

## CHAPTER 3 PROVIDING CLASS II, III PACKAGED, AND IV SUPPLIES

### Section I MANAGEMENT

#### ISSUE CONTROLS

Because of high cost and the possibility of unforeseen demands, Class IV items (and some Class II) may be placed under controls not applied to other classes of supply. These controls include selective stockage and command approval of items before they are issued.

##### Selective Stockage

The MMC selects the type and amount of items to be stocked at supply points. As a rule, these items are stocked only after they have been requested a set number of times in a given period. This prevents large inventories that would impede mobility.

##### Command Approval

Issues must often be controlled if items in short supply are to be on hand for priority requests. Expensive, highly technical, or scarce items are often placed on regulated or command-controlled lists. Items on these lists are critical to a local command for an indefinite period. Division commanders may compose a list of command-controlled items critical to their command. Command approval is required before an item on this list can be issued. Requests for the item must be sent through channels to the commander who made the list. DA prints the lists, and only the commander who initiated the list may take an item off the list.

#### MOBILITY CONSTRAINTS

There are specific mobility requirements that apply to DSUs and their subordinate elements. The ASL mobility index is the percentage of the total cube of essential stocks that can be transported in one lift with transportation assets that are organic to the DSU. Mobility requirements are in AR 710-2. All ASL items that can be stored in bins must be truck- or van-mounted. DSU forward elements

supporting a brigade (maintenance company or supply company, FSB) must be able to move 90 percent of their ASL items within 30 minutes and the remainder within 4 hours. All DSU elements supporting division or large combat units must be 50 percent mobile in one lift and must be able to move the remainder of their ASL by shuttle. Weight and cube data are listed on the AMDF and can be provided by ADP equipment. If corps transportation assets are not dedicated, DSUs need to request transportation from their battalion. Requests would then be passed from the DISCOM MCO to the COSCOM MCO. He coordinates with the DTO who then coordinates with the COSCOM MCT or MCC.

#### CLOTHING AND TEXTILE REPAIR CONSTRAINTS

The decision on whether or not to repair a clothing or a textile item is based on the total cost to repair that item. For personal clothing items to be economically repairable, the cost of repair must not be more than 35 percent of the cost of the item. For textile items, the cost to repair the item must not exceed 65 percent of the cost of the item. The repair cost includes labor, materials, transportation, and overhead. The theater commander may need to publish a repair policy that would relax these repair limitations for critical items and items in short supply.

#### PROCUREMENT

Most secondary items are procured with stock funds. A MAT CAT code enables the requisitioner to know if funds are required to requisition the item. It also identifies the type of funds used to procure the item locally. A requisition for stock-funded or OMA-funded items requires that the

requester have OMA funds and the requisitioner have either OMA funds or stock fund obligation authority available. An alphabetic character in the second position of the MAT CAT indicates that an

item is procurement appropriation-financed. This means that it is generally a free issue. The third position of the code shows whether an item is repairable or nonrepairable.

## Section II

### CLASS II SUPPLY REQUIREMENTS

#### CLOTHING, INDIVIDUAL EQUIPMENT, TENTAGE, AND ADMINISTRATIVE AND HOUSEKEEPING SUPPLIES

There are over 100,000 Class II items listed in the AMDF. Class II items include clothing, individual equipment, tentage, organizational tool sets and kits, hand tools, and administrative and housekeeping supplies and equipment. Parkas, combat boots, general-purpose tents, general mechanic tool sets, hammers, file cabinets, and paper towels are examples of each type. Class II also includes NBC-related items. Class II subclasses are identified in Appendix B. The Defense Personnel Support Center procures and manages most of the Class II clothing and individual equipment used by the Army.

##### Authorized Clothing Allowances

CTAs 50-900, 50-909, and 50-970 list basis of issue allowances for Class II items. Clothing allowances for contingency plans and mobilization must conform with that shown in the "Active Army-Mobilization" column of CTA 50-900. The only exceptions to this are special issue and clothing allowances authorized by special lists or movement orders. Mobilization clothing allowances are mandatory. However, because of existing climatic conditions, commanders should use caution in prescribing full clothing allowances throughout a given command.

**Discretionary allowances.** An additional allowance may be authorized by movement orders for the health and comfort of soldiers assigned duty in certain climatic zones. Parka liners and mitten inserts are examples of discretionary items authorized for

operations in cold climates. Discretionary allowances are listed in CTA 50-900, Appendix I. They are issued at the discretion of the major commander or major Army subcommander. The authority to issue discretionary items may be delegated to subordinate commands.

**Contingency force allowances.** When allowances are considered inadequate for possible deployment to a specific zone of operation, contingency force commanders may obtain approval from DA to modify the allowances listed in the "Active Army-Mobilization" column of CTA 50-900. An additional canteen and canteen cover for hot desert areas is an example of a special allowance which may be authorized to meet contingency force requirements.

##### Requirements

Requirements for clothing and individual equipment are based on seven climatic zones. These zones are explained in CTA 50-900, Appendix D. Clothing may also be issued on the basis of MOSs listed in CTA 50-900, Appendix F. The theater or contingency force commander or the FORSCOM or readiness command commander designates those items in the "Active Army-Mobilization" column of CTA 50-900 which are to be worn or carried and those which are to be transported. Requirements for other items of Class II, such as administrative supplies, are based on unit, organization, or activity needs. CTA 50-970 lists initial issue and initial stockage levels for expendable and durable

items. Replenishment quantities must be based on demands and anticipated requirements.

#### **Consumption Rates**

In 1987, FM 101-10-1/2 listed the consumption rate for Class II as 3.67 pounds per person per day. The rate may vary depending on force size.

#### **BASIC AND OPERATIONAL LOAD REQUIREMENTS**

MACOMs designate the units which must keep basic loads of Class II supplies. Basic loads sustain operations in combat for a prescribed number of days. The method for determining the stockage level will be prescribed. AR 710-2, Chapter 2, authorizes up to 15 days stockage of expendable CTA 50-970 Class II operational load items to sustain peacetime operations. A seven-day level should be enough when operational load items are also available through an SSSC. Operational load supplies may be moved into combat if transportation assets are available after essential lift requirements are met.

#### **Responsibility and Accountability**

The commander is responsible for durable items in the basic load. Hand-receipt procedures are used to assign responsibility for durable items but are not required for expendable items. Property book accountability is not required for durable and expendable Class II basic load items.

#### **Replenishment**

Basic load items must be on hand or on order at all times. Replenish these items as they are used.

#### **Records**

Though property book records are not kept for Class II durable and expendable items, maintain records of demands for basic load items. Document registers must also be kept, but post only the document number, description, quantity, and date.

#### **Load List**

A list of Class II basic load items must be on file at the using unit. Give a copy of the initial list to the SSA. Give list changes to the SSA after the first and every other periodic review. Prepare a new list for the using commander's approval, and

send it to the SSA after the second and every other periodic review.

#### **INVENTORY REQUIREMENTS**

AR 710-2, Chapter 2, requires that all items be inventoried at least annually. Inventory Class II basic load items during the regular review period. Inventory durable items in Class II operational loads annually or upon change of responsibility. Inventory components when the end item is inventoried.

#### **Property Book Items**

Account for Class II items on property books. Account for items in the "authorized column" of authorization documents when the quantity in the required column is less than that authorized. Account for CTA 50-900 items (except insignia and initial and supplemental clothing issued according to AR 700-84). Account for CTA 50-909 items and on-hand or on-request nonexpendable special tools and test equipment authorized by an MTOE, a TDA, a JTA, or a CTA and which are listed in a TM or which are not separately type-classified. AR 710-2 requires that property book items be inventoried--

- Upon receipt. (The receiving person must conduct a complete inventory.)
- Prior to being turned in.
- When issued on a hand receipt. (The receiving person must conduct a complete inventory.)
- Upon change of responsible officer.
- Upon change of PBO.
- When directed by the commander.
- During the required annual property book inventory.
- During the annual responsible officer inventory.

When property books are kept at other than the using unit level, the PBO may require a cyclic, monthly, quarterly, or semiannual inventory in place of the required annual inventory. The PBO must conduct an annual inventory of items not issued on hand receipts.

#### **OCIE**

OCIE must be inventoried when the soldier has been dropped from the rolls, hospitalized, hospitalized for

more than 60 days (and OCIE was not previously inventoried), ordered to permanently change station while on emergency leave, or placed in an absent-without-leave status.

### **Wartime Inventories**

Inventory requirements during actual wartime conditions depend on the level of organization and

the tactical situation. Requirements for using units to perform inventories cease in wartime. Inventories should be taken merely to determine the quantity on hand and the condition or status of property. However, these inventories do not have to be documented. If the situation allows, a cyclic inventory may be conducted. Though discrepancies should be recorded, they do not have to be reported.

## **Section III**

### **MAP SUPPLY SUPPORT**

#### **INITIAL ISSUE**

Since a large percentage of logistical planning is done using maps, a major requirement for any operation is an adequate supply of maps. Requirements vary depending on force structure, probable duration of planned operations, quantity of map stocks set aside for the task force, quantity in unit basic loads, and anticipated battlefield mobility. The initial issue of maps for three corps (12 divisions) ranges from 2.7 to 3 million copies (weighing from 135 to 150 tons). However, the Defense Mapping Agency shipped more than 45 million maps (about 2,250 tons) to Southwest Asia in support of only two corps during Operation Desert Shield. Small- and medium-scale maps are issued in small quantities to headquarters only. Quantities vary depending on the size and mission of the headquarters. Large-scale maps are the standard maps normally issued in the main battle area. Initial issue allowances for large-scale maps depend on the type of unit. Small quantities of joint ground-to-air operation graphics are issued to headquarters. Two copies are issued per organic Army aircraft. One copy should be issued per air defense artillery fire unit. Road maps are issued on the basis of one map per vehicle. Limited quantities may also be issued to unit headquarters. Small quantities of maps and map products are issued to interagency teams, such as law enforcement, in support of peacetime contingency operations.

#### **THEATER RESERVE STOCKS**

For operations on a mobile battlefield to be effective, topographic data and pre-positioned stocks

must be available in deployed units. Actual stockage levels vary according to the types of units. NATO nations have accepted production responsibilities to ensure that preplanned stocks of standard maps are available for interchange between allied forces.

#### **Division Reserve**

The division reserve may equal one brigade basic load.

#### **Corps Reserve**

The corps reserve may equal one division basic load plus an equal amount of blank paper and printing supplies. A 10-day corps reserve could equal 400,000 to 650,000 copies and weigh 20 to 32.5 tons.

#### **Theater Army Reserve**

This reserve may equal a five-division basic load plus an equal amount of blank paper and printing supplies. A QM map supply detachment assigned to the QM supply company, GS, maintains a 30- to 60-day reserve stockage of topographic supplies. A 45-day theater depot reserve could range from 5.4 to 9.0 million copies and weigh 270 to 450 tons.

### **REQUIREMENTS**

From 100,000 to 120,000 copies may be needed daily to resupply three corps (12 divisions). This requirement is based on the map replenishment percentages listed in FM 101-10-1/1, Chapter 6. The formula in Table 3-1, page 3-5, may be used to estimate map requirements for an operation.

Table 3-1. Formula for estimating map requirements

<b>Total Copies (each scale)</b>	<b>=</b>	<b>*Coverage for a Scale</b>	<b>x</b>	<b>Initial Issue</b>	<b>+</b>	<b>Replenishment</b>
<b>*This is determined by using the Catalog of Maps, Charts, and Related Products published by the DOD DMA.</b>						

### Replenishment Estimates

Replenishment of small-scale maps is 50 percent of initial requirements. Replenishment of medium- and large-scale maps may reach 100 percent of initial requirements.

### Operation Plan Requirements

AR 115-11 requires that topographic guidance be included in all OPLANs and orders. OPLANs must include topographic appendixes or sections which describe the map support needed to complete a tactical operation. These OPLANs should include the following:

- Size and makeup of the envisioned task force.
- Initial map issue allowances.
- Existence, quantity, and currency of map stocks which have been or will be set aside for the task force.
- Quantity held by task force units in unit basic loads.
- Possible duration of the tactical operation.
- Degree of allied topographic support anticipated.
- Anticipated map shortfall.
- Ways to decrease any shortfall. This may include anticipated support from indigenous governmental and civilian agencies.
- Deployment phasing and security considerations.

### REQUISITION PROCEDURES

The DMA publishes catalogs of standard maps, charts, and map products. Catalogs are available down to separate-company level. All standard map products have a unique number that identifies the map series, sheet, and edition. Maps may be

requisitioned using ADP systems and the DMA catalog number as a manufacturer's part number.

### Theater Requisition

A catalog of maps may be prescribed for use within a theater. Instructions for preparing requests are listed in the catalog or map index. Maps needed to support critical situations are requisitioned according to MACOM instructions. The S2 or G2 validates requests for nonstandard map products.

### Classified Requisitions

AR 380-5 shows how to prepare classified requisitions. According to AR 115-11, requisitions for maps must be classified when map indexes indicate that a map is classified, when size or nature of the requisition indicates a classified operation, or when geographic coverage reveals the location of a classified operation. All classified product requisitions and supplies are handled by intelligence channels. However, GS map supply points store classified maps.

### Special Map Products

Requests for special maps and map products go through command channels to supporting engineer map elements. Special products are those items historically provided to commanders by Army topographic engineers. These products include terrain intelligence products, analysis and surveys of all kinds, map overprinting, and overlays. Special products are produced in response to specific command requests. These products do not enter the supply system. If the need is great enough or DMA cannot obtain suitable maps from

any source, engineer topographic units in the theater have the ability to print small quantities of maps. Requirements for small-quantity, quick-service map printing is normally validated by the requesting unit S2 or G2. The request is forwarded to the engineer topographic control detachment. This unit coordinates with the MMC to requisition any standard products to satisfy overprints or other special preparation of map products. If directed by local commanders, some engineer-produced special products may be assigned local control numbers and be stocked and distributed by the GSU map storage site.

### **REQUISITION AND DISTRIBUTION FLOW**

The DMA provides standard maps. Engineer cartographic units in the theater update and, as necessary, prepare locally unique nonstandard maps. Requisitions for unclassified maps flow through supply channels to a QM map supply detachment. Requisitions for classified maps must be sent through S2 or G2 channels. The Quartermaster Corps proponent units are assuming the mission for the receipt, storage, and issue of standard maps and map products.

#### **Brigade Support Area**

Using units submit requests for maps to their supporting forward Class II, III packaged, IV, and VII supply point run by a supply company in the

BSA. These requests are transmitted to the supply company in the DSA.

#### **Division Support Area**

Using units in the DSA submit requests to their Class II, III packaged, IV, and VII supply point run by supply company personnel. This company transmits requests to the DMMC. The DMMC may cut an MRO directing the issue or prepare and transmit requisitions to the CMMC. Battalion S2s verify, consolidate, and transmit requisitions for classified maps to the division G2, who may then send the requisitions to the corps G2.

#### **Corps Rear Area**

In the corps, personnel in QM general supply companies run a corps map supply point. Requisitions which cannot be filled in the corps are sent to the TAMMC.

#### **Communications Zone**

All units in the COMMZ submit requisitions for maps through their supporting DSU in the same manner as units in the corps rear areas. If the theater is developed enough to have a TAMMC, it acts as the item manager for maps. DMA may operate one or more map depots in the area in peacetime and will continue to operate them in war. The theater army map depot may be collocated with the DMA theater depot. In order to satisfy requisitions, DMA may procure maps from allied or other sources or draw from CONUS depots.

## **Section IV**

### **CLASS IV SUPPLY REQUIREMENTS**

#### **CONSTRUCTION AND BARRIER MATERIALS**

There are nearly 4,000 Class IV items in the AMDF. They range from construction materials, such as nails and lumber, to fortification and barrier materials such as blackout curtains and barbed wire. Class IV items are often bulky and are often required in large quantities. They are often under the control of engineer construction organizations. Most Class IV construction supplies are

procured by the Defense Construction Supply Center of the Defense Logistics Agency.

#### **Requirements**

The GS supply base maintains 4 to 10 days of Class IV supplies plus OST. Requirements for items such as bridge equipment are based on barrier plans. Requests for such items normally

require command approval. CTA 50-970 authorizes basis of issue allowances for Class IV items.

### **Consumption Rates**

FM 101-10-1/2 sets 8.5 pounds per person per day as the Class IV consumption rate. When the force is a corps or larger, the consumption rate used must be adjusted to allow for the buildup of stocks to support base development and to repair war damage to critical facilities. For each of the following periods, multiply the 8.5 rate by the factor shown:

<b>Period</b>	<b>Factor</b>
D-Day to D+30	2.4
D+31 to D+60	1.6
D+61 to D+90	1.6
D+91 to D+120	1.6
D+121 to D+150	1.4
D+151 to D+180	1.4
D+181 and after	1.0

More Class IV consumption rate data are available from the proponents.

### **BASIC AND OPERATIONAL LOAD REQUIREMENTS**

Major commands determine which units must maintain a basic load of Class IV items for war. Up to 15 days of expendable Class IV operational load items listed in CTA 50-970 may also be stocked. If transportation is available, operational load items may be moved into combat. The commander is responsible for any durable items.

Responsibility for durable items is assigned on hand receipts. Records of responsibility are not maintained on expendable items. Since the basic load must be on hand or on order at all times, replenish Class IV basic load items as they are used. Class IV basic load items are not maintained on property books. Records of demands, however, must be kept on basic load items. A copy of the initial basic load list for Class IV items must be sent to the SSA. Changes found during the first and every other periodic review must also be sent to the SSA. A new list should be prepared for the using unit commander's approval and sent to the SSA after the second and every other review.

### **INVENTORY REQUIREMENTS**

AR 710-2, Chapter 2, prescribes Class IV inventory requirements. Basic loads of Class IV supplies must be inventoried during the regularly scheduled review period. Durable items in operational loads must be inventoried annually or upon change of responsibility, whichever occurs first. Inventories are not required for expendable items in operational loads. In war, using units may inventory unit property to assess status and on-hand quantity. However, units do not need to document the inventory. SSAs may conduct a cyclic inventory if the situation allows. SSA inventory discrepancies must be recorded. However, they do not need to be reported.

## **Section V**

### **DISTRIBUTION OF CLASS II AND IV SUPPLIES**

#### **DISTRIBUTION OF CLASS II ITEMS**

Maintenance-related Class II items are distributed by ALOC. See Chapter 1. All other Class II items are sent by sea or surface transportation. Their distribution depends on the type of item.

#### **Clothing and Individual Equipment**

DS or GS supply units replenish Class II stocks in the corps and COMMZ.

#### **Maps**

There are two separate distribution channels for maps. These distribution channels have been discussed previously in this chapter.

#### **Other Class II Items**

SSSCs provide expendable Class II items. DSUs and GSUs provide nonexpendable TOE items.

## DISTRIBUTION OF CLASS IV ITEMS

Class IV distribution is supported by the DSS concept of direct delivery from one of three CONUS wholesale depots to a DS or GS unit. Class IV items are distributed by surface means. They are shipped to the theater and then transported by rail or vehicle to a theater army GSU for replenishment issue.

### Controlled Items

CTA 50-970 durable items must be controlled. Class IV regulated items are controlled through command channels. Users send requests through intermediate commands to the approving commander. The MMC tells the approving commander if the item is available. After command approval, the MMC issues an MRO for the storage unit to transport the item to the user.

### Noncontrolled Items

Requests for noncontrolled Class IV items are sent to the CMMC. If the items are on hand, the MMC sends an MRO to the supplying unit to issue the item. When the items are not on hand, a requisition is sent to the TAMMC.

## THEATER SOURCES OF CLASS II AND IV ITEMS

The major GS supplier for Class II and IV is the QM general supply company. It also maintains a portion of the reserve stocks. In the heavy or infantry divisions, the S&S company, MSB, provides Class II and IV supplies to supported units in the DSA. The supply company, FSB, provides these supplies in the BSA. In the light divisions, the headquarters and supply company, MSB, provides supplies in the DSA. The headquarters and supply company, FSB, provides supplies in the BSA. The S&T company supports separate brigades. The S&T troop supports the ACR. The QM supply company, DS, supports nondivisional troops in the corps rear and division areas. For more details, including the amount of support in each class, see FM 10-27-2, Chapter 2.

### SUPPLY POINTS

Forward units are supported by forward supply points. The DMMC determines the types and quantities of

items to be stored. Forward supply points generally maintain fast-moving items only. Other items are held in the DSA. As a rule, the DMMC sends an MRO to the supply point directing it to issue an item. However, if authorized, main supply points may fill high-priority requests, then notify the DMMC of the issue. The number and location of supply points may vary. However, a division is usually organized with three forward points and one main point.

### Forward Supply Points

There is a forward supply point in each BSA. These points are operated by elements of the DISCOM, normally by the supply company, FSB. Separate brigades submit requisitions to the brigade MMC. Divisions send requisitions to the DMMC. Local policy may require that requests be sent through the FSB.

### Main Supply Point

Supply companies set up a main supply point in the DSA. This supply point supports divisional units in the DSA. It also replenishes stocks in forward supply points in the BSA. Divisional units in the DSA send requests to the main supply point which, in turn, sends the requests to the DMMC. DS supply companies, corps support battalions, set up a Class II, III packaged, IV, and VII point in the division area and throughout the corps rear area in support of nondivisional forces. Nondivisional units send requests to their supporting supply point. The supply point forwards requisitions to the CMMC.

### Storage Methods

Depending on the tactical situation and transportation assets, supply points may store supplies using one or more methods. In the unit pile method, supplies are grouped in piles according to the unit making the request. Unit trucks stop at the proper pile. The customer loads and signs for the supplies. In the item pile method, supplies of one type are stored in one location. Trucks can then move through the supply point for the unit soldiers to pick up each type of item requested. In the truck-to-truck

method, supplies are passed directly from the truck delivering to the main supply point to the truck that will deliver supplies to forward supply points or supported units. This method keeps supplies under cover, allows for complete mobility, and saves time and handling. However, it may tie up transportation.

### **Distribution Methods**

Supplies may be distributed by supply point distribution or unit distribution. Though the unit distribution method is preferred, a combination of supply point distribution and unit distribution may be used to distribute supplies.

***Supply point distribution.*** The receiving unit is issued supplies at a supply point. The receiving unit moves the supplies in its organic vehicles.

***Unit distribution.*** The receiving unit is issued supplies in its own area. Transportation is provided by the issuing agency.

### **CLOTHING EXCHANGE SOURCES**

Clothing may be exchanged at clothing exchange points, CEB points, or unit supply sections. FM 10-27-2, Chapter 1, lists the sources of clothing exchange in a theater of operations. If exchange facilities are not available, clothing may be exchanged directly with a DSU. Clothing exchange facilities obtain initial exchange stocks and replacements for unserviceable items through standard Class II channels. Details on CEB operations are in FM 10-280.

### **SALVAGE COLLECTION POINTS**

Salvage is property that has some value beyond that of its basic material content, is not economically repairable, and can no longer be used for its intended purpose. Salvage items include items that are discarded, captured, uneconomically repairable, condemned, abandoned, and scrapped. Salvage collection points are an alternate source of items which can be placed back into the supply system for reissue. As a rule, the Class II, III packaged, IV, and VII sections operate the division or brigade collection point. It is often located near the maintenance collection point. It receives

all salvage materiel for which maintenance units do not have maintenance responsibility. It receives nonmechanical and nonelectrical items such as clothing, tentage, and individual equipment. A large part of this type of salvage is generated by recovering unneeded clothing and individual equipment from casualties. Medical clearing stations should return these items to supply channels for processing and reissue. A salvage collection point does not receive toxic agents, radioactive materials, aircraft, ammunition and explosives, COMSEC equipment, and medical supplies. Units should bring salvage materiel to the salvage collection point.

### **Receipt**

When receiving materiel, soldiers at the collection point should check the item and its condition against the information shown on the turn-in document.

### **Storage**

Identify, classify, and segregate the items. Salvage collection points in the BSA depend on points in the DSA for final identification and classification of items. If you are in the DSA, identify the item using technical publications. Determine if the item is serviceable or unserviceable. Protect serviceable items by using tents, dunnage, and tarpaulins. Secure the items by providing continuous surveillance. Segregate items in the holding area by serviceable and unserviceable scrap and waste.

### **Disposal**

Dispose of items based on guidance from the DMMC. In forward areas, use trucks that bring supplies to the forward supply point to send material back to the DSA supply point. Send repairable items to the maintenance shop. Send serviceable clothing and canvas to the laundry and renovation platoon. The division intelligence officer should provide you with disposition instructions for foreign or captured materials. Evacuate unreparable and scrap items through salvage channels to a property disposal unit. Send a copy of the turn-in document and a copy of DD Form 1348-1 to the DMMC. Use AR 725-50.

## **THEATER REQUISITION AND DISTRIBUTION FLOW**

Figures 3-1, page 3-11, and 3-2, page 3-12, show the flow of requisitions for Class II, III packaged, and IV supplies not delivered by ALOC during the transition-to-war phase and during sustained war. During the transition phase, control of theater army pre-positioned war reserve stocks in corps rear areas shifts to the corps. High-priority requests for Class IV supplies and NMCS requisitions for Class IV supplies may be filled from in-theater war reserves maintained in corps and TAACOM GSUs. During sustained war, CONUS war reserves and CONUS depots are used to replenish the 30-day sustaining stocks stored in TAACOM GSUs. Maintenance-related Class II items other than heavy tonnage items are provided by the ALOC. Certain Class IV items are selected as controlled items. Requests for controlled items require command approval before items can be issued. All other Class II and IV items are shipped by ship, rail, or truck.

### **Brigade Support Area**

Users submit DA Forms 2765 directly to the forward supply point. If the supplies are on hand, the requests are filled. Once the supplies are issued, the supply point forwards all requests to the DMMC (or separate brigade or regiment MMC) of the issue transaction. To maintain mobility, forward supply points maintain minimal stocks on hand. If an item is not available at a main supply point in the DSA, the DMMC prepares and sends a requisition to the CMMC.

### **Division Support Area**

Divisional units in the DSA send their requests to the Class II, III packaged, IV, and VII supply point run by the headquarters and supply company or S&S company. Nondivisional units send their requests to the QM supply company, DS. If possible, the supply point fills the request and annotates the request to notify the DMMC of the issue. It forwards all requests to the DMMC. The DMMC forwards requests for controlled items to the next-higher MMC. For

noncontrolled items, the MMC performs a search of its magnetic tapes or disks. If the item is on hand, the MMC cuts an MRO. It sends the MRO to the supply point in the DSA and a copy to the requester. Depending on organic transportation assets, the supply point transports supplies to the requester or to a forward supply point. Users in the division rear usually go to the DSA supply point to pickup supplies. If the item is not on hand in the DSA, the DMMC prepares a requisition and sends it to the CMMC. It also prepares receipt cards for each request. It sends one copy to the requesting unit and one to the supply point. Corps transportation assets usually deliver Class II and IV supplies to the division supply point. If the situation permits, supplies are delivered to the forward supply point in the BSA or to the requesting unit. Oversize Class IV loads maybe delivered directly to the construction site.

### **Corps Rear Area**

Nondivisional units in the corps rear area send their requests to the QM supply company, DS, which, in turn, forwards the requests to the CMMC. The CMMC, in turn, forwards requests for controlled Class IV items to the TAMMC. The CMMC prepares and transmits daily replenishment requisitions to the TAMMC. The quantity ordered must be sufficient to fill the RO plus back orders. If the item is on hand in the corps rear area, the CMMC will normally cut an MRO directing a QM supply company, DS, to issue the item to the requesting unit. If the item is not on hand in the supporting DSU, the MMC may cut an MRO directing a lateral issue or an issue from the QM supply company, GS. The CMMC coordinates movement requirements with the CMCC. After the item is issued, the DSU or GSU sends an activity summary back to the CMMC. If the item is not on hand in the corps, the CMMC prepares a requisition and sends it to the TAMMC.

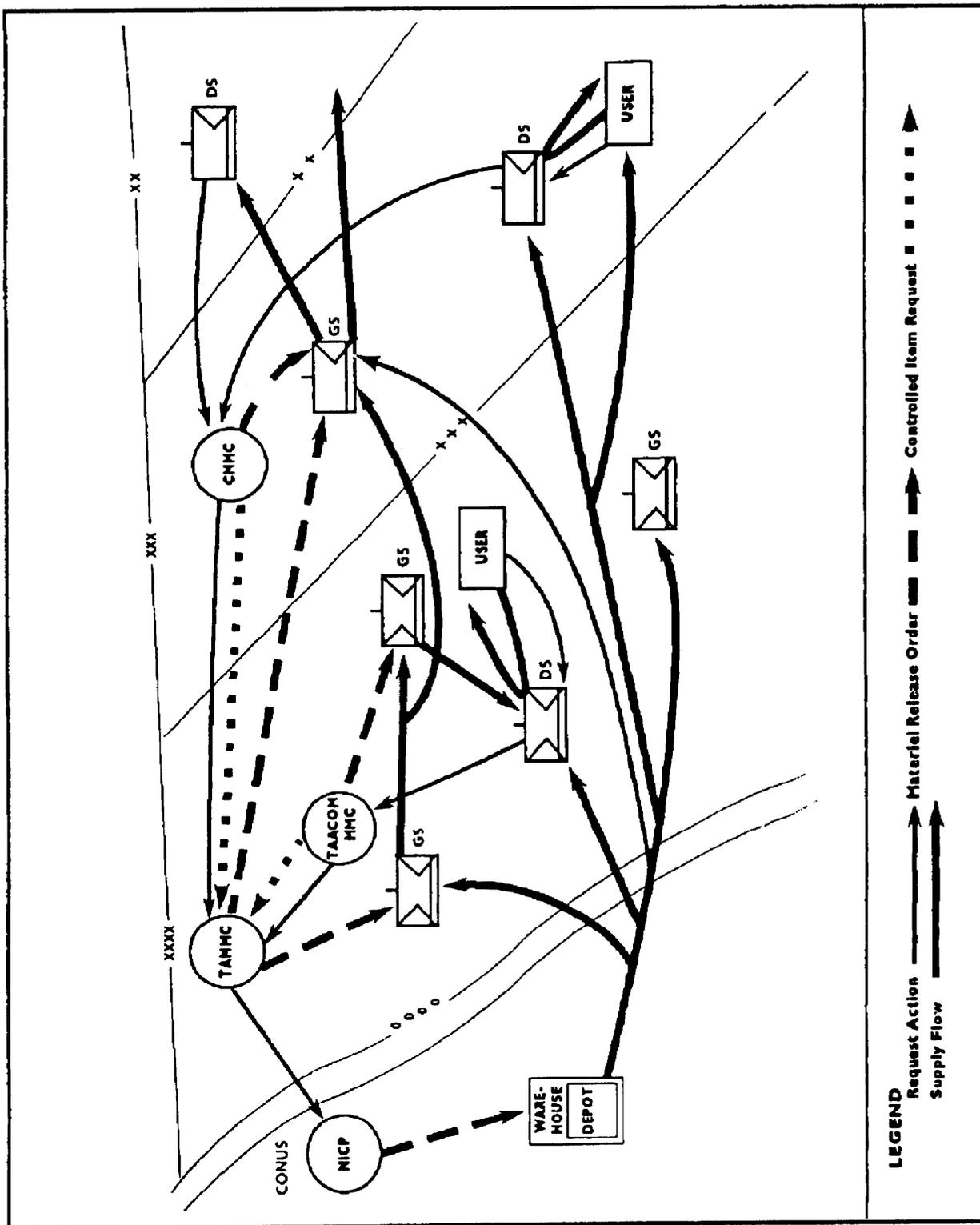


Figure 3-1. Request and delivery of Class II, III packaged, and IV supplies from CONUS to COMMZ

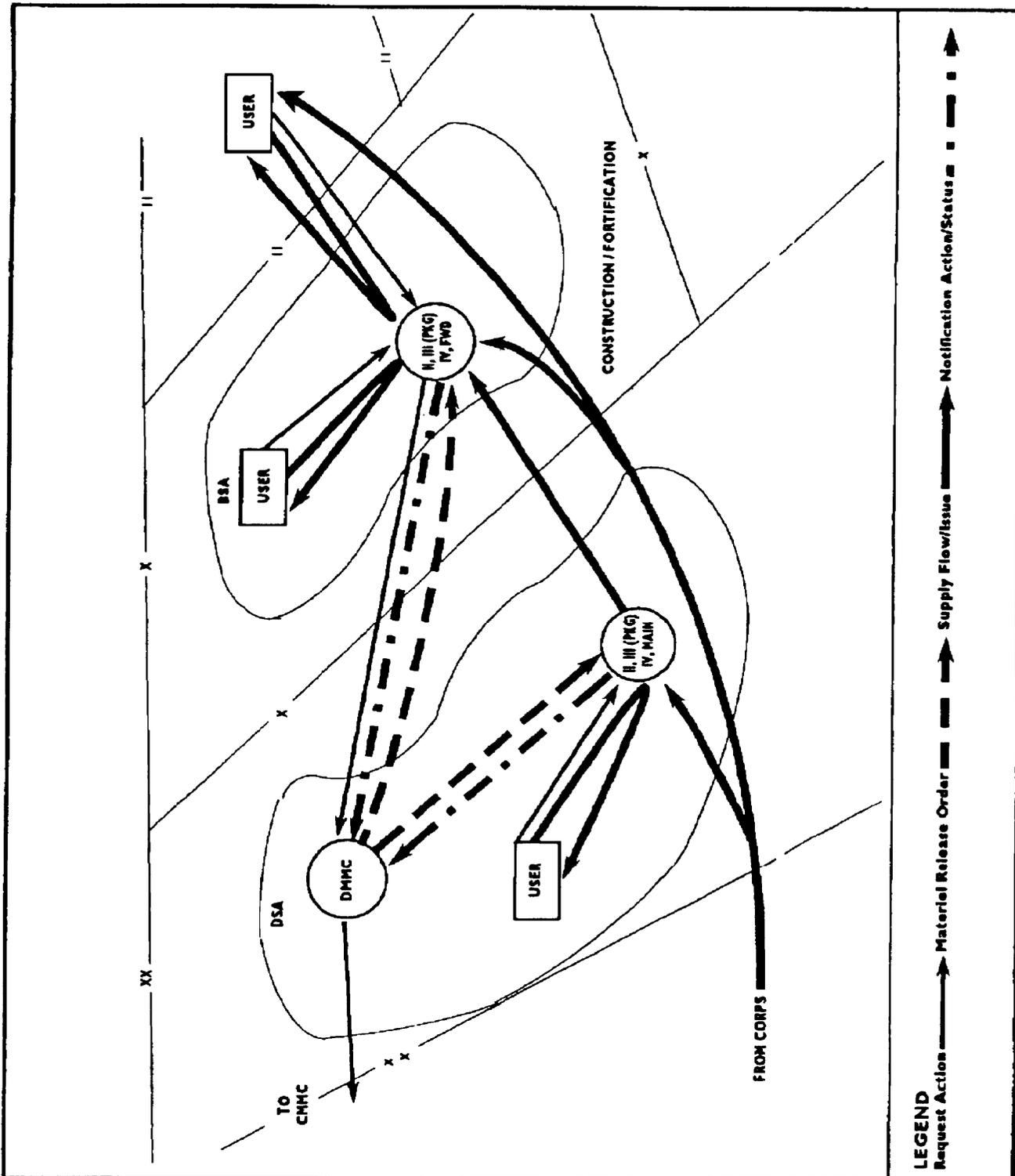


Figure 3-2. Request and delivery of Class II, III packaged, and IV supplies from division to user

### **Communications Zone**

QM supply companies, DS, support nondivisional units in the COMMZ as well as units passing through the COMMZ. Units send requests through their supporting QM supply company, DS, to the TAACOM MMC. That MMC submits daily replenishment requisitions to the TAMMC. The TAACOM MMC also transmits requests for controlled Class IV items to the TAMMC. The TAMMC searches its files to determine if the controlled item is on hand in a TAACOM DSU or GSU. If the item is on hand, the TAACOM MMC cuts an MRO directing the supporting QM supply company, DS, to issue the item to the requesting unit. If the company does not have the item, the TAACOM MMC may cut an MRO directing a lateral issue from another DSU or issue from a QM supply company, GS. If the item is not on hand in a TAACOM unit, the TAMMC prepares and transmits a requisition to the appropriate NICP. The NICP sends requisitions for controlled items to the TAMMC. That MMC maintains records on 30 days of Class II and IV items stored in QM supply companies, GS, throughout the COMMZ. Depending on the situation, the TAMMC may cut an MRO directing a QM supply company, GS, to issue the item to a QM supply company, DS, in the COMMZ or to a QM supply company, GS, in the corps. The

TAMMC may also prepare and transmit a requisition to the appropriate CONUS NICP.

#### **Distribution Flow from CONUS**

The NICP cuts an MRO directing a CONUS depot to release the item. Normally, the item is then shipped to a QM supply company, GS, in the COMMZ. Depending on the tactical situation and available transportation assets, the item may be sent on truck or rail as far forward into the theater as possible. However, surface throughput to DSUs or GSUs is expected only 20 percent of the time.

#### **AUTOMATIC RETURN ITEMS**

The automatic return items program expedites the retrograde of selected secondary items in critical stock positions that are considered as being recoverable. An automatic return items list is distributed quarterly with the AMDF. CDA Pamphlet 18-1-5 describes codes on that list. Disposition instructions from commodity managers are not needed for automatic return items. Due to their critical asset positions, automatic return items will be returned to CONUS depots or repair facilities without prior receipt of disposition instructions. Items coded "E" for "expedite" must be returned on premium transportation. Credit is given for the return of Army stock find items. For more details, see AR 725-50 and AR710-1, Chapter 3.

## **Section VI**

### **STORAGE AND DISTRIBUTION OF CLASS III PACKAGED SUPPLIES**

#### **THEATER SOURCES**

The major wholesale supplier of Class III packaged is the QM supply company, DS. As a rule, Class III packaged is received, stored, and issued with Class II, IV, and VII in a Class II, III packaged, IV, and VII section. See page 3-8 for information on theater sources of Class II and IV items. NOTE: Both the petroleum supply company and the petroleum pipeline and terminal operating company are authorized FARE. FARE may be used to fill 5-gallon cans, 55-gallon drums, and 500-gallon collapsible drums from supplies of

bulk fuel. In this sense, these companies provide Class III packaged supplies. However, since they do not provide lubricants and oils, they do not have a true Class III packaged supply mission. For details on the amount of support in the sections in each of these companies, see FM 10-27-2, Chapter 2.

#### **THEATER REQUISITION AND DISTRIBUTION FLOW**

If lubricants are required in large quantities, support battalions may periodically forecast needs

and forward stock status reports from supply points to the DMMC. The DMMC then uses these status reports to compute overall requirements for the division. When Class III packaged products are used in small quantities, they are requested or requisitioned like Class II and IV items. FM 10-1, Chapter 5, details the requisition and materiel flow for Class III packaged supplies in a theater.

### **RECEIPT PROCEDURES**

Use advance copies of DD Form 1348-1 to plan for the receipt of Class III packaged items. After these items are received, check containers for leaks, illegible or improper markings, or incorrect packaging. Receiving tests are unnecessary if containers have no leaks and markings properly identify the products. However, upon receipt of pre-positioned war reserve stocks of packaged petroleum products, reserve storage activities must take samples and prepare DD Forms 1222 and 1225. Damaged containers should be issued immediately and not returned to the supplier. Containers of positively identified products should be remarked. If the contents cannot be identified, a sample should be sent to the petroleum laboratory.

### **STORAGE PROCEDURES**

Procedures and instructions for storing Class III packaged products are described in MIL-HDBK 201 and in FM 10-69, Chapter 16. Improper storage can lead to contamination of the product because of deterioration or corrosion of the container and can result in a possible fire hazard. Table 3-2, page 3-15, lists storage concerns for packaged products. If a gasoline can is leaking or looks as though it might leak, transfer the product to another container. Store only one product in each storage section, and store the product so that the oldest is issued first. DOD 4145.19-R-1, Chapter 2, discusses covered storage and the use of bins,

shelves, metal pallets (for storage of small lot items), and racks.

### **Stacking of Cans and Drums**

Provide stacking areas for each product and type of package. This aids inventory control and correct labeling of products. The layout and size of the stacking area are determined by local conditions, safety requirements, and container size. Separate stacks of a single product so that the entire stock of one product is not lost during attack or fire. See FM 10-69 for more details on stacking.

### **Storage of Packaged Lubricants and Grease**

Packaged lubricating oil and grease should generally be stored indoors. When storage buildings are unavailable, packaged lubricants and grease may be stored outdoors if they are protected by tarpaulins. DOD 4145.19-R-1, Chapter 5, provides details for storing lubricating oil, grease, and paint.

### **Inspections**

Place special emphasis on inspection of petroleum stocks and storage areas. Inspect containers for war reserve stocks semiannually using statistical sampling methods. Inspect containers for other petroleum stocks. As a part of a quality surveillance program, petroleum personnel must periodically inspect the storage areas set up by supply sections. MIL-HDBK 200 prescribes inspection frequencies.

### **Field Markings**

Mark packaged fuels and lubricants in line with instructions in MIL-STD-290 or according to provisions of the procurement contract. Mark containers transported by military aircraft according to TM 38-250. To make sure 500-gallon collapsible drums used for fuel are not used for water, mark them "FLAMMABLE." Mark each container with a standard nomenclature or short identification of the product. The designations authorized for field use include MOGAS, AVGAS, JP, and DF.

Table 3-2. Storage concerns for Class III packaged products

- **Were containers inspected before being placed in storage?**

- **Are drums stored on their sides?**

**NOTE:** Drums should never be stored on end outdoors. Rainwater can collect on drum heads, rust container tops, seep through bungs, and contaminate the product.

- **Do drums stored on dunnage have proper blocking and bracing?**

- **When drums are stored in double rows, do the bungs and vents face outward? This makes it easier to detect leaks.**

- **Are containers smaller than 55-gallon drums stored under cover?**

**NOTE:** In an emergency situation when these containers must be stored outside, they must be covered with tarpaulins and stored off the ground on pallets or dunnage.

- **Are different products and grades stored separately?**

- **Were stocks rotated so that the oldest product is issued first?**

- **Are stocks with similar dates of filling stored together? Petroleum products should be stored in sections by product date and batch number.**

- **Are packaged products which were opened for spot-checking or storage control tests marked to show that they had been opened previously?**

- **Are opened containers issued or their contents used as soon as possible?**

- **Are stained cartons marked to indicate that leaking containers have been removed? This will prevent reinspection.**

### **Loading Procedures**

FM 10-69, Chapter 16, has details on loading procedures. Products transported by aircraft must be packaged and handled according to TM 38-250. Equip transport vehicles with a 10-B-C fire extinguisher or one of greater capacity. Tie and brace containers so that they will not shift or become damaged during transit. This means that supply point personnel may need to build braces and to fill slack space with planks or dunnage to ensure stacks are stable. Railcar doorways should be protected with wooden gates. Dunnage should be

placed between tiers of 5-gallon cans and between tiers of drums.

### **Transportation**

Methods for delivering packaged petroleum products to dispensing points vary with terrain, tactical situation, type and quantity of product, and transportation resources available. The products are delivered in vehicles and tank cars. Petroleum products that are stored in drums, cans, cylinders, and pails can be transported by standard military vehicles or railcars. Air transport should be used as an emergency measure.

## **Section VII**

### **LIQUID AND COMPRESSED GASES**

#### **REQUIREMENTS**

Class III packaged items include liquid and compressed gases. The major requirement is for cylinders of oxygen, acetylene, and nitrogen gases. Most requirements come from maintenance activities. Oxygen and acetylene gases are standard motor pool shop stock items. Repairers require these gases for welding and fabrication. Each wrecker truck carries a bottle of oxygen and acetylene required to cut through metal in support of recovery operations. Oxygen and nitrogen are required to maintain optical sight instruments on tanks.

#### **SUPPLY SOURCE**

In peacetime, obtain containers of compressed gases through local purchase. Contractors refill empty cylinders. However, local purchase and contractor refill may not be possible during wartime. Therefore, cylinders of compressed gases need to be shipped full to a theater. In wartime, the QM supply companies supply compressed gas containers. Submit requisitions through your supporting DSU to the appropriate MMC. As Class III packaged supplies, compressed gases are distributed through Class II and IV channels. Section V describes the distribution of Class II and IV supplies.

#### **HAZARDS**

Gases may be flammable or explosive. Handle with extreme care. They are compressed in containers under pressures exceeding 40 to 104 pounds per square inch. Contact with fire, sparks, or electrical circuits can cause the gas cylinder to explode. Such an explosion can be as destructive as a bomb explosion. Continuous exposure to large quantities of some gases can induce a drug-like sleep, irritate the surface tissue of the breathing passage, constrict the respiratory tract, and cause death. Large quantities of nitrogen can cause suffocation. Acetylene, in particular, is extremely flammable. Proper protective equipment must be worn when entering areas known to be contaminated with gases.

#### **IDENTIFICATION MARKINGS**

Gas cylinders must be identified by a color code according to MIL-STD-101. The color code for oxygen is green and for acetylene is yellow. Gases must be identified by their proper name, not merely as "gas." Flammable gases must be identified as flammable. Filled cylinders must be tagged or labeled with the stock number of the gas and the stock number of the cylinder. Do not alter or deface stock numbers and markings stamped on

gas cylinders. Tags on empty cylinders must be overstamped "MT." Do not apply additional markings without proper approval.

**STORAGE AND HANDLING  
PRECAUTIONS**

Due to the hazardous nature of compressed gases, a number of precautions must be observed when storing

and handling them. All cylinders must be considered full. Therefore, store and handle them with extreme care. Use precautions, particularly with regard to cylinder valves, storage separation requirements, and movement by MHE. DOD 4145.19-R-1, Chapter 5, has storage criteria for open-sided and enclosed sheds used to store gas cylinders.