

SAMPLE MONTHLY TRAINING SUMMARY

NAVAL COMMUNICATIONS SECURITY MATERIAL SYSTEM
1560 Colorado Avenue
Andrews AFB, MD 20762-6108



EKMS 5

**CRYPTOGRAPHIC EQUIPMENT
INFORMATION/GUIDANCE MANUAL**




DEPARTMENT OF THE NAVY
NAVAL COMMUNICATIONS SECURITY MATERIAL SYSTEM
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From: Commanding Officer, Naval Communications Security
Material System

Subj: EKMS 5 LETTER OF PROMULGATION

1. PURPOSE. EKMS 5 amplifies the policies and procedures for issuing, accounting, handling, safeguarding, and disposing of Communications Security (COMSEC) material contained in EKMS 1 (series).
2. APPLICABILITY. The policies and procedures contained herein apply to COMSEC material held by Navy, Military Sealift Command, Marine Corps, and Coast Guard Electronic Key Management System (EKMS) accounts and their subordinate Local Elements (LE). These provisions are applicable to all personnel whose duties require access to or the use of COMSEC material. Persons involved in the handling of COMSEC material must be aware that non-compliance or deviation from the prescribed procedures can jeopardize the security of the United States and could result in prosecution of the parties concerned under the espionage laws, Title 18, U.S.C, Sections 793, 794, and 798.
3. SCOPE. The guidance in this manual is derived from policy and procedures set forth in national COMSEC doctrinal publications. Guidance herein supplements, but in no way alters or amends, the provisions of U.S. Navy Regulations, SECNAV M-5510.30, SECNAV M-5510.36 and EKMS 1 (series).
4. ACTION. EKMS 5 is effective upon receipt and supersedes CMS-5A, which is authorized for destruction.
5. REPRODUCTION. EKMS 5 is authorized for reproduction and use in any operational environment. EKMS 5 is a web-based publication available for viewing and downloading via NCMS websites [http://www.ncms.navy.\(smil\).mil](http://www.ncms.navy.(smil).mil).
6. COMMENTS. Comments, recommendations, and suggestions for changes to the procedures herein should be submitted to Naval Communications Security Material System (NCMS).


W. BOOZER

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CHAPTER 1 - COMMUNICATIONS SECURITY (COMSEC) MATERIAL CONTROL SYSTEM (CMCS)

101 APPLICATION OF POLICY AND PROCEDURES IN EKMS 5

The policies and procedures contained in this manual apply to all personnel of the Navy, Marine Corps, Coast Guard and Military Sealift Command who receive, store and use COMSEC equipment. Proper and conscientious application of these policies and procedures will ensure the required physical security and accounting controls for COMSEC equipment and will prevent the material from being compromised through loss, inadequate security protections, or improper or inadequate accounting records. However, this publication cannot address every conceivable situation that might arise in day-to-day operation. When unusual situations arise, the basic tenets of physical security, proper accounting controls, good judgment and common sense will protect the COMSEC material. Instructions or guidance should then be requested from Naval Communications Security Material System (NCMS).

102 SCOPE OF EKMS 5

This manual is a reference for Commanding Officers, Electronic Key Management System (EKMS) Managers, maintenance personnel and users of COMSEC equipment. Chapter 1 contains information on policies applicable to all personnel associated with COMSEC equipment. Chapter 2 provides policy for use by the EKMS Manager while Chapters 3 through 6 and the annexes are applicable to EKMS Managers, maintenance personnel and COMSEC equipment users.

103 INTRODUCTION TO THE COMMUNICATIONS SECURITY MATERIAL CONTROL SYSTEM (CMCS)

a. COMSEC material is that material used to protect U.S. Government transmissions, communications, and the processing of classified or sensitive unclassified information related to national security from unauthorized persons and that material used to ensure the authenticity of such communications.

b. The protection of vital and sensitive information moving over government communications systems is crucial to the effective conduct of the government and specifically to the planning and execution of military operations. To this end, a system has been established to distribute, control, and safeguard COMSEC material. This system, which consists of production facilities, COMSEC Central Offices of Record (COR), Service Authority (SA), distribution facilities (i.e., CMIO, depots), and EKMS accounts, is known collectively as the CMCS.

c. Naval Communications Security Material System (NCMS) operates the CMCS and functions as the Navy SA and COR to provide accountability controls for COMSEC material used throughout the Department of the Navy (DoN), United States Coast Guard (USCG) and Military Sealift Command (MSC).

NOTE: Throughout this manual, "DoN," for COMSEC purposes, applies to U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, and Military Sealift Command unless otherwise indicated.

104 INTRODUCTION TO THE ELECTRONIC KEY MANAGEMENT SYSTEM (EKMS)

EKMS is an interoperable collection of systems, facilities, and components developed by the National Security Agency (NSA), the Military Services and agencies of the U.S. Government to automate the planning, ordering, filling, generation, distribution, accountability, storage, usage, destruction and management of electronic key and other types of COMSEC material. The overall EKMS architecture consists of four layers or tiers. Descriptions and functionality of the four tiers are identified in EKMS 1 Chapter 1.

105 COMSEC EQUIPMENT PUBLICATIONS (KAM/SAM/KAO/LMM)

Publications associated with COMSEC equipment are Cryptographic Operational Maintenance Manuals (KAM), that contain maintenance criteria for their related equipment; Special Purpose Operational Maintenance Manuals (SAM), containing maintenance procedures for COMSEC test equipment; Cryptographic Operational Operating Manuals (KAO), that contain operating instructions for COMSEC equipment; and Limited Maintenance Manuals (LMM), that are unclassified versions of the limited maintenance KAM. LMMs are distributed outside the CMCS and can be obtained through the supply system.

a. **KAM manuals** are divided into three basic classes; depot, full, and limited maintenance manuals. Normally depot and full level manuals will only be issued to Cryptographic Repair Facilities (CRFs). Limited maintenance manuals are available to those activities having a limited maintenance technician qualified in the repair of the COMSEC equipment associated with the KAM.

b. **KAO manuals** contain operating instructions for a variety of COMSEC equipment and are provided with the initial issue of the equipment. Not all equipment has an associated KAO (e.g., KYV 5), and future plans are to replace the KAO with non-CMCS accountable laminated cards containing abbreviated operating instructions.

c. **LMMs** are unclassified documents that will replace the limited maintenance KAM for a variety of COMSEC equipment. LMMs are available for issue through the Naval Logistics Library webpage. These manuals will not be stocked or issued by NCMS or the COMSEC Material Issuing Office (CMIO).

106 CLASSIFICATION GUIDELINES

a. The assignment of classification to COMSEC equipment is a Director, National Security Agency (DIRNSA) responsibility, and the following guidelines shall not be construed as authority for COMSEC equipment classification assignment by any other command or agency within the DON.

b. In some cases, maintenance manuals and other documents that provide detailed schematics (or other descriptions of cryptologic circuits) of equipment may be classified higher than the equipment to which the manual or documents refer.

c. Operational COMSEC equipment is UNCLASSIFIED for external viewing when all appropriate covers are in place and no keying material is visible. Appropriate measures shall be taken to prevent unauthorized access to COMSEC equipment; however, casual external viewing of the equipment by uncleared personnel, both by accident or operational necessity, is not a COMSEC incident and need not be reported.

d. Photographs of external views of COMSEC equipment and other UNCLASSIFIED information concerning COMSEC equipment are government information and shall be marked "FOR OFFICIAL USE ONLY." COMSEC equipment and associated material shall not be publicly discussed or exhibited and will not be released to news media.

e. The classification of COMSEC material is indicated by the standard classification markings: Top Secret (TS), Secret (S), Confidential (C), or Unclassified (U). The security classification assigned to COMSEC material determines its storage and access requirements. Controlled Cryptographic Item (CCI) is the designator which identifies secure telecommunications or information handling equipment, or an associated cryptographic component, which is unclassified but controlled within the CMCS.

107 ACCOUNTING GUIDELINES

a. As with COMSEC keying material, COMSEC equipment is assigned an Accounting Legend (AL) Code (ALC) to provide specific accountability within the CMCS. These ALC's are assigned as a matter of national policy by NSA.

b. All classified COMSEC equipment and that equipment designated as CCI are, by national policy, assigned ALC 1 or ALC 2, requiring accountability of each individual equipment or component by serial number or quantity.

c. Most ancillary equipment is assigned ALC 2, requiring accounting by quantity, but some are assigned (by national policy) ALC 4, which requires report of initial receipt followed by local accountability thereafter.

d. Within the DON, COMSEC equipment is both accounted for and managed within the CMCS.

e. Micro-miniaturization has led to the embedding of COMSEC functions within an End Cryptographic Unit (ECU). The embedded item is normally CCI and requires accounting within the CMCS. This is discussed in detail in chapter 6.

108 INVENTORY REQUIREMENTS

EKMS accounts must conduct a COMSEC equipment and publications inventory annually, upon a change of custodian, and upon a change of command. Annual inventories of COMSEC equipment will normally be conducted along with the routine inventory conducted during the first six months of the calendar year. Detailed inventory requirements and procedures are contained in EKMS 1.

109 PAGE CHECK REQUIREMENTS

a. Repair kits must be page checked upon initial receipt, during annual (fixed-cycle) and combined inventories, and before transfer or issue to a user. Items within repair kits that must be inventoried are listed in Annex D. It is recommended that repair kits be kept locked with an installed lock or locally procured padlock to preclude accidental loss of individual repair kit components.

b. Maintenance personnel/users must inventory all components contained within a repair kit upon initial local custody receipt and upon return of the repair kit to the EKMS Manager.

110 COMSEC EQUIPMENT STORAGE

Because of a special configuration or capability, COMSEC equipment may require special storage facilities and procedures that will normally be addressed in the handling and security doctrine for the specific system. The following general procedures apply for storage of COMSEC equipment:

a. When keyed, COMSEC equipment is classified at the level of the keying material contained within the equipment, or the classification of the equipment, whichever is higher. Two Person Integrity (TPI) is not required for unkeyed COMSEC equipment or if it contains non-extractable keying material. Equipment that produce electronic key (KG 83, KGX 93), and fill devices (i.e., KYK 13, KYX 15, AN CYZ 10, AN PYQ 10 C, KIK 20) when loaded with keying material may require TPI.

b. Unkeyed classified COMSEC equipment should be stored as prescribed for other classified material of the same classification.

c. Unclassified, unkeyed equipment, including CCI, should be stored in a manner that affords protection equal to that which is normally provided to other high value or sensitive material and is sufficient to preclude any reasonable chance of pilferage, theft, sabotage, tampering, or access by unauthorized persons.

d. All batteries must be removed from COMSEC equipment prior to storage.

e. Storage requirements for COMSEC non-keying material, including equipment related manuals, are the same as for classified non-COMSEC material of equal classification. See SECNAVINST 5510.36 for requirements for storage of non-COMSEC classified material.

f. Self-contained communications vans secured with locks and/or stored within locked and/or guarded compounds where the probability of theft or tampering is negligible provide sufficient protection for the storage of CCI equipment.

g. Procedures for safeguarding transportable and mobile COMSEC facilities (e.g., aircraft, tanks, communications vans, or mobile key distribution center (KDC)) are located in EKMS 1.

111 COMSEC EQUIPMENT MAINTENANCE TRAINING

a. Subsequent training is governed by DODINST 4660.2 and amplified by OPNAVINST 2221.3.

b. Within DoN, all COMSEC equipment maintenance personnel, including limited maintenance technicians, must have completed a formal course of instruction on the equipment to be maintained and have a current DD 1435 (figure 1-1), Record of Training, filed in the technician's service record. You can download this form via web site:

www.dtic.mil/whs/directives/infomgt/forms/eforms/dd1435.pdf

c. Commanding Officers may, when operational circumstances dictate, authorize non-qualified technicians to perform limited maintenance on COMSEC equipment. Each instance should be reported to NCMS for evaluation and the equipment sent to a CRF for examination at the earliest opportunity.

d. Internal strapping of COMSEC equipment may be performed by a technician who has attended a formal course of instruction on any COMSEC equipment. Example: A KG 36 limited maintenance technician may perform internal strapping functions on the KG 84C equipment.

112 Release of COMSEC Material to a Contractor Account

a. U.S. Government COMSEC operations are normally conducted by U.S. Government personnel. However, when there is a

valid need and it is clearly in the best interest of the DON and the U.S. Government, COMSEC equipment, keying material (including manual COMSEC systems), related COMSEC information, and access to classified U.S. Government information may be provided to U.S. contractor personnel to:

(1) Install, maintain, or operate COMSEC equipment for the U.S. Government.

(2) Participate in the design, planning, production, training, installation, maintenance, operation, logistical support, integration, modification, testing or study of COMSEC material or techniques.

(3) Electronically communicate classified national security information in a cryptographically secure manner or unclassified national security-related information by COMSEC protected means.

b. COMSEC accounts that begin with "87" are civilian contractor accounts. Before releasing COMSEC material to a contractor account, the provisions of OPNAVINST 2221.5 must be met.

(1) Once the requirements of OPNAVINST 2221.5 have been met submit the following information to NCMS//N3:

- (a) Identity of Navy project office/contracting office
- (b) Contractor name and address
- (c) Contract number
- (d) Identity of COMSEC material involved
- (e) Any other information deemed appropriate in evaluating the request

c. Material will normally be issued on a "one year loan basis" to the contractor and require renewal of the requirement on an annual basis. NCMS will assign a loan number to each message and contract which will be placed in the TIER 1 system for tracking purposes. It is the responsibility of the contractor's sponsoring government entity to request renewal of the loan, if not renewed the contractor must return the equipment to CMIO Norfolk account 078202 within 30 days of loan expiration. If an extension is needed, a message requesting an extension must be sent to NCMS prior to the expiration of the loan period. Ensure loan number, contract number, short title, serial numbers (if applicable) and account number are included in the message. For a loan extension include the NCMS-assigned loan number.

113 INSTALLATION OF FOREIGN COMSEC EQUIPMENT

a. Certain foreign COMSEC equipment and systems have been approved for installation at specific commands, where, by agreement, the U.S. command must terminate with approved non-U.S. COMSEC equipment. All proposed installations of non-U.S. COMSEC equipment and/or associated ancillary devices at Navy, Marine Corps, Coast Guard, and Military Sealift Command activities will be reported to CNO (N6F322), NCMS, and as applicable, Commandant of the Marine Corps, Commandant of the Coast Guard, or Commander, Military Sealift Command prior to installation.

b. When approved this equipment will be installed and operated in the low level input mode. However, when a requirement exists for the foreign equipment to be located adjacent to U.S. COMSEC equipment, the approved foreign COMSEC equipment may be installed and operated with Normal Input Keying (NIK) mode only when used with red signal input.

114 ASSISTANCE TO FOREIGN GOVERNMENTS

a. Occasionally commands or personnel may be queried concerning the existence and/or availability of U.S. COMSEC material (including COMSEC equipment and associated devices) for foreign governments. COMSEC requests shall be referred to the cognizant Combatant Commander and handled IAW Chairman of the Joint Chiefs of Staff Instruction (CJSI) 6510.06.

b. COMSEC information in any form is **NOT RELEASABLE** to foreign nationals unless specifically authorized by national policy. Some material will be marked "**NOT RELEASABLE TO FOREIGN NATIONALS**", "**NO FOREIGN DISSEM**", "**NOFORN**," or "**U.S. ONLY**". **REGARDLESS OF THE PRESENCE OR ABSENCE OF SUCH MARKINGS, NO COMSEC MATERIAL OR INFORMATION SHALL BE ISSUED TO A FOREIGN NATIONAL WITHOUT THE EXPRESS PERMISSION OF APPROPRIATE AUTHORITY.**

115 NON-COMSEC MATERIAL

NCMS provides a variety of material that is not true COMSEC material but is unique and required for a unit to fulfill its COMSEC function. This material includes but is not limited to:

a. **Fill Cables.** Fill Cables were issued by NCMS as part of an initial issue of fill devices (KOI 18, KYK 13 and AN CYZ 10). NCMS issued the fill cables in order to facilitate the prompt use of the fill devices and to provide complete cryptographic equipment. Replacement or extra cables will be obtained via the supply system.

b. **Mounts.** Many mounts and interconnection boxes are unique to the COMSEC equipment they support and were provided as a part of the equipment by NCMS. These items included the HNF

81, MT 4416A, MT 4417 S and Z AHQ.

c. **Power Supplies.** Certain COMSEC equipment requires unique power supplies in order to function properly, such as the PP 7506, PP 7507, etc. While most of these power supplies are available through normal supply procedures, NCMS provides them with new equipment installations to facilitate installation and operation.

ALCOM 059/06 (DTG 161400ZJUN06) removed the following items from CMCS. Commands are directed to remove them from their inventory. Replacements can be obtained through the supply system. If unable to obtain in supply, contact NCMS or CMIO for direction.

SHORT TITLE	NSN	NOMENCLATURE
PP 7516	5810-01-274-0862	POWER SUPPLY
PP 7506	5810-01-275-6665	POWER SUPPLY
ON 512424	5810-01-066-7587	FILL CABLE
IMPVD FILL	5995-01-463-0408	FILL CABLE
HYP 71	5810-01-082-8412	AUXILLIARY POWER SUPPLY
HYP 57	5810-01-026-9621	VEHICULAR POWER SUPPLY
HYX 57/-1/ -2	5810-01-026-9622	WIRELINE ADAPTER B16
HGF 93	5810-01-212-8129	TRANSITION UNIT ASSEMBLY
HGF 94	5810-01-083-2896	TRANSITION UNIT FRAME
Z AIJ	6140-01-048-8167	BATTERY CASE FOR KY 57
Z AHQ	5810-01-026-9624	INTERFACE ADAPTER
Z AKG	5810-01-050-2498	BATTERY PACK ASSEMBLY
Z AHP	5810-01-026-9623	RCU FOR KY 58
CV 3591	5895-01-250-9557	ANDVT AUX SUPPORT EQUIP
HNF 81 1	5975-01-160-4742	FRAME ASSEMBLY
HNF 81 2	5810-01-068-3692	FRAME ASSEMBLY B16

116 LIST OF MATERIAL REQUIRED FOR A COMSEC EQUIPMENT SHORT TITLE

a. Annex D contains a listing of COMSEC, accountable, end-item repair kits. Components and parts listed under a specific short title must be maintained by the EKMS Manager. Unless otherwise authorized by NCMS, material listed as part of a short title must be maintained and transferred as a complete item.

b. Annex K contains a comprehensive listing of equipment in use within DoN. This listing has equipment short titles in the exact format which must be used within EKMS. The listing will include short title, accountability legend, and classification (while CCI is listed under the classification heading, the equipment is unclassified). Strictly following this format will expedite all accounting functions.

CHAPTER 2 - COMSEC EQUIPMENT MANAGEMENT**201 INTRODUCTION TO COMSEC EQUIPMENT MANAGEMENT**

CNO establishes COMSEC equipment allowances based on standard configurations of platforms, squadrons, battalions and shore facilities etc. Normally all COMSEC equipment is centrally procured by CNO and included in various master plans and implementation plans.

a. Any request to increase established allowances must be submitted to CNO for validation IAW EKMS 1.

b. Any request to decrease established allowances and routine transfers of COMSEC equipment must be submitted to NCMS IAW EKMS 1.

c. Delivery of COMSEC equipment normally requires 90 days after receipt of the initial request to NCMS. Material required more rapidly and needing specialized delivery must be funded by the requesting activity. This may be in the form of a Federal Express (FEDEX) or United Parcel Service (UPS) account number to which specialized delivery costs may be charged. A fixed address (i.e. not FPO/APO address) must be provided in the message request along with POC and phone number. FEDEX, DHL, and other commercial carriers are not authorized outside the U.S., per NSA regulations. No exceptions will be made. The only authorized means to ship OCONUS is Registered mail or DCS.

202 KOK 22A KEY PROCESSOR GUIDELINES AND PROCEDURES

The KOK 22A (commonly referred to as the KP) is an electronic key processor used in conjunction with the LMD suite at most tier 2 sites. All KP's have been centrally procured by the Navy and are stored for distribution at CMIO Norfolk. CMIO maintains a database of all KP's held by tier 2 sites for the Navy via the RATS system, a software system designed for tracking of the KOK 22A. This system enables CMIO to monitor all recertification dates, locations of each KP and distribution.

a. Each KOK 22A key processor will require certification when the equipment is fielded. The re-certification process must be accomplished every three years; however the recertification date should not be confused with the date received by the command. CMIO receives each KOK 22A from CPSG with the recertification date located on the back of the unit. The storage of the KP's are on a rotational basis, based on the recertification date, with the newest dates being stored at the back, oldest front. CMIO, using the RATS system, will ensure each KP leaving the facility has the most certification time expected, and will not issue a KP with less than 1 year of certification left. Because of the lag time in issuance from

receipt, the KP received by the command most often has a recertification date shorter than the expected 3 years. For this reason, it is critical the EKMS managers track the recertification date on the back of the KP and not the date received.

b. At 9 months prior to re-certification due date, CMIO will release a Navy message to each account within the recertification window detailing the serial number coming up for recertification, the account number, the serial number of the replacement and shipment instructions, i.e. via over the counter (OTC) or DCS. This message will additionally provide return instructions and DCS tracking numbers for the replacement KP's. Each KP will be shipped via DCS only. Once the account receives the KP, and a successful swap of the units has occurred, the account must return the KP via DCS to CMIO Broken Copy acct 078202, on a SF-153 with transaction number, within 30 days. This will prevent commands from initiating a COMSEC incident per EKMS 1 (failure to return a KP past its expiration date) and ensure the continued process of adequate KP's throughout the Fleet. It is recognized, however, that this may not be possible at all times, i.e. deployed, combat area, intermittent DCS pick ups. If this occurs, the account should send a message to NCMS and CMIO stating reason for delay in return and give approximate time the asset will be shipped.

c. If an account fails to receive the CMIO recertification message or the replacement KP within four months of the recertification date of the unit currently held, contact CMIO or NCMS (N3) immediately. Possible reasons are:

1. Non-receipt of message. CMIO sends each message via DMS. While the DMS system works with AUTODIN, there can be problems associated with receipt of messages at times. Contact CMIO or NCMS for the message.

2. Asset shipped, not received. As the KP is shipped via DCS, it is imperative that the EKMS manager ensure their DCS address is the most current within the CAD. Additionally, precommunits must submit the DCS Form 10 to their servicing DCS stations at the earliest time to receive and DCS shipments, including the KP. Each KP is tracked in the DCS system by CMIO.

d. Early swap of KP's for recertification, due to deployment, are authorized. The account must send in a message to CMIO requesting early recertification due to deployment. The account number, serial number of the KP up for recertification and reason for request is mandatory on the message. CMIO will issue the replacement, and advise shipment of the soon to be expired KP back to CMIO.

On the average, CMIO sees approximately 11 failures of KOK 22A's a month. For this reason, there are spare key processors retained at CMIO. The same philosophy is maintained for these as

with the recertification assets, oldest first. When an account experiences a failure, the first step is to contact the EKMS helpdesk. They may be able to aid the account in getting the KP up and running and can provide sound advice on the KP. If advised to do so in the event it cannot be repaired by the helpdesk, a message must be sent to NCMS, info CMIO, for the disposition and replacement of the KP. The format of the message should be similar as stated in section 403, however it is important to annotate the cause of the failure. This information is retained in the RATS system and is used for failure statistics. It is recognized, however, that normal DCS shipments take time, and emergent requirements are needed. NCMS, in conjunction with CMIO, SPAWAR EKMS and CNO, set allowances for each command holding KP's. Currently, each account is allocated one KOK 22A. This is due to the quantity initially centrally procured by the Navy and the loss of manufacturing of the current fielded units. However, to reduce the expected downtime, there have been certain accounts allocated with spare key processors specifically for these cases. These spare assets are NOT to be used for expired KOK 22A's, only for failed units. It is the responsibility of the accounts holding these spare units to be available to support emergent transfer of these assets when instructed to do so. It is also the responsibility of the EKMS manager of these accounts to track the expiration date of these spares in the same manner as their own operational KP. The following procedures apply to this process.

a. When an account experiences a failure of their KP, and it is considered an emergent need, it is advised to contact the nearest facility that contains spares to verify availability. Considerations for emergent needs are:

1. Rapid deployment (within 1 week for CONUS/2 weeks for OCONUS).
2. At sea or in combat area.

All other requests are on a case by case basis, requiring authorization by NCMS prior to issue.

b. Once a spare has been set, the command with the failure must send in a message action NCMS, info CMIO, for disposition and replacement of their KP. The message should contain the account number, serial number of the failed unit and reason for outage and request emergent transfer of spare key processor from another command. Annotate account number, command name, the reason for emergent requirement and serial number of the unit to be transferred). NCMS will provide instructions for the failed KP, authorize the transfer and request CMIO issue a replacement for the spare given. **No transfer is authorized prior to NCMS approval.**

c. The following accounts have been allocated for

spare issuance of KOK 22A's. This allowance has been set to facilitate a spare cache at certain points around the world for rapid transfer in emergent times and reduce downtime:

Command	Account	Qty Authorized as Spare
NCTAMS Naples		2
NCTS Bahrain		3
Makalapa COMSEC		3
NCTS FarEast		3
NCTS Guam		3
CG I MEF MCMO		3
CG II MEF MCMO		3
CG III MEF MCMO		3
ALL CARRIERS		3
ALL LARGE DECK AMPHIBS		2

These allowances are in addition to the authorized operational KP and are the responsibility of the owning account to maintain as emergent spares only, and are not to be used as spares for that account.

203 COMSEC EQUIPMENT REQUIRED IN SUPPORT OF NEW CONSTRUCTION, SHIP OVERHAULS, AND PLANNED UPGRADES

NCMS may or may not be aware of the scheduled installation requirements for new construction, ship overhaul or aircraft and shore establishment upgrades. CNO will direct SPAWAR or the command receiving the installation to coordinate with NCMS for equipment delivery. Validations covering single installations will normally be automatically handled by NCMS upon receipt of the validation. Some validations cover an extensive period of time (i.e. new constructions, global system). In this case, it is the responsibility of the receiving command to send a message to NCMS requesting the equipment under that validation. If the command receiving the installation does not receive notification from NCMS that COMSEC equipment in support of the installation has been shipped within 60 days of installation, the EKMS Manager should take action to request the material via message to NCMS, citing the appropriate CNO Validation number. SPAWAR contract and SHIPALT numbers are not required nor needed. If NCMS receives a message for an increase in allowance, and no validation number is assigned, equipment will not be issued until confirmation of validation from CNO is received by NCMS.

204 RECEIPT OF DEFECTIVE EQUIPMENT

If cryptographic equipment is received that is not in proper operating condition, the receiving user will attempt to repair the equipment, using qualified limited maintenance repair personnel. If unable to repair, request disposition and replacement via message to NCMS.

205 DISPOSITION OF COMSEC EQUIPMENT DURING YARD OVERHAULS

a. During periods a ship is engaged in a yard overhaul it may be advisable for COMSEC equipment to be removed and stored in another secure location. EKMS Managers should contact a CRF and arrange for storage of COMSEC equipment. Storage by a non-DON account, i.e., contractor or other Service/Agency, must first be approved by NCMS. Equipment may be transferred on a hand receipt to a DON storage facility for the period of overhaul without NCMS authorization. Transfers to non-DoN activities, once approved by NCMS must be documented on a SF-153 and cite the NCMS authorization and include the following statement in the comments: **INTER-SERVICE/AGENCY TRANSFER FOR STORAGE DURING OVERHAUL PERIOD. ALL MATERIAL LISTED MUST BE RETURNED TO THE TRANSFERRING EKMS ACCOUNT WHEN DIRECTED BY EITHER NCMS OR THE TRANSFERRING EKMS ACCOUNT. USE, DESTRUCTION, OR OTHER FORM OF DISPOSITION BY THE STORAGE ACCOUNT IS SPECIFICALLY NOT AUTHORIZED.**

b. Those ships undergoing a Selected Lifetime Extension Program (SLEP) will disestablish their COMSEC account IAW EKMS 1 Chapter 8. NCMS will coordinate the transfer of all COMSEC equipment to, SPAWARSYSCEN Charleston, CMIO or a CRF. A message from the requesting activity must include all equipment, serial numbers (if applicable) and a request for disposition of equipment. It is feasible for the activity to make arrangements to store material in advance with CRF, though permission to store during this extensive period is required by NCMS. Storage of material at facilities other than CMIO, CRF or SSC Charleston will be on a case by case basis and must be approved first through NCMS. NCMS will reply back to requesting activity and provide either disposition instructions for equipment and/or transfer approval for equipment.

c. It is the responsibility of the requesting activities EKMS manager to inventory all items transferred before, during and after the storage period. EKMS managers will continue to conduct required inventories with submission to the COR per EKMS 1 during the extended yard period.

206 RECEIPT OF EQUIPMENT WITH INCORRECT SERIAL NUMBERS

Cryptographic equipment received from a manufacturer by CMIO is not unpacked to verify correct serial numbers on nameplates. This material is shipped using the serial numbers printed by the manufacturer on the original packing containers and will occasionally not reflect the actual number on the equipment. EKMS Managers receiving equipment which has an accounting number not in consonance with that listed on the SF-153 transfer report must comply with the procedures set forth in EKMS 1.

207 RECEIPT/TRANSFER OF EQUIPMENT FROM/TO ARMY OR AIR FORCE ACCOUNTS

Follow procedures set forth in EKMS 1. Loans to Army/Air Force are specified for 1 year only and will be assigned loan numbers by NCMS for tracking purposes in TIER 1.

208 TRANSFER OF EQUIPMENT TO CONTRACTOR ACCOUNTS

COMSEC accounts that begin with "87" are civilian contractor accounts. Any COMSEC equipment transferred to these accounts must have NCMS authorization. Transfers must be documented by submission of an SF-153 to NCMS. Navy owned COMSEC equipment is normally only given to contractors on a loan basis for purposes specified in EKMS 1. An NCMS loan number will be assigned to loan and tracked in the TIER 1 database. The provisions of Chapter 1 article 112 apply.

a. Temporary Transfer to contractor accounts.
Each temporary transfer (loan) of equipment to a contractor account should have the following notation included on the SF-153 transfer document below the "Total Lines/Total Quantity":

"This material provided as a Navy to contractor loan in support of contract number _____, (for repair, testing, or modification and return, to _____,). This equipment is on loan for a period of one (1) year ending on (YYYYMMDD) Loan number XXXXXXXX has been assigned."

CHAPTER 3 - MODIFICATIONS

301 MODIFICATION DESCRIPTION

A modification is any electrical, mechanical or software change which may or may not affect the electrical or mechanical characteristics of cryptographic equipment. Modifications will be either mandatory, optional/special mission modifications, or repair actions. The purpose of cryptographic equipment modifications is to install improved or special capabilities. Modifications are required to improve the electrical processing capability and security of the equipment, to correct equipment deficiencies, to satisfy specific operational requirements, or to adapt to local conditions.

302 MAJOR MODIFICATIONS

Each major modification to the production model of a COMSEC equipment, assembly, or applicable software which results in a loss of interchangeability of component parts and/or cryptographic communicability between the modified and unmodified versions is identified by the addition of a modification suffix letter to the short title of the modified equipment or assembly, e.g., KG 40 to KG 40A. The addition of a suffix, alphabetic or numeric, must be approved by NCMS and reflected in the NSA Master Reference Catalog (MRC).

303 MINOR MODIFICATIONS

a. Each minor modification made to equipment or assembly, which affects neither cryptographic intercommunicability nor the physical interchangeability, is identified by an appropriate marking on the modification record plate, affixed to the modified equipment or assembly. The short title of the modified equipment is unchanged

b. Minor modifications of subassemblies or elements, which affect neither cryptographic intercommunicability nor the physical interchangeability, are identified by a modification number, preceded by a slant, e.g., A ACC/1. When subassemblies or elements are modified to the extent that either physical interchangeability or cryptographic intercommunicability is lost, a new tri-graph is assigned to the modified subassembly or element.

304 MANDATORY MODIFICATIONS

a. Mandatory modifications **must** be installed in order to ensure continued effectiveness of the cryptographic equipment and to retain its approval for use. Annex E is the primary source for mandatory modifications. The Mandatory Modification

Verification Guide (MMVG) provides a detailed description of the mandatory modifications and is available upon request from NCMS.

b. Mandatory modifications must be installed by a predetermined time compliance date that is established on the basis of security, human safety, TEMPEST, or reliability. Mandatory modifications are mandatory for all U.S. commands or using activities and are so designated in the appropriate KAM/SAM manual. Kits for mandatory modifications will contain the necessary parts, instructions, and two report-back forms.

305 OPTIONAL MODIFICATIONS

Optional modifications are not required to be installed by all users. These usually are tailored to specific operational or environmental needs and may be installed at the discretion of the command or as directed by higher authority. An Optional modification will be issued in kit form only when required subassemblies, components, or parts are unique and not obtainable elsewhere; otherwise the modification parts must be obtained locally or through the Navy Supply System.

306 REPAIR ACTIONS

NSA repair actions are optional and do not affect the original characteristics of the cryptographic equipment. Repair actions are limited to minor electrical and/or mechanical improvements to the equipment's operation, maintenance, reliability, etc. Repair actions can include substituting supply system parts for original design parts, increasing the wattage rating of a resistor, installing more rugged lamps, etc. Repair actions do not require an identification label, marking, or control but are fully documented by maintenance manual changes. Authorized repair actions are listed in the appropriate KAM/SAM manuals. Required parts and materials for NSA repair actions must be obtained locally or from the Navy Supply System.

307 MODIFICATION IDENTIFICATION

a. Whether modifications apply to basic cryptographic equipment, related equipment, repair kits, or related devices, all modifications are numbered sequentially for the basic equipment only and in the order in which NSA has approved the modification. A summary of all cryptographic equipment modifications approved by NSA are contained in Annex E. Modifications are listed alphabetically by equipment short title and MOD number.

b. When modification kits are available through the CMCS, kit nomenclature will reflect the basic equipment short title and the modification number, e.g., KY 75 MOD 1, KG 84 MOD 3, KG 38 MOD 7.

c. When cryptographic equipment is modified, the number(s)

of the installed modification(s) must be entered on the mod-record plate which is attached to the equipment. This is accomplished by removing the appropriate number(s) from the list appearing on the MOD Record Plate. A hard, rubber eraser is recommended. Incorporated repair actions are not recorded on the mod record plate or on the equipment. Nameplates, mod record plates, and other short title markings must remain attached to the equipment unless removal is specifically authorized or directed by DCMS.

308 MODIFICATION IMPLEMENTATION AUTHORIZATION

The publication of a modification or a repair action instruction in a KAM/SAM constitutes authorization for its incorporation into equipment held by Navy, Marine Corps, Coast Guard, and Military Sealift Command units.

309 MODIFICATION INFORMATION RELEASE

All information concerning the existence, applicability, nature or operational impact of mandatory or optional modifications, incorporated or unincorporated, is **NOT RELEASABLE** to non-U.S. commands, activities, nations or international organizations (e.g., NATO). All queries and requests for information from non-U.S. commands, activities, or persons regarding modifications to U.S. crypto equipment held by them must be referred to NCMS in accordance with CJSI 6510.06.

310 MODIFICATION INSTALLATION

a. Internal modifications of equipment must be preformed at Navy Crypto Repair Facilities.

b. External modifications of equipment can be preformed by qualified COMSEC maintenance personnel of the unit holding the equipment within prescribe time compliance date. Upon receipt of the MOD kit, the EKMS Manager must issue MOD kits on local custody to qualified COMSEC maintenance personnel within the prescribe time compliance date. Qualified COMSEC maintenance personnel must promptly report the installation and destruction of MOD kit residue to the EKMS Manager.

NOTE: The destruction of AL 1 and AL 2 MOD kit residue must be witnessed by two persons, both of whom must sign a local destruction record, which is then forwarded to the EKMS Manager.

The EKMS Manager must report the destruction of AL 1 and AL 2 MOD kit residue to the COR. In some instances, there will be no residue to destroy after installing a MOD kit. In these cases, it is still necessary to submit an SF-153 Destruction report to in order to delete AL 1 and AL 2 MOD kit short titles from the account's records in the COR data base.

311 MODIFICATION VERIFICATION

a. EKMS Managers must ensure the mandatory modifications and optional mission required modifications have been installed by using Annex E and/or MMVG. A non-technician may examine the exterior of COMSEC equipment to determine which mandatory modifications and optional mission required modifications have been installed.

b. Modification verification will be accomplished during each scheduled inspection and during CMS Advise and Assistance Team visits in accordance with EKMS 3.

312 TIME COMPLIANCE DATE

a. Mandatory modifications must be incorporated no later than the time compliance date (the date, determined by NSA, by which a modification must be installed in order for the equipment to remain approved for use), unless otherwise directed by NCMS. Time compliance dates are issued with each mandatory modification.

b. Commands may request an interim exception to mandatory modification time compliance dates if unusual circumstances exist. Such requests must be forwarded to NCMS via the chain of command. Each request must provide the short title of the equipment involved, identification of the mandatory modification(s), a description of the circuit(s) involved (including the volume and highest classification of message traffic processed), justification for the exception, and an estimated installation date.

c. Commanding Officers may authorize a temporary exception to mandatory modification time compliance dates if an interim exception has not been received but operational necessity dictates. All temporary exceptions must be reported to NCMS, with an information copy to CNO (N6F322), DIRNSA, and the chain of command.

d. Extreme care must be exercised by Commanding Officers when authorizing a temporary exception to a time compliance date. Many modifications significantly change the characteristics of the equipment and often will not permit interoperability between modified and unmodified equipment. Recommend contacting NCMS//N3A1// prior to granting temporary exceptions to determine if there will be a compatibility problem.

CHAPTER 4 - COMSEC EQUIPMENT DISPOSITION

401 COMSEC EQUIPMENT TRANSFERS FOR MAINTENANCE PURPOSES

a. Temporary Transfers - Temporary transfers of COMSEC equipment can fall into several categories:

1. Vendor or contractor - some COMSEC equipment may be required to be sent for repair or upgrade to a vendor or contractor, due to items being under warranty, contracts requiring vendor repair, embedded COMSEC (see Chapter 6) or if the equipment was purchased by the command, a program office or some entity other than CNO (i.e. not centrally procured). If the equipment is under warranty or not centrally procured, the command must contact the vendor to receive a Return Merchandise Authorization (RMA) number and request a temporary transfer of the assets for repair/upgrade to NCMS. NCMS will provide approval with a loan number assigned in most circumstances (for tracking in TIER 1) for a 90 day period.

2. Local CRF or maintenance facility - temporary transfers of COMSEC equipment to either a CRF or local maintenance facility (i.e. Aircraft Intermediate Maintenance Depot (AIMD), Maintenance Battalion) can be accomplished without approval from NCMS, if expected timeframe is less than 180 days. A hand receipt may be used for this temporary transfer. Equipment issued on a local custody is still on charge to the original EKMS account.

b. Permanent Transfers - All permanent transfers and anticipated operational need/outage exceeding eight months must be authorized by NCMS. Routine transfers of COMSEC equipment to meet operational necessity or to support a mission outage anticipated to last less than eight months may be authorized by the Commanding Officer but must be returned to the Transferring EKMS account when the operation/mission outage has ended. The following format is to be used to request equipment transfers.

TO: NCMS WASHINGTON DC//N3//
INFO: ISIC
Chain of Command

SUBJ: REQUEST FOR COMSEC EQUIPMENT TRANSFER AUTHORIZATION

(1) Request an account to account transfer of the following from (Account name/Account number) to (Account name/Account number) ISO of (give description or reason for transfer).

Short title Serial (if applicable)

2. Equipment will be returned to this command (give date if known). (If return date unknown, give approximate time)

c. The following are authorized to direct or authorize the permanent transfer of COMSEC equipment between COMSEC account commands within their respective areas of control to meet operational needs:

1. U.S. Navy: CINCLANTFLT, CINCPACFLT, CINCUSNAVEUR, COMNAVAIRFOR, COMNAVSURFLANT, COMNAVSURFPAC, COMSUBLANT and COMSUBPAC.

2. U.S. Coast Guard: COMDT COGARD, COGARD TISCOM, COGARD Area and District Commanders.

3. USMC: CMC, CG MARCORSSYSCOM, MEF's and COMMARCORLOGBASES.

NOTE: NCMS must be advised of all permanent equipment transfer requests via naval record message.

402 COMSEC EQUIPMENT ROUTINE MODIFICATIONS OF ALLOWANCES

a. NCMS is the COMSEC equipment Inventory Control Point (ICP) for DON and all requirements for a routine modification of an allowance for equipment, related device, equipment manuals and/or operating instructions must be requested IAW EKMS 1. All requests for COMSEC material that are not contained in the CNO SECURE VOICE AND RECORD DATA PLAN must be validated by CNO IAW EKMS 1.

b. Equipment increase - CNO is the approving authority for any increase in allowance. Activities must submit a request to CNO via email or message for action. COMLANTFLT and COMPACFLT will approve allowance increase for shipboard increases and submit to CNO for final approval and action. Once approved, CNO will notify NCMS for action, if needed. If an increase has been validated and assigned a number, The EKMS manager must request to modify equipment allowance to NCMS via record message. NCMS requires a minimum of 30 days before required delivery date. NCMS will ensure requesting requirements match validated requirements. NCMS cannot provide spares or additional requirements other than what is approved by CNO.

NOTE: Neither NCMS nor CMIO Norfolk are funded for "Overnight" delivery of COMSEC equipment. Thus, any requirement for immediate delivery of COMSEC, via Defense Courier Service (DCS), Registered Mail, or commercial carrier (FEDEX) must be funded by the receiving command.

The following is an example of an increase in COMSEC equipment allowance message:

TO: NCMS WASHINGTON DC
INFO: CNO WASHINGTON DC
ISIC
CMIO NORFOLK VA
SPAWARSYSCEN CHARLESTON SC

1. RQST NCMS ISSUE THE FOLLOWING EQUIPMENT FOR (GIVE INSTALLATION INFORMATION) UNDER CNO VALIDATION CMSXX-XXX. REQUIRED DELIVERY DATE IS XXXX/XX/XX (YEAR/MO/DA).

SHORT TITLE QTY

2. (PROVIDE SHIPPING INSTRUCTIONS IF NEEDED, I.E. FEDEX (ONLY WITHIN THE U.S AND HAWAII), DCS OR OVER THE COUNTER PICK-UP (FROM CMIO ONLY). IF NO INSTRUCTIONS ARE GIVEN, NCMS WILL ASSUME NORMAL REGISTERED MAIL IS ACCEPTABLE.

NOTE: FEDEX shipments require a fixed address (i.e. not FPO/APO address), along with POC and telephone and must be coordinated with CMIO, i.e. funding.

c. Equipment decrease - When a COMSEC account has excess equipment and requires disposition, submit request to NCMS via record message. Ensure request has the proper short title(s) and include equipment serial number(s) for ALC 1 and/or quantity(s) for ALC 2 material. **Do not** destroy COMSEC equipment without NCMS authorization. All correspondence should include account number. An example message has been provided.

TO: NCMS WASHINGTON DC
INFO: SPAWARSYSCEN CHARLESTON SC
CMIO NORFOLK VA
ISIC
CHAIN OF COMMAND

SUBJ: REQUEST DISPOSITION OF EXCESS COMSEC EQUIPMENT

1. RQST DISPOSITION OF EXCESS EQUIPMENT LISTED BELOW FOR (COMMAND NAME AND ACCOUNT NUMBER).

SHORT TITLE QTY SERIAL (IF APPLICABLE)

2. REPLACEMENTS NOT NEEDED.//

403 COMSEC EQUIPMENT FAILURES

a. The complexity and extreme micro-miniaturization of modern COMSEC equipment is not conducive to corrective maintenance in the field. As a result, the CRF concept aboard major ships and some stations are no longer valid. Routine troubleshooting and repair requires large, complex, and expensive automated test equipment. In support of this non-availability of

field maintenance, NCMS has taken several steps to support COMSEC equipment failures.

1. Repair kits - provided to support equipment on platforms that possess qualified limited maintenance technicians if those repair kits are available. The quantity of equipment supported by repair kits is rapidly diminishing. Repair kits are provided on a one for every ten, installed equipment's when available in NCMS stock. Repair kits provide the means for limited maintenance technicians to troubleshoot by exchanging a failed circuit board (PWA) for a good spare from the repair kit to isolate a faulty PWA. The repair kit is **NOT** a spare kit, and boards should not be used to replace failed PWA's. Once isolated, a replacement card should then be ordered through the supply system.

2. Repair/Replacement - If operationally feasible, NCMS will replace failed equipment with certified replacement equipment. Equipment failures should be promptly reported to NCMS, via message traffic. Upon receipt of a message concerning COMSEC equipment, NCMS will immediately initiate action for the replacement. This support may entail direction for shipment to a CRF for repair and return of the failed equipment, direct replacement of the equipment from CMIO stock, or replacement of the equipment from a provisional spare equipment cache located in the reporting unit's area. The action taken is dependent upon operational requirements, location of the reporting unit, and availability of spare equipment. The following format is to be used to request equipment repairs.

TO: NCMS WASHINGTON DC
 INFO: SPAWARSYSCEN CHARLESTON SC
 ISIC
 CMIO NORFOLK VA
 CHAIN OF COMMAND

SUBJ: REQUEST FOR DISPOSITION AND REPLACEMENT OF FAILED COMSEC EQUIPMENT.

1. REQUEST DISPOSITION AND REPLACEMENT OF THE FOLLOWING EQUIPMENT FROM (ACCOUNT NAME AND ACCOUNT NUMBER). (ADDITIONAL INFORMATION AS APPLICABLE).

SHORT TITLE	SERIAL (IF APPLICABLE)	FAILURE
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2. RQST PROVIDE REPLACEMENT VIA (GIVE PREFERRED SHIPMENT METHOD, I.E. REGISTERED MAIL/DCS/FEDEX/OTC).

b. COMSEC Equipment Exchange Program (CEEP) - CRF San Diego is the only functioning entity under this program. CRF Norfolk and CMIO operate from authority from NCMS only for the disposition and replacement of equipment. Replacement of failed equipment can be coordinated directly from CRF San Diego without

the need for formal request from NCMS under CEEP. Upon equipment failure, and prior to delivery of the failed unit, call to determine the availability of replacement equipment:

CRF San Diego

COMM: (619) 556-6175

DSN: 526-5064

Once it is determined that a replacement is available, generate a SF-153 Transfer Report for the failed equipment. Use this article as authority to transfer.

c. COMSEC Equipment Repair Program (CERP) - Equipment failures must be reported to NCMS to obtain any depot level repair. Navy depot level repair facilities will not accept equipment for repair unless accompanied by NCMS authorization, with the exception of CRF San Diego. The CERP provides funding for the repair of failed COMSEC equipment used by mobile units (i.e., ships and air squadrons embarked aboard an afloat command). Shore commands, air squadrons not embarked aboard an afloat command, and all other units not actually "feet wet" when equipment fails must fund for repair of failed COMSEC equipment. Costs and direction for submission of funding data may be obtained from the major CRF located in Norfolk and San Diego.

d. Marine Corps units are guided by the provisions of Marine Corps instruction MCO P4790.2 in the repair of cryptographic equipment.

404 CRFS AFLOAT AND INTERMEDIATE MAINTENANCE ACTIVITIES

A CRF afloat, intermediate maintenance activity or Marine maintenance battalion is not authorized to do any type of repair except back-to-back testing or trouble shooting a piece of equipment or replacement of certain chassis mounted components. Upon identification of a problem, CRF afloat and intermediate maintenance activities can replace defective PWA's with good PWA's from onboard repair kits. Equipment that requires repair above and beyond board replacement or replacement of chassis mounted components listed in Annex I must be sent to a depot level CRF for repair or replacement.

405 COMSEC EQUIPMENT HELD BY CONTRACTORS

a. COMSEC equipment issue/transfer - DON COMSEC Equipment that is provided to contractors is considered Government Furnished Equipment (GFE). NCMS will maintain control of the GFE and issue as a loan or authorize transfer through the period of one year. If a loan extension of the GFE is required, it is the responsibility of the Navy program manager of that contract to submit a request of loan extension via record message, IAW Chapter 1 article 112.

NOTE: Annotate on the transfer report (SF 153) "This material provided as a Navy to contractor loan under loan _____. Period of loan is one year, ending _____."

b. COMSEC equipment repair - GFE COMSEC Equipment that is provided to contractors that requires repair will be supported by NCMS. Any equipment needing repair identified to NCMS will either be exchanged or the holding account will be directed to forward the equipment the nearest CRF for repair/replacement.

CHAPTER 5 - LOGISTICS

501 EQUIPMENT CONFIGURATION/LOGISTICS

a. NCMS, as the Item Manager and Inventory Control Point for COMSEC equipment for DON, is responsible for the inventory of DON COMSEC equipment from procurement to final destruction (given normal usage cycle). Based on approved and validated requirements for COMSEC equipment from CNO, NCMS coordinates with COMSPAWARSYSCOM to ensure that COMSEC equipment type and required installation milestones are proper for the requirement. As part of this function, NCMS:

1. Reviews communication system plans for compliance with established policy and procedures pertaining to cryptographic equipment.

2. Implements and directs the Navy Mandatory Accounting for COMSEC Equipment (MACE).

3. Implements installation/interface requirements for COMSEC equipment and associated ancillary devices for general service shore communication facilities in Navy, Marine Corps, Coast Guard and Military Sealift Command.

4. Provides configuration control and logistic support in the event that the normal channels of support are not available. NCMS further coordinates with Commander, Naval Supply System Command (COMNAVSUPSYSCOM) to ensure adequate and effective logistics support for COMSEC equipment.

5. NCMS ensures that COMSEC equipment has logistic supply support and repair maintenance support along with providing maintenance manuals and operating instructions for COMSEC equipment.

502 COMSEC SPARE EQUIPMENT ALLOWANCES

With the advent of solid-state and micro-chip technology, reliability and maintainability of COMSEC equipment has greatly increased. Mean-Time-Between-Failure (MTBF) and Mean-Time-To-Repair (MTTR) puts the overall Operational Availability (OA) in the range of .98 plus. Accordingly, the COMSEC spare equipment ratio and overall COMSEC repair philosophy has made a positive change. That quantity of equipment authorized in the various master plans provides spare equipment based upon platform and requirements. When validating COMSEC equipment requirements, the number of spare equipment programmed is determined by the following guidelines:

<u>Tactical</u>	<u>Compatible Dedicated COMSEC Equipment</u>	<u>Spare COMSEC</u>
Small Ship	1-10	1
Unit/Squadron	11-20	2
	20+	10%
Large Ship	1-20	1
	20+	10%
<u>Shore</u>	<u>Compatible Dedicated COMSEC Equipment</u>	<u>Spare COMSEC</u>
Small	1-10	1
Command/Unit/Det	11-20	2
	20+	10%
Priority I Circuits	1	
Large Command	1-20	1
Station/Facility/Act	20+	10%
Priority I Circuits	1	

503 SPARE EQUIPMENT POLICY

a. No spare equipment will be issued unless all of the following criteria apply:

1. The equipment in question is not supported by a repair kit.
2. The circuit application of the equipment is such that it absolutely requires a "hot spare". Such a request will be validated by CNO IAW EKMS 1.
3. The commands location is at the end of a logistic pipeline and timely support for defective equipment cannot be maintained. Such lack of support must be documented.

b. Issue of spare equipment designated as battle group spares for afloat units will be replaced by Provisional Spare equipment IAW EKMS 1A Art 410. While battle group spares will not be recalled, the battle group spare concept will disappear by attrition as NCMS will not replace failed battle group spares.

c. Deploying units should not request additional equipment to serve as contingency material during periods of deployment. NCMS has provided Provisional Spares assets at various locations to support timely replacement of failed equipment. These assets must be used in lieu of contingency equipment carried during a vessel's deployment.

d. Sufficient COMSEC equipment has been provided to the parent location of all air squadrons. These assets, including spare equipment and repair kits, will be provided by the air squadron's parent COMSEC account in support of deployments.

Units receiving embarked air squadrons should not request equipment assets to support those embarked units from NCMS.

504 EQUIPMENT LOGISTIC SUPPORT

a. COMSEC equipment subassemblies and repair parts supported by NAVICP Mechanicsburg are obtained, funded and stocked in accordance with NAVSUP PUB 437 (for shore commands) and NAVSUP PUB 485 (for fleet units). These manuals include procedures for ordering repair parts except for certain classified COMSEC equipment related items which are covered by SPCCINST 5511.24.

b. Generally, for the Navy, subassemblies and repair parts for COMSEC equipment supported by NAVICP is included in station, unit, or ship allowances and load lists. NAVICP furnishes two or more copies of Allowance Parts List (APL's) to each ship or station concerned with COMSEC equipment. Cognizant maintenance personnel shall obtain one copy of the appropriate APL's from the respective individual command's supply officer and retain a copy for ready reference. The APL shall always be consulted when ordering replacement parts.

c. Although the COMSEC equipment KAMs and SAMs list required or suggested general purpose electronic test equipment, measuring equipment, specialized tools, etc., for particular items of equipment, these items are not normally supplied with the COMSEC equipment or issued through the CMCS. The list in the associated maintenance manuals is provided for guidance. Naval establishment commands or activities holding COMSEC equipment shall obtain required general purpose test or avionic test equipment and support material.

d. The Navy, Marine Corps, Coast Guard, and Military Sealift Command are the only services that recognize repair kits as a method to facilitate the repair of any particular piece of equipment when there is a failure. In order to ensure a replacement PWA for the repair kit the holding command shall review APL's, Coordinated Shore Allowance Lists (COSAL's), Coordinated Shipboard Allowance Lists (COSBAL's), and load lists. NAVICP should be requested to amend these listings to ensure that ship, unit or station repair parts support fully satisfies requirements.

e. Repairable and mandatory turn in items are listed in NAVSUP PUB 4107-N for unclassified equipment and SPCCINST 5511.24 for classified equipment. These instructions include procedures for the exchange of defective items for operational items through the Navy Supply System.

f. NCMS is identified as 2L Cog item manager in the Navy Supply System. In many cases, supply personnel will find a 7G Cog or a 2Z Cog listing for COMSEC equipment which indicates that NAVICP or SPAWAR did the registration in the Federal Logistic

System. COMSEC equipment ordered through normal supply channels, even though it bears a 7G or 2Z Cog, will be canceled by NAVICP with an advice code indicating the request should be sent to NCMS.

g. NAVICP supports COMSEC equipment piece parts and PWA replacements as the primary inventory control point. To facilitate the standard support provided by NAVICP, NCMS issues repair kits for immediate repair support. These kits are described in the following paragraphs.

505 CRYPTOGRAPHIC EQUIPMENT REPAIR KITS

a. Repair kits stocked with replaceable PWA's, plug-in assemblies, circuit element cards, module cards, etc. and other unique hardware are provided by NCMS on request from the COMSEC account. Quantities of repair kits to be held are determined by NCMS. Assemblies, boards, cards or other classified items contained in a particular repair kit shall not be held in excess of the item quantity shown in the inventory list contained in Annex D.

b. Repair kits provide a ready, local stock of spare circuit boards, elements, assemblies, and sub-assemblies. The contents of each kit are determined on the basis of individual element Mean-Time-Between-Failure (MTBF) rate and their logistic support data. Repair kits contain both classified and unclassified items. The kits are CMS accountable and must be page checked in accordance with Article 140. Individual items within the kit are handled within the Navy Supply System under the cognizance of NAVICP. Details concerning requisitioning, handling, or shipping of individual items are contained in SPCCINST 5511.24 for classified repair parts and NAVSUP Publication 4107-N for unclassified repair parts.

c. Short titles of repair kits, along with the individual contents and associated stock numbers, and the equipment supported by the kits are listed in Annex D. When requisitioning replacement parts, EKMS Managers shall refer to the actual APL to verify the stock numbers. When a failed PWA card is turned in for replacement/repair a copy of the supply requisition shall be placed in the repair kit in order to satisfy the page check or inventory requirements. Individual PWA's are not accountable as CMS items but are page check items. Even though an inventory list may be contained in individual repair kits, duplicate the list of kit contents contained in Annex D and place it in the respective kit. EKMS Managers may also duplicate the inventory list and provide the list to their local holders or users for use in maintenance shops or supply offices. The inventory lists in this publication for specific repair kits take precedence over any list contained in a repair kit. EKMS Managers must update the inventory list to reflect changes contained in this publication. Items may be added, replaced, or removed from a particular repair kit because of modifications to equipment.

These changes will be reflected on the inventory list. Usually the item will be included as part of the mod kit. However, if it is not included, use the procedures in SPCCINST 5511.24 for classified items and NAVSUP PUB 4107-N for unclassified items to requisition the new item or turn in the excess material. If the new item is listed in these instructions as repairable, authorization must be requested from NCMS before NAVICP or the Navy Supply System will honor the requisition without an exchange on an one-for-one basis.

506 SHIPPING COMSEC EQUIPMENT

a. Materials used for packaging COMSEC equipment for transportation must be strong and durable enough to provide secure protection while in transit, prevent equipment from breaking through the container, and facilitate the detection of any tampering. Double wrap and securely seal all classified COMSEC equipment prior to shipment in accordance with EKMS 1, Art 525. Unclassified and CCI equipment requires only one wrapping.

b. COMSEC equipment must be shipped separately from its associated keying material.

c. COMSEC equipment may not be shipped in a keyed condition unless removing the keying material is impossible. All batteries must be removed from the equipment which normally zeroizes the key, the selector switches should be in the zeroize position, and any crypto ignition keys (CIK) removed. If these actions can not be accomplished and the equipment must be shipped in a keyed state the shipment will assume the classification of the keying material resident in the equipment.

d. The cost of shipment of COMSEC equipment must be borne by the shipping activity. This includes shipment to repair activities and return of excess or obsolete equipment. Commands decommissioning or disestablishing should be aware that shipment costs for large quantities of equipment can become quite high and sufficient funding must be obtained to support these shipments.

507 TRANSPORTING CLASSIFIED COMSEC EQUIPMENT

a. Defense Courier Service (DCS), State Department Courier Service, and designated command couriers are the preferred authorized means of transporting classified COMSEC equipment.

b. COMSEC equipment classified higher than Confidential may be transported by cleared commercial carriers using Protective Security Service (PSS). COMSEC equipment classified Confidential may be transported by commercial carriers under Constant Surveillance Service (CSS) within the continental United States, and U.S. military or military contractor air service (MAC, LOGAIR, QUICKTRANS) provided that a continuous chain of accountability and custody (e.g., signature tally record) is maintained. In addition, COMSEC equipment classified

Confidential may be sent through U.S. Registered Mail provided the material does not pass out of U.S. control and does not pass through a foreign postal system or foreign inspection. Registered mail sent to APO and FPO addresses does not pass out of U.S. control.

c. Individual editions of Confidential KAMs and KAOs may be shipped by U.S. Registered Mail within the continental U.S., Alaska, Hawaii, and to APO/FPO addresses.

d. COMSEC equipment being hand delivered to or from CMIO or a CRF does not require crating or wrapping. It is recommended the equipment be moved in a closed van or truck or be covered by a tarp during transport to prevent inadvertent viewing.

508 CONTROLLED CRYPTOGRAPHIC ITEMS (CCI)

a. A CCI is a secure telecommunications or information handling equipment or associated cryptographic component, which is unclassified but controlled. Equipment so designated shall bear the designator "Controlled Cryptographic Item" or "CCI".

b. CCI equipment is accountable to the COR by serial number (AL 1) or quantity (AL 2) material. All new CCI equipment and components will be identified by a CCI label. Older equipment which has been downgraded from classified to CCI may have the labels reflecting the original classification. Labels reflecting the CCI designation should be requested from NCMS.

c. Older equipment that was downgraded to CCI may also contain printed wiring assemblies (PWA's) that reflect the original classification. In most instances it is difficult or impossible to reflect the classification downgrading on these items. Items resident in CCI equipment that reflect a classification have been downgraded to CCI and should be handled accordingly. While EKMS Managers, users, and maintenance personnel must be aware of the declassification of these items, remarking to reflect this downgrading is neither required nor desired.

509 TRANSPORTING CCI EQUIPMENT

CCI equipment may be transported by any means that provides continuous accountability and protection against loss and unauthorized access while in transit. CCI equipment must be shipped only to another COMSEC account using any of the following methods:

a. Authorized U.S. service, department or agency courier which includes the Naval Supply System.

b. Authorized U.S. Government Contractor/Company, U.S. citizen courier.

c. U.S. Postal Service Registered mail or express mail, provided the material does not at any time pass out of U.S. postal control, pass through a foreign postal system, pass through any foreign inspection, or otherwise fall under the control of unescorted foreign nationals. When using express mail, the shipper must obtain assurance from U.S. Postal Service authorities that the material will receive continuous electronic or manual tracking to the point of delivery. A recipient's signature must be obtained. Material must be introduced into the postal system "across-the-counter" at a U.S. Postal Service Facility; postal drop boxes must not be used.

NOTE:

1. There are certain restrictions governing the size and weight of packages that can be shipped via registered mail. Prior to shipping the CCI, check with the postal service to determine whether the shipment qualifies.

2. First, fourth, certified, insured, and parcel post are not authorized methods of shipping CCI equipment.

d. Commercial carriers that provide strict accountability (a continuous chain of receipts) and physical protection sufficient to preclude any reasonable chance of theft, sabotage, or tampering. This includes Federal Express, Emory Air Freight, and any other commercial carrier who can provide nearly instantaneous location of a particular shipment.

e. U.S. military, military-contractor, or private air service (e.g., AMC, LOGAIR, QUICKTRANS), provided the carrier satisfies the requirements identified above for commercial non-aircraft carriers.

f. U.S. Diplomatic Courier Service.

g. DCS outside CONUS, when no other method of secure transportation is available. Prior authorization must be obtained from DCS before any unkeyed CCI are introduced into the DCS system.

h. Commercial passenger aircraft may be used within the U.S., its territories, and possessions. Transport of CCI material outside the U.S., its territories, and possessions on a U.S. flag or any foreign-owned, controlled, or chartered aircraft, is strongly discouraged because of the threat of terrorists and the lack of U.S. control.

NOTE: Requirements/restrictions for shipping CCI on commercial aircraft are detailed in paragraph 1.

i. Non-U.S. citizens who are employed by the U.S. Government at foreign locations where there is a significant U.S. military presence (two or more military bases) may transport CCI

material, provided there is a signature record that provides continuous accountability for custody of the shipment from the time of pick-up to arrival at the final destination.

NOTE: A U.S. citizen must accompany the foreign driver carrying the material; or the material must be contained in a closed vehicle or shipping container (e.g., CONEX, DROMEDARY, or similar authorized container) which is locked with a high security lock and contains a shipping seal that will prevent undetected access to the enclosed material.

j. Requirements and Restrictions for Transporting CCI on Commercial Aircraft:

1. The container(s) and content(s) may be subject to certain security inspections, including x-ray, by airport personnel. Inspections are permissible, but only in the presence of the courier.

2. Inspection of CCI material must be restricted to exterior examination only and conducted in the presence of the courier. To preclude unnecessary inspections by airport personnel, couriers should carry current orders, letters, and ID cards identifying them as designated couriers.

3. CCI material must be stored in the cabin of the aircraft where the courier can maintain continuous control of the material.

4. When the size of the CCI shipment is too large for storage in the cabin of the aircraft, the entire shipment must be packaged in a suitable container which is secured and sealed in such a manner so that any unauthorized access to the enclosed CCI can be detected by the courier. The CCI shipment may then be shipped as checked baggage provided the LIFO procedure is coordinated with the carrier.

510 DOCUMENTS REQUIRED FOR SHIPPING OF CCI EQUIPMENT

Shipment of CCI equipment via the Navy Supply System requires the EKMS Manager/Supply Officer of the shipping activity to prepare the following forms for inclusion with the shipment:

a. A "shipment request form" produced locally by the activity's supply department.

b. A "Signature and Tally Record", (DD Form 1907, MAY 00)

CHAPTER 6 - EMBEDDED COMSEC

601 DEFINITION OF EMBEDDED COMSEC

a. Embedded COMSEC is defined as families of standard embeddable Communications Security (COMSEC) products that contain core cryptographic algorithms, key management functions, and control/conversation circuitry. These products have been designed to provide a compact, transparent, and cost effective solution for use in host equipment, e.g., computer, teletype, radio, etc. Embedded COMSEC will usually take the form of a single microchip or microchips on a pluggable Lowest Replaceable Unit (LRU) in host equipment. Nomenclature (short title), part number and serial number will identify the embedded COMSEC product, i.e., chips, boards, modules, or subassemblies. NSA will approve these products, for inclusion in the Secure Product Selection List. The embedded COMSEC will normally be CCI.

b. The following items are currently handled under the embedded COMSEC procedures and are currently maintained by NAVICP Philadelphia and NAVICP Mechanicsburg.

NAVICP PHILADELPHIA PA (CODE 03333) will be the item manager for the following:

Short title	NSN
RT 1840 C U	5821-01-481-7430
	5821-01-531-3820
	5821-01-484-2791
	5821-01-528-7375
E-HVM	5998-01-481-7446
	5998-01-483-8803
	5998-01-529-6739
RT 1794 C	5895-01-456-3702
RT 1824 C	1680-01-495-1208
RT 1836 C	5895-01-504-0407
RT 1716 C	5999-01-483-0586
RT 1851C	5821-01-518-2956
MATT	5810 01-381-2779
	5810 01-472-8382
	5810 01-452-8907
	5810 01-472-8383
	5810 01-452-8909
U TVB 2	5998-01-484-2525

NAVICP MECHANICSBURG PA will be the item manager for the following:

Short title	NSN
E HUA	5998-01-457-1163
KOV 17	5998-01-482-7516
MD 1324 U	5895-01-448-8901
MD 1324A U	5895-01-481-4599

The following items, while part of the embedded process, are only

handled using these procedures for MACS accounts under NAVAIR control. It is anticipated that other accounts holding this equipment will eventually fall under this procedure.

Short title	NSN
RT 1796F P C/PRC	5820-01-521-0291
RT 1694D P C	5820-01-496-3523
RT 1523E C	5820-01-44-1219

c. EKMS managers must develop a close working relationship with their local supply department to ensure smooth processing of embedded COMSEC retail spares and replacement actions. They should also develop local operating procedures to account for embedded COMSEC items to the satisfaction of the supply officer and EKMS manager.

d. SPAWAR PMW 161 will continue to be responsible for procuring COMSEC chip sets for both production and repair of host CCA at no cost to user.

e. NCMS/CMIO will be the primary central stock point for embedded COMSEC items managed through supply. CMIO will separate system stock managed by NAVICP Philadelphia Pa (CMIO account 078502) and NAVICP Mechanicsburg (CMIO account 078402) from production assets. Only system stock under the management of either NAVICP will be logged, tracked, repaired and replenished via supply. CMIO will be responsible to track embedded assets through CAV provided by NAVICP Philadelphia Pa (code 03333). Production assets will not be reported through CAV.

602 EMBEDDED MATERIAL LABELING

Host equipment requires a manufacturer's label identifying COMSEC when installed. This is usually accomplished on a nameplate stating "this unit contains", followed by the Classification, Short Title and serial Number of the embedded material. Ultimately the Government Program Manager is responsible for ensuring the manufacturer proper labeling is applied to each COMSEC equipment or component. When the LRU is removed for shipment or repair, the matching label will be removed and kept as a set.

603 ACCOUNTABILITY

a. The embedded COMSEC item is normally CCI and requires accounting within the CMCS. Either the LRU or the host equipment must be accounted for. However, the size and ready access of the COMSEC item may require accounting of the host unit rather than the actual device itself. For example, the MD 1324 will have a KGV 11 embedded for operation on a DAMA circuit. The KGV 11 is not readily available for sighting so the serial number and nomenclature of the MD 1324 is used within the CMCS to account for that embedded KGV 11.

b. If the host is being accounted for and the Embedded COMSEC LRU is removed, The LRU must be accounted for individually by performing a possession report using this article as authorization, i.e. E HVM 1 card installed in RT 1840 U. You must also perform a relief report on the host equipment, as it is no longer COMSEC accountable.

604 INVENTORY OF EMBEDDED COMSEC

Physically sighting the accountable embedded COMSEC LRU installed in the host equipment is normally impossible due to warranty and/or certification restrictions. If the host equipment is operational and properly labeled, the custodian must presume the embedded COMSEC LRU is installed and inventory it as such.

605 HANDLING AND SHIPPING

a. Embedded COMSEC material should be handled as all other COMSEC material, with custody of the material in control of the EKMS manager at all times. In the event a CASREP is deemed necessary, it is important that NCMS, CMIO and NAVICP be either an action or info addee on the CASREP.

b. Supply Officers/Departments will be an integral part of this process but must understand that COMSEC material will remain within the CMCS. Their involvement in the process will be limited to ensuring that funded requisitions and the processing of receipts for retail and wholesale spares is promptly coordinated on behalf of the user activity supported by the EKMS manager.

c. CMIO will ship replacement assets via FISC Norfolk by tracking number. Supply Officers may track asset(s) by retrieving copy of requisition and noting tracking number assigned on bottom of requisition. If not listed on requisition, tracking number may be obtained from CMIO. EKMS managers/supply personnel may contact FISC directly at (757) 444-4336 and give tracking number to track asset. Current guidelines for shipping are either registered mail or DCS to overseas units. FEDEX or other similar carriers are not authorized for shipment of COMSEC material outside the United States per NSA regulations. FISC Norfolk determines fastest means of shipping upon receipt from CMIO. If available, FEDEX will be used within the CONUS region.

606 LOGISTICS SUPPORT

Embedded COMSEC support is detailed in two phases, retail spares or site allowances and disposition/ replacement. Spares are issued IAW TYCOM and NAVICP guidance. Disposition and replacements of units follow similar guidance as conventional COMSEC.

a. Spare Embedded COMSEC only applies for those assets currently maintained by NAVICP Philadelphia. NAVICP Mechanicsburg does not issue retail spares of their assets. The procedures are as follows:

1. EKMS managers will request initial retail spares of Embedded COMSEC units managed by NAVICP Philadelphia Pa (Code 03333) via naval message and copy NCMS.

2. NAVICP Philadelphia Pa (code 03333) establishes site allowances for initial retail spare requirements of the embedded COMSEC units (RT-1840, RT-1824, RT-1794, RT-1716, RT-1836, RT-1851 and E-HVM) and forwards the established retail spare allowance requirements and authorized allowance quantities via naval message to the appropriate TYCOM, base sites and deploying fleet activities.

3. Supply Officers initiate a Milstrip requisition document, DD form 1348, (1 request per requisition) with a RIC of N32 for NAVICP Philadelphia during pre and post-msd, a y6 fund code at pre-msd and a qz fund code at post-msd, and a 5d advice code during pre-msd and post-msd. Ensure that card column 3 does not contain the letter "e", as the CAV system will reject the requisition. The Supply Officer transmits the requisition and provides the document number to the EKMS manager.

4. The EKMS manager will send a naval message to NCMS, requesting initial/increase of spares, with NAVICP Philadelphia Pa (code 03333) as an info addee. The message to NCMS should cite the following additional items: requisition document number provided by the Supply Officer, nomenclature and NSN of the embedded COMSEC unit. The following example has been provided:

```

TO          NCMS WASHINGTON DC(UC)
INFO        NAVICP PHILADELPHIA PA(UC)
            SPAWARSYSCEN CHARLESTON SC(UC)
            CHAIN OF COMMAND/ISIC

UNCLAS//
MSGID/GENADMIN/COMMAND NAME//
SUBJ/REQUEST FOR INITIAL SPARE INCREASE OF EMBEDDED COMSEC,
RT-XXXX//
REF/A/DOC/NCMS WASHINGTON DC/EKMS 5//
AMPN/CHAPTER 6, EMBEDDED COMSEC PROCEDURES.//
POC/XXXXXXXX,X.X/RANK/COMMAND/TEL: COMM AND DSN/EMAIL
ADDRESS//
REMARKS/1. PER REF A, (COMMAND NAME AND ACCOUNT NUMBER)
REQUESTS INITIAL/INCREASE OF SPARE ALLOTMENT FOR (S/T OF
EMBEDDED COMSEC). THE FOLLOWING INFORMATION IS PROVIDED:
SHORT TITLE          NSN          REQUISITION NUMBER//
    
```

5. When NAVICP receive the requisition document and a

copy of the naval message from NCMS authorizing release of initial/increase of retail spares, they will forward the requisition document to CMIO authorizing release of the embedded COMSEC unit from CMIO via the Commercial Asset Visibility system (CAV) to the requiring activity. Initial retail spares will not be issued by CMIO until both message from NCMS and requisitions are received.

6. Upon receipt of the embedded COMSEC unit the EKMS manager must provide the DD form 1348 to the Supply Officer who will process the receipt transaction.

b. Disposition and replacement of embedded COMSEC will follow the same guidelines as for traditional COMSEC but adding some supply procedures.

1. EKMS managers will request disposition and replacement of all failed embedded COMSEC listed section 601 via naval message to NCMS. The following example has been provided:

```
TO NCMS WASHINGTON DC(UC)
INFO NAVICP PHILADELPHIA PA(UC) OR NAVICP MECHANICSBURG
PA(UC)
SPAWARSYSCEN CHARLESTON SC(UC)
CMIO NORFOLK VA(UC)
CHAIN OF COMMAND/ISIC
UNCLAS//
MSGID/GENADMIN/COMMAND NAME//
SUBJ/REQUEST FOR DISPOSITION AND REPLACEMENT OF EMBEDDED
COMSEC//
REF/A/DOC/NCMS WASHINGTON DC/EKMS 5//
AMPN/CHAPTER 6, EMBEDDED COMSEC PROCEDURES.//
POC/XXXXXXX,X.X/RANK/COMMAND/TEL: COMM AND DSN/EMAIL
ADDRESS//
REMARKS/1. PER REF A, (COMMAND NAME AND ACCOUNT NUMBER)
REQUESTS DISPOSITION AND REPLACEMENT FOR (S/T OF EMBEDDED
COMSEC). THE FOLLOWING INFORMATION IS PROVIDED:
SHORT TITLE SER NSN REQUISITION NUMBER
```

2. REQUEST REPLACEMENT OF ABOVE UNITS.//

2. NCMS will respond via naval message providing directions for disposition and authorizing replacement of the failed unit. This traditional process remains intact with the following changes:

FOR NAVAIR UNITS ONLY:

a. The maintainer orders crypto material via Naval Aviation Logistics Command Management Information System (NALCOMIS), who then takes a non-ready-for-issue (NRFI) unit that has had applicable security measures taken i.e.; zeroized along with associated local custody form, and a copy of the maintenance

action form (MAF) to EKMS manager. This procedure applies only to the Aviation community or where NALCOMIS is used in conjunction with MAF.

b. The local element accepts the NRFI unit, ensures serial number and part number match the serial and part numbers on the MAF and transfers local custody of that part to the EKMS manager. If applicable, the EKMS manager issues a replacement RFI unit from his pool of stock spares and transfers local custody of the RFI unit to replace the failed unit. The EKMS manager provides a copy of the MAF to the local supply POC.

FOR ALL EKMS ACCOUNTS:

3. The EKMS manager must notify the Supply Officer and AIMD officer (if applicable) of the NRFI unit so that a requisition document, DD form 1348, can be generated to "beyond capability of maintenance" (BCM). The NRFI unit and a replacement wholesale spare can be requisitioned from the supply system. The supply officer creates a Milstrip requisition document, DD form 1348, and submits it into the supply system using a ric of n32 (Philadelphia) or n35 (Mechanicsburg) during pre and post-msd, a y6 fund code at pre-msd and appropriate fund code at post-msd, and the appropriate advice code during pre-msd and post-msd. The supply officer requests AIMD to induct the retrograde using the MAF created by the squadron in their mailbox (if applicable). The AIMD officer will process a BCM-1 action in NALCOMIS and the Supply Officer will complete the squadron DDSN if an issue was made by the EKMS manager. The Supply Officer must provide two copies of the DD form 1348 shipping document and a copy of the completed MAF to the EKMS manager.

4. The EKMS manager sends a message to NCMS with NAVICP Philadelphia Pa (code 03333) or NAVICP Mechanicsburg as an info addee requesting a replacement unit and disposition of the failed unit. The message to NCMS should cite the following additional items: replacement requisition document number, nomenclature and NSN of the embedded COMSEC unit, provided by the supply officer. In some instances, there will be two generated DD-1348's, one for turn in and one for replacement. If two requisitions are generated, the replacement requisition number is required on the EKMS message and the turn in requisition must accompany the failed unit when sent for repair to vendor, or turned into CMIO.

5. NCMS will respond via message with the disposition instructions for the failed unit. Once authorized to transfer the embedded COMSEC device for repair, the EKMS manager will generate a SF-153 account to account transfer report. Proper accounting of COMSEC devices using SF-153's is paramount in maintaining the EKMS inventory. The DD form 1348 is essential to ensuring the user receives credit for turning in the failed unit and assuring the user receives a replacement device. The EKMS manager must annotate the serial number of the failed unit, the

BCM/replacement requisition document number and the NSN of the failed unit onto the SF-153. The EKMS manager will place one copy of the DD form 1348 on the outside of the shipping container of the failed unit and attach a second copy of the DD form 1348 with the SF-153 to the failed unit inside the shipping container. The EKMS manager will provide a copy of the DD 1348 shipping document annotated with applicable shipping information to the Supply Officer. Once item has been shipped, the EKMS manager will provide signed proof of shipment (POS) document to the Supply Officer and when received, must provide the Supply Officer a copy of the DD form 1348 with the proof of delivery information. Failure to complete this transaction with the Supply Officer will leave open requisitions in the supply system.

6. The Supply Officer will process a D6R in rsupply upon receipt of the 1348 shipping document. Upon receipt of the DD form 1348 containing proof of delivery, the supply officer will post proof of delivery in resupply.

7. When either NAVICP Philadelphia Pa (code 03333) or NAVICP Mechanicsburg receives the BCM/replacement requisition document and a copy of the replacement/disposition message from NCMS, they will forward the stock requisition document (if an issue was made) or the DTO requisition (if no issue was made) to CMIO authorizing release of the replacement embedded COMSEC unit from CMIO via CAV to the requiring activity.

NOTE: A replacement unit will not be issued by CMIO until a requisition is received and passed by NAVICP to CMIO and a message is received from NCMS.

8. Upon receipt of the stock replacement embedded COMSEC unit the EKMS manager must provide the DD form 1348 to the Supply Officer who will process the receipt transaction.

**CHAPTER 7 - OBSOLETE OR BEYOND ECONOMICAL REPAIR (BER)
EQUIPMENT DISPOSITION**

701 DESTRUCTION FOR COMSEC EQUIPMENT

a. Most contemporary cryptographic equipment carries nameplates showing "TSEC" (Telecommunications nomenclature) and either a security classification or "Controlled Cryptographic Item" (CCI) markings. Classified and CCI printed wiring assemblies and other removable components of such equipment are identified by similar nameplates. Current procedures for disposing of cryptographic equipment which is determined to be obsolete or beyond economical repair (BER) require that classified and CCI components and equipment nameplates be removed and destroyed as classified material and that unclassified equipment hulks be destroyed by any method which masks the purpose or application of the equipment. User commands have previously been prohibited from disposing of cryptographic equipment and considerable expense has been incurred in collecting them at NCMS or CMIO for disposal.

b. It is stressed that these instructions provide disposition guidance for equipment but do not provide blanket authorization to carry out destruction. User commands will submit requests for disposition of cryptographic equipment to NCMS in accordance with EKMS 5, Chapter 4.

c. NCMS will direct users to locally dispose of that equipment which have been determined to be obsolete and for which no reutilization requirements exist. Disposal will be accomplished through demilitarization and sale via the local Defense Reutilization and Marketing Office (DRMO) (if available) in accordance with the following procedures:

1. All classified, CCI components and equipment nameplates which show either a classification, the "Controlled Cryptographic Item (CCI)" or U.S. Government Property markings must be removed and mutilated beyond recognition by smashing, cutting, tearing and/or burning residue as with other classified material. Components may be removed from printed wiring assemblies prior to smashing, and individual components retained as bin spares if desired.

2. All other printed wiring assemblies (PWA) and pluggable components can be removed and turned over in bulk to a local DRMO (if available) for precious metal recovery IAW DOD 4160.21-H. Each delivery to a DRMO must be accompanied by a completed DD Form 1348-1 showing the scrap classification list code "P8E" (precious metals). Individual boards need not be listed on the DD Form 1348-1. Identification need only be "one lot of printed wiring assemblies."

NOTE: If DRMO cannot be utilized, due to lack of facility,

not accepting scrap, it is recommended that alternate means of disposal be utilized, i.e. recycling centers or trash bins. In this case, it is incumbent upon the managers to ensure the carcasses are completely unusable and demilitarized.

3. The unclassified hulks can be turned in to a local DRMO (if available) along with a Certificate of Demilitarization ("I certify that this item has been demilitarized IAW DOD 4160.21-M-1") and a DD Form 1348-1 showing demilitarization code "L" (scrap) and a demilitarization performance code "6" (demilitarization accomplished). Like equipment hulks may be turned in under the same DD Form 1348.1, but a separate demilitarization certificate must accompany each piece of equipment.

4. If DRMO is unavailable or will not except the material, the PWA's and hulks of the equipment may be disposed of locally.

5. Upon completion of demilitarization and disposal actions, disposing EKMS Manager must submit an SF-153 destruction report in accordance with EKMS 1 in order to remove the equipment from the account inventory.

d. Money acquired through the sale of scrap material through the DRMO is channeled back to the activity that turned in the material, but the most significant cost savings to the government through these disposal techniques are the avoidance of transportation and packing costs that would otherwise be required when returning the obsolete equipment to NCMS or CMIO.

e. Questions and specific guidance related to the disposition of obsolete cryptographic equipment may be directed to N34 division at NCMS.

f. The following procedures (per NSA doc IAPG-001-04) will be utilized once approval has been granted by NCMS for destruction.

1. REMOVE ALL CLASSIFIED OR CCI PRINTED CIRCUIT BOARDS (PCB's), modules, chips, etc., from the equipment - The boards should be labeled CCI, Classified, or Crypto

2. DEFACE/REMOVE NAMEPLATES & LABELS (once boards are removed) - Peel off all labels that show the equipment classification or "CCI", or obliterate all writing on the surface of the equipment. Remove or obliterate the equipment nameplates.

3. RETURN ALL CLASSIFIED AND/OR CCI BOARDS, CHIPS, or PROCESSORS to the NSA for destruction.

4. CCI boards and chips can be sent via agency courier, U.S. Registered Mail, or commercial carriers that certify that they utilize a system that accurately reflects a

continuous chain of accountability for the material while it is in transit. Address the shipping package to:

National Security Agency
Attn: CMC - Suite 6890 (Account 889999)
9800 Savage Road
Fort George G. Meade, MD 20755-6890

Note: Overseas sites forwarding CCI components to NSA shall ensure the material does not at any time pass out of US control, pass through any foreign postal system, or be subject to any foreign inspection

5. SECRET and above and CRYPTO marked boards and chips must be sent via agency courier or by the Defense Courier Service (DCS) to:

449563- BA20
FILM DESTRUCTION FACILITY
Attn: Account 889999

Include TWO (2) COPIES of the CMC Receipt for Destruction of Classified Material form (which can be obtained by calling 301-688-6672) and a self addressed stamped envelope. Once destruction is completed CMC will send back a signed copy within 4-6 weeks (this process supports a continuous chain of accountability). If a return copy is not received within that time, call CMC at 301-688-6672 to inquire. Upon receipt of the returned copy, you may submit a SF-153 Destruction Report using your normal COMSEC accounting procedures to NSA, I5131. When sending different types of items place all similar items (chips with chips, boards with boards, etc.) in the same package.

6. The remaining equipment hulks and other PCBs that are NOT classified or CCI may be kept for spares. All accountable items must be turned in for destruction in order to purge the demilitarize equipment from the COMSEC account and to complete the disposal process.

702 DISPOSITION OF EXCESS STU III TELEPHONES

a. Commands holding excess STU III telephones will make them available to their ISIC for reassignment to other commands within the ISIC sphere of influence.

b. NCMS will direct the transfer of any excess and useable STU III's the ISIC does not require to BAE account 870597. Each user command must be explicit in identifying each excess STU III to ensure proper reassignment of the equipment, i.e. disposition message should have each STU reflected by serial number. When a command is directed to return STU III's to BAE, everything associated with that STU III (i.e., manuals, power supplies,

handsets, etc.) must be included.

703 DISPOSITION OF INOPERATIVE STU III TELEPHONES

a. Failed STU III telephones should be transferred to BAE for repair or replacements. If a one-for-one replacement is required, the holding command must annotate the requirement on the SF-153 transfer document and on the STU III Failure Report, which will accompany each returned STU III.

b. Prior to transfer of inoperative STU III's or requests for disposition, custodians should call the INFOSEC Help Desk at BAE commercial (757) 366-4600 or SPAWARSYSCEN CHARLESTON at commercial in U.S. at 1-800-304-4636. Overseas commands must call DSN 563-8878 or commercial (803) 974-5426.

704 DISPOSITION INSTRUCTIONS FOR STU III

The following guidance applies to all STU III's directed by NCMS to locally destroy. All associated supplies will be included in the destruction.

a. Remove all printed circuit boards contained in each telephone.

b. Package and ship the removed circuit boards per NSA instructions provided in Chapter 7, sec 701.

c. All other pluggable components must then be turned over in bulk to a local DRMO for precious metal recovery. Each delivery to DRMO must be accompanied by a completed DD Form 1348-1. Identification need only be "One lot of printed wiring assemblies."

d. The unclassified hulks must be turned in to a local DRMO, along with a DD Form 1348-1 with the statement "I certify that this equipment has been demilitarized IAW reference (c)."

NOTE: If DRMO cannot be utilized, due to lack of facility, not accepting scrap, it is recommended that alternate means of disposal be utilized, i.e. recycling centers or trash bins. In this case, it is incumbent upon the managers to ensure the carcasses are completely unusable and demilitarized.

e. Submit a SF-153 destruction report to NCMS to have the material removed from your COMSEC inventory.

ANNEX A

EKMS 5 YELLOW PAGES

Account 163015 (CRF SAN DIEGO)

Commanding Officer
Space Naval Warfare Center
Attn: EKMS MGR
53560 Hull Street
San Diego CA 92152-5001

DCS Address:
163015-SN00
SPAWARSYSCEN San Diego
DSN: 526-6175/6177/1886
Com: (619) 556-6175/6177/1886

Account 181022 (CRF NORFOLK)

Commander
Norfolk Naval Shipyard
Attn: EKMS Manager
Portsmouth VA 23709-5000

DCS Address:
181022-NF00
Norfolk Naval Shipyard
DSN: 961-5369/5395
Com: (757) 396-5369/5395

Account 078202 (CMIO BROKEN COPY)

CMIO Norfolk
Broken Copy Stock
8876 2nd Street
Norfolk, VA 23511-3797

DCS Address:
078202-NF01
CMIO Norfolk Broken Copy Stock
DSN: 565-7797
Com: (757)445-7797

Account 078402 (CMIO NAVICP-S)

Officer In Charge
CMIO NAVICP-S
8876 2nd Street
Norfolk, VA 23511-3797

DCS Address:
078402-NF01
CMIO NAVICP-S Norfolk
DSN: 564-7051/7052/7053
Com: (757)444-7501/7052/7053

Account 5B1099

Commander
Tobyhanna Army Depot
Attn: Acct 5B1099/SIOTY-MC-D
Bldg 73, 11 Hap Arnold Blvd
Tobyhanna PA 18466-5110

DCS Address:
5B1099-BA06
Tobyhanna Army Depot
DSN: 795-6598/6806/6861
Com: (717) 895-6598/6806/6861

ANNEX A

**Account 169200
(COMMARCORLOGBASES ALBANY)**

COMMANDING GENERAL
ATTN: EKMS MANAGER ACCT 169200
814 RADFORD BLVD STE 2032
BLDG 1340 DOOR 9
MCLB ALBANY, GA 31704-0321

DCS Address:
169200-JA30
CG MCLB CCI EQUIP ALBANY GA

DSN: 567-6385
Com: (229)639-6385

**Account 281015 (SPAWARSYSCEN
ST JULIENS CREEK)**

COMMANDING OFFICER
SPAWAR DET ST JULIENS CR
ATTN EKMS MGR 281015
PO BOX 1376
NORFOLK VA 23501-1376

DCS Address:
281015-NF00
SPAWAR DET ST JULIENS CREEK
DSN: 961-6713
Com: (757)558-6713/396-0100)

Account 870597 (BAE SYSTEMS)

BAE SYS
APPLIED TECH INC
821 LIVE OAK DRIVE
CHESAPEAKE, VA 23320-2601

DCS Address:
870597-NF00
BAE SYSTEMS CHESAPEAKE VA
Com: (757)366-4790/4793

**Account 870871 (L-3
Communications West)**

L3 COMMUNICATION SYS CSWT
ATTN: CHERISE PALMER/SANDRA
KROS
P.O. BOX 16850
SALT LAKE CITY, UT 84116-0850

DCS Address:
870871-CS04
L-3 COMMUNICATION SALT LAKE
CITY UT

COMM: (801)594-3030

Account 873173 (Raytheon)

RAYTHEON CO
ATTN: EKMS MGR ACCT 873173
7887 BRYAN DAIRY RD
LARGO, FL 33777-1452

DCS Address:
873173-JA21
RAYTHEON CO LARGO FL

Comm: (727)768-8790/8970

**Account 870981 (General
Dynamics Comm Systems)**

General Dynamics/Comms Sys
400 John Quincy Adams Rd Bldg
80
Attn: EKMS MGR Mark Bouchard
Taunton, MA 02780-1069

DCS Address:
870987-MG12
GD-C4 SYSTEMS
TAUNTON MA

Comm: (508)880-4598/4539

ANNEX B

COMSEC EQUIPMENT/ANCILLARIES SUPPLY INFORMATION

SHORT TITLE	PART NUMBER	STOCK NUMBER
E HUA	ON642550	5998-01-457-1163
E HVM		
IMPVD FILL	02227-0111490	
KGV 25	4071761-0501	
KGV 26	4073523-0501	5895-01-426-0493
KGV 113	4073700-0501	5998-01-423-8722
KOV 17	ON657841	
MD 1324A U	VA-002550-0124	5895-01-448-8901
MD 1324 U	VA-010542-000	5895-01-481-4599
ON 512424		5810-01-066-7587
PP 7506		
PP 7507		
PP 7516		
PP 7517		
RT 1799 P C	01-P4510F001	5825-LL-H55-5023

ANNEX C

AVAILABLE PWA KITS

ALL FEDERAL ITEM IDENTIFICATION NUMBERS (FIIN)
ARE CURRENT AT TIME OF PRINTING

<u>SHORT TITLE</u>	<u>EQUIPMENT SUPPORTED</u>	<u>REMARKS</u>
KWQ 46R	KWR 46 2	
KWQ 46T	KWT 46 2	
RGQ 40A PARALLEL	KG 40A	PARALLEL
RGQ 40A SERIAL	KG 40A	SERIAL
RGQ 84A	KG 84A	
RGQ 84C	KG 84C	
RXQ 58	HYX 58	
RYQ 57	KY 57	
RYQ 58 1	KY 58	NOTE 1 ON PAGE D-44
RYQ 58 2	KY 58	INCLUDES E DTT BOARD
RYQ 99A	KY 99A	

The remainder of this annex contains inventory listings for repair kits. These inventories must be maintained, and all PWAs in operational condition. These inventory lists should be duplicated and copies placed inside each repair kit to facilitate inventories/page checks.

ANNEX C

KWQ 46R

PN: ON360790-501

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E DZA OR	ON360807	1	U	5810-01-214-3054
E DZA/2	ON360807	1	U	5998-01-337-4328
E DZB	ON360803	1	U	5810-01-214-3053
E DZC	ON360811	1	C	5810-01-214-3055
E DZE	ON360831	1	U	5810-01-213-9033
E DZF	ON360827	1	U	5810-01-213-9032
E DZG	ON360823	1	U	5810-01-213-9031
E DZH	ON360843	1	U	5810-01-214-3057
E DZI	ON360835	1	U	5810-01-214-3064
E DZK	ON360819	1	U	5810-01-214-3056
E DZL	ON360851	1	U	5810-01-214-3058
E DZM	ON360815	1	U	5810-01-213-9030
E DZP	ON360839	1	U	5810-01-213-8140
E DZU	ON360855	1	U	5810-01-214-3063
E DZV	ON360847	1	U	5810-01-214-3017
E DZX	ON360862	1	U	5810-01-213-8144
Z ALA	ON360875	1	U	5810-01-213-8149
Z ALG	ON360859	1	U	5810-01-213-8139

KWQ 46T

P/N: ON360790-501

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E DZC	ON360811	1	C	5810-01-214-3055
E DZD	ON360884	1	C	5810-01-213-8137
E DZE	ON360831	1	U	5810-01-213-9033
E DZG	ON360823	1	U	5810-01-213-9031
E DZH	ON360843	1	U	5810-01-214-3057
E DZJ	ON360896	1	U	5810-01-213-8142
E DZK	ON360819	1	U	5810-01-214-3056
E DZL	ON360851	1	U	5810-01-214-3058
E DZM	ON360815	1	U	5810-01-213-9030
E DZQ	ON360919	1	U	5810-01-214-3059
E DZR	ON360915	1	U	5810-01-215-9277
E DZS	ON360888	1	U	5810-01-214-3060
E DZT	ON360892	1	U	5810-01-214-3061
E DZV	ON360847	1	U	5810-01-214-3017
E DZW	ON360900	1	U	5810-01-214-3062
E DZX	ON360862	1	U	5810-01-213-8144
Z ALA	ON360875	1	U	5810-01-213-8149
Z ALG	ON360859	1	U	5810-01-213-8139

ANY OTHER MISCELLANEOUS TOOLS, FUSES, ETC., ARE NOT SUBJECT TO PAGECHECK; WHEN ATTRITED, OBTAIN THROUGH REGULAR SUPPLY ALLOWANCE PROCEDURES.

ANNEX C

RGQ 40A PARALLEL

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E CRJ OR	0313640	1	U	5998-01-366-2261
E CRJ/1				
E CRK OR	0313644	1	U	5998-01-366-2266
E CRK/1				
E CRL OR	0313616	1	U	5998-01-366-2261
E CRL/1				
E CRM OR	0313612	1	U	5998-01-366-2260
E CRM/1				
E CRN OR	0313620	1	U	5998-01-366-2262
E CRN/1				
E CRO OR	0313624	1	U	5998-01-366-2263
E CRO/1				
E CRP OR	0313646	1	U	5998-01-366-2267
E CRP/1				
E CRV OR	0313745	1	U	5998-01-362-9494
E CRV/1				
E CRW OR	0313679	3	U	5998-010366-2239
E CRW/1				
E CRY OR	0313667	1	U	5998-01-336-2236
E CRY/1				
E CRZ OR	0313675	1	U	5998-01-366-2238
E CRZ/1				
E CSA OR	0313708	1	U	5998-01-366-9598
E CSA/1				
E CSB OR	0313608	1	U	5998-01-366-2259
E CSB/1				
E CSC OR	0313741	1	U	5998-01-362-9495
E CSC/1				
E CSN OR	0313752	1	U	5998-01-364-5483
E CSN/1				
E GHZ	0313642	1	U	5998-01-366-2265
E CRX OR	0313747	1	U	
E CRX/1				
Extender	02227-16887	1	U	

Note: A limited number of RGQ 40 Parallel repair kits were converted from older assets. These kits may or may not contain the E CSA, E CSB, or E CSC printed wiring assemblies.

ANNEX C

RGQ 40A SERIAL

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E CRJ OR	0313640	1	U	5998-01-366-2261
E CRJ/1				
E CRK OR	0313644	1	U	5998-01-366-2266
E CRK/1				
E CRL OR	0313616	1	U	5998-01-366-2261
E CRL/1				
E CRM OR	0313616	1	U	5998-01-366-2260
E CRM/1				
E CRN OR	0313620	1	U	5998-01-366-2262
E CRN/1				
E CRO OR	0313624	1	U	5998-01-366-2263
E CRO/1				
E CRP OR	0313646	1	U	5998-01-366-2267
E CRP/1				
E CRR OR	0313655	1	U	5998-01-366-2269
E CRR/1				
E CRS OR	0313651	1	U	5998-01-366-2268
E CRS/1				
E CRU OR	0313659	1	U	5998-01-366-2270
E CRU/1				
E CVZ OR	0313694	1	U	5998-01-366-7272
E CVZ/1				
E DZZ	0313663	1	U	5998-01-366-2271
E GHZ	0313642	1	U	5998-01-366-2265
Extender	02227-16887	1	U	

ANNEX C

RGQ 84A

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E EQA	ON315904-1		U	5810-01-150-5037
E EQB/1	ON315896-1		U	6130-01-150-5062
E EQQ	ON535837	1	U	5810-01-095-9916
E EQU	ON535853	1	U	5810-01-096-0761
E EQY	ON278466	1	U	5810-01-095-9922
E EWA	ON315900-1		U	6130-01-151-1699
E FNJ/1	ON278592-1		U	5810-01-150-5030
E FNK	ON278632-1		U	5810-01-150-5038
E FNL	ON278628-1		U	5810-01-150-5031
E FNM	ON278624-1		U	5810-01-151-1715
E FNN/1	ON278620-		U	5810-01-150-5032
E FNO	ON278604-1		U	5810-01-150-7870
E FNP	ON278616-1		U	5810-01-150-5029
E FNQ	ON278600-1		U	5810-01-148-5093
Z AMW	ON278463	1	U	5810-01-095-9807
CONTAINER, METAL		1	U	

RGQ 84C

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E EQA	0N315904-1		U	5810-01-150-5037
E EQB-1	0N315896-1		U	6130-01-150-5062
E EWA	0N315900-1		U	6130-01-151-1699
E EQY	0N278466	1	U	5998-01-095-9922
E FYA/1	0N422158-501	1	U	5998-01-297-0695
E FYB	0N363374-501	1	U	5810-01-231-6217
E FYD	0N363311-501	1	U	5810-01-231-6218
E FYE	0N363315-501	1	U	5810-01-231-6220
E FYF	0N363319-501	1	U	5810-01-231-6221
E FYG	0N363323-501	1	U	5810-01-231-6222
E FYH	0N363459-501	1	U	5999-01-292-3554
E FYI	0N363479-501	1	U	5999-01-292-3555
E FYJ	0N363471-501	1	U	5340-01-258-1632
Z AMW	0N278463	1	U	5810-01-095-9807
CONTAINER, METAL		1	U	

ANNEX C

RXQ 58

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E EVP OR	0126127-1		U	5810-01-128-5982
E EPY	0126897	1	U	5999-01-164-3454
E EVQ OR	0126126-1		U	5810-01-128-5983
E EPZ	0126899	1	U	5999-01-164-3455
E EVR	0125973	1	U	5810-01-129-1379
E EVS	0126149-1		U	5810-01-128-5987

THE ITEMS BELOW ARE NOT ACCOUNTABLE. INFORMATION IS PROVIDED FOR RE-ORDERING PURPOSES ONLY. IF EXACT QUANTITY IS NOT RECEIVED OR ITEM IS ATTRITED, REPLACE THROUGH NORMAL SUPPLY CHANNELS. THESE ITEMS ARE CONTAINED IN A PLASTIC BOX IN THE REPAIR KIT

<u>NOMEN</u>	<u>PART NR</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>NSN</u>
GASKET	0126901-1		GASKET	
SCREW	0126773-2	5	SCREW, FLATHEAD, 138-32 X .44	
KNOB	MS91528-OC1B	1	KNOB	5355-00-057-7794
SCREW	0126012-1	4	SCREW, MACHINE	
SCREW	MS3212-14	8	SCREW, PANHEAD, 138-32 X .44	5305-00-832-5200
WASHER	0126001-1	8	WASHER, NON-METALLIC	5310-01-126-1643
GASKET	0126971-1	2	GASKET	
LAMP	0125999-1	2	LAMP, INCANDESCENT	6240-01-135-3873
INDICATOR	0125998-1		LIGHT, INDICATOR	6210-01-134-1272
INDICATOR	0125998-2	1	LIGHT, INDICATOR	6210-01-134-1272
GASKET	MS29513-017	1	"O-RING"	5330-00-004-3105
GASKET	MS29513-019	1	"O-RING"	5330-00-248-3849
GASKET	MS29513-022	1	"O-RING"	5330-00-250-0230

ANNEX C

RYQ 57

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E DTA	ON241639	1	U	5810-01-048-8994
E DTB	ON241624	1	U	5810-01-048-8516
E DTC/1	ON241626	1	U	5810-01-048-8517
E DTD	ON503181	1	U	5810-01-048-8518
E DTE	ON241622	1	U	5810-01-048-8515
E DTF/1	ON241620	1	U	5810-01-048-8514
E DTG	ON241618	1	U	5810-01-048-8513
E DTH	ON241635	1	U	5810-01-048-8519
CONTAINER, METAL	ON503198-1	1	U	

RYQ 58 1

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E DTB	ON241624	1	U	5810-01-048-8516
E DTC/1	ON241626	1	U	5810-01-048-8517
E DTD	ON503181	1	U	5810-01-048-8518
E DTE	ON241622	1	U	5810-01-048-8515
E DTF/2	ON241620	1	U	5810-01-048-8514
E DTG	ON241618	1	U	5810-01-048-8513
E DTU	ON241614	1	U	5810-01-048-8511
CONTAINER, METAL	ON503198-3	1	U	

ANNEX C

RYQ 58 2

P/N: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E DTB	ON241624	1	U	5810-01-048-8516
E DTC/1	ON241626	1	U	5810-01-048-8517
E DTD	ON503181	1	U	5810-01-048-8518
E DTE	ON241622	1	U	5810-01-048-8515
E DTF/2	ON241620	1	U	5810-01-048-8514
E DTG	ON241618	1	U	5810-01-048-8513
E DTT	ON241616	1	U	5810-01-048-8512
E DTU	ON241614	1	U	5810-01-048-8511
FRONT PANEL				5810-01-067-1204
EXTRACTOR	ON205104	1	U	5810-01-035-2860
BOARD				
CONTAINER,	ON503198-4	1	U	
METAL				

NOTE 1: RYQ 58 1 AND RYQ 58 2 SUPPORT ITEMS ARE INTERCHANGEABLE WITH THE EXCEPTION OF ADDITIONAL E-DTT BOARD ITEM INCLUDED WITH RYQ 58 2.

NOTE 2: EXTENDER BOARD IS NOT PROVIDED WITH ALL UNITS. IF NOT PRESENT, DO NOT ORDER.

RYQ 99A

PN: N/A

NSN: N/A

<u>SHORT TITLE</u>	<u>PART NR</u>	<u>QTY</u>	<u>CLASS</u>	<u>NSN</u>
E HWA	ON406512-1	1	U	5998-01-408-9148
E HWA/1	ON405792-2	1	U	5998-01-443-1050
E HWB	ON406506-1	1	U	5998-01-408-9151
E HWB/1	ON406600-1	1	U	5998-01-443-1055
E HWC	ON406558-1	1	U	5998-01-408-9153
E HWD	ON406503-1	1	U	5998-01-408-9152
E HWD/1	ON406586-1	1	U	5998-01-443-1057
E HWD/2	ON405801-2	1	U	5998-01-443-1056
E HWD/3	ON406597-1	1	U	5998-01-443-1058
E HWE	ON406509-1	1	U	5998-01-412-9690
BATTERY COVER	ON198959	1	U	5810-01-059-1532
LATCHES				
LENS FILTER	ON406328-1	1	U	5810-01-366-9492
CARD EXTRACTOR	ON408346-1	1	U	5810-01-366-2544
KNOB	ON406349-1	4	U	5810-01-366-2540

ANNEX D

AUTHORIZED MODIFICATIONS

The following is a summary of all cryptographic equipment modifications approved by NSA as of the promulgation date of this publication. Modifications are listed alphabetically by equipment short title and MOD number. Amplification and identification of modifications may be obtained from the Mandatory Modification Verification Guide. Information provided is:

- a. Cryptographic Equipment Short Title
- b. MOD Status
 - O - Optional
 - M - Mandatory
 - (MC) - Mode Change Required (see Purpose column)
 - * - Still awaiting approval or promulgation
- c. MOD Source
 - Supply - See paragraph 0403
 - DCMS - Code 30
 - N/A - Not Applicable, no material required
- d. Reference - Source of modification instructions
- e. Purpose - Purpose of the modification. (Check for installation of all mandatory modifications before placing equipment in service.)

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
HGF 91/92/94				
	1	M	REF: NAMM 19 N/A	REMOVE CLASSIFICATION PLATE.
HNF 81 1				
	1	O	REF: NAMM 15 DCMS	REMOVE OVER-VOLTAGE PROTECTION
HNF 81 2				
	1	M	REF: NAM 15 DCMS	REPLACE K-1. ISOLATE K-6 GROUND
HYP 67				
	1	M	REF: MAMM 384 DCMS	RESOLVE EMI PROBLEM.

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
HYX 57				
	1	M	REF: KAM 340 DCMS	IMPROVE E DTN PWA IN HYX 57 SERNUMS 1 - 151.
KG 30 (FAMILY)				
	2	O	REF: KAM 237/243 SUPPLY	CORRECT OPERATIONAL ABNORMALITIES WHEN SOME EQUIPMENTS ARE TURNED ON.
	5	O	DCMS	INSTALL THE KGK 30 ELECTRONIC PERMUTER. KG 33A AND KG 35A EQUIPMENT WILL NOT HAVE THIS MOD INSTALLED.
	6	M	DCMS	WARNING LABEL.
	7	M	N/A	REPLACE E BDA WITH E FWO.
	8	M	N/A	ADD FERRITE BEAD TO KG 30 FAMILY PERMUTER (KGK 30)
KG 33/33A				
	1	M	REF: KAM 237/243 DCMS	TO ELIMINATE A POSSIBLE SHOCK HAZARD.
KG 34/34A				
	4	O	REF: KAM 237/243 SUPPLY	TO ALLOW OPERATION WITH LOW-SPEED INTERFACE CIRCUITS.
KG 40				
	1	O	REF: KAM 270 N/A	SPECIAL MISSION E CRQ/E DZZ
	2	M (MC)	N/A	REPLACE E CRI, E CRJ, AND MOTHERBOARD. CHANGES TO KG 40A.
KG 44				
	1	M	REF: KAM 313 N/A	SAFETY SHIELD
	2	M	N/A	TO IMPROVE TEMPEST

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
KG 45				
	1	M	REF: KAM 377 SUPPLY	TO PREVENT FAILURE OF THE KG 45 INPUT RESISTORS WHEN OPERATED IN THE WORST-CASE MODE.
	2	O	SUPPLY	TO DECREASE THE PROBABILITY OF FAILURE OF DIODE CR-10.
	3	M	SUPPLY	PREVENT COMPROMISE OF THE SECURITY OF E DSV/1 PRINTED WIRING ASSEMBLY (PWA).
	4	M	DCMS	CORRECT SEVERAL PROBLEMS ASSOCIATED WITH THE KG 45.
<hr/>				
KG 66				
	1	O	REF: KAM 471 CRF	CORRECT THE VARIABLE HOLD FEATURE.
<hr/>				
KG 67				
	1	M	REF: MAMM 381 DCMS	REPLACE DIODE CASE CR11.
<hr/>				
KG 84A				
	1	M	REF: KAM 410 DCMS	TO INITIATE RESET SIGNAL ON E FNN WHEN POWERING UP.
	2	M	DCMS	TO REDUCE VOLTAGE OVERSHOOT ON E EQB WHEN POWERING UP.
	3	O	DCMS	SPECIAL MISSION MOD.
	4	O	N/A	SPECIAL MISSION MOD.
<hr/>				
KG 84C				
	1	O	REF: KAM 504 DCMS	CONDITIONED DATA

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
KG 94/94A/194/194A				
			REF: KAM 457/529	
	1	M	N/A	ROM MODIFICATION FOR RESYNC LEVEL COMMAND. SERNUMS 1 - 1200.
	2	O	N/A	MIL-STD-188 TO CCITT CONVERSION
	3	O (MC)	DCMS	MODIFIES E GQY AND E GFX/1. CHANGES TO KG 194/194A.
	4	M *	DCMS	REPAIR KSD 64A SPORADIC ZEROIZATION.
<hr/>				
KG 95 2				
			REF: KAM 521	
	1	O	DCMS	DISABLE HOT SPARE IN KG 95R MODE.
<hr/>				
KGR 96				
			REF: KAM 318	
	1	O	N/A	FOR REMOTE CONTROL.
<hr/>				
KGT 7/7A				
			REF: N/A	
	1	O		
	2	M	DCMS	INSTALL JUMPER.
<hr/>				
KGT/KGR/KGX 60				
			REF: N/A	
	1	M	DCMS	CHANGE "J" LEAD CONFIGURATION.
<hr/>				
KGV 61				
			REF: N/A	
	1	M	DCMS	ATTACH MYLAR TAPE TO CHASSIS.
<hr/>				
KGX 40				
			REF: KAM 279	
	1	M	DCMS	WARNING LABEL.
<hr/>				
KGX 60				
			REF: N/A	
	1	O		
	2	O		
	3	M	DCMS	DATA CLOCK FIRMWARE CHANGE.

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
KI 111				
			REF: N/A	
	1	M	DCMS	CHANGE LOCATION OF MICROSWITCH.
	2	M	DCMS	CHANGE E-GKI LABELS.
	3	M	DCMS	REMOVE RESISTOR ON E-HYP.
	4	M	DCMS	NEW REGULATED BATTERY PACK.
	5	M	DCMS	WARNING AND CAUTION LABELS.
	6	M	DCMS	DOWNGRADE TO CCI.
<hr/>				
KI 113				
			REF: MAMM 507	
	1	M	DCMS	INCREASE BLACKER FRONT END CAPABILITY.
<hr/>				
KL 51				
			REF: KAM 438	
	1	O	SUPPLY	IMPROVE TEMPEST.
	2	M	SUPPLY	IMPROVE TEMPEST. PERFORMED BY MICRO-MIN CRF ONLY.
<hr/>				
KWR 46				
			REF: KAM 490	
	1	M	CRF	IMPROVE TEMPEST FOR CERTAIN SERIAL NUMBERS. REFER TO KAM.
	2	O	SUPPLY	REDUCE POTENTIAL DAMAGE TO DOOR.
	3	O	NESSEC	REDUCE VOLUME ON SONIC ALARM
	4	O	CRF	ELIMINATES PREAMBLE MIS-INTERPRETATION.
	5	M	DCMS	MERCURY/LITHIUM BATTERY WARNING.
<hr/>				
KWT 46				
			REF: KAM 490	
	1	M	CRF	IMPROVE TEMPEST FOR CERTAIN SERIAL NUMBERS. REFER TO KAM.
	2	O	SUPPLY	REDUCE POTENTIAL DAMAGE TO DOOR.
	3	O	SUPPLY	REDUCE VOLUME ON SONIC ALARM.
	4	O	CRF	ELIMINATES PREAMBLE MIS-INTERPRETATION.
	5	M	DCMS	MERCURY/LITHIUM BATTERY WARNING.

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
KY 57/58				
			REF: KAM 336/337	
	1	O	SUPPLY	INSTALL AN ELAPSED TIME METER.
	2	M	DCMS	INSTALL A DIODE INDUCTOR.
	3	O	SUPPLY	ELIMINATE A FAILURE MECHANISM ASSOCIATED WITH THE RC-C CHIP U-3 (ON190221) ON THE E DTF PRINTED WIRING ASSEMBLY (PWA).
	4	O	N/A	SPECIAL MISSION MOD.
	5	O	N/A	SPECIAL MISSION MOD.
	6	O	DCMS	REPLACE E DTC/1. MANDITORY MOD FOR USE WITH PATRIOT MISSILE.
	7	M	DCMS	REPLACE U3 ON E DTF.

NOTE: MOD 7 Time Compliance date has been postponed indefinitely for the KY 57. The modification must be installed when it is returned for repair.

KY 65

			REF: KAM 333	
	1	M	DCMS	REPLACE NAMEPLATES.
	2	M	N/A	EPOXY BATTERY PACK Z AKG.
	3	M (MC)	DCMS	REPLACE E DVA, E DVB, E DVC, AND E DVK WITH E EPG, E EPH, AND E EPE. CHANGES TO KY 65A.

KY 75

			REF: KAM 334	
	1	M (MC)	DCMS	REPLACE E DVA, E DVB, E DVC, AND E DVQ WITH E EPG, E EPH, AND E EPF. CHANGES TO KY 75a.

KYK 13

			REF: KAM 330	
	1	O	SUPPLY	PROVIDE CONNECTOR COVER.
	2	O	DCMS	PROVIDE LANYARD YOKE.
	3	O	SUPPLY	PREVENT FILL CONNECTOR DAMAGE.

ST 20

			REF: SAM 20	
	1	M	N/A	REMOVE R1, R2, R3.

ANNEX D

<u>EQUIP</u>	<u>MOD NR</u>	<u>STATUS</u>	<u>SOURCE</u>	<u>PURPOSE</u>
ST 27			REF: SAM 41	
	1	M	N/A	WIRE CHANGES.
ST 31A			REF: N/A	
	1	M	N/A	POWER CABLE.
ST 44			REF: KAM 339	
	1	M	N/A	REMOVE SHOCK HAZARD.
ST 58			REF: SAM 151	
	1	M	SUPPLY	PROTECT FILL CONECTOR.
	2	O		TROUBLESHOOT KG 84C.
Z AHP			REF: KAM 340	
	1	O	SUPPLY	PROVIDE 28VDC TO TEMPEST RELAYS.
	2	O		PROVIDES SWITCHED GROUND IN CIPHER MODE.
	3	O		CHANGES LIGHTING TO NVG COMPATIBLE.
Z AHQ			REF: KAM 340	
	1	O	SUPPLY	FOR ANALOG DATA.
	2	M	SUPPLY	REPLACE RESISTORS.

ANNEX E

This annex provides a listing of publications that have been published in support of various COMSEC equipment. Each manual is identified along with the equipment it supports, the type manual, and a notation whether the manual will be issued to users.

TECHNICAL PUBLICATION LISTING

ALPHABETIC LISTING OF TECHNICAL MANUALS

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 228	KG 28	FULL	NO
KAM 229	KG 29	FULL	NO
KAM 232	KIT 23 VOL I	FULL	NO
KAM 233	KIT 23 VOL II	FULL	NO
KAM 237	KG 33/34 VOL I	FULL	YES
KAM 238	KG 33/34 VOL II	FULL	YES
KAM 239	KG 33/34 VOL III	FULL	YES
KAM 243	KG 33/34	LIMITED	YES
KAM 252	KIR 23	DEPOT	NO
KAM 253	KIX 23/KIP 23	LIMITED	YES
KAM 254	KIX 23/KIP 23	DEPOT	NO
KAM 270	KG 40A	FULL	NO
KAM 281	KG 33/34	LIMITED	YES
KAM 293	KG 81	LIMITED	YES
KAM 295	KGX 84	LIMITED	YES
KAM 296	KGX 84	DEPOT	NO
KAM 305	HGX 82	LIMITED	YES
KAM 311	KIR 23A	FULL	NO
KAM 312	KG 46	FULL	NO
KAM 313	KG 44	LIMITED	NO
KAM 314	KG 44	DEPOT	NO
KAM 315	KG 43	FULL	NO
KAM 318	KGR 47	LIMITED	NO
KAM 319	KGR 47A	FULL	NO
KAM 320	KGT 47/47A	FULL	NO
KAM 322	KY 70	DEPOT	NO
KAM 323	KY/KT 70	LIMITED	NO
KAM 330	KYK13/KYX15/KOI18	LIMITED	YES
KAM 331	KYK13/KYX15/KOI18	DEPOT	NO
KAM 333	KY 65A	LIMITED	YES
KAM 334	KY 75A	LIMITED	YES
KAM 335 VOL I-III	KY 65A/75A	FULL	YES
KAM 336	KY 57	LIMITED	YES
KAM 337	KY 58	LIMITED	YES
KAM 338	KY 57/58 VOL I	FULL	YES
KAM 339	KY 57/58 VOL II	FULL	YES
KAM 340	KY 57/58 ANCILL. VOL III	FULL	YES

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 357	KG 66	FULL	NO
KAM 361	Z ALN	FULL	NO
KAM 371	KG 57	FULL	NO
KAM 372	KI 35	DEPOT	NO
KAM 376	KG 45	LIMITED	YES
KAM 377	KG 45	DEPOT	NO
KAM 378	KI 45	LIMITED	NO
KAM 379	KI 45	THEORY	NO
KAM 385	KY 67/HYP 67	FULL	YES
KAM 386	KY 67/HYP 67	FULL	YES
KAM 388	KN 2	THEORY	NO
KAM 389	KN 2	LIMITED	NO
KAM 393	HGX 84	LIMITED	YES
KAM 394	HGX 84	FULL	NO
KAM 401	HGX 83	LIMITED	YES
KAM 402	HGX 83	FULL	NO
KAM 403	KY 68/78	LIMITED	YES
KAM 404	KY 68/78	FULL	NO
KAM 405	KGX 93/HGF 93	LIMITED	YES
KAM 407	KG 83	LIMITED	NO
KAM 408	KG 83	FULL	NO
KAM 409	KG 58/KGV 6	LIMITED	YES
KAM 411	KG 84/84A	THEORY	NO
KAM 412	KG 84/84A	DEPOT	NO
KAM 420	KGT/KGR/KGX 60	FULL	NO
KAM 421	KGT/R 61/KGT/R 62	LIMITED	NO
KAM 422	KGT/R 61/KGT/R 62	FULL	NO
KAM 423	KYK 26	LIMITED	NO
KAM 424	KYK 26	FULL	NO
KAM 425	HST/R 60	FULL	NO
KAM 426	HYX 58 MODE 1	LIMITED	YES
KAM 429	KY 71/71A	LIMITED	YES
KAM 432	HYX 58 MODE 1	DEPOT	NO
KAM 435	KY 90	LIMITED	YES
KAM 436	KGV 8(E2)/11(E2)	FULL	NO
KAM 437	KGR 66	FULL	NO
KAM 438	KL 51	LIMITED	NO
KAM 439	KL 51	DEPOT	NO
KAM 444	KI 31	LIMITED	NO
KAM 445	KI 32	DEPOT	NO
KAM 456	KG 94/94A	LIMITED	YES
KAM 457	KG 194/194A	FULL	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 458	KIK 45	FULL	NO
KAM 459	KSK 45	LIMITED	NO
KAM 464	HYX 58 MODE 3	LIMITED	NO
KAM 466	KIK 45	THEORY	NO
KAM 470	KN 2	DEPOT	NO
KAM 471	KG 66	FULL	NO
KAM 472	KI 37	FULL	NO
KAM 473	KI 36	FULL	NO
KAM 474	KGV 9	FULL	NO
KAM 475	CI 11	LIMITED	NO
KAM 477	KYV 5	FULL	NO
KAM 490	KW 46	LIMITED	YES
KAM 491	KW 46/ST 41	FULL	NO
KAM 494	KGR 96	LIMITED	NO
KAM 495	KGR 96	FULL	NO
KAM 496	KG 96/96A	FULL	NO
KAM 502	KG 58/KGV 6	FULL	YES
KAM 503	KGR 96	LIMITED	NO
KAM 505	KG 84C	THEORY	NO
KAM 508	KGV 61	LIMITED	NO
KAM 509	KGR 47	FULL	NO
KAM 510	KGT 47/47A	FULL	NO
KAM 511	KGT 47A	FULL	NO
KAM 512	KGV 11	FULL	NO
KAM 513	KGV 8A/11A	FULL	NO
KAM 514	KGV 61	THEORY	NO
KAM 515	KGV 61	DEPOT	NO
KAM 516	KGT 47A	FULL	NO
KAM 517	KY 90	FULL	NO
KAM 521	KG 95	FULL	NO
KAM 523	KY 99/99A	FULL	NO
KAM 524	KOK 13	LIMITED	NO
KAM 525	KOK 13	DEPOT	NO
KAM 526	KG 44A	FULL	NO
KAM 527	KIT/R 1C	DEPOT	NO
KAM 528	KIT/R 1C	LIMITED	YES
KAM 529	KG 194/194A	LIMITED	YES
KAM 530	KG 194/194A	FULL	NO
KAM 531	Z ANG/Z ANH	FULL	NO
KAM 533	KGV 8B/11B	FULL	NO
KAM 534 VOL I & II	KI 111/112	LIMITED	NO
KAM 535	KIT 123	FULL	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 536	KGT 77/77A	FULL	NO
KAM 537	KGT 77B	FULL	NO
KAM 538	KGR 77A	FULL	NO
KAM 539	KG 194A CCITT	FULL	NO
KAM 540	KG 194A CCITT	FULL	NO
KAM 542	KGV 8C/11C	FULL	NO
KAM 553	KGR 68	FULL	NO
KAM 555	KG 44B	FULL	NO
KAM 556	KIR 123	FULL	NO
KAM 557	KG 144	FULL	NO
KAM 558	KY 100	FULL	NO
KAM 563	KOK 22	FULL	NO
MAMM 565	KG 75	FULL	NO
KAO 123	KGR 96	OPERATING	YES
KAO 135	KG 28/29	OPERATING	YES
KAO 154	KY 65/75	OPERATING	YES
KAO 168	KY 57/58	OPERATING	YES
KAO 179	KG 81	OPERATING	YES
KAO 180	KGX 93/HGF 93/KG 82	OPERATING	YES
KAO 184	KG 84/84A	OPERATING	YES
KAO 191	KY 71	OPERATING	YES
KAO 193	REPLACED BY KAO 180	OPERATING	YES
KAO 198	KGR 66	OPERATING	YES
KAO 202	KSK 45	OPERATING	YES
KAO 207	KW 46	OPERATING	YES
KAO 210	KG 84C	OPERATING	YES
KAO 211	KI 36	OPERATING	YES
KAO 217	KGV 61/KN 2	OPERATING	YES
KAO 218	KG 194/194A	OPERATING	YES
KAO 222	KG 44A	OPERATING	YES
KAO 223	KY 99	OPERATING	YES
KAO 230	KG 40A	OPERATING	YES
KAO 231	KG 95	OPERATING	YES
KAO 236	KGR 68	OPERATING	YES
KAO 241	KIT 123	OPERATING	YES
KAO 242	KG 194A CCITT	OPERATING	YES
KAO 243	CI 13	OPERATING	YES
KAO 245	KOK 22	OPERATING	YES
LMM 1	KG 40A	LIMITED	YES
LMM 2	KG 84C	LIMITED	YES
LMM 5	KG 84/84A	LIMITED	YES
LMM 7	HYX 58	LIMITED	YES
LMM 8	AN CYZ 10	LIMITED	YES
LMM 9	KY 99	LIMITED	YES
LMM 10	KGV 61	LIMITED	NO
LMM 11	AN CYZ 21	LIMITED	YES

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
LMM 12	KG 95	LIMITED	YES
LMM 14	KY 100	LIMITED	YES
LMM 15	KG 189	LIMITED	YES
LMM 18	KI 17	LIMITED	YES
LMM 19	KG 194/194A	LIMITED	YES
MAOM 195	KY 90	OPERATING	YES
SAM 19	ST 28	LIMITED	YES
SAM 21	ST 20	LIMITED	YES
SAM 22	ST 21/22	LIMITED	YES
SAM 23	ST 19	FULL	NO
SAM 26	KT 7	FULL	NO
SAM 27	KT 40	FULL	NO
SAM 39	ST 47	LIMITED	NO
SAM 40	ST 47	FULL	NO
SAM 42	ST 57	LIMITED	YES
SAM 64	ST 57	LIMITED	YES
SAM 66	ST 45	FULL	YES
SAM 67	ST 34	LIMITED	YES
SAM 68	ST 34	FULL	NO
SAM 69	ST 53	FULL	NO
SAM 70	KT 83	FULL	NO
SAM 81	ST 60	LIMITED	YES
SAM 82	ST 60	FULL	NO
SAMM 83	ST 61 E2	FULL	NO
SAM 151	ST 58	LIMITED	YES
SAM 152	ST 63	FULL	NO
SAM 153	STX 34A	LIMITED	YES
SAM 154	ST 41	LIMITED	YES
SAM 157	SY 57	LIMITED	NO
SAM 158	SY 58	LIMITED	NO
SAM 164	STX 34A	FULL	NO
SAM 165	SG 84C	LIMITED	NO
SAM 168	STE 10A	FULL	NO
SAMM 170	KOK 13	FULL	NO
SAMM 171	ST 61 E1	FULL	NO
SAMM 172	ST 208	DEPOT	NO
SAMM 173	ST 209	DEPOT	NO
SAMM 174	ST 210	DEPOT	NO

ANNEX E

ALPHABETIC LISTING OF EQUIPMENT

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
LMM 8	AN CYZ 10	LIMITED	YES
LMM 11	AN CYZ 21	LIMITED	YES
KAM 475	CI 11	LIMITED	NO
KAO 243	CI 13	OPERATING	YES
KAM 305	HGX 82	LIMITED	YES
KAM 402	HGX 83	FULL	NO
KAM 401	HGX 83	LIMITED	YES
KAM 393	HGX 84	LIMITED	YES
KAM 394	HGX 84	FULL	NO
KAM 370	HS 57/57A/57D	FULL	NO
KAM 425	HST/R 60	FULL	NO
LMM 7	HYX 58	LIMITED	YES
KAM 426	HYX 58 MODE 1	LIMITED	YES
KAM 432	HYX 58 MODE 1	DEPOT	NO
KAM 464	HYX 58 MODE 3	LIMITED	NO
KAM 423	KYK 26	LIMITED	NO
KAM 557	KG 144	FULL	NO
LMM 15	KG 189	LIMITED	YES
KAM 457	KG 194/194A	FULL	NO
KAM 529	KG 194/194A	LIMITED	YES
KAM 530	KG 194/194A	FULL	NO
KAO 218	KG 194/194A	OPERATING	YES
LMM 19	KG 194/194A	LIMITED	YES
KAM 539	KG 194A CCITT	FULL	NO
KAM 540	KG 194A CCITT	FULL	NO
KAO 242	KG 194A CCITT	OPERATING	YEKAM
KAM 228	KG 28	FULL	NO
KAO 135	KG 28/29	OPERATING	YES
KAM 229	KG 29	FULL	NO
KAM 243	KG 33/34	LIMITED	YES
KAM 281	KG 33/34	LIMITED	YES
KAM 237	KG 33/34 VOL I	FULL	YES
KAM 238	KG 33/34 VOL II	FULL	YES
KAM 239	KG 33/34 VOL III	FULL	YES
KAO 230	KG 40A	OPERATING	YES
KAM 270	KG 40A	FULL	NO
KAM 315	KG 43	FULL	NO
KAM 314	KG 44	DEPOT	NO
KAM 313	KG 44	LIMITED	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 526	KG 44A	FULL	NO
KAO 222	KG 44A	OPERATING	YES
KAM 555	KG 44B	FULL	NO
KAM 376	KG 45	LIMITED	YES
KAM 377	KG 45	DEPOT	NO
KAM 312	KG 46	FULL	NO
KAM 371	KG 57	FULL	NO
KAM 409	KG 58/KGV 6	LIMITED	YES
KAM 502	KG 58/KGV 6	FULL	YES
KAM 357	KG 66	FULL	NO
KAM 471	KG 66	FULL	NO
KAM 293	KG 81	LIMITED	YES
KAM 395	KG 82/HGX 82	LIMITED	YES
KAM 396	KG 82/HGX 82	FULL	NO
KAM 408	KG 83	FULL	NO
KAM 407	KG 83	LIMITED	NO
KAM 308	KG 83	DEPOT	NO
KAM 411	KG 84/84A	THEORY	NO
LMM 5	KG 84/84A	LIMITED	YES
KAM 412	KG 84/84A	DEPOT	NO
KAO 184	KG 84/84A	OPERATING	YES
KAM 505	KG 84C	THEORY	NO
KAO 210	KG 84C	OPERATING	YES
LMM 2	KG 84C	LIMITED	YES
KAM 456	KG 94/94A	LIMITED	YES
KAO 231	KG 95	OPERATING	YES
KAM 521	KG 95	FULL	NO
LMM 12	KG 95	LIMITED	YES
KAM 496	KG 96/96A	FULL	NO
KAM 318	KGR 47	LIMITED	NO
KAM 509	KGR 47	FULL	NO
KAM 319	KGR 47A	FULL	NO
KAM 437	KGR 66	FULL	NO
KAO 198	KGR 66	OPERATING	YES
KAM 553	KGR 68	FULL	NO
KAO 236	KGR 68	OPERATING	YES
KAM 538	KGR 77A	FULL	NO
KAM 494	KGR 96	LIMITED	NO
KAM 495	KGR 96	FULL	NO
KAM 503	KGR 96	LIMITED	NO
KAO 123	KGR 96	OPERATING	YES
KAM 420	KGT/KGR/KGX 60	FULL	NO
KAM 422	KGT/R 61/KGT/R 62	FULL	NO
KAM 421	KGT/R 61/KGT/R 62	LIMITED	NO
KAM 320	KGT 47/47A	FULL	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 510	KGT 47/47A	FULL	NO
KAM 511	KGT 47A	FULL	NO
KAM 516	KGT 47A	FULL	NO
KAM 536	KGT 77/77A	FULL	NO
KAM 537	KGT 77B	FULL	NO
KAM 512	KGV 11	FULL	NO
KAM 508	KGV 61	LIMITED	NO
KAM 514	KGV 61	THEORY	NO
KAM 515	KGV 61	DEPOT	NO
LMM 10	KGV 61	LIMITED	NO
KAO 217	KGV 61/KN 2	OPERATING	YES
KAM 436	KGV 8(E2)/11(E2)	FULL	NO
KAM 513	KGV 8A/11A	FULL	NO
KAM 533	KGV 8B/11B	FULL	NO
KAM 542	KGV 8C/11C	FULL	NO
KAM 474	KGV 9	FULL	NO
KAM 296	KGX 84	DEPOT	NO
KAM 295	KGX 84	LIMITED	YES
KAM 405	KGX 93/HGF 93	LIMITED	YES
KAO 180	KGX 93/HGF 93/KG 82	OPERATING	YES
KAO 193	REPLACED BY KAO 180	OPERATING	YES
KAM 527	KIT/R 1C	DEPOT	NO
KAM 528	KIT/R 1C	LIMITED	YES
KAM 534 VOL 1 & II	KI 111/112	LIMITED	NO
LMM 18	KI 17	LIMITED	YES
KAM 444	KI 31	LIMITED	NO
KAM 445	KI 32	DEPOT	NO
KAM 372	KI 35	DEPOT	NO
KAM 473	KI 36	FULL	NO
KAO 211	KI 36	OPERATING	YES
KAM 472	KI 37	FULL	NO
KAM 378	KI 45	LIMITED	NO
KAM 379	KI 45	THEORY	NO
KAM 466	KIK 45	THEORY	NO
KAM 458	KIK 45	FULL	NO
KAM 556	KIR 123	FULL	NO
KAM 252	KIR 23	DEPOT	NO
KAM 311	KIR 23A	FULL	NO
KAM 535	KIT 123	FULL	NO
KAO 241	KIT 123	OPERATING	YES
KAM 232	KIT 23 VOL I	FULL	NO
KAM 233	KIT 23 VOL II	FULL	NO
KAM 254	KIX 23/KIP 23	DEPOT	NO
KAM 253	KIX 23/KIP 23	LIMITED	YES
KAM 438	KL 51	LIMITED	NO
KAM 439	KL 51	DEPOT	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 388	KN 2	THEORY	NO
KAM 389	KN 2	LIMITED	NO
KAM 470	KN 2	DEPOT	NO
KAM 524	KOK 13	LIMITED	NO
KAM 525	KOK 13	DEPOT	NO
SAM 170	KOK 13	FULL	NO
KAM 563	KOK 22	FULL	NO
KAM 459	KSK 45	LIMITED	NO
KAO 202	KSK 45	OPERATING	YES
SAM 26	KT 7	FULL	NO
SAM 27	KT 40	FULL	NO
SAM 167	KT 8	FULL	NO
SAM 70	KT 83	FULL	NO
KAO 207	KW 46	OPERATING	YES
KAM 490	KW 46	LIMITED	YES
KAM 491	KW 46/ST 41	FULL	NO
KAM 323	KY/KT 70	LIMITED	NO
LMM 14	KY 100	LIMITED	YES
KAM 336	KY 57	LIMITED	YES
KAO 168	KY 57/58	OPERATING	YES
KAM 339	KY 57/58 VOL II	FULL	YES
KAM 338	KY 57/58 VOL I	FULL	YES
KAM 340	KY 57/58 ANCILL. VOL III	FULL	YES
KAM 337	KY 58	LIMITED	YES
KAO 154	KY 65/75	OPERATING	YES
KAM 333	KY 65A	LIMITED	YES
KAM 335 VOL I - III	KY 65A/75A	FULL	YES
KAM 385	KY 67/HYP 67	FULL	YES
KAM 386	KY 67/HYP 67	FULL	YES
KAM 403	KY 68/78	LIMITED	YES
KAM 404	KY 68/78	FULL	NO
KAM 322	KY 70	DEPOT	NO
KAO 191	KY 71	OPERATING	YES
KAM 429	KY 71/71A	LIMITED	YES
KAM 334	KY 75A	LIMITED	YES
KAM 435	KY 90	LIMITED	YES
KAM 517	KY 90	FULL	NO
MAOM 195	KY 90	OPERATING	YES
KAO 223	KY 99	OPERATING	YES
LMM 9	KY 99	LIMITED	YES
KAM 523	KY 99/99A	FULL	NO
KAM 558	KY 100	FULL	NO
KAM 423	KYK 26	LIMITED	NO
KAM 424	KYK 26	FULL	NO

ANNEX E

<u>SHORT TITLE</u>	<u>EQUIPMENT</u>	<u>TYPE MANUAL</u>	<u>ISSUE</u>
KAM 330	KYK13/KYX15/KOI18	LIMITED	YES
KAM 331	KYK13/KYX15/KOI18	DEPOT	NO
KAM 477	KYV 5	FULL	NO
SAM 165	SG 84C	LIMITED	NO
KAM 507	SI 111/112	FULL	NO
SAM 23	ST 19	FULL	NO
SAM 21	ST 20	LIMITED	YES
SAM 172	ST 208	DEPOT	NO
SAM 173	ST 209	DEPOT	NO
SAM 174	ST 210	DEPOT	NO
SAM 22	ST 21/22	LIMITED	YES
SAM 19	ST 28	LIMITED	YES
SAM 67	ST 34	LIMITED	YES
SAM 68	ST 34	FULL	NO
SAM 154	ST 41	LIMITED	YES
SAM 66	ST 45	FULL	YES
SAM 39	ST 47	LIMITED	NO
SAM 40	ST 47	FULL	NO
SAM 69	ST 53	FULL	NO
SAM 42	ST 57	LIMITED	YES
SAM 64	ST 57	LIMITED	YES
SAM 151	ST 58	LIMITED	YES
SAM 81	ST 60	LIMITED	YES
SAM 82	ST 60	FULL	NO
SAM 171	ST 61 E1	FULL	NO
SAMM 83	ST 61 E2	FULL	NO
SAM 152	ST 63	FULL	NO
SAM 168	STE 10A	FULL	NO
SAM 153	STX 34A	LIMITED	YES
SAM 164	STX 34A	FULL	NO
SAM 157	SY 57	LIMITED	NO
SAM 158	SY 58	LIMITED	NO
KAM 361	Z ALN	FULL	NO
KAM 531	Z ANG/Z ANH	FULL	NO

ANNEX E

LISTING & ORDERING LIMITED MAINTENANCE MANUALS

<u>LMM</u>	<u>EQUIP</u>	<u>RMKS</u>
LMM 1B	KG 40A	EE015-TS-MMO-010/KG40A NSN 0913-LP-601-8200
LMM 2A	KG 84C	EE187-BC-MMO-0100/TSEC/KG-84C NSN 0913-LP-291-0600
LMM 5A	KG 84/84A	EE187-BB-MMO-010/KG-84/84A NSN 0913-LP-291-0400
LMM 7A	HYX 58	EE107-BA-INM-010/HYX-58 NSN 0913-LP-290-9400
LMM 8A	AN CYZ 10	
LMM 9C	KY 99/99A	EE107-BE-MMD-010/TSEC/KY-99 NSN 0913-LP-010-3540
LMM 11A	AN CYZ 21	
LMM 12A	KG 95	EE015-TT-MMO-010/KG-95 NSN 0913-LP-601-9700
LMM 14C	KY 100	
LMM 15D	KG 189	
LMM 18A	KI 17	Available 2001
LMM 19C	KG 194/194A	Available 2000
LMM 20A	KG 94/94A	Available 2001

Limited Maintenance Manuals (LMM) are not accountable to NCMS. To acquire LMM's, submit DD Form 1425 to Forms and Publications Issuing Division, NAVCIP Philadelphia PA. Availability information can be obtained by calling DSN 442-2626 or COMM (215)-697-2626.

ANNEX F

ELECTRONIC KEY GENERATOR RECERTIFICATION

Electronic key generators have been developed and fielded which are capable of producing electronic key of all classifications for nearly all COMSEC equipment currently in use. The sensitivity of these key generators and their associated test sets requires stringent control procedures be in place to protect the information the key they produce will protect, and provide routinely scheduled examinations of the key generators to ensure the key being produced is valid and secure. To meet these ends All Department of the Navy users of these items shall adhere to the following policies and procedures.

KT 83/KG 83/KGX 93 RECERTIFICATION

a. The KT 83 test set electronically examines the key produced by an electronic key generator. This examination determines if the key being produced is truly random, is valid in format, and is in fact secure. This testing, along with physical examination of the key generator itself, is called re-certification, and must be accomplished every two years on all KT 83 test sets. The physical examination will consist of an inspection of the test set being re-certified for evidence of tampering, condition of applied tamper-protection seals, etc. The re-certification process is completed when new tamper-protection seals are installed and a certification label applied. The KT 83 test set must be at least as secure as the key generator it is testing. The following procedures in respect to the KT 83 apply:

1. KT 83s will be held at the cryptographic repair facilities located at NAVSHIPYD Norfolk, SPAWARSCEN San Diego and Marine Corps commands. These KT 83s, will be classified at the Secret level and used to certify any KG 83, KGX 93, and KT 83s. All KG 83s and KGX 93s certified will be classified at the Secret level and capable of generation of key at all classification levels.

2. It is a reportable COMSEC incident if the KT 83 is used to re-certify a KG 83, KGX 93 or another KT 83 that is in one of the following conditions.

- a) Has not been re-certified within two years.
- b) Have two or more destroyed or mutilated tamper detection tapes on one side.
- c) Has failed and not been re-certified since the failure.

b. The KG 83 key generator will always be classified at the Secret level within the DON when certified. KG 83s must be re-certified every two years by a KT 83 classified at the Secret level. Commands holding KG 83 equipment should monitor re-certification dates and, if there is no direction on re-certification at the 30 days prior to the due date. The

following procedures in respect to the KG 83 apply:

1. KG 83s that have been provided as dual installations have had a dual two person integrity dual installation frame containing a power supply provided. Those installations who receive a single KG 83 will also receive a two person integrity single installation frame containing a power supply.

2. It is a reportable COMSEC incident if the KG 83 is used in one of the following conditions.

a) Has not been certified within the past two years to produce key.

b) Have two or more destroyed or mutilated tamper detection tapes on one side.

c) Has failed and not been re-certified since the failure.

c. The KGX 93 key generators will always be classified at the Secret level when certified, Confidential when uncertified. KGX 93s must be re-certified every two years. The following procedures in respect to the KGX 93 apply:

1. It is a reportable COMSEC incident if the KGX 93 is used in one of the following conditions.

a) Has not been certified within the past two years to produce key.

b) Have two or more destroyed or mutilated tamper detection tapes on one side.

c) Has failed and not been re-certified since the failure.

ANNEX F

KOK 22A RECERTIFICATION

The KOK 22A key processor is currently fielded to all Tier 2 COMSEC accounts.

KOK 13/13A RECERTIFICATION

The KOK 13 key generator will always be classified at the Secret level within the DON when certified. KOK 13s must be re-certified every two years. Kelly AFB is the only activity equipped and authorized to perform re-certification on the KOK 13/13A Key Processor. NCMS maintains a database of KOK 13 equipment held by all DON activities and the last re-certification date. The Following procedures apply:

- a. When re-certification dates are approached, normally about 60 days prior to re-certification due date, NCMS will have a replacement KOK 13 forwarded to holding commands and direct the return of the KOK 13 approaching re-certification to be transferred to CMIO Broken copy account **078202**.
- b. The command requiring a re-certified KOK 13 must provide funding to the re-certification activity.
- c. The KOK 13 **must** be shipped via Defense Courier Service and transferred on a SF-153 transfer report **with** a transaction number.
- d. When the command receives the re-certified KOK 13 key generator, NCMS must be notified with the following information: Equipment serial number and date of re-certification.

ANNEX G

COMSEC EQUIPMENT NOTES

DESTRUCTION OF PROMS and CDROMS CONTAINING COMSEC KEY

a. Programmable Read-Only Memory Devices (PROMS) and Compact Disc Read-Only Memory Devices (CDROMS) are being used in limited quantities to store COMSEC key. It is expected the use of these robust storage media to increase sharply in the next few years. At the present time, high temperature burning is the only authorized method for destroying key-bearing PROMS and CDROMS.

b. National security considerations dictate that holders of key-bearing PROMS and CDROMS be relieved of the responsibility to store them securely after they have been superseded or are otherwise no longer required. Effective immediately, the National Security Agency (NSA) is prepared to assume the responsibility to destroy all unneeded PROMS and CDROMS that contain COMSEC key. Such devices may be transferred, via the Defense Courier Service (DCS), to:

Director, National Security Agency
Fort George G Meade, Maryland
Attn: COMSEC Account 889999

The DCS address is:

449563BA21
Film Destruction Facility

The sending COMSEC account is responsible to ensure all PROMS and CDROMS sent to NSA are authorized for destruction. When CDROMS are sent for destruction, they must be removed from their "jewel box" containers prior to shipment. Before such containers are reused or disposed of, all labels and paper inserts must be removed and destroyed, on the basis of their classification. Each shipment must be accompanied by an original and two copies of a completed SF-153 transfer report with a separate advance copy of each such transfer report sent to the COMSEC Central Office of Record (COR). The COR for Navy, Marine Corps, Coast Guard and MSC accounts is:

Naval Communications Security Material System
1560 Colorado Ave Room 126
Andrews AFB, MD 20762-6108
Attn: N3

c. The NSA film destruction facility inventories each PROM/CDROM shipment, returns a signed copy of the transfer report to the sending COMSEC account, destroys the PROMS and/or CDROMS, and sends another signed copy to the NSA COR, which forwards this verification copy of the transfer report to the servicing COR (DCMS).

d. The Navy COR compares the advance and verification copies of the transfer report and relieves the sending COMSEC

ANNEX G

account of accountability for the transferred PROMS and/or CDROMS.

KOI 1C KEY LOADING PROCEDURES

a. With the KOI 18

1. Ensure power is applied to the KI 1C.
2. Attach the KOI 18 to the KI 1C via a fill cable.
3. Carefully pull the first key (A) through the KOI 18

Note: The green parity LED on the KI 1C will not flash until the second key (B) is loaded.

4. Disconnect the KOI 18 from the KI 1C.

Note: It is necessary to remove the KOI 18 from the KI 1C between loads in order to break the voltage sense line to the KI 1C.

5. Reattach the KOI 18 to the KI 1C via a fill cable.
6. Pull the second key (B) through the KOI-18.

Note: The green parity LED on the KI-1C should flash indicating the KI 1C has received both keys and is ready for operation.

b. With the KYK 13

1. Load the KI 1C A and B key in separate storage locations in the KYK-13.
2. Turn the KYK 13 off and attach to the KI 1C via a fill cable.
3. Select the first key (A) on the KYK 13.
4. Turn the KYK 13 on.

Note: The red parity LED on the KYK 13 will flash indicating the key has been transferred.

5. Turn the KYK 13 off.
6. Select the second key (B) on the KYK 13.
7. Turn the KYK 13 on.

Note: The red parity LED on the KYK 13 will flash indicating the key has been transferred and the green parity LED on the KI 1C will flash indicating the KI 1C has received both keys and is ready for operation.

8. Turn off KYK 13 and remove from the KI 1C.

c. Production Data Transfer Devices (DTD), AN CYZ 10, with "fill" software version 4.03 and above can be used to load the KIT 1C.

ANNEX G

BATTERIES USED IN COMSEC/CCI EQUIPMENT

1. The following table contains a consolidated list of equipment batteries. This list is provided for your convenience when replacing and ordering batteries.

2. There can be no substitutions of lithium batteries in COMSEC equipment other than the ones specifically approved for that COMSEC device. If the below listed equipment is received, even from the manufacturer, with lithium batteries different from the ones authorized below, they must be removed and replaced with the authorized one or a non-lithium battery. Alkaline batteries may be freely substituted for lithium batteries as long as the size and voltage are the same.

COMSEC/CCI Battery Logistics Data

COMSEC Equipment	Battery Part Number	Battery NSN	Battery Type
AN CYZ 10/10A	BA-5123/U2/3A	6135-01-351-1131	Lithium
	U9VL	6135-01-369-9792	Lithium
	BA-3090/U	6135-00-900-2139	Alkaline
HGX 82	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
HGX 83	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
HYP 71	BA-5590A/U	6135-01-438-9450	Lithium-Sulfur Dioxide
HYX 57	BA-5590A/U	6135-01-438-9450	Lithium-Sulfur Dioxide
KG 30/31/33/34/35 /36/37/38, with KGK 30 permuter	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KG 40A	BA-1371/U	6135-00-845-9232	Mercury
	BR-2/3A	6135-01-308-5688	Lithium
KG 81	9V	6135-00-900-2139	Alkaline
KG 84A/84C	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KG 94/94A	9V	6135-00-900-2139	Alkaline
	U9VL	6135-01-369-9792	Lithium
KG 194/194A	9V	6135-00-900-2139	Alkaline
	U9VL	6135-01-369-9792	Lithium
KG-95	9V	6135-00-900-2139	Alkaline
	U9VL	6135-01-369-9792	Lithium

ANNEX G

COMSEC/CCI Battery Logistics Data (Continued)

COMSEC Equipment	Battery Part Number	Battery NSN	Battery Type
KGX 93/93A	CF6V1(ON273658-1)	6140-01-111-6379	Calcium Lead Rechargeable
KI 1C	BA-5567A/U	6135-01-447-5082	Lithium-Sulfur Dioxide
KIT 1C	BA-5567A/U	6135-01-447-5082	Lithium-Sulfur Dioxide
KIR 1C	BA-5567A/U	6135-01-447-5082	Lithium-Sulfur Dioxide
KI 111	BA-5847/U	6135-01-090-5364	Lithium-Sulfur Dioxide
KIV 7	ER6C (AA)	6135-01-301-9776	Lithium
KL 43A	C cell	6135-00-998-7846	Alkaline
KL 43 C/D/F	AA cell	6135-00-985-7845	Alkaline
	NiCad	6140-00-449-6001	Potassium Hydroxide
KN 2	BA-1100/U	6135-00-926-0827	Mercury
	BA-3100/U	6135-01-419-4985	Alkaline
KOI 18	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KOK 12	BA-5567A/U	6135-01-447-5082	Lithium-Sulfur Dioxide
KW 46	BR-2/3A	6135-01-308-5688	Lithium
KY 57	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
	BA-5590A/U	6135-01-438-9450	Lithium-Sulfur Dioxide
KY 58	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KY 65A	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
	BA-4386/U	6135-00-926-8322	Magnesium
KY 68	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide

ANNEX G

COMSEC/CCI Battery Logistics Data (Continued)

COMSEC Equipment	Battery Part Number	Battery NSN	Battery Type
KY 75A	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KY 90	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KY 99/99A	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KY 100	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KYK 13	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KYV 5	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide
KYX 15/15A	BA-5372/U	6135-01-214-6441	Lithium Manganese Dioxide

ANNEX H

Limited Maintenance Repairs on CCI Equipment

Since the initial maintenance concept did not involve chassis mounted component training and the field technical manuals do not provide instructions on how to perform the replacement functions, it will be the responsibility of the holding command to ensure that the technicians performing limited maintenance are properly trained and qualified.

Qualified technicians will only perform repairs or replacement functions as prescribed in respective limited maintenance manuals, on the following equipment:

KG 84A
KG 84C
KG 194
KG 194A
KY 57
KY 58
KYK 13
KYX 15A

The following tables identify those chassis mounted components which may be replaced by qualified technicians.

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KG 84A

Repair Part/Nomenclature	Part Number	NSN
CB1 Circuit Breaker On/Off Switch	ON535928-2	5925-01-097-1741
DS1 LED Yellow Full Operate Light	M19500/520-01	5980-01-103-5042
DS2 DS3 LED Red Parity & Alarm Light	M19500/519-01	5980-01-103-5043
DS4 LED Green Power Indicator	M19500/521-01	5980-01-207-9598
E1 Contact Assembly Negative Battery Contact	ON278502	5999-01-096-7671
E2 Contact Assembly Positive Battery Contact	ON278501	5999-01-096-7672
J1 Connector Fill Connector	ON241775-2	5935-01-053-8909
S1 S6 Switch Rotary TTY & Data Length	ON278443-6	5930-01-096-5909
S10 Switch Rotary Sync Mode	ON278443-3	5830-01-096-5906
S11 Switch Assembly Interlock	ON278497	5930-01-096-0719
S12 Switch Toggle Zeroize	ON278443-1	5980-01-096-8084
S13 Switch Rotary Data Mode	ON278443-5	5930-01-096-5908
S14 Switch Rotary Clock	ON278443-4	5930-01-096-5907
S2 S7 S15 Switch Rotary Step Pulse/Data Rate	ON278443-8	5930-01-102-8889
S16 Switch Toggle TTY Xmit	MS21354-271	5930-01-096-8083
S17 Switch Toggle Initiate	8869K611	5930-01-046-9309
S19 Switch Rotary Mode	ON278443-6	5930-01-096-5909
S3 S5 S8 Switch Toggle Step Pulse/Data Rate	MS21354-231	5930-01-043-3006
S4 S20 Switch Rotary Interface & X Var	ON278443-1	5930-01-096-5904
S9 Switch Rotary	ON278443-7	5930-01-096-5910
Cable Assy Flex W1	ON278580-1	5930-01-169-1811
Cable Assy Flex W2	ON278578-1	5995-01-169-1912
Cable Assy W3	ON313346-1	5995-01-169-1913
Door	ON278476-1	5810-01-102-9656
Handle Box Front Panel Handle	MS39087-4	5340-00-840-0954
Cover Battery Assy	ON278508-1	5810-01-105-4827
J1 Connector Power Connector	MS27468T15B18PA	5935-01-097-3680
J2 Connector Black I/O	MS27468T17B35AA	5935-01-097-3705
J3 Connector Red I/O	MS27468T17B35A	5935-01-097-3704

KG 84C

Repair Part/Nomenclature	Part Number	NSN
CB1 Circuit Breaker On/Off Switch	ON535928-2	5925-01-097-1741
DS1 DS4 LED Yellow Xmt/Rcv Ready	M19500/520-01	5980-01-103-5042
DS2 DS3 LED Update Display	ON373943-3	5980-01-260-2453
DS5 LED Green Power Indicator	ON373943-1	5980-01-265-5524
E1 Contact Assembly Negative Battery Contact	ON278502	5999-01-096-7671
E2 Contact Assembly Positive Battery Contact	ON278501	5999-01-096-7672
J1 Connector Fill Connector	ON241775-2	5935-01-053-8909
S1 S2 S12 S13 Switch Toggle Data Rate TDM Clk	MS21354-231	5930-01-043-3006
S3 S5 S6 Switch Rotary Sync Mode Data Rate	ON363382-1	5830-01-258-1624
S4 Switch Rotary Comm Mode	ON363382-2	5930-01-258-7358
DS6 DS7 DS8 LED Red PT Alarm Parity	ON373943-2	5980-01-260-9478
S7 Switch Rotary TTY Mode	ON363382-3	5930-01-258-1625
S8 Switch Rotary Data Length	ON363382-4	5930-01-258-1626
S9 S10 S11 Switch Toggle Sync GRTXC GTXC	MS21354-211	5930-01-181-4783
S14 Switch Toggle Zeroize	ON278543-1	5930-01-096-8084
Cover Battery Assy	ON278508-1	5810-01-105-4827
Cable Assy W3	ON313346-1	5995-01-169-1913
Handle Bow Front Panel Handle	MS39087-4	5340-00-840-0954
J1 Connector Power Connector	MS27468T15B18PA	5935-01-097-3680
J2 Connector Black I/O	MS27468T17B35AA	5935-01-097-3705
J3 Connector Red I/O	MS27468T17B35A	5935-01-097-3704

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KG 194

Repair Part/Nomenclature	Part Number	NSN
Filter Radio Frequency	M15733/49-0006	5915-01-143-3294
Inductor	ON370464-2	5810-01-279-1301
Connector Body Plug	ON370499-2	5935-01-214-2296
Contact Electric	ON450319-1	5999-01-277-7105
Ferrule Electric	M835119/1-2	5940-01-136-2540

KG 194A

Repair Part/Nomenclature	Part Number	NSN
Filter Radio Frequency	M15733/49-0006	5915-01-148-3294
Connector Recpt	MS27468T13F35P	5935-00-506-6636
Connector Plug	MS27468T11F98P	5935-01-109-2233
Connector Recpt	MS27468T15F35P	5935-01-085-4546
Inductor	ON370464-1	5810-01-279-9934
Connector Plug	ON370199-2	5935-01-214-2296
Switch Sensitive	MS16106-4	5930-00-892-9246
Connector Recpt	ON370186-1	5935-01-313-0995
Holder Elec PWA	ON370463-5	5998-01-281-3996
Holder Elec PWA	ON370463-6	5998-01-281-3995
Contact Electric	ON450319-1	5999-01-277-7105
Ferrule Electric	M83519/1-2	5940-01-136-2540
Plug End Seal Electric	MS27488-20	5935-00-496-7171
Plug End Seal Electric	MS27488-22	5935-00-351-5944

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KY 57

Repair Part/Nomenclature	Part Number	NSN
E1 Contact Assy Negative Battery Contact	ON241654-4	5810-01-066-6964
E2 Contact Assy Positive Battery Contact	ON214646-4	5810-01-066-6965
Cable Special Purpose Flexible Cable	ON241861	6145-01-058-0288
S2 S7 S15 Switch rotary SStep Pulse/Data Rate	ON278443-8	5930-01-102-8889
J1 J2 Connector Fill/Audio Connector	ON241775-2	5935-01-053-8909
J3 Connector Radio Connector	ON199312-1	5935-01-054-4099
J4 Connector Plug Rear Power Connector	ON199139	5935-01-056-0196
Resistor Variable Volume Control	ON241689-1	5905-01-054-4559
S1 Switch Rotary 30 Deg Mode Switch	M3786/35-042	5930-01-094-9969
S2 Switch Rotary 36 Deg Mode Switch	ON241600-1	5930-01-143-7015
S3 Switch Rotary 36 Deg Fill Position Switch	ON199316-2	5930-01-056-4702
S2 Switch Sensitive Interlock Switch	ON241861-1	5933-01-062-7398

ANNEX H

KY 58

Repair Part/Nomenclature	Part Number	NSN
E1 Contact Assy Negative Battery Contact	ON241645-5	5810-01-066-6966
E2 Contact Assy Positive Battery Contact	ON241646-5	5810-01-070-6984
Cable Special Purpose Flex Cable	ON241858	5810-01-054-4103
J1 Connector Circ Filter Conn/Filter	ON199312-2	5999-01-054-4099
J2 Connector Plug Elect Connector	ON198873-1	5935-01-054-4131
J3 Connector Recpt	ON241775-2	5935-01-053-8909
J4 Connector Radio Connector	ON241775-1	5810-01-046-3722
J5 Connector 1 Pin Inside Panel	MS90335-1	5935-01-061-1483
R1 Resistor Variable Volume Control	ON503111-1	5905-01-054-3392
R2 Resistor, Variable Mic Bias Control	ON403111-2	5905-01-054-3393
S1 Switch Rotary Mode Switch	ON503092-1	5930-01-056-4620
S2 Switch Rotary Fill Switch	ON503095-1	5930-01-056-8151
S3 Switch Rotary Power Switch	ON503094-1	5930-01-056-4621

ANNEX H

KYK 13

Repair Part/Nomenclature	Part Number	NSN
E1 Contact Assembly Negative Battery Clip	ON241645-1	5930-01-037-0626
E2 Contact Assembly Positive Battery Clip	ON241646-1	5930-01-037-0627
J1 Connector Receptacle Fill Connector	ON241775-1	5935-01-046-3722
P1 Connector Receptacle Fill Connector	ON190305-1	5930-01-048-7510
S3 Switch Rotary Mode Switch	ON190307-2	5930-01-162-5571

KYX 15A

Repair Part/Nomenclature	Part Number	NSN
E1 Contact Assembly Negative Battery Clip	ON241645-2	5810-01-055-6754
E2 Contact Assembly Positive Battery Clip	ON241646-2	5810-01-055-6756
J1 Connector Receptacle Fill Connector	ON241775-1	5935-01-046-3722
S1 Switch Rotary Mode Switch	M3786/35-014	5930-01-041-6482
S2 Switch Push Initiate Switch	ON190177-5	5930-01-048-6653
S3-18 Switch Toggle Add Select Switch	MS24655-231	5930-00-225-7111

KOI 18

Repair Part/Nomenclature	Part Number	NSN
E1 Contact Assembly Negative Battery Clip	ON241645-1	5930-01-037-0626
E2 Contact Assembly Positive Battery Clip	ON241646-1	5930-01-037-0627
J1 Connector Receptacle Fill Connector	ON241775-1	5935-01-046-3722

ANNEX I

SHORT TITLE FORMATS

This annex is designed to provide the proper format to be used for entering a short title into Tier 1 or your EKMS system, the short title, Accountability, and the classification of the material. The new short titles have included the old short title, the edition (model), and the amendment (equipment version).

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
AN ARC 231 V C	U	1
AN CSZ 1	U	1
AN CSZ 10	U	1
AN CSZ 11	U	1
AN CSZ 12	U	1
AN CSZ 1A	U	1
AN CSZ 4	U	1
AN CSZ 4A	U	1
AN CSZ 5D	U	1
AN CSZ 9	U	1
AN CSZ 9 E1	U	1
AN CYZ 10	U	1
AN CYZ 10 10A	C	1
AN CYZ 10 10A V3	C	1
AN CYZ 10 2	U	1
AN CYZ 10 V2	U	1
AN CYZ 10 V3	U	1
AN CYZ 10A	U	1
AN CYZ 16	U	4
AN CYZ 21 E2	U	1
AN CYZ 24	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
AN CYZ 7	U	2
AN GRR 43 C	U	1
AN PRC 117B C	U	1
AN PRC 117C C	U	1
AN PRC 117D C	U	1
AN PRC 117D C V2	U	1
AN PRC 117D V2C	U	1
AN PRC 117F V C	U	1
AN PRC 137 B	U	1
AN PRC 137 C	U	1
AN PRC 137 F	U	1
AN PRC 137 G	U	1
AN PRC 137 X N1	U	1
AN PRC 137F	U	1
AN PRC 148 V1 C	U	1
AN PRC 148 V2 C	U	1
AN PRC 148 V5 C	U	1
AN PRC 148 V6 C	U	1
AN PRC 152	U	1
AN PRC 6740C	U	1
AN PSC 11	U	4
AN PSC 5	U	1
AN PYQ 10	C	1
AN PYQ 10 C	U	1
AN UPX 41 C	U	1
AN USC 55A	U	1
AN USC 55B	U	1
AN USR 5	U	1

<u>AN USR 9 V1 C</u> <u>SHORT TITLE</u>	<u>U</u> <u>CLASS</u>	<u>1</u> <u>ALC CODE</u>
AN VRC 99A C	U	1
AN VRC 99B C	U	1
BID 2010 1	U	1
BID 2010 1 ISDN	U	1
BID 2010 1 V1	U	1
BID 2010 1 V5	U	1
BID 610 1	C	1
BID 610 11A	C	2
BID 610 12A	C	2
BID 610 13	C	2
BID 610 13A	C	2
BID 610 18	C	1
BID 610 2	C	1
BID 610 3	C	1
BID 610 7	C	1
BID 610 8B	C	1
BID 610 950	S	1
BID 700 1	C	1
BID 720 1	C	1
BID 750 1	C	1
BID 950 18	C	1
BID 950 20	C	1
BID 950 IV 2	C	1
BRF A 9	U	1
C 11561 C U	U	2
CCT 1 4	U	2
CCU 1	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
CCU 3 TEST KIT	C	2
CCU 3KV4	C	1
CD 81A USC 55A	U	1
CD 81B USC 55B	U	1
CDH	U	2
CEM 7516	S	1
CS 15	U	1
CS 15A	U	1
CV 3591	U	4
E AJJ 34	S	2
E AJJ 6	C	2
E AJJ 8	C	2
E AJK 34	S	2
E AJK 6	U	2
E AJK 8	U	2
E AJL	C	2
E AJO	C	2
E AJV	C	2
E AJX	U	4
E BDA	C	2
E BDB	C	2
E BDC	C	2
E BDD	C	2
E BDV	C	2
E BOT 1	U	4
E BPL	C	2
E DQA	S	2

E DQB	U	4
<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
E DQC	S	2
E DQD	U	4
E DQE	U	4
E DRZ	U	2
E DRZ 1	U	2
E DRZ 2	U	2
E DTD	U	4
E DTG	U	4
E DUJ 3	S	1
E DUJ 4	S	1
E DVI	U	4
E DVR	U	4
E DZZ	U	4
E EJQ	U	2
E ELO 5A	S	1
E ELO 7A	S	1
E ENK	U	4
E EQQ	U	2
E EQU	U	2
E EWW	U	4
E FGS 3	S	1
E FGS 4	S	1
E FGS 7	S	1
E FOU	U	4
E GHZ 1	U	2
E GIB	U	2

E HKP	S	2
E HLU	S	1
<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
E HLU A	U	1
E HMF	U	2
E HMM	S	1
E HMS 2	U	2
E HND	U	2
E HNS	U	2
E HNT	U	2
E HOH	U	2
E HOI	U	2
E HOP	U	2
E HOR	U	2
E HOT	U	2
E HOT 1	U	2
E HOT E1	S	2
E HPB	U	4
E HPC	U	4
E HPD	U	4
E HPE	U	2
E HPF	U	2
E HPH 2	U	2
E HPH 6	U	2
E HQL	U	2
E HQP	U	1
E HQQ	U	1
E HQY	U	1

E HRA	U	1
E HRE	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
E HRI	U	2
E HRJ	U	2
E HRK	U	2
E HRW	U	2
E HSF	U	4
E HSJ	U	2
E HUA	U	2
E HUB	U	2
E HUI	U	2
E HUZ	U	2
E HVH	U	2
E HVM	U	2
E HVM 1	U	2
E HVM 2	U	2
E HVQ	U	2
E HWC	U	2
E HWJ	U	2
E HWN	U	2
E HWX	U	2
E HXK	U	2
E HXW	U	2
E HXX	S	1
E HYK	U	2
E IAS	U	2
E IBT	U	1

E IBT 3	U	1
E IBT X1	U	1
ELCROVOX 1 3	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
FAM 131	U	2
FNAC21	U	1
FNAC50	U	1
FNBA20	U	1
FNBA21	U	1
FNBB21	U	1
FNBB30	U	1
FNBB40	U	1
FNBB50	U	1
FNBC22	U	1
FNBD21	U	1
FNBDEU	U	1
FNBEEU	U	1
FNBH21	U	1
FNCI21	U	1
FNCJ21	U	1
FRAC	U	1
HAC 3RP	U	1
HAC AA	U	1
HGF 91 E1	U	4
HGF 92	U	4
HGF 93	U	4
HGF 93 E1	U	4
HGF 94	U	4

HGF 96	U	4
HGX 82	U	4
HGX 83	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
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HNF 66	U	1
HNF 66 E1	U	1
HNF 81 1	U	4
HNF 81 2	U	4
HNF 81 4	U	4
HNP 81 4	U	1
HYB 88 V1	U	1
HYP 57	U	2
HYP 67	U	2
HYP 67 E11	U	1
HYP 71	U	2
HYP 78 V1	U	1
HYX 57	U	2
HYX 57 1	U	2
HYX 57 2	U	2
HYX 57 E1	U	1
HYX 58	U	4
HYX 58 1	U	4
HYX 58 2	U	2
HYX 58 3	U	4
HYX 58 BYPASS	U	2
HYX 58 E2 1	U	2
HYX 58 EXTRACTOR	U	2
HYX 58 TEST CABLE	U	2

HYX 58 X1 2	U	1
HYX 58B	U	4
HYX 60	U	2
HYX 60 1	U	2
<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
HYX 65 1	U	2
HYX 65 2	U	2
HYX 70	U	2
HYX 70 E1	U	1
HYX 71	U	2
HYX 71 P1	U	1
HYX 71A	U	4
HYX 88 V1	U	1
IWFA 00	U	1
IWFA 44	U	1
J 4941	U	1
J 6214 C VSX 3	U	1
J 6433 ARQ 55	U	1
J6384 C	U	1
KF 4 2	C	2
KG 112	U	1
KG 135	C	1
KG 135 E1	C	1
KG 144	S	1
KG 175	U	1
KG 175 1	U	1
KG 175 2	U	1
KG 175 3	U	1
KG 175 4	U	1

KG 175 5	U	1
KG 175 6	U	1
KG 175 A	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KG 175 AFTR	S	4
KG 175 B	U	1
KG 175 BFTR	S	4
KG 175 E1	S	1
KG 175FTR	S	4
KG 184A E1	S	1
KG 184C E1	S	1
KG 189	U	1
KG 189A	U	1
KG 194	U	1
KG 194A	U	1
KG 235	U	1
KG 240	U	1
KG 245	U	1
KG 250	U	1
KG 250 E1	S	1
KG 250A	U	1
KG 255	U	1
KG 255 E1	S	1
KG 30B 53	C	1
KG 31A	C	1
KG 33 107	C	1
KG 33 108	C	1
KG 33 16	C	1

KG 33 53	C	1
KG 33 54	C	1
KG 33 57	C	1
KG 33 58	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KG 33 MOD05	C	4
KG 33 MOD07	C	4
KG 33A	C	1
KG 33A 2	C	1
KG 33A 3	C	1
KG 33A 57	C	1
KG 33A 58	C	1
KG 33A 65	C	1
KG 33B	C	1
KG 33B 107	C	1
KG 33B 115	C	1
KG 33B 57	C	1
KG 33C 5	C	1
KG 34	C	1
KG 34 103	C	1
KG 34 104	C	1
KG 34 2	C	1
KG 34 53	C	1
KG 34 54	C	1
KG 34 62	C	1
KG 34 65	C	1
KG 34 MOD05	C	4
KG 34 MOD07	C	4

KG 34A 53	C	1
KG 34A 54	C	1
KG 34B	C	1
KG 34B 103	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KG 34B 3	C	1
KG 35	C	1
KG 35B 54	C	1
KG 36 54	C	1
KG 36B	C	1
KG 36B 104	C	1
KG 36C	C	1
KG 37	C	1
KG 38	C	1
KG 38 108	C	1
KG 38 16	C	1
KG 38 MOD5	C	4
KG 38 MOD7	C	4
KG 38B 104	C	1
KG 40	U	1
KG 40 MOD2	U	2
KG 40 PARALLEL	C	1
KG 40 SERIAL	C	1
KG 40A	U	1
KG 40A E1	S	1
KG 40A EXTDR BOARD	U	2
KG 40A EXTDR CABLES	U	2
KG 40A PARALLEL	U	1

KG 40A SERIAL	U	1
KG 43	S	1
KG 44	S	1
KG 44A	S	1
KG 45	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KG 45 1	C	2
KG 45 2	C	1
KG 45 MOD4	S	2
KG 46	S	1
KG 58	U	1
KG 58 E1	C	1
KG 66	U	1
KG 66 E1	U	1
KG 66A	U	1
KG 68	U	1
KG 70	U	1
KG 75	U	1
KG 75 E1	S	1
KG 75 E2	U	1
KG 75A	U	1
KG 81	U	1
KG 81 E3	U	1
KG 81 MOD03	C	2
KG 82	U	1
KG 83	C	1
KG 84	U	1
KG 84 A MOD03	U	2

KG 84A	U	1
KG 84A CONV KIT	U	2
KG 84A MOD01	U	2
KG 84A MOD02	U	2
KG 84C	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KG 84C CONV KIT	U	2
KG 84C E2	C	1
KG 87	U	1
KG 94	U	1
KG 94 CCITT	U	1
KG 94 CONV KIT	U	2
KG 94A	U	1
KG 94A CONV KIT	U	2
KG 95	U	1
KG 95 1	U	1
KG 95 2	U	1
KG 95 2 E1	S	1
KG 96	S	1
KG 96 E1	S	1
KG 96 P1	S	1
KG 96 V1	S	1
KG 96A	S	1
KGF 28	U	1
KGF 28B	U	1
KGF 7	U	4
KGK 30	U	2
KGR 28	S	1

KGR 28 V1	S	1
KGR 62	S	1
KGR 66	C	1
KGR 66 E1	C	1
KGR 68	U	1
KGR 68B	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
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KGR 69 E1	U	1
KGR 71	U	1
KGR 96	S	1
KGR 96 P1	S	1
KGR 96 V1	S	1
KGT 61	S	1
KGT 62	S	1
KGT 7 V1	S	1
KGV 10	U	2
KGV 10 V2	U	4
KGV 11	U	1
KGV 11 E2	U	1
KGV 113	U	1
KGV 113 V1	U	1
KGV 11A	U	1
KGV 11C	U	1
KGV 135	U	2
KGV 135A	U	2
KGV 2 V1	C	1
KGV 21	U	2
KGV 228	U	1

KGV 229	U	2
KGV 23	U	1
KGV 25	U	1
KGV 25 E1	S	1
KGV 25 V1 B	S	1
KGV 25 V1A	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KGV 25 V1B	U	1
KGV 25 X 1	S	1
KGV 26	U	2
KGV 26 E1	U	2
KGV 26A	U	2
KGV 6	U	2
KGV 61	S	1
KGV 61 E1	S	1
KGV 61A	S	1
KGV 66	U	1
KGV 66 E1	U	1
KGV 68	U	2
KGV 68 E1	C	2
KGV 681	U	2
KGV 68A	U	2
KGV 68B	U	2
KGV 68B PROTO	U	2
KGV 69	U	2
KGV 69A	U	2
KGV 8	U	1
KGV 8 E1	U	1

KGV 8 E2	U	1
KGV 8A	U	1
KGV 8B	U	1
KGV 8B E1	U	1
KGV 8C	U	1
KGV 9	U	2
KGX 40	U	4

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KGX 40A	U	4
KGX 93	C	1
KGX 93A	C	1
KI 11	U	1
KI 111	S	1
KI 111 P1	S	1
KI 111 PI	S	1
KI 15 X1	S	1
KI 17	S	1
KI 36	S	1
KI 45	S	1
KIK 111 P1	U	4
KIK 18	U	4
KIK 18A	U	4
KIK 20	U	1
KIK 45	U	1
KIK 45T	U	1
KIK 68	U	2
KIP 23	U	1
KIR 1A	U	2

KIR 1C	U	2
KIT 123	U	1
KIT 1A	U	2
KIT 1A MOD05	U	4
KIT 1C	U	2
KIT 223	U	1
KIT 223A	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KIT 23	S	1
KIV 119	U	1
KIV 14	U	1
KIV 16	U	1
KIV 18A	U	1
KIV 18A P	U	1
KIV 19	U	1
KIV 19 P1	U	1
KIV 19A	U	1
KIV 21	U	1
KIV 21 LLC	U	1
KIV 2A	U	1
KIV 6	U	1
KIV 7	U	1
KIV 7 HS	U	1
KIV 7 HSA	U	1
KIV 7 HSA E1	U	1
KIV 7 HSB	U	1
KIV 7 M	U	1
KIV 7 M BETA	S	1

KIX 23	U	4
KIX 23A	S	1
KL 41 E1	U	2
KL 42	U	1
KL 43	U	1
KL 43A	U	1
KL 43C	U	1
KL 43D	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
--------------------	--------------	-----------------

KL 43F	U	1
KL 51	C	1
KL 51 MOCK UP	C	1
KL 41 E1	S	2
KMU B 4180	U	1
KN 2	C	1
KN 2 E1	S	1
KN 3	U	2
KO 2	U	1
KO 4	S	1
KO 9	U	1
KOI 18	U	2
KOI 18 1	U	2
KOI 18 E1	U	2
KOK 1	C	2
KOK 12 V2	U	1
KOK 13	C	1
KOK 13A	C	1
KOK 22	S	1

KOK 22 A TESTPACK	S	1
KOK 22 E1	S	1
KOK 22 TESTPACK	S	1
KOK 22 X1	S	1
KOK 22A	S	1
KOK 3	C	2
KOQ 1 E4	U	2
KOQ 4	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KOQ 4 E1	S	1
KOQ 8 V1	U	1
KOV 11	U	4
KOV 12	U	4
KOV 13	S	1
KOV 13 S SP	S	1
KOV 13 T SP	T	1
KOV 14	U	1
KOV 15	U	1
KOV 17	S	1
KOV 17 1	S	1
KOV 17 E1	U	1
KOV 17D	S	1
KOV 21	U	1
KOV 21 E1	U	1
KOV 21 E2	U	1
KOV 21 X	U	1
KOV 26 E2	S	1
KOV 26 E3	U	1

KOV 3	U	1
KOV 8	U	1
KSK 3 X1	S	1
KSK 45 ED T	S	1
KSV 21	U	2
KSV 3	U	2
KT 83	C	1
KVN 4 1 A	U	2
KVRU 1	C	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
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KVRU 4 1	U	2
KW 46	C	1
KWQ 46R	S	1
KWQ 46T	C	1
KWR 46	C	1
KWR 46 V2	C	1
KWT 46	C	1
KWT 46 V2	S	1
KY 100	U	1
KY 100 E2	U	1
KY 171	U	1
KY 171A	U	1
KY 28	U	1
KY 3	C	1
KY 3 MOD18	C	2
KY 3A	C	1
KY 3A MOD21	C	4
KY 40	U	1

KY 57	U	1
KY 57 58MOD2	U	2
KY 57 58MOD7	U	2
KY 57 V1	U	1
KY 57 V2	U	1
KY 58	U	1
KY 58 1	C	1
KY 58 2	C	1
KY 58 3	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KY 58 4	C	1
KY 58 5	U	1
KY 58 E1	U	2
KY 65	U	1
KY 65 MOD03	U	2
KY 65A	U	1
KY 67	U	1
KY 68	U	1
KY 68 E2	U	1
KY 71	U	1
KY 71 E1	U	1
KY 71 MOD02	U	2
KY 71 P1	U	1
KY 71 P2	U	1
KY 71A	U	1
KY 75	U	1
KY 75 MOD01	U	2
KY 75 TEST CABLE	U	4

KY 75A	U	1
KY 90	U	1
KY 953A	U	1
KY 99	U	1
KY 99 E1	U	1
KY 99 E2	U	1
KY 99A	U	1
KYG 70	C	1
KYG 70 E1	C	1
KYK 13	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
KYK 13 KOI 18 OP INSTR	U	4
KYK 28	U	2
KYK 71	U	2
KYK 71 1	U	2
KYK 71 2	U	2
KYK 71 E1	U	2
KYK 71 P1	U	2
KYQ 5	C	2
KYV 2	U	1
KYV 2 E1	U	1
KYV 2A	U	1
KYV 2A E1	U	1
KYV 5	U	1
KYV 5 E2	U	1
KYX 15	U	2
KYX 15A	U	2
KYX 70	U	1

KYX 9A	U	2
LST 5D	U	1
LST 5E	U	1
MD 1324	U	1
MD 1324 U	U	1
MD 1324A U	U	1
MD 1324B U	U	1
MD 1333	U	2
MD 1333A	U	2
MFAX 5000 1	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
MOD LABELS	U	4
MOT CU	U	1
MOT MX	U	1
MOT NE1	U	1
MOT NE2	U	1
MOT NE3	U	1
MOT PRT	U	1
MOT SDT	U	1
MOT SPA	U	1
MOT SR	U	1
MSRT KIT	U	1
MT 4416A	U	4
MT 4417	U	2
MT 4417 S	U	2
MT KG 83	U	2
MT KG 95	U	2
MX 18290	U	1

MYK 15	U	1
MYK 16	S	1
MYK 17 1	S	1
MYK 17 A	S	1
MYK 7	U	1
MYK 7A	U	1
NOV 1	U	4
NOV 2	U	4
OL 303 V 6 C	U	1
ON 500869 2	U	4
ON 512424	U	4

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
ON0 20399 10	S	4
ON0 20399 12	S	4
ON477450 1	U	4
PACE	U	1
PACE PRINTER	U	2
PES B4P	U	1
PP 7506	U	2
PP 7507	U	2
PP 7516	U	2
PP 7517	U	2
QSEC08	U	1
R 2536 USR 5	U	1
R 2609 V1 C	U	1
R 2609 V2 C	U	1
R2536 USR 5	U	1
RCI LHR	U	1

RCI MSH	U	1
RCI MSH W	U	1
RCI RTP	U	1
RGQ 30	T	1
RGQ 33 7	C	1
RGQ 33 8	C	1
RGQ 33B 7	C	1
RGQ 34 12	C	1
RGQ 34 3	C	1
RGQ 34 4	C	1
RGQ 34A 3	C	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
RGQ 34B 1	C	1
RGQ 34B 12	C	1
RGQ 34B 15	C	1
RGQ 34B 3	C	1
RGQ 35 4	C	1
RGQ 35B 4	T	1
RGQ 36 4	C	1
RGQ 36A 4	C	1
RGQ 36B 4	C	1
RGQ 36C 4	C	1
RGQ 37	C	1
RGQ 38 8	C	1
RGQ 40	U	1
RGQ 40 2	C	1
RGQ 40 MOD01	C	2
RGQ 40 PARALLEL	C	1

RGQ 40 SERIAL	C	1
RGQ 40A MOD01	C	2
RGQ 40A PARALLEL	C	1
RGQ 40A SERIAL	C	1
RGQ 81	U	2
RGQ 81 2	U	2
RGQ 84	U	2
RGQ 84A	U	2
RGQ 84C	U	2
RIQ 1 A 1R	U	2
RIQ 1A T	U	2
RT 1343	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
RT 1439	U	1
RT 1478 D C	U	1
RT 1523 C U	U	2
RT 1523A C U	U	2
RT 1523B C U	U	2
RT 1523C C U	U	2
RT 1523D C U	U	2
RT 1523E C U	U	2
RT 1523F C U	U	1
RT 1672 U C	U	1
RT 1672C C U	U	1
RT 1672D C U	U	1
RT 1694D P C U	U	1
RT 1696 U C	U	1
RT 1716	U	1

RT 1718	U	1
RT 1719B C G	U	1
RT 1719D C G	U	1
RT 1720 G	U	1
RT 1720B C G	U	1
RT 1720C C G	U	1
RT 1720E C G	U	1
RT 1720F C G	U	1
RT 1720G C G	U	1
RT 1730 C	U	1
RT 1730B C	U	2
RT 1730C C	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
RT 1730E C	U	2
RT 1765 C	U	1
RT 1770 C	U	1
RT 1785 C	U	1
RT 1785C U	U	1
RT 1794 C	U	1
RT 1794C	U	1
RT 1796 PRC	U	1
RT 1797 C	U	1
RT 1799 P C	U	1
RT 1807	U	1
RT 1807 C	U	1
RT 1812 C U	U	1
RT 1824 C	U	1
RT 1834C U	U	1

RT 1836C	U	1
RT 1837C	U	1
RT 1840C U	U	1
RT 1841C U	U	1
RT 1842C U	U	1
RT 1851C	U	1
RT 1912 C APX	U	1
RXQ 58	U	2
RYQ 57	U	2
RYQ 58	U	2
RYQ 58 2	U	2
RYQ 65	U	2
RYQ 71 2	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
RYQ 71 3	U	2
RYQ 75	U	2
RYQ 90	U	2
RYQ 99	U	2
RYQ 99A	U	2
SBB	U	4
SECTEL 9600 SLC	U	1
SG 175	U	1
SG 50	S	1
SG 50 PARALLEL	S	1
SG 50 SERIAL	S	1
SG 50A 7 PARALLEL	S	1
SG 84A	S	1
SG 84A 3	S	1

SG 84C 3	S	1
SG 84C 7	S	1
SG 94	U	1
SGV 8B 7	S	1
SGV 8C 7	S	1
SIK 20	U	1
SO 66	U	1
SO 66 E1	U	1
SSP 3110	U	1
ST 13	U	4
ST 19	U	1
ST 20	U	4
ST 20 V1	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
ST 21	U	4
ST 22	U	4
ST 23	U	1
ST 28	U	4
ST 31 1	U	1
ST 31 MOD01	U	2
ST 31A	U	4
ST 34	U	4
ST 38 E1	U	1
ST 40	U	4
ST 41	U	4
ST 43	U	4
ST 44	U	4
ST 50 E2	U	1
ST 51	U	1

ST 57	U	1
ST 58	U	1
ST 58 E1	U	1
ST 58 E2	U	1
ST 6	U	1
ST 61 E2	U	4
ST 65	U	4
ST 6A	U	1
ST 81	U	4
STB 34 V1	U	4
STP 5 V1	U	1
STP 6 V1	U	1
STQ 41	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
STU A10	U	1
STU A12	U	1
STU A15	U	1
STU A20	U	1
STU A22	U	1
STU A24	U	1
STU A26	U	1
STU A27	U	1
STU A43	U	1
STU B10	U	1
STU B12	U	1
STU B20	U	1
STU B22	U	1
STU B26	U	1

STU D10	U	1
STU D20	U	1
STU G VDU	U	2
STU G20	U	1
STU G30	U	1
STU H10	U	1
STU H20	U	1
STU H40	U	1
STU J10	U	1
STU K20	U	1
STU L20	U	1
STU M20	U	1
STU N10	U	1

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
STU N20	U	1
STU N29	U	1
STU N30	U	1
STU P10	U	1
STU P20	U	1
STU Q44	U	1
STX 34A	U	4
SV 7	U	1
SV 7 HSA	U	1
SV 7 HSB	U	1
SW 15	S	1
SW 15 34	S	1
SW 15 6	S	1
SW 15 8	S	1
SY 28	C	1

SY 57	U	1
SY 58 1	S	1
SY 58 7	S	1
SY 71A	S	1
SY 71D	U	1
SY 71E	U	1
SYV 5	S	1
SYV 5 6	S	1
TCE 621	U	1
U ABD	S	2
U ALO	U	2
U ALR	U	2
U AMA	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
U AQE	U	2
U ARO	U	2
U ARV	U	2
U ARW	S	2
U ARX	U	2
U AVM	U	2
U AXM	U	2
U AYI	U	1
U AYJ	U	1
U AYL	S	2
U AYM	S	2
U BLW	U	1
U BST	U	2
U DED	U	2

U HAY	U	1
U HAY 2	U	1
U TVA	U	2
U TVB	U	2
U TVB 2	U	2
U TVB 3	U	2
U TWA 3	U	2
U TWW	U	2
U TXZ	U	2
U UEI	U	1
U UEK	U	1
ULC SSP	U	1
VDU	U	2

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
VM 300	U	1
WINDSTER	U	2
WLI T1A	U	1
XRX A1	U	1
XRX A2	U	1
XTS 5000	U	2
Z ACA 3	U	4
Z ACB 1	U	4
Z ACC	U	4
Z ACD 1	U	4
Z ACE 2	U	4
Z AGF	U	4
Z AGK	U	4
Z AGN	U	4
Z AHD	U	4

Z AHL	U	4
Z AHP	U	4
Z AHP 2	U	4
Z AHQ	U	4
Z AIJ	U	4
Z AJI	U	4
Z AKE	U	4
Z AKF	U	4
Z AKG	U	4
Z AKH	U	4
Z AKM	U	4
Z AKN	U	4
Z AKQ	U	4

<u>SHORT TITLE</u>	<u>CLASS</u>	<u>ALC CODE</u>
Z AKR	U	4
Z AKR 2	U	4
Z AKS 1	U	4
Z AKS 2	U	4
Z AKT 1	U	4
Z AKT 2	U	4
Z AKV	U	4
Z AKX	U	4
Z AKY	U	4
Z AMX	U	4
Z AMX 1	U	4
Z ANG	U	4
Z ANH	U	4
Z ANP	U	4

Z APA	U	4
Z APB	U	4
Z APD	U	4
Z ATI	U	2
Z AVH	U	4
Z AWO E1	U	1
Z AWP E1	U	1
Z AWQ	U	1
Z AWQ E1	U	1
Z AWU	U	1
Z BQK	U	4
ZS 01 E1	U	1

ANNEX J

List of Acronyms

Acronyms	Definitions
AL	Accounting Legend
ALC	Accounting Legend Code
ALCOM	All Communications Elements
APL	Allowance Parts List
BCM	Beyond Capability of Maintenance
CCI	Controlled Cryptographic Item
CD-ROM	Compact Disc Read-Only Memory Device
CEEP	Cryptographic Equipment Exchange Program
CERP	Cryptographic Equipment Repair Program
CIK	Cryptographic Ignition Key
CJSI	Chairman of the Joint Chiefs of Staff
CMCS	COMSEC Material Control System
CMIO	COMSEC Material Issuing Office
CNO	Chief of Naval Operations
COMSEC	Communications Security
COR	Central Office of Record
COSBAL	Coordinated Shipboard Allowance List
CRF	Cryptographic Repair Facility
CSS	Constant Surveillance Service
DCS	Defense Courier Service
DIRNSA	Director National Security Agency
DON	Department of the Navy
DRM	Defense Re-Utilization and Marketing Office
ECU	End Cryptographic Unit
EKMS	Electronic Key Management System
GFE	Government Furnished Equipment
ICP	Inventory Control Point
ISIC	Fleet Integrated Supply Center
KAM	Cryptographic Operational Maintenance Manual
KAO	Cryptographic Operations Manual
KDC	Key Distribution Center
LMM	Logistics Maintenance Manual
MACE	Mandatory Accounting for Equipment
MAF	Maintenance Action Form
MMVG	Mandatory Modification Verification Guide
MTBF	Mean Time Between Failure
MTTR	Mean Time to Repair
NALCOMIS	Naval Aviation Logistics Command Information Management System
NCMS	Naval Communications Security Material System
NIK	Normal Input keying
NOFORN	No Foreign Dissemination
NRFI	Non-Ready for Issue
NSA	National Security Agency
OA	Operational Availability

OCONUS	Out of the Continental United States
PCB	Printed Circuit Board
PROMS	Programmable Read-Only Memory Device
PSS	Protective Security Service
RFI	Ready for Issue
RMA	Return Merchandise Authorization
SA	Service Authority
SAMS	Special Purpose Operational Maintenance Sample
SLEP	Selected Lifetime Extension Plan
TPI	Two Person Integrity