DATE	
PART II- REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS								
PUBLICATION/FORM NUMBER				DATE		TITLE		
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
<div style="position: relative; height: 300px;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%) rotate(-45deg); font-size: 100px; opacity: 0.5;">EXAMPLE</div> </div>								
PART III - REMARKS (Any general remarks, recommendations, or suggestions for improvement of publications and blank form for additional remarks may be used if more space is needed.)								
TYPED NAME, GRADE OR TITLE			TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION			SIGNATURE		

TO: <i>(Forward to proponent of publication or form) (Include ZIP Code)</i>				FROM: <i>(Activity and location) (Include ZIP Code)</i>			DATE	
PART II- REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS								
PUBLICATION/FORM NUMBER				DATE		TITLE		
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
PART III - REMARKS <i>(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)</i>								
TYPED NAME, GRADE OR TITLE			TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION			SIGNATURE		

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS <small>For use of this form, see AR 25-30; the proponent agency is OAASA</small>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: (Forward to proponent of publication or form) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)	
PART I - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER						DATE	TITLE
ITEM	PAGE	PARA-GRAPH	LINE	FIGURE NO.	TABLE	RECOMMENDED CHANGES AND REASON	
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

TO: <i>(Forward to proponent of publication or form) (Include ZIP Code)</i>				FROM: <i>(Activity and location) (Include ZIP Code)</i>			DATE	
PART II- REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS								
PUBLICATION/FORM NUMBER				DATE		TITLE		
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
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TM 70XX-XXX-XX

By Order of the Secretary of the Army:

Official:

To Be Supplied

PETER SCHOOMAKER
General, United States Army
Chief of Staff

- JOEL B. HUDSON
*Administrative Assistant to the
Secretary of the Army*

Distribution:

To be distributed in accordance with the initial distribution number (IDN) 361142 requirements
for TM 70XX-XXX-XX

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeter = 0.01 Meters = 0.3937 inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 inches
 1 kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 100 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.81 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeter = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

$5/9 (^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5 ^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches.....	Centimeters.....	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters.....	0.836
Square Miles	Square Kilometers.....	2.590
Acres	Square Hectometers	0.405
Cubic Feet.....	Cubic Meters	0.028
Cubic Yards.....	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.350
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters.....	1.356
Pounds per Square Inch	Kilo pascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters.....	Inches.....	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters.....	Square Feet	10.763
Square Meters.....	Square Yards	1.196
Square Kilometers.....	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet.....	35.714
Cubic Meters	Cubic Yards.....	1.307
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters.....	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.204
Metric Tons	Short Tons	1.102
Newton-Meters.....	Pound-Feet	0.738
Kilo pascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.352
Kilometers per Hour	Miles per Hour	0.621

