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COMDTINST 4000.4A
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COMMANDANT INSTRUCTION 4000.4A

Subj: **STANDARDIZED BAR CODING WITHIN THE COAST GUARD FOR LOGISTICS APPLICATIONS**

Ref: **(a) Operational Logistics Support Plan (OLSP) for the Acquisition Equipment of Bar Code for the U.S. Coast Guard, COMDTINST 4000.12**

1. PURPOSE. To define bar coding symbology, clarify responsibilities and provide policy and procedural guidance for bar code applications within the logistics community.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, Commanding Officer, Aircraft Repair and Supply Center (ARSC), Commanding Officers of Supply Centers Baltimore (SCB) and Curtis Bay (SCCB) and commanding officers of headquarters units shall ensure compliance with the provisions of this instruction.

3. DIRECTIVES AFFECTED. Standardized Bar Coding Within the Coast Guard for Logistics Applications, COMDTINST 4000.4 is cancelled.

4. **BACKGROUND**.

    a. The Department of Defense (DOD) is modernizing their logistics systems which support the Coast Guard (CG) as well as Other Government Agencies (OGAs). The CG is in

the process of updating its bar code hardware and software in order to maintain and improve DOD interface for critical catalog/inventory/logistics functions. Currently, DOD and OGAs provide approximately 92 percent of CG requirements from the Federal Supply System. Bar code hardware and software will allow the CG to use modern, state-of-the-art equipment for faster data entry of materiel shipped, received, placed into inventory and registered as accountable property. Bar code hardware will also facilitate the integration of the requisitioning, accounting and materiel management functions at field level and provide better management information to command and central support organizations (e.g., CG Headquarters, ARSC, SCB, SCCB, Finance Center).

b.   The Logistics Application of Automated Marking and Reading Symbols (LOGMARS) is the bar code standard developed by DOD for government-wide use. This standard identifies the machine-readable symbology to be used by commercial vendors and DOD activities on items of supply, unit packs, outer containers and other selected items. The LOGMARS contract expired during 1993 and in April 1994, General Services Administration awarded a new bar code contract to INTRMEC Corporation, under contract number DAHC94-94D-0003. The term "LOGMARS" has been replaced by "AIT," which stands for Automatic Identification Technology. The coordinating office for this contract is the Project Manager, AIT, Fort Belvoir, Virginia.

c.   Initially, bar code equipment will be procured and installed at approximately 268 CG operational units that currently use Shipboard Computer Aided Maintenance Program (SCAMP) hardware and software; additional units will also receive bar code equipment as new asset tracking/configuration management software (which makes use of bar code technology) is fielded. Reference (a) identifies units to recieve bar code equipment.

5.   **DEFINITIONS.**

a.   Bar Code is a symbol, usually found in the automated environment, which is used primarily to identify an item or equipment. Bar codes consist of rectangular bars and spaces, arranged in predetermined patterns to represent coded elements of data, that can be automatically read and interpreted by automatic bar code reading devices or scanners.

b.   Code 39 Symbology. The 3-of-9 bar code is a variable length, discrete, self-checking, bidirectional, alphanumeric bar code, and is the accepted government, industry and CC standard.

6.   DISCUSSION. This section provides direction on usage and implementation of standardized bar code symbology for all logistics applications.

    a.   <u>Purpose and Application</u>.

        (1)   The Standard DOD Bar Code Symbology, MIL-STD-1189 (series), requires the use of 3-of-9 bar code and is established as the standard for the automated marking and reading of items of supply, equipment, property, materiel, unit and intermediate packs, outer containers and selected documents in logistics operations. An intermediate pack is defined as a number of packages that, by themselves, can be shipped separately but are shipped together in an overpack container (i.e., crate).

        (2)   All bar code marking and reading must be accomplished In Accordance With (IAW) MIL-STD-1189. This standard shall be applied IAW the Standard for Marking for Shipment and Storage, MIL-STD-129 (series). MIL-STD-129 provides requirements for uniform marking of military supplies and equipment for shipment and storage. It sets forth standard methods for applying labels to materiel, intermediate and exterior packs and further defines label data (e.g., Contract number, National Stock Number). It accommodates the requirements for movement processing as specified in the Military Standard Requisitioning and Issue Procedures (MILSTRIP), DOD 4000.25-1-M, the Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP), DOD 4000.25-2-M and in the Military Standard Transportation and Movement Procedures (MILSTAMP), DOD 4500.32-R.

        (3)   Bar Code Marking Information for End Item Materiel (Serialized, Warranty), MIL-STD-130G, provides the item marking requirements and methods for identification of items of military property produced, stocked, stored and issued by or for DOD.

    b.   <u>Computer Resource Support</u>.

        (1)   Standardization of Hardware. Bar code equipment shall be standardized to interface with the CG Standard Workstation. Policy regarding Automated Data Processing equipment associated with implementing AIT applications is published in reference (a).

        (2)   Standardization of Software. Bar code software is defined as software which resides in a portable bar code reader, a micro, mini or a mainframe computer.

Utility programs will be used to interface with shipboard and ashore existing programs (e.g., SCAMP, Configuration Management Plus (CMPlus), Aviation Maintenance Management Information System (AMMIS)). Policy regarding software acquisition and development for implementing AIT applications is also published in reference (a).

7. **POLICY**.

    a.   The implementation of specific hardware and software standards for bar code application and support of the Coast Guard's Logistics Management program is subject to approval by Commandant (G-TTC). All commands and Headquarters units implementing bar code functionality shall use AIT technology. This includes both existing and planned systems which require an interface with CG or DOD service/agency systems. Enclosure (1) is a preliminary planning guide for determining bar code applicability.

    b.   CG units will account for bar code hardware (e.g., Portable Data Collection Device, Type I Bar Code Label Printer) and software in their Unit Financial System Property Database, IAW the Property Management Manual (COMDTINST M4500.5 (series)). Although issued to individual units for use and accountability, bar code assets will remain under the control of Commandant (G-ELM). Assets will not be transferred or disposed of without prior approval from the Information Resources Management Branch, Commandant (G-ELM-4), (202) 267-0859. All bar code policy and procedural questions should be referred to the Policy Branch, Commandant (G-ELM-2), (202) 267-0656.

8. **RESPONSIBILITIES**

    a.   <u>Commandant (G-ELM) shall</u>:

        (1)   Establish bar code policy for logistics applications in the CG. Consider and decide on any proposed waivers from the established standards;

        (2)   Act as functional manager for all bar code technology logistics applications;

        (3)   Fund all logistics bar code requirements including software, hardware, system implementation through the formal budget cycle for existing applications (i.e., SCAMP);

        (4)   Monitor the overall planning, implementation, and operation of the CG bar code program for logistics; and

      (5)   Act as CG's focal point for AIT.

    b.   Headquarters Project Offices shall: Provide funding for all hardware and software short and long-term requirements when fielding new information systems dependent on bar code technology.

    c.   Maintenance and Logistics Commands (MLCs), District Commanders, Commanding Officers of Headquarters Units and Unit Commanding Officers shall:

      (1)   Implement bar code policy and procedures and ensure that in-house bar code requirements are met;

      (2)   Obtain prior approval from Commandant (G-ELM-4) for exceptions or variations to the AIT program;

      (3)   Conduct and participate in AIT tests and studies as required;

      (4)   Submit new bar code implementation plans for logistics applications via the normal chain of command to Commandant (G-ELM-2) for approval;

      (5)   Submit descriptions of any existing bar code systems implemented for logistics applications to Commandant (G-ELM-4); and

      (6)   Develop internal procedures as required.

9.   **FORMS/REPORTS**. None.

Encl: (1) Automated Information Systems (AIS) Requirement for Bar Code Logistics Proposals

AUTOMATED INFORMATION SYSTEMS (AIS)
REQUIREMENT FOR BAR CODE
LOGISTICS PROPOSALS

1. AIT technology should be considered for all logistics applications that could significantly benefit from the use of bar code equipment to enhance readiness, responsiveness, productivity and the quality of logistics operations. After the decision to use bar code equipment has been made and prior to implementation, units will submit a 12-step AIS proposal to Commandant (G-ELM) for review and approval.

2. When making a proposal to implement bar code technology, the cost of bar code technology should be weighed against the current costs of performing the operation. The decision to use bar codes and readers can usually be justified based on the time savings alone. Benefits are both direct and indirect in terms of cost savings.

    a. Typical direct cost savings result from reduced time in:

        (1) Identifying or locating items to be inventorled or issued;

        (2) Collecting and recording specific data about the item;

        (3) Correcting errors;

        (4) Updating inventory for missing and disposed of items;

        (5) Posting, filing and reporting the results;

        (6) Matching inventory records with the results of physical inventory; and

        (7) Processing issues and receipts.

    b. Estimated dollar savings are derived from staff-hour savings using automated processes to replace manual procedures. Other indirect benefits come from access to the inventory data base, better quality data, more timely information and improved accuracy. These tend to be non- quantifiable savings. For example:

        (1) Easy to maintain and retrieve historical information about inventory;

        (2) Improved internal controls in data gathering (audit trails of updates and revisions to permanent inventory files);

        (3) Edits on entered transactions and rejection of invalid data;

    (4)   Less time spent gathering data and more time resolving inventory problems;

    (5)   Less time spent processing issues and receipts; and

    (6)   Less time stocking incoming material.

3.   When it is decided to implement bar code technolgy, AIT symbology is mandatory for all logistics applications.

4.   Commandant (G-ELM) will fund bar code requirements, with hardware and software acquisitions taking place during FY96.

5.   Units may fund and implement their own bar code initiatives for local allocation after submitting their requirements including a cost benefit analysis (paragraphs 2.a and 2.b above provide sample cost benefit analysis elements) to Commandant (G-ELM), via normal chain of command, for approval.

6.   Commandant (G-ELM) will review unit bar code requirements and analyses. New bar code efforts will be compared with other initiatives to prevent duplication, promote standardization and achieve the greatest overall benefits for the CG.

7.   After Commandant (G-SLM) reviews all new initiatives, a response will be forwarded to the submitter. This coordination process shall stimulate shared research, interchange of data, compatible scheduling, development of standards and adoption of common solutions to common problems.

8.   Commandant (G-ELM) will monitor progress; fostering, guiding and facilitating implementation; and providing for coordination and participation with other units on areas of common interest.