Logistics

# Storage and Supply Activity Operations

Headquarters
Department of the Army
Washington, DC
26 August 2008

# **SUMMARY of CHANGE**

AR 740-1 Storage and Supply Activity Operations

This administrative revision, dated 26 August 2008--

- o Updates publication title page.
- o Makes administrative changes (throughout).

Effective 26 September 2008

#### Logistics

#### Storage and Supply Activity Operations

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR. General, United States Army Chief of Staff

Official:

JOYCE E. MORROW Administrative Assistant to the Secretary of the Army

**History.** This publication is an administrative revision. The portions affected by this administrative revision are listed in the summary of change.

**Summary.** This regulation prescribes policy and procedures for the management of material storage and supply operations worldwide.

**Applicability.** This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United

States, and the U.S. Army Reserve unless otherwise stated.

Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G-4. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

Army management control process. This regulation contains management control provisions and identifies key management controls that must be evaluated. This

regulation contains a checklist for conducting internal control reviews in appendix B.

**Supplementation.** Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–4 (DALO–SUS), 500 Army Pentagon, Washington, DC 20310–0500.

**Suggested improvements.** Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Office of the Deputy Chief of Staff, G–4 (DALO-SUS), 500 Army Pentagon, Washington, DC 20310–0500.

**Distribution.** This publication is available in electronic media only and is intended for command level C for the Active Army, and the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

i

Contents (Listed by paragraph and page number)

Responsibilities • 1–4, page 1

#### Chapter 1

**General,** page 1 Purpose • 1–1, page 1 References • 1–2, page 1 Explanation of abbreviations and terms • 1–3, page 1

#### Chapter 2

Storage of Army Prepositioned Stocks and Strategic and Critical Material, page 3

Section 1

Army Prepositioned Stocks, page 3

Army prepositioned stocks control • 2–1, page 3

Reporting • 2–2, page 3

Storage • 2–3, page 3

<sup>\*</sup>This regulation supersedes AR 740-1, dated 9 September 2002.

#### Contents—Continued

Inspection, packaging, and maintenance • 2–4, page 3 Representative types of equipment requiring controlled humidity storage • 2-5, page 4 Representative types of equipment not requiring controlled humidity storage • 2–6, page 4 Section II Report of Strategic and Critical Materials Stored in Army Installations, Report Control Symbol, U.S. Army Materiel Command 111, page 5 Purpose and scope of report • 2-7, page 5 Preparing agencies • 2-8, page 5 Frequency, period covered, and due date • 2-9, page 5 Number of copies and routing • 2-10, page 5 Chapter 3 Ammunition Surveillance and Stockpile Reliability Program Management, page 7 Scope • 3–1, *page* 7 Program policy • 3-2, page 7 Ammunition stockpile reliability program • 3–3, page 7 Ammunition Surveillance Modernization Program • 3-4, page 9 Chapter 4 Storage and Space Control, page 10 Section I Utilization, Allocation, and Conversion of Storage and Warehousing Facilities, page 10 General • 4-1, page 10 Policy • 4-2, page 10 Facility expansion or establishment • 4-3, page 11 Inactivation of storage and warehousing facilities • 4-4, page 12 Contracts for commercial storage services • 4–5, page 12 Cross-servicing, license, or permit • 4–6, page 12 Space programming and allocation • 4–7, page 12 Space diversion • 4-8, page 13 Request for space diversion • 4-9, page 13 Space conversion • 4–10, page 13 Space utilization standards • 4-11, page 14 Section II Storage Space Management Report, RCS CSGLD-1339, page 14 Purpose and scope of report • 4-12, page 14 Preparing agencies • 4-13, page 14 Electronic • 4–14, page 15 Frequency, period covered, and due dates • 4-15, page 15 General instructions for preparation of DD Form 805 • 4-16, page 15 Detailed instructions for preparation of DD Form 805 • 4-17, page 15 Installation identity codes used on the Storage Space Management Report • 4-18, page 15 Army storage space reporting • 4-19, page 16 Section III Covered and Open Storage of Supplies, page 16 Scope • 4-20, page 16 Warehousing policy • 4–21, page 17 Processing requests for warehouse space • 4-22, page 17 Criteria for use of storage facilities • 4-23, page 17

Types of warehouse space • 4-24, page 17

#### Contents—Continued

Section IV

Determination and justification of storage facilities requirements, page 18

Scope • 4-25, page 18

Storage facilities policies • 4-26, page 18

Facility requirements recognition • 4-27, page 19

Facility computation requirements • 4-28, page 19

Facility justification requirements • 4-29, page 20

#### Chapter 5

#### Quality Control and Reliability Management, page 31

General • 5–1, page 31 Objectives • 5–2, page 31 Functions • 5–3, page 32

#### Chapter 6

#### Class V Ammunition Storage and Transportation Procedures, page 33

Scope • 6–1, page 33 Objectives • 6–2, page 33 Storage and transportation policies • 6–3, page 33 Functions • 6–4, page 34

#### **Appendixes**

- **A.** References, page 35
- B. Management Control Evaluation Process, page 37

#### **Table List**

Table 4-1: Density factors, page 19

Table 4-2: Installation identity codes, page 21

Table 4-3: Type of storage facilities required for supplies, page 24

Table 5-1: Inspection frequencies, page 33

#### **Figure List**

Figure 2-1: Sample of DA Form 621, page 7

Figure 4–1: Sample of completed DD Form 805, Storage Space Management Report, with completion instructions (by item, column and line), page 25

Figure 4–1: Sample of completed DD Form 805 with completion instructions (by item, column, and line) – continued, page 31

#### Glossary

#### Chapter 1 General

#### 1-1. Purpose

This regulation prescribes policy and procedures to be followed in the formation and management of material storage and supply operations.

- a. Army storage and supply operations worldwide will comply with this regulation. Other Army components or organizational elements with particular or peculiar assignments under this regulation are identified in the appropriate chapter(s). The policies pertaining to storage and supply operations are set forth, as appropriate, in each subsequent chapter.
  - b. This regulation covers the following subject areas:
  - (1) Storage and maintenance of Army prepositioned stocks (APS).
  - (2) Ammunition Surveillance and Quality Assurance Program.
  - (3) Determining storage space requirements.
  - (4) Justifying the construction of new storage facilities.
  - (5) Instructions for the preparation of DD Form 805 (Storage Space Management Report).
  - (6) Army quality control and reliability management of supplies and equipment within Army supply activities.
  - (7) Information concerning sources regarding identification, control and utilization of shelf life items.

#### 1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

#### 1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

#### 1-4. Responsibilities

- a. The Deputy Chief of Staff, G-4 (DCS, G-4) will-
- (1) Develop concepts and long-range plans for future worldwide storage space requirements in support of the Army supply distribution system.
- (2) Evaluate worldwide storage space facility requirements and use to determine the need for acquisition, modification, diversion, conversion, assignment, closure, and assessing depot facilities.
- (3) Serve as the principal staff element for development and dissemination of policy pertaining to the Ammunition Stockpile Reliability Program (ASRP).
- (4) Have primary staff responsibility for programming and funding all equipment, material requirements and services necessary to conduct the ASRP.
- (5) Process requests for warehouse space when major commands are confronted with storage problems that cannot be resolved between interdepartmental storage offices.
- (6) Issue policy directions in connection with the application and use of quality control and reliability management at Army storage depots.
  - (7) Manage quality control and reliability management program in coordination with major Army commands.
- (8) Develop, maintain and supervise a program to standardize and control ammunition storage and transportation procedures in support of the Army Ammunition Program. Authority for execution and evaluation of this program is delegated to the Commander, U.S. Army Materiel Command (AMC).
- (9) Develop, maintain and supervise a program to standardize and control ammunition storage and transportation procedures in support of Army ammunition requirements.
- (10) Issue policy to standardize and integrate automatic identification technology (AIT) into existing and future storage and supply activity infrastructure.
- b. The Commanders of Army Commands (ACOMs), Army Service Component Commands (ASCCs), and Direct Reporting Commands (DRUs) will—
  - (1) Manage storage space use within subordinate commands and activities.
  - (2) Initiate action to ensure storage space meets Department of the Army (DA) standards.
- (3) Evaluate command storage space requirements and use it to determine the need for acquisition, modification, diversion, conversion, assignment, or closure of depot facilities; submit appropriate recommendations to DCS, G-4 (DALO-SUS) concerning excess depot facilities or future storage space requirements. Evaluations must identify absence of and barriers to AIT integration and recommend corrective actions to AMC for consideration.
- (4) Provide support within their mission and capability as requested by the Commanding General, AMC for any portion of the ASRP that is conducted within their area of geographical jurisdiction. This support, which will be provided on a non-reimbursable basis will include the furnishing of test ranges, facilities firing units, recovery of test material and movement of associated troops and material belonging to the supporting command.

- (5) Program, budget, and fund subordinate commands and installations for the conduct of the ASRP. Pertains to ammunition items on accountable records at subordinate commands and installations.
- (6) Develop and instill a quality control and reliability management program for Army depots within their command.
  - c. The Commanding General, Army Materiel Command (AMC) will—
- (1) Submit for approval to the DCS, G-4 (DALO-SUS) concepts, long-range plans, policies, and objectives for the operation and management of depot storage space under the command of AMC.
  - (2) Establish standards for the use of storage space on an Armywide basis within the framework of DA policy.
- (3) Prepare technical requirements and procedures for the storage, inspection, testing, preservation, packaging, packing, exercising, rotation and maintenance of APS.
- (4) Conduct the ASRP pertaining to those ammunition items in storage worldwide. Accumulate data and findings from the tests for comparison with the results of previous and subsequent tests.
- (5) Coordinate with other ACOMs/ASCCs/DRUs, as required, in directing and conducting the ASRP, including furnishing the projected annual program.
- (6) Budget, program and fund for the conduct of the ammunition stockpile reliability program, including depot programs over which AMC exercises direction as the material developer.
- (7) Provide quality assurance specialist (Ammunition Surveillance) (QASAS) personnel for the conduct of the ammunition surveillance program in accordance with the provisions of AR 702–12. This includes necessary support and the provision of QASAS to those deploying commands and ammunition supply units without organic QASAS to provide Class V technical assistance to those commands for the duration of their deployments.
  - (8) Establish storage serviceability standards for Army managed items of supply, per chapter 5.
  - (9) Coordinate and track integration of AIT in storage and supply activity infrastructure.
- d. The Commander, AMC Logistics Support Activity (LOGSA) Packaging, Storage, and Containerization Center (PSCC) will be the Army Storage Space Reporting Administrator (SSRA). Responsibilities as the SSRA will be accomplished by LOGSA PSCC Logistics, Testing, and Evaluation Division (LTAD) as discussed in chapter 4, section II.
  - e. The Commander, U.S. Army War Reserve Support Command (AWRSPTCMD) will—
- (1) Establish combat equipment groups (CEG), which will be responsible for receipt, storage, maintenance, and issue functions for APS in their assigned geographic areas.
- (2) Provide necessary resources including support functions required to successfully perform the APS storage and maintenance mission.
- (3) Develop and install a Quality Control/Assurance and Reliability Management Program for storage and maintenance of APS.
- (4) Develop and submit construction requirements for facilities necessary for storage and maintenance of APS for funding consideration by Headquarters AMC, for facilities located in continental United States (CONUS), or under the appropriate host nation support agreement, when appropriate, for facilities located outside continental United States (OCONUS).
  - f. Commanders of AMC storage installations will—
  - (1) Provide commodity commands, upon request, information as to availability of storage space.
- (2) Advise AMC when adequate and appropriate type storage space is not available to store material received or scheduled for receipt.
  - g. The commander of an installation, activity, or command with an ammunition mission will—
- (1) Ensure all ammunition at an installation is subjected to Class V specific management and surveillance functions. Results of examinations, tests, and investigations will be reported in accordance with current requirements.
  - (2) Ensure supplies and equipment stored are subjected to quality control and reliability management per chapter 5.
  - (3) Ensure compliance with all explosives safety requirements of DA PAM 385-64.
  - h. Commanders of combat equipment groups will—
- (1) Prepare and maintain current standard operational policies and procedures for use by all elements of their command.
- (2) Prepare and maintain current plans and procedures for issue of APS in the event of an emergency. These procedures will be coordinated with those units designated to use APS.
  - (3) Store and maintain APS in combat ready condition.

#### Chapter 2

#### Storage of Army Prepositioned Stocks and Strategic and Critical Material

#### Section 1

#### **Army Prepositioned Stocks**

#### 2-1. Army prepositioned stocks control

- a. Controlled humidity (CH) storage space is the preferred type of storage for APS.
- b. APS must be qualified for issue under applicable serviceability standards before they are accepted for storage at an APS storage site or vessel and before they are preserved, packaged and packed, and placed in storage.
- c. APS, except for Class V, will be stored so as to maintain unit integrity down to and including battalion and separate company level. Engineer, signal and maintenance battalion equipment may be configured so that issue can be made by company. However, equipment of one battalion or separate company will not be stored in more than one APS storage site.
- d. A quality control/assurance and reliability management program will be established for APS. This program will assure that all APS are stored and maintained to meet prescribed serviceability standards.
  - e. Standing operating procedures will be developed and kept current for use by each CEG and element thereof.
- f. Issue procedures will be developed by each CEG to facilitate the issue of APS to using units in an emergency, or for use in an exercise.

#### 2-2. Reporting

Unit status reporting of APS will be reported in accordance with AR 220–1. As an exception, the equipment serviceability criteria (ESC) used for reporting will be based on the ESC at the time of initial entry of equipment into Phase II, or the most recent Phase II cyclic inspection if the latter occurred on a more recent date.

#### 2-3. Storage

- a. APS types of equipment will be stored in available CH storage space when it is planned that APS will remain in storage for more than 1 year.
- b. When CH storage is not available, covered storage space and open storage space in that order of preference will be used pending availability of CH storage space.
  - c. Warehousing requirements are as follows:
- (1) Equipment stored in CH buildings will be block stowed in such a manner as to facilitate rapid withdrawal of equipment.
- (2) Sufficient space will be provided around each major item stored to allow free movement of quality control, maintenance and warehouse personnel.
  - (3) Equipment in open storage will also be stored to facilitate rapid withdrawal, but need not be block stowed.
  - (4) Except where specifically required by TM 38-470, equipment in storage will not be blocked off the ground.
- (5) Vehicles in open storage will be protected through the use of vehicle protective closures. Refer to TB 9–2300–278–20 for lists of stock numbers and corresponding vehicle model numbers for which closures have been provided.
  - (6) Both the storage facility and the inventory stored within will be AIT-enabled.
- d. A central stock location system will be established for each APS storage site. This system will utilize the nine-digit location system prescribed by TM 743-200-1, Data appearing in the locator card may be tailored as required but will be standardized for each major command concerned.
- e. A planograph of each open storage area and storage building will be developed, maintained, and displayed as prescribed by TM 743-200-1.
- f. Most APS material stored afloat requires temperature and humidity controlled storage as well. Determination is made by AWRSPTCMD and CEG Afloat (CEG-A) in coordination with item national inventory control point (NICP) personnel.

#### 2-4. Inspection, packaging, and maintenance

- a. Inspections.
- (1) APS will be subject to the following inspection requirements:
- (a) Combat equipment in a non-CH environment will be subject to at least one serviceability inspection annually.
- (b) Tactical equipment in a non-CH environment will be subject to at least one serviceability inspection every 24 months.
  - (c) Equipment in covered and open storage will be given a visual inspection once each 30 days.
- (d) Equipment Afloat (APS-3) will be inspected on board ship, when practical, according to item manual requirements, and during ship download/upload periods.

- (2) Inspection techniques applicable to APS are prescribed by TM 38-470.
- (3) Sampling techniques prescribed in TM 38–470 will be employed for serviceability inspections. Equipment will be rated based on the condition of the sample. If the sample is rated serviceable, each item in the lot from which the sample is taken will be rated serviceable. If the sample fails, that is, not serviceable, the lot becomes suspect as to serviceability and each item in the lot will be inspected and rated separately. Equipment that fails an inspection will be downgraded and scheduled for necessary maintenance within 5 days after assignment of an unsatisfactory inspection rating.
- (4) Class V (ammunition) stored afloat will be inspected during ship download/upload periods. Ship maintenance cycles will be at 24 to 30 month intervals.
  - b. Packaging.
  - (1) APS will be preserved, packaged, and packed prior to storage.
- (2) APS stored in CH storage will be processed for storage using the procedures in TM 38–470 applicable to CH storage. APS stored in the non-CH storage awaiting availability of CH storage space or designated for open storage will be processed for storage using the procedures in TM 38–470.
  - (3) Packaging will include AIT marking in accordance with Deputy Chief Staff, G-4 policy.
- c. Maintenance. Maintenance will be provided in support of APS during all phases of the prepositioned material cycle. The maintenance provided in each phase of the prepositioned material cycle will be as follows:
- (1) *Phase I.* Maintenance provided during this phase for APS will be organizational, direct, general, and depot level maintenance necessary to qualify earmarked stocks in accordance with established serviceability criteria for inclusion in APS.
- (2) *Phase II*. The maintenance provided during this phase will be from organizational, direct, and general support levels. Maintenance is provided to inspect and maintain APS stock at that level of overall condition and operational reliability necessary for these stocks to qualify for issue under prescribed serviceability criteria and for stocks to be issued within the reaction time established by applicable operational plans.
- (3) *Phase III*. The maintenance provided during this phase is necessary to qualify APS stocks for issue within the time frame prescribed by operational plans.

#### 2-5. Representative types of equipment requiring controlled humidity storage

Representative types of equipment requiring controlled humidity storage are—

- a. Vehicular and nonvehicular equipment including towed equipment having—
- (1) Internal combustion engines.
- (2) Sensitive or delicate components.
- (3) Electrical or electronic components.
- (4) Components subject to deterioration from mildew, corrosion, or rot.
- b. Artillery and small arms.
- c. Electric and electronic equipment.
- d. Tents, canvas and leather items.
- e. Instruments (optical, mechanical, and hydraulic).
- f. Special protective equipment.
- g. Chemical warfare equipment and devices.
- h. Miscellaneous items, such as batteries and basic issue items of a sensitive nature.
- i. Medical supplies and equipment.
- j. Audio-visual and photographic equipment.
- k. Test, measurement and diagnostic equipment.
- l. Tool sets, tool kits and shop sets.
- m. Afloat stocks of class V and other classes of supply as determined by AWRSPTCMD/CEG-A.

#### 2-6. Representative types of equipment not requiring controlled humidity storage

Representative types of equipment not requiring controlled humidity storage are as follows—

- a. Trailers, such as ammunition, cargo, and semitrailers.
- b. Towed nonpowered equipment, such as rocket launchers and construction equipment.
- c. Bridging.
- d. Pipeline.
- e. Storage tanks.
- f. Fortification materials.
- g. Hand tools, such as picks and shovels.

#### Section II

Report of Strategic and Critical Materials Stored in Army Installations, Report Control Symbol, U.S. Army Materiel Command 111

#### 2-7. Purpose and scope of report

This section prescribes the preparation of the report of Strategic and Critical Material Stored in Army Installations, report control symbol (RCS) AMC 111. The report is prepared on DA Form 621. A sample of a completed DA Form 621 with completion instructions is contained in figure 2–1. This report will include all strategic and critical materials stored at Army installations for the account of Defense National Stockpile Center (DNSC). The report will reflect the storage space allocated and occupied by strategic and critical material at each installation and the quantity by commodity stored there.

#### 2-8. Preparing agencies

Each depot/installation storing strategic and critical material will prepare DA Form 621. The Army report is comprised of all individual reports.

#### 2-9. Frequency, period covered, and due date

The report will be prepared quarterly on DA Form 621 as of 30 September, 31 December, 31 March, and 30 June. The report will be dispatched within 5 working days after the close of the report quarter.

#### 2-10. Number of copies and routing

Reports will be forwarded in original and three legible copies to Chief, AMC Logistic Support Center, Packaging Storage, and Containerization Center (AMCLS-T), 11 Hap Arnold Boulevard, Tobyhanna, PA 18466–5097. Installations other than depots will forward reports through appropriate command channels.

ST	RATEGIC AND CRITICAL MATERIAL STORED  For use of this form, see AR 740-1; the proponent	QUARTER ENDING 31 MARC	H 2001	Requirement Control Symbol - AMC 111			
TO CHIEF, INTEGRATED MANAGEMENT ACTIVITY ATTN: AMXSI-DL CHANBERSBURG, PA. 17201  PREPARED BY Object and Position!  CHARLES REEVES, II, C, TD, ANMC		FROM (Reporting Installa ANNISTON A ANNISTON, A	RMY DEPOT	<u> </u>		OUTBOARD STORAGE REPORT NO.	RECEIVING REPORT NO.
		APPROVED BY (Name, Grade and Official Position) CHARLES REEVES, II, C, TD, ANMC					
NUMBER	GOMMODITY IDENTIFICATION ITEM 6	INVENTORY CLASSIFICATION	TYPE	GROSS STORAGE SPACE ALLOTTED (Sq. ft.)	GROSS STORA SPACE OCCUP (54. ft.)	SED [	QUANTITY IN STORAGE
	ASBESTOS	NDS	WHSE	0	0	0	
	BAUXITE	NDS	OPEN UNIP	395000	395,000	371,311	S.T.
	GEYLON GRAPHITE	NDS	WHSE	0	0	0	
	MANGANESE METAILURGICAL	NDS	OPEN UNIP	74,688	56,000	29,992	S.T.
	MERCURY	NDS	WHSE	0	0	0	
	TIN	NDS	OPEN UNIP	30,000	30,000	18,613 :	S.T.
	TITANIUM	NDS	WHSE	0	0	o	
	TITANIUM	NDS	HG	0	0	0	
	TANTALUM	NDS	WHSE	0	0	0	
	A.CARBIDE	NDS	WHSE	0	0	o	
	B.METAL INGOT	NDS	WHSE	0	0	0	
	C.METAL POWDER	NDS	WHSE	0	0	o	
	D.METAL SLABS	NDS	WHSE	0	0	o	

DA FORM 621, MAR 01 REFLACES DA FORM 621, 1 AUG 56 WHICH DESOLETE UNSAFA VIOO

Legend for Figure 2-1;

Quarter Ending: Enter the date of the end of quarter being reported.

To: The name and mailing address of the LOGSA, PSCC.

From: The name and location of the installation preparing the report.

**Outbound Storage Report No.:** The last outbound storage report number issued by the installation prior to the end of the reporting period.

Receiving Report No.: The last receiving report number issued by the installation prior to the end of the reporting period.

Prepared By: The name and position of the individual who prepared the report.

Approved By: Enter the name, grade, and official position of the individual authenticating the report.

Column "a" (Number): The number of the line entries on the report consecutively for each commodity stored, 1, 2, 3, etc.

Column "b" (Commodity Identification Item): In alphabetic sequence list the name of each commodity stored. For each commodity, show data for each type of space in which material is stored.

Column "c" (Inventory Classification): The inventory classification symbol, i.e., SCM (Strategic and Critical Material)
D (Defense Material)
CCC (Commodity Credit Corporation)
DM (Domestic Minerals)

Figure 2-1. Sample of DA Form 621

**Column "d" (Type):** The type of space allotted for storage of each commodity, for example, warehouse, shed, igloo, magazine, tank, vault, open improved, or open unimproved.

Column "e" (Gross Storage Space Allotted (Sq. ft.): The gross amount of storage space allocated to GSA, Property Management and Disposal Service for storage of the specific commodities listed in column b. Entries for covered storage space will be rounded to the nearest hundred of square feet (for example, 10,349 will be entered as 10,300; 10,350 as 10,400). Entries for open storage space will be rounded to the nearest thousand of square feet (for example, 25,499 will be entered as 25,000, 25,500 as 26,000). If more than one inventory classification (column c) is involved for a commodity listed, make entry in column e only for the first inventory classification listed.

Column "f" (Gross Storage Space Occupied (Sq. ft.): The gross amount of storage space occupied by material indicated in column b. Entries will be rounded to the nearest hundred square feet or to the nearest thousand square feet (as indicated above for column e).

**Column "g" (Quantity in Storage):** The amount of material stored to the nearest whole short ton, converting ounces to pounds and pound to short tons when necessary. Should the total amount of material be less than 1,000 pounds, the amount will be entered in pounds and so identified.

Note: No change will be made in allocated space without prior approval of LOGSA PSCC.

Figure 2-1. Sample of DA Form 621

## Chapter 3 Ammunition Surveillance and Stockpile Reliability Program Management

#### 3-1. Scope

This chapter establishes the Ammunition Surveillance and Quality Assurance Program. It prescribes policy, and outlines the objectives concerning the surveillance and quality assurance of guided missile, rocket ammunition, and conventional ammunition to include toxic-chemical ammunition stored, maintained, and issued by the Army. It applies to all Army activities with a mission for the receipt, storage, maintenance, and issue of ammunition and Class V basic loads within the reporting requirements of AR 700–19 and commodities managed by the U.S. Army Aviation and Missile Command (AMCOM) and the Soldiers Biological and Chemical Command (SBCCOM). This regulation does not include containerized ammunition awaiting shipment and break–bulk ammunition received for transshipment under the control of Military Traffic Management Command (MTMC).

#### 3-2. Program policy

Each installation, activity, and command concerned will establish and maintain an ammunition surveillance and quality assurance program in accordance with AR 702–6, this regulation, Supply Bulletin (SB) 742–1 and other applicable SBs.

#### 3-3. Ammunition stockpile reliability program

The ASRP provides "cradle to grave" responsibilities, to include demilitarization, monitoring the performance, reliability, and safety characteristics of the ammunition items and class V components. These programs apply to chemical and conventional ammunition, small and large rockets and guided missile ammunition and material. The ASRP consists of the ammunition surveillance program, the stockpile function test program and the stockpile laboratory test program. Depending on the type and nature of the ammunition item to be evaluated, any part or all of these programs will be used.

- a. Ammunition Surveillance Program.
- (1) The Ammunition Surveillance Program is an integral part of the ASRP. It evaluates the functional and nonfunctional characteristics of the ammunition stockpile. The program includes, but is not limited to, visual inspections and tests such as initial receipt inspections, cyclic inspections, storage monitoring inspections, pre—issue inspections, and basic load inspections.
- (2) All installations with a mission for receipt, storage, and issue of ammunition/rockets and guided missiles will establish an Ammunition Surveillance Program. Wholesale and retail quantities of ammunition and related material stored at depots, depot activities, ammunition plants, arsenals, proving grounds, pre–stock points, ammunition supply points, and using units are subject to the ammunition surveillance program. Included are depot, project, operational loads, APS, pre–positioned war reserves, basic load, training stock, and components used for assembling ammunition.

- b. Surveillance program elements. The primary elements of the surveillance program consist of surveillance inspections, and the review and monitoring of safety and logistics functions. The Inspection and review of these elements will be performed by personnel in the QASAS career program (Army Career Program 20). See AR 690–950. Under the direction of a QASAS, designated civilian technicians, including local nationals and military ammunition inspectors (military occupational specialty (MOS) 89A), who have been appropriately trained, may supplement and assist QASAS in accomplishment of these functions. Procedures are included in SB 742–1 and supporting publications. This program includes—
- (1) Surveillance inspections. Surveillance inspections, i.e., visual inspections and tests are administered through the care of supplies in storage (COSIS) programs. These inspections encompass all elements and are applicable to all Army activities having a receipt, storage, issue, maintenance, surveillance or test mission for ammunition. Includes depots, proving grounds, ammunition supply points and basic load storage areas.
- (2) Safety. The ammunition surveillance program encompasses safety functions involving ammunition during storage, handling and use. It provides review and reporting of conditions affecting safety and the recommendations for corrective actions. Important areas included are—
- (a) Storage. Suitability, siting, use of facilities and the proper use of storage drawings and methods. Ensure compliance with the applicable quantity-distance (QD) and compatibility standards.
- (b) Processing and handling. Use approved facilities, equipment, methods, and approved standing operating procedures. Ensure compliance with the applicable QD standards.
- (c) Transportation. Suitability of transportation equipment and loading or stowage methods. Compliance with tariffs and other regulatory requirements applicable to the shipment of munitions/explosives and hazardous materials.
- (d) Deterioration or damage. During inspections, examine for deterioration or damage that may indicate hazardous or potentially hazardous material. Recommendation for appropriate disposition.
- (e) Restricted or suspended munitions. Management of the program of ammunition restriction, suspension and release to minimize the possible use of hazardous items. See TB 9–1300–385.
- (3) Logistics functions. The ammunition surveillance program provides for the review and reporting of conditions affecting ammunition during various logistics activities incurred in stockpile and use. It also provides a source of technical expertise and advice in regards to numerous logistic activities. These include—
- (a) Supply and maintenance operations; provides reporting of conditions and recommendations as well as technical advice concerning storage, receipt, issue, identity, inventory, care and preservation, maintenance, demilitarization, inert certification, disposal, transportation and other related functions.
- (b) Troop training deployments and operations other than war (OOTW), and combat (except under specified emergency essential requirements). Provides reporting of conditions and recommendations, and technical advice in regard to the use of authorized ammunition and components. Addresses complete rounds, item interchangeability, range operations, malfunction investigation and reporting, per AR 75–1 and field storage, supply, transportation and other related logistics activities.
- (c) Provides technical expertise to ensure compliance with the toxic chemical surety programs as directed by AR 50–6. The QASAS at grade GS 12 and above are qualified to serve as surety officers for toxic chemical munitions and as members of base camp assessment teams during deployments, or peacekeeping missions. This includes monitoring ammunition stocks for proper storage and serviceability.
- c. Life-cycle stockpile reliability testing. Life-cycle stockpile reliability testing at ammunition testing facilities is a part of the ASRP. Testing will be performed by or as directed by the material developer to evaluate reliability and to detect trends in the performance of the stockpile. The stockpile is stratified into various representative segments, for example, period of production, manufacturing, storage, and climatic conditions. Samples from these segments are selected and tested. These tests will be conducted at designated test facilities or proving grounds having special facilities and equipment when it is not economical or otherwise appropriate to perform these tests at the storage location.
- d. Ammunition stockpile reliability laboratory testing. For those items conducive to laboratory testing, samples of materiel will be randomly selected from the stockpile for nondestructive or destructive tests, as appropriate. Testing is conducted to detect the development of undesirable trends or to uncover potential defects, which are suspected, but are not known to exist. These tests may be independent of, or supplemental to other inspections and tests included in this regulation. If such action is required on a recurring basis, consideration will be given to incorporating such requirement as part of installation surveillance inspections. After the tests are completed, all recoverable samples will be restored to a ready–for–issue condition and returned to the stockpile. The cost of restoration will be applied against those funds designated to finance the cost of performing the inspection.
- e. Ammunition stockpile reliability functional tests. Samples of materiel will be withdrawn from the stockpile by or as directed by the materiel developer. These samples will be fired or functioned under controlled conditions to determine degradation. Such testing may also be undertaken for the purpose of revising or establishing surveillance criteria or similar yardsticks for items currently in use or in stock. These tests may be independent of, or supplemental to other inspections and tests included in this regulation. Annual service practice (ASP) firings conducted by military units are used to obtain information on the ballistic performance and reliability of rockets and guided missiles. In some

cases ASP firings may be monitored by telemetry or other equipment, as required, in order to collect stockpile reliability data.

- f. Funding. The various ASRP elements will be funded as follows:
- (1) Surveillance inspections performed in connection with "care of supplies in storage" and "quality control" activities will normally be financed with operations and maintenance, Army (OMA) 424041 funds. Testing performed as part of the maintenance activity will normally be financed with OMA funds. Inspections performed within organizations designated as "general purpose forces" will be financed with OMA program 2 funds (see Defense Finance and Accounting Service–Indianapolis Center (DFAS-IN) Regulation AR 37–1).
- (2) Inspections performed by or as directed by the material developer in connection with the life-cycle stockpile reliability testing program or stockpile laboratory tests will be funded by AMC. Applicable procurement appropriation (PA) or OMA appropriation funds will be used.
- (a) Inspections of components, parts, assemblies, and end items currently under procurement or production by the PA will be programmed, budgeted, and charged to those PA hardware accounts which provide for the procurement, manufacture or remanufacture of such items. Inspection charges to the ammunition appropriations will be limited to costs incurred in connection with approved programs for the remanufacture of existing inventory to a new approved configuration. Such costs will not be charged to the PA production base support account.
- (b) Inspections directed to PA type components, parts, assemblies, or end items that are out of production will be programmed, budgeted and charged to the OMA appropriation.

#### 3-4. Ammunition Surveillance Modernization Program

- a. The Ammunition Surveillance Modernization Program (ASMP) reviews the ammunition surveillance business processes and develops state-of-the-art methodology for evaluating quality of the ammunition stockpile. The DA has committed to modernizing ammunition surveillance missions, functions, facilities equipment, procedures, and programs. This requires aggressive commitment to—
  - (1) Evaluate and refine ammunition surveillance missions and functions.
- (2) Formulate corrective actions for problems with performance, user satisfaction, explosive safety, operational readiness and support costs of class V material.
  - (3) Develop new or refined policies and business procedures.
  - (4) Pursue application of innovative management techniques and test programs for enhanced productivity.
  - b. Program assessments apply to all phases of the ASMP.
  - c. Program funtions are as follows:
  - (1) The DCS, G-4 will-
- (a) Establish policy and direct ASMP by assignment of tasks and responsibilities developed during in process reviews (IPRs).
  - (b) Provide representatives, as required, as working group members.
  - (c) Direct implementation of all approved policy and business process changes.
  - (2) AMC, DSC-Ammo will-
  - (a) Direct implementation of all approved policy and business process changes.
  - (b) Provide representatives, as required, as working group members.
  - (3) JMC, Ammunition Surveillance Division will-
  - (a) Serve as program manager for ASMP projects.
- (b) Plan and schedule regular meetings/IPRs. As a minimum, IPRs will be conducted annually in conjunction with the QASAS career program management committee meeting.
- (c) Prepare and distribute minutes of each meeting/IPR, assign project numbers to each assigned/adopted project and monitor status of ongoing projects on a regular basis.
  - (d) Provide representatives, as required, as working group members.
  - (e) Direct implementation of all approved policy and business process changes.
  - (f) Conduct and test pilot programs, as directed.
  - (g) Maintain historical repository of past surveillance modernization projects and accomplishments.
  - (4) U.S. Army Defense Ammunition Center (USADAC) will-
  - (a) Designate an assistant program manager.
  - (b) Assist program manager in coordinating total program.
  - (c) Provide representatives, as required, as working group members.
  - (d) Develop equipment to test and pilot programs, as directed.
  - (5) Directorate for Product Assurance, AMCOM will-
  - (a) Provide representatives, as required, as working group members.
  - (b) Direct implementation of all approved policy and business process changes.
  - (c) Conduct test and pilot programs, as directed.

- (d) Monitor the progress of missile related ASMP initiatives.
- (e) Serve as the focal point for coordination with other AMCOM organizations.
- (6) Major and subordinate commands with an ammunition surveillance mission will:
- (a) Provide representatives, as required, as working-group members.
- (b) Direct implementation of all approved policy and business process changes.
- (c) Conduct test and pilot programs, as directed.
- (d) Review and comment on proposed projects.
- (e) Provide representatives to attend ASMP IPRs.
- d. ASMP functional procedures are as follows:
- (1) The program manager will plan and coordinate ASMP activities and ensure participation of the appropriate organizations.
- (2) For each adopted project or task, working group members should be the most knowledgeable representative from each represented organization. Working group members are the vote for all aspects of the assigned project or task. Each working group member must be empowered to make decisions for their organization.
- (3) A "working group" will be established for each adopted ASMP project or task. The size and make—up of the work group will be determined by the ASMP program manager and will depend on the nature and magnitude of the project or task. One working group member will be selected as chairperson for each adopted project or task. The working group will establish milestones, accomplish assigned tasks and report project status to the program manager.
- (4) Each command or activity with an ammunition surveillance mission will plan and program sufficient resources to provide representatives to IPRs and to support working group member participation in required meetings.
- (5) Semiannual ASMP IPRs should be scheduled during the second and fourth quarters of each fiscal year. As a minimum, an IPR will be conducted annually in conjunction with the QASAS career program management committee meeting.
  - e. Report guidelines are as follows:
- (1) *IPR minutes*. A draft report of IPR proceedings will be provided to all attendees for review within 10 working days of the IPR. Final report, incorporating attendee comments, will be forwarded to DCS, G-4 (DALO-SUM) for approval. Copies of the approved minutes will be provided to all IPR attendees and to the senior QASAS at each major and major subordinate command with an ammunition surveillance mission.
  - (2) Adopted project reporting.
  - (a) The chairperson of each working group will prepare a milestone chart for each project.
- (b) The chairperson of each working group will prepare a quarterly report, documenting project activities for the previous quarter. The report, with updated milestone chart, will be forwarded to the ASMP program manager no later than the last day of the first month of each quarter.
- (c) Upon project completion, a final report will be prepared and forwarded to the program manager for review. After the review, the program manager will forward the final report to the Deputy Chief of Staff, G-4 (DALO-SUM) for approval.
  - (d) Each final report will be distributed to the senior QASAS at each major and major subordinate command.

### Chapter 4 Storage and Space Control

#### Section I

#### Utilization, Allocation, and Conversion of Storage and Warehousing Facilities

#### 4-1. General

Policy, responsibility, and procedures regulating the establishment, disestablishment, inactivation, conversion, allocation, and use of storage and warehousing facilities within DA are set forth herein. This section applies to overseas commanders, commanders of AMC, FORSCOM, and U.S. Training and Doctrine Command (TRADOC). This section also has application to Department of Defense (DOD) components and civilian agencies requesting storage space at supply installations of the Army.

#### 4-2. Policy

a. The DA policy is to retain and make maximum use of those storage and warehousing facilities needed for the performance of the Army's logistics mission. In developing requirements for storage and warehousing facilities, emphasis is to be placed on using permanent or semipermanent facilities that, separately or in combination with allied facilities, are the most economical to operate and maintain. Local policy must support and incorporate the current AIT processes, and these processes must be evaluated and updated periodically to adapt future AIT processes and provide optimum protection to store material. Planning will include phased programs to improve the use of permanent storage

facilities and close out, vacate, and demolish or place in standby, those facilities that are the least desirable for retention or operation. Inactivation of complete installations will be emphasized rather than partial inactivation of several installations.

- b. Unless there is adequate justification to the contrary, existing storage facilities of DOD components will be used before establishment or expansion of the Army's storage or warehousing facilities is undertaken.
- c. The DA will perform storage services for DOD components or Government agencies at supply installations, for example, strategic and critical materials for the DNSC.
- d. Depots and depot activities will not divert storage facilities to nonstorage functions without preapproval of the facility life-cycle command. Exceptions to this policy are permitted when:
- (1) Emergency situations involving high priority requirements that cannot be fulfilled satisfactorily by other reasonable means. In such instances, it must be demonstrated that other means have been explored and proven to be impracticable.
  - (2) Depots or depot activities having an occupancy rate of 70 percent or less of the type of facilities concerned.
  - (3) Temporary diversions of storage space not to exceed 60 days.
- e. Diversion of storage facilities at installations, arsenals, test facilities, and industrial plants for nonstorage purposes such as office space and maintenance shops is discouraged. Diversion of storage space should only be considered in the event that all other means explored have proven impracticable. Diversion of ammunition and explosive storage or facilities for such non–ammunition related use will require an approved site safety plan. Explosive safety site plans will be submitted through command safety channels to Director, U.S. Army Technical Center for Explosive Safety (USATCES) for Army approval.
- f. Storage missions or activities that are not required to meet the current requirements will be inactivated. Any depot or depot activity having a sustained net covered storage space occupancy rate of 75 percent or less for a period exceeding one year is a candidate for closure. Action will be initiated to close, or to justify the continued operation of those depots or depot activities failing to meet the above occupancy rate. Status of closure or justification for the continued operation will be provided to DCS, G–4 (DALO–SUS) within 60 days of the end of the last fiscal year. Standby facilities should be integrated into a commercial contract. Also, the Army will not construct and maintain excess facilities strictly for mobilization.
- g. Short-term covered storage requirements will be met through the use of temporary storage facilities. The need for temporary covered storage facilities, such as transitory shelters must be justified by a detailed analysis of the requirement. This analysis will include consideration of available covered storage space at other Army and DOD installations on a regional and national basis. The acceptance or rejection of such space will be substantiated by a thorough economic analysis of the alternatives. Occupancy and density levels at the requesting installation will likewise support the need for additional covered space.
- h. Additional covered storage space will not be provided at CONUS and overseas depots and installations as long as the commandwide storage system occupancy rate does not equal or exceed the DA utilization standard of 85 percent of net available (other covered) and 90 percent (igloo magazine).
- *i.* All plans for new construction or renovation of storage facilities that do not include AIT provisions, regardless of type, will be disapproved.

#### 4-3. Facility expansion or establishment

- a. When additional storage and warehousing facilities are necessary, consideration will be given to the following in the order shown—
  - (1) Obtain required facility or services from existing Army assets.
  - (2) Alter and convert existing facility.
  - (3) Obtain required facility or service from another military department or agency.
  - (4) Acquire by whichever of the following methods is most feasible:
  - (a) Use of warehousing services, facilities, or portion of a facility of another Government agency.
  - (b) Use of commercial services available under the DOD Commercial Warehouse Service Plan (AR 740-30).
  - (c) Transfer.
  - (d) Lease.
  - (e) Construction.
  - (f) Purchase.
- b. Prior to initiating action to acquire a permanent or temporary storage facility, for example, transitory shelter, by transfer, lease, construction, alteration, conversion, or purchase), approval by the DCS, G-4 (DALO-SUS) will be obtained. The request will show that use of facilities or services of another military department or agency, other Government agencies, or commercial warehouse service is not practical. See paragraph 4–2g above. If the proposed acquisition is in accordance with mobilization plans, the approved mobilization plan will be cited. Prior to the acquisition or construction of ammunition or explosive facilities, a safety site plan must be submitted and approved.

Explosive safety site plans will be submitted through command safety channels to Director, USATCES for Army approval.

c. Storage space may be taken from standby status only on approval of the Commander AMC; Commander TRADOC; Commander FORSCOM; and overseas ACOM/ASCC/DRU commanders.

#### 4-4. Inactivation of storage and warehousing facilities

Storage and warehousing facilities for which no current or projected Army requirement exists will be inactivated per paragraph 4–2f above.

- a. Storage and warehousing facilities for which no current or projected Army requirement exists will not be continued in operation because of prior commitments, or occupancy by other military departments or nonmilitary agencies. These military departments or nonmilitary agencies will be given the option of accepting the transfer of the facility, the responsibility for its operation, or removing the stored material.
- b. When portions of an installation are inactivated, emphasis will be placed on centralizing these inactivated portions by area and segregating these areas from the remainder of the installation.
- c. Consideration will be given to space required for mobilization in determining projected Army requirements. Inactivated space that is considered necessary as a mobilization reserve will be placed in standby status. When storage space in standby for any command exceeds 15 percent of a command's gross storage space, action will be initiated by the command concerned to inactivate one or more depots, depot activities, storage activities or similar activities.
  - d. Inactivated Army storage space may be leased to private interests in accordance with AR 405-80.
- e. Storage and warehousing facilities selected for inactivation and placed in standby status will be reported on the Storage Space Management Report (RCS CSGLD-1339) (DD Form 805), and explained under "Remarks" block section IV. (See section II.)
- f. Careful consideration must be given to the location of non-Class V material in the vicinity of established class V storage or operational sites. Failure to maintain the explosives safety separation distances mandated in DA Pam 385-64 (encroachment) can cause a reduction in the capability of the class V storage area.

#### 4-5. Contracts for commercial storage services

Contracts for garage space, parking and storage of administrative vehicles, and the storage of supplies and equipment at contractor facilities will be the responsibility of the using activity.

#### 4-6. Cross-servicing, license, or permit

- a. DA will provide warehousing services and storage space to other military departments and agencies and nonmilitary agencies under cross-servicing agreements, licenses, or permits in accordance with AR 405–80.
  - b. Normally, licenses or permits will be used when—
  - (1) Required warehousing services cannot be provided by the command administering the facility.
  - (2) The intended operations are of a type not associated with warehousing services.

#### 4-7. Space programming and allocation

- a. General. Army activities receiving requests for storage space from DOD components or other Government agencies are responsible for specifying, at the time of such requests, data to support programming requirements and procedures needed to ensure proper storage space management. Establishment of new class V storage sites or the addition of class V material beyond the currently approved limits of existing sites must be supported by an explosives safety site plan submittal approved by The Department of Defense Explosives Safety Board unless waived by HQDA.
  - b. FORSCOM and TRADOC supply installations.
- (1) FORSCOM and TRADOC are authorized to allocate to DA agencies open storage space in any amount, and covered storage space not to exceed 40,000 square feet of gross space.
- (2) FORSCOM and TRADOC are authorized to allocate to other Government agencies and DOD components open space in any amount, and covered space not to exceed 5,000 square feet of gross space.
- (3) Regardless of the allocations of space that may be made in accordance with the above, all space at these installations will remain under the control of FORSCOM and TRADOC.
- (4) Requests for allocation of covered space in the above will be forwarded to Commander, FORSCOM AFLG or TRADOC ATBO-H for approval.
- c. AMC supply installations. No change in space allocation at AMC installations may be made without prior approval of AMC AMCOPS-IEB. The assignment of space is the responsibility of the installation commander.
- (1) All DOD components and other Government agencies requiring space for the storage of military or nonmilitary material at AMC controlled supply installations will be requested to submit annually, on a fiscal year basis, programmed space requirements to AMC AMCLG-LS for space allocation. These programs will be reviewed semiannually, June and December and adjusted as required.
  - (2) Requests for allocation of space will include the following information:
  - (a) Name of department, agency, command, or service.

- (b) Desired or suggested location.
- (c) Type of storage facility desired, shown in net square feet; for example, warehouse, CH, heated, refrigerated, shed, igloo.
  - (d) Type and estimated tonnage of supplies to be stored.
  - (e) Phased timing of space requirements and approximate length of time the allocation will be required.
- (3) Programmed net square feet of storage space will be converted to gross square feet by AMC (AMCOPS–IEB). Allocation of space will be expressed in gross square feet to programming activities and storage sites.
- d. Space in overseas installations. Overseas commanders are authorized to allocate space at installations under their control to DOD components and civilian agencies of the Government.

#### 4-8. Space diversion

- a. Authority to divert storage space granted herein may not be redelegated. Regardless of the circumstances or the amount of space, storage facilities may not be diverted without prior approval of the ACOM/ASCC/DRU concerned.
- (1) *Installations, arsenals, industrial plants, and test facilities*. Oversea commanders and Commanders, FORSCOM, TRADOC, and AMC are authorized to divert storage and warehousing facilities not to exceed 40,000 gross square feet at any one of the above type installations during 1 calendar year.
- (2) Depots and depot activities reporting storage space semiannually. See section II, below. Commander, AMC and overseas commanders of installations are authorized to divert no more than 40,000 gross square feet of storage facilities during any 6-month calendar period. Calendar periods end 30 June and 31 December for each year concerned. The authority granted above extends only to the exceptions to policy stated in paragraphs 4-2d(l) and (2).
- b. Requests for authorization to divert storage and warehousing facilities in excess of 40,000 gross square feet will be submitted by FORSCOM, AMC, TRADOC, and major overseas commanders to DCS, G-4 (DALO-SUS) for approval.
- c. The provisions of paragraphs a and b above are not intended to restrict the temporary use, not to exceed 60 days, of a facility in the event of an emergency. Facilities required on this basis will be used without structural changes.
- d. A CH warehouse space will not be used for purposes other than for which constructed when any other warehouse or other type of suitable covered space can be made available. All requests for diversions of CH storage space for purposes other than that for which constructed will be referred to HQDA (DALO–SUS) for approval.

#### 4-9. Request for space diversion

- a. Requests for diversion of storage space will include the following information:
- (1) The amount of space recommended for diversion.
- (2) The types of space, that is, warehouse, shed, open improved, and so forth. Request will contain the building number and/or area number involved, the planned use of the space recommended for diversion, suitability of the space for the planned use, and justification for the requirement.
  - (3) Foreseeable storage requirement for the space recommended for diversion.
  - (4) A statement regarding the availability of other space suitable for this purpose.
- (5) The amount of re-warehousing and estimated cost if the diversion is authorized. In the event re-warehousing is required and vacant space is available, a statement should be included stating why occupied space is considered preferable to the available vacant space.
  - (6) Any modification of the facility required and the estimated cost.
- (7) In the event that storage space is recommended for diversion to maintenance missions, the following additional information will be furnished:
- (a) Show why there is no production capability at other depots in the total depot system having similar depot maintenance missions that can be used to meet the requirement or that cannot be expanded to absorb the increased maintenance production.
  - (b) Document the need for the increase in the depot maintenance production output.
- (c) Justify why the mission expansion that necessitates the diversion must be made at the depot in question in lieu of another depot.
- b. In requesting diversion of storage space, show economic evaluation of gains that will result if diversion recommended is approved. For example, personnel spaces will be saved and reduced from the installation's table of distribution and allowances. Number of operational funds and military construction, Army (MCA) dollars will be saved through the diversion of storage space. The time frame should also be used to permit computing total savings involved. Diversion of nonammunition or explosive storage space to ammunition or explosive storage will require an approved safety site plan. Explosive safety site plans will be submitted through command safety channels to the Director, USATCES for Army approval.

#### 4-10. Space conversion

a. All projects for conversion of storage and warehousing facilities, i.e., involving permanent structural changes, will

be submitted to DCS, G-4 (DALO-SUS) for approval. Conversion projects will not be submitted to DCS, G-4 prior to the receipt of approval for the diversion of storage space by the ACOM/ASCC/DRU, or HQDA, as appropriate. (See paragraph 4–8a and 4–8b.) The request for diversion of storage space, and the resulting approval will be submitted as an appendix to each storage space conversion project. Projects that do not contain the request for diversion and approval thereof will be returned for resubmission and compliance with this section.

- b. All approved conversions of space will be reported on DD Form 805 and explained in the "remarks" block. See section II below.
- c. Approved conversions will be reflected in the installation master plan and the inventory of military real property in accordance with AR 210-20 and AR 405-45.

#### 4-11. Space utilization standards

- a. The efficient use of space at an installation is the responsibility of the installation commander. Principles and guidance concerning the proper management of storage space are contained in TM 38–400 and TM 743–200–1.
- b. To improve Armywide space use, all space for which there is no foreseeable requirement will be reported by installation commanders for disposition, allocation to others, placement in standby, or disestablishment per AR 405–80.
- c. Utilization of covered space, not including igloos and magazine space, will seek an occupancy level of 85 percent of net storage space available and will attain a storage density of 15 square feet per short ton (table 4–1).
- d. Utilization of igloo and magazine space will seek an occupancy level of 90 percent of net storage space available when such occupancy is not in conflict with regulatory directives concerning compatibility and safety distances. Additionally, ammunition storage space occupancy will attain the following storage densities:
  - (1) Conventional ammunition, 7 square feet per short ton.
  - (2) Chemical munitions, 12 square feet per short ton.
- (3) Guided missiles, large rockets, command destruct units (CDUs) and cluster bomb units, 9 square feet per short ton.
- e. Net storage space available for storage will meet a minimum criterion of 65 percent of gross storage space used for bulk storage operations. This objective is applicable to total covered storage space excluding igloos and magazines.
- f. Major overseas commanders and Commanders, FORSCOM, TRADOC, and AMC will indicate in the "Remarks" block, DD Form 805 what actions are being taken to improve space management when the appropriate density level is not being achieved.

#### Section II

#### Storage Space Management Report, RCS CSGLD-1339

#### 4-12. Purpose and scope of report

This section sets forth DA policies and procedures for reporting the Armywide utilization and occupancy of storage space. It also provides an evaluation of space use against established storage management objectives. Army installations listed in table 4–2, including those activated subsequent to the publication of this regulation, and containing 50,000 gross square feet (GSF) or more of covered storage space will comply with this section. The reporting frequency for each installation is indicated in table 4–2. At the discretion of DCS, G–4 (DALO–SUS), installations having less than 50,000 GSF of covered storage space may be required to submit reports should the installation be considered to have significant importance by reason of mission assignment, location, or activity. Exceptions will be made to this criteria based on demands for information from higher authority. This report provides a basis for the management of storage space for purposes of allocation, assignment, and control through evaluation of installation, utilization and occupancy performance. It also provides background information on which to base responses to inquiries from higher authority. Only storage space used for the following purposes are excluded:

- a. Bulk petroleum, oils, and lubricants (POL).
- b. Post or installation exchange and supporting storage space.
- c. Installation civil or post engineer and the supporting storage space.
- d. Commissary and the supporting storage space.
- e. Shop stock and bench stock in shops.
- f. Transit sheds and open areas at terminals and depots used exclusively for cargo throughput operation.

#### 4-13. Preparing agencies

Reports will be prepared in accordance with the instructions contained in this section and figure 4-1A and 4-1B.

- a. CONUS and overseas installations annual and semiannual reports will be prepared by the installation in accordance with information provided in paragraph 4–15 and will be reviewed by the responsible installation for accuracy and completeness prior to submission to LOGSA PSCC.
  - b. LOGSA PSCC will prepare Armywide electronic reports and a detailed summary analysis.

#### 4-14. Electronic

Reports will be prepared on DD Form 805 (Storage Space Management Report) diskette. Copies of the diskette and instructions are available from the Chief, AMC Logistics Support Activity, Packaging, Storage, and Containerization Center, (AMXLS-T), 11 Hap Arnold Boulevard, Tobyhanna, PA 18466–5097.

#### 4-15. Frequency, period covered, and due dates

The report will be prepared either annually or semiannually as indicated in table 4-2 and as follows:

- a. CONUS and overseas installations, including those in Alaska and Hawaii, reporting annually, will prepare reports as of 30 June, and forward the reports not later than 14 workdays after the "as of" date.
- b. CONUS and overseas AMC installations reporting semiannually will prepare reports as of 30 June and 31 December each year. Reports will be dispatched not later than 15 working days after the as of date.
- c. The Chief, LOGSA PSCC, will forward reports to DLA within the following time elements after the "as of" dates.
  - (1) CONUS installations. Twenty workdays for semiannual reports and 35 workdays for annual reports.
  - (2) Overseas installations. Thirty workdays for semiannual reports and 35 workdays for annual reports.
- d. The Commander, AMC, will forward reports to DCS, G-4 (DALO-SUS) so as to arrive no later than 24 August and 24 February each year.

#### 4-16. General instructions for preparation of DD Form 805

Instructions contained in this paragraph apply to each installation listed in table 4–2. These instructions also pertain to those installations with 50,000 GSF of covered storage space that are activated subsequent to the publication of this regulation.

- a. General.
- (1) The principles of storage space control and reporting are contained in TM 38-400, and TM 743-200-1, chapter 2, sections V and VI.
- (2) DD Form 805 will be prepared to cover the total amount of storage space, by type, at the installation or activity concerned, even though such space is temporarily used for other purposes. It will include all such space which has been out–leased, licensed, permitted, cross-serviced, or which otherwise is used. It will include the total amount of storage space at the installation, regardless of the identity of the occupants, except those specific exclusions in paragraph 4–13.
- (3) Only one DD Form 805 will be prepared for each installation. The criterion to be applied is that real property and improvements thereon, located on contiguous land under the control of the Army, will be considered as one installation regardless of missions, functions, activities, or installation classification that may be located thereon. A public highway or railroad right–of–way passing through an installation will not be considered as breaking the continuity of the land. In those instances where installations are geographically separated, they will be treated and reported as separate installations regardless of command structure.
- (4) Where an installation has an annex or sub-installation, geographically separated, the annex or subinstallation will be reported on a separate DD Form 805 at the same frequency as the parent installation. The parent installation will be identified under the "Remarks" block on all subinstallation reports. Data pertaining to the subinstallation or annex, geographically separated, will not be included in the parent installation report. Annexes or subinstallations not presently reporting will submit reports only if the 50,000 GSF criterion is met. A separate installation identity code will be assigned in this instance.
- (5) All entries, line entries or remarks, pertaining to space will be expressed in thousands of square or cubic feet rounded out to the nearest thousand, for example, 23,499 will be "23," 24,500 will be "25." All reported data must be checked in accordance with figure 4–1 prior to transmittal.
  - b. Gross space. All entries requiring an expression of areas in gross square feet will be computed by-
- (1) Using inside measurements between exterior walls without deductions for firewalls or other structural losses including employee–parking areas when covered storage space is used. Employee parking areas will be reported as vacant.
- (2) Using overall measurements of open storage areas with no deductions for trackage and permanent roads within the area. In the case of unimproved open areas, only that space actually occupied by stored material or used in support of storage operations will be reported.
- c. Cubic space. All entries requiring an expression of area in cubic space capacity will be computed by multiplying square feet by the unobstructed stacking height permitted by safety restrictions.

#### 4-17. Detailed instructions for preparation of DD Form 805

Detailed instructions for preparation of DD Form 805 are contained in figure 4-1.

#### 4-18. Installation identity codes used on the Storage Space Management Report

Installation identity codes are contained in table 4–2.

- a. Reports will be submitted annually (A) or semiannually (L) as indicated in the column titled "Report."
- b. The installation identity codes will be furnished by LOGSA, PSCC on request.
- c. To keep listing current, changes to table 4–2 caused by activations, changes in name, principal function, or similar actions will be reported through reporting channels to Chief, LOGSA PSCC (AMXLS–T), 11 Hap Arnold Boulevard, Tobyhanna, PA 18466–5097. This also applies to installations, not currently required to report, that expand their covered storage space to 50,000 GSF, or more.
- (1) Changes will be reported to the Chief, LOGSA, PSCC within 45 days after the effective date of the activation etc.
- (2) In the case of oversea activations, inactivations, changes in name, prime mission or category of material stored, a copy of the authorizing document will accompany corrections to the listing. Grouping of installations or activities under one command does not remove the necessity for reporting by installation or activity and will not be considered an activation.
- (3) Inactivated installations will be deleted from this listing when a "final report" is submitted. A copy of the authorizing document will accompany overseas "final reports."
- d. The names of installations and their locations that are not required to be transmitted are automatically entered in the computer.

#### 4-19. Army storage space reporting

- a. It is the policy of Army to maintain a uniform, accurate storage space inventory and utilization reporting system to—
  - (1) Identify gross, net, occupied, and vacant storage space by type of storage.
  - (2) Exchange storage space data among DOD components to foster optimum use of DOD-owned space.
  - (3) Conduct DOD-wide and Federal Governmentwide storage space management and distribution studies.
  - (4) Evaluate major storage space military construction or modernization projects.
  - (5) Identify future peacetime and contingency storage requirements.
  - (6) Evaluate the extent to which storage space policies are being implemented.
  - b. The LOGSA PSCC functions as the Army SSRA. As the SSRA, LOGSA PSCC, LTAD-
  - (1) Receives and consolidates DD Form 805 submissions.
- (2) Develops and maintains the automated data processing program specification supporting the system; performs a routine analysis of the storage space inventory database and ensures the automated integrity and accuracy of the information; publishes and distributes storage space management and inventory information; responds to ad hoc requests concerning storage space availability or storage space management information; and reviews all requests and responses on the availability of storage space with a view toward optimum use of the Army's existing storage assets.
  - (3) Recommends system improvements to higher headquarters.
  - c. Army installations willl submit the SSMR, DD Form 805 in accordance with the provisions of this regulation.
  - d. Reporting requirements are as follows:.
- (1) Each installation having 1,000,000 GSF or more of warehouse space owned or ingranted for their use or any tenant of an installation having 1,000,000 GSF ingranted to them must report semiannually as of 30 June and 31 December. Reports must be submitted for installations having fewer than 1,000,000 GSF of covered storage space if the installation is considered to be of significant logistical importance by reason of mission assignment, location, or activity. It is the responsibility of the Army SSRA to maintain visibility of storage space for those installations having fewer than 1,000,000 GSF of covered storage space that are considered strategically important.
- (2) DOD standard data elements and codes will be used in complying with this reporting requirement when applicable. Army shall identify installations in the installation code block on DD Form 805 (Joint Reporting Structure, General Use of Miscellaneous Subscription Form: Proponent ID. Other data elements used herein are subject to change.
- (3) Reports will be submitted no later than 60 calendar days after June 30 and December 31 (the "as of" date) of each year. Only one report (a single copy of DD Form 805) will be submitted (preferably on a floppy disc) for each installation site or activity that is required to report. These reports will include storage space that is primarily used for mission operations, regardless of the identity of the occupants, except space excluded in paragraph 4–13 above.
- (4) Army will provide reports to DLA prepared on DD Form 805 for those installations meeting the criteria of paragraph 4–1 and in accordance with guidance outlined in TM 38–400, chapter 2. Reports will be provided to Defense Distribution Center DDC–T, Building 81, 2001 Mission Drive, New Cumberland, PA 17070–5001.

#### Section III

#### Covered and Open Storage of Supplies

#### 4-20. Scope

This section—

a. Establishes DA policy for the use of storage space.

- b. Establishes responsibility and criteria for determining items of supply for storage in CH, conventional warehouse, shed, and open storage space; identification of items as to required type of storage; and for positioning of items at installations having adequate and appropriate storage space.
  - c. Applies to—
  - (1) The Office of the DCS, G-4 of AMC, major AMC subordinate commands, and oversea commands.
- (2) All DA CONUS installations and activities engaged in the storage of wholesale supplies and equipment. This section will be implemented to the maximum extent feasible by posts, camps, and stations worldwide.

#### 4-21. Warehousing policy

- a. Warehouse space will be used to the maximum extent of availability to store serviceable and economically reparable unserviceable supplies. When warehouse space is not available, items may be placed in shed storage. Open storage will only be used for those items determined to be suitable for open storage.
- b. The prescribed relative humidity (RH) level (50 percent RH) for dehumidified storage will be achieved through dynamic dehumidification, or air conditioning or by using the moderating effects of the building and the natural environment. Certification of the latter will be requested from AMC.

#### 4-22. Processing requests for warehouse space

DALO-SUS process requests for warehouse space when major commands are confronted with storage problems that cannot be resolved between interdepartmental storage offices. Such requests should be made under one of the following conditions:

- a. When supplies can be more economically positioned at another installation operated by another DOD component or Federal civilian agency for example, in order to avoid unnecessary backhauls.
- b. When the lack of a specific type storage space at an installation of the requesting DOD component will result in the storage of supplies in a manner not in the best interest of the Federal Government. Suitable storage space is available at another installation operated by another DOD component or Federal civilian agency.
- c. When storage space available to one DOD component is insufficient to meet the requirement and such space can be made available at an appropriately located installation operated by another DOD component or Federal civilian agency.

#### 4-23. Criteria for use of storage facilities

- a. Most military supplies and equipment will deteriorate rapidly when exposed to the elements. To prevent item deterioration, reduce the costs of initial and recurring care and extend the shelf life of items, supplies and equipment should be afforded the protection of covered storage.
- b. Except for items determined suitable for open storage, supplies and equipment will not be positioned at any installation lacking adequate covered storage space. Agencies responsible for directing shipments into storage installations will make certain that adequate covered storage space is available at the installation.
- c. When the demands on CH storage result in limited or no space available, warehouse and shed space will be used in that order of priority.
- d. All vehicles in unserviceable condition codes F and M equipped with protective closures and preserved, may be stored in open improved space while awaiting maintenance action. Material so stored will be inspected every 36 months to insure the degree of unserviceability does not increase as a result of such exposure.
- e. In instances where a depot or similar supply installation receive advance notice of shipments of material and the receipt of such material would result in the improper use of storage facilities—that is, the type of storage is less than the minimum required type—action will be taken by the storage activity to notify the appropriate inventory control points. After notification, the appropriate inventory control point will divert the shipments to another installation(s) that has (have) the required facilities available.
- f. When a FORSCOM or TRADOC supply installation receives material that necessitates the use of an improper and detrimental storage environment, immediate action will be taken to advise AMC with complete information regarding the shipment.
- g. Installations having material in inappropriate types of storage will establish a program to re-warehouse the material to proper storage at the earliest practicable date.
  - h. Material will always be stored in accordance with its controlled inventory item code.

#### 4-24. Types of warehouse space

- a. CH space. CH space, where available, will be used for the storage of those items that will best benefit from such storage facilities. Priorities established in TM 38-400 will be followed in selecting items for CH storage.
  - b. General purpose warehouse space General-purpose warehouse space will be used—
  - (1) For items qualifying for CH storage when CH space is unavailable at the installation.
  - (2) For supplies and equipment sensitive to moisture.
  - (3) When such storage will reduce the cost of initial and recurring preservation, packaging, and packing of material.

- (4) To protect material such as rubber products, adversely affected by sunlight and elements in the air.
- (5) To protect packaging and packing materials and metal containers containing material.
- c. Shed space. Shed space may be used for-
- (1) Material slightly sensitive to moisture.
- (2) Extremely large and/or heavy equipment, which cannot be stored physically in warehouse space.
- (3) Metal containers, full or empty, including loaded, desiccated, reusable metal containers.
- d. Open space. Open space may be used for items which will derive little or no benefit from covered storage nor lose their serviceability when stored in open space or are slated for demilitarization, and for items which are impractical to be placed in covered storage due to item characteristics.
- e. Dehumidified atmosphere. The dehumidified atmosphere provided in CH space must have access to the material to be protected in order to function as a preservative method. Items placed in airtight containers or sealed in vapor or waterproof envelopes are effectively isolated from the benefits of a CH environment. Therefore, the extra protection inherent in the airtight container placed in CH storage should be restricted to a very minimum number of items. Items selected for this double protection should have, as a minimum, a critical supply position, a high unit cost, a mandatory serviceability status responsive to a contingency plan (APS); and an identity as a major item or component essential to the conduct of combat.

#### Section IV

#### Determination and justification of storage facilities requirements

#### 4-25. Scope

This section prescribes the policies and procedures for determining requirements for and justifying the construction of storage facilities within DA. This section is applicable to the DCS, G–4 and all major commanders responsible for the operation of U.S. Army depots and installations listed in table 4–2, except for the following:

- a. Wet storage facilities, rail storage yards, POL tank farms, and arsenals.
- b. Manufacturing plants.
- c. Complete aircraft storage facilities.
- d. Industrial tool storage.
- e. Refrigerated facilities for the storage of special items such as perishable subsistence, pharmaceuticals, films, and photosensitized materials.
  - f. Self-service supply centers.
  - g. Adjutant General supply facilities.
  - h. Army Post Exchange storage facilities.
  - i. Storage space within hospitals.
  - j. Commissary storage facilities.

#### 4-26. Storage facilities policies

- a. Projects involving storage facilities required by Army commands and activities will conform to the qualifications and limitations prescribed herein.
- b. Projects for new storage facilities at depots and depot activities will be based on computations using factors and methods presented herein.
  - c. The criteria in table 4-3 will be applied in determining the type of facilities required for storage of supplies.
- d. Criteria contained in chapter 2, paragraph 2–5 will be used to determine the amount and what type of equipment requires CH storage. In the absence of a list of equipment to be pre–positioned, 90 percent of the storage objective will be provided CH storage and 10 percent will be provided another type of storage, as appropriate.
- e. Space used in support of storage operations at a depot or depot activity and contained within the warehouse buildings will not exceed 15 percent of the actual covered storage space. This should not be construed to mean that as actual covered storage space expands, that support space will expand in the same ratio.
- f. Except for office space for first line supervision governing the immediate warehousing area concerned, administrative office space should not be located in the warehousing area. If attached to the outside of the building perimeter, administrative office space should be located so as not to interfere with additions or extensions to the actual storage space. This does not preclude the location of personal service space, for example, toilets, washrooms and lunch areas or facilities within the building concerned for the convenience of operating personnel assigned therein. These facilities should not intrude into actual storage space or limit future expansions.
- g. If offices, administrative areas and personal service areas must be within the warehouse perimeter, they should be grouped together to take maximum advantage of space economy. In high bay warehouses, consideration should be given to combine ground floor and mezzanine use of support space in vertical alignment to minimize the use of warehouse floor space.

h. Support space and administrative or personal services space will be identified separately and justified by validated workload and personnel requirements for the function concerned.

#### 4-27. Facility requirements recognition

- a. Projects submitted for construction of new storage facilities to qualify for approval must have requirements that are specific and easily recognizable as creating a real need for the project.
  - b. Storage space requirements recognition will be based on the following:
  - (1) DA-approved and -authorized storage objectives, where applicable.
- (2) Deficits in capacity where consideration has been given to the use of existing storage facilities within a command.
  - (3) Objectives, capacities, factors, and computations will be set forth in a clear and concise manner.

#### 4-28. Facility computation requirements

a. Density factors. Density factors will be used in conjunction with validated tonnage data. The factors used for determining the amount of storage space required may be equal to, but not exceed the density factor depicted in table 4–1.

able 4-1 ensity factors	
Type of storage space required	Density factor
Covered stora	age
General supplies	15 sq ft/st
Medical supplies	30 sq ft/st
Army pre-positioned stocks (APS)	Variable
Conventional ammo	7 sq ft/st
Chemical munitions	12 sq ft/st
Guided missiles	9 sq ft/st
Open storag	je
General supplies	25 sq ft/st
Conventional ammo	10 sq ft/st
APS	Variable

#### Notes:

The above factors exclude allowances for support space, but include allowances for aisles, quantity distance, and structural loss. Space requirements based on factors in excess of the above will be authorized only after each increase has been specifically justified.

#### b. Formulas.

- (1) Actual storage space or density factor = capacity, in short ton.
- (2) Storage objective capacity of existing facilities = capacity deficit (only if objective is greater than capacity).
- (3) Storage objective or capacity deficit × density factor = actual storage space requirement.
- (4) Actual storage space requirement, covered or open excluding igloo and magazine space × 15 percent = storage space required for storage support.
  - (5) Actual storage space + storage support space = gross storage space.
- (6) The results of computations using formulas (1), (2), and (3) above will be the amount of actual storage space that is needed to store a certain tonnage of supplies and equipment. Requirements for each type of space will be computed and shown separately. When a depot, depot activity, direct or general support unit or similar type storage activity is being created and the support facilities are to be located in covered storage buildings, support space may be added to the actual storage space requirement to determine the total number of gross square feet of storage space that needs to be constructed (formulas (4) and (5) above). When an existing facility is being expanded, a requirement for support space will not be included as a storage space requirement unless covered storage is being used for support operations. When covered storage is being used for support operations, expansion of each support facility to accommodate an expanded mission requirement must be documented and accompany the stated requirement.

#### 4-29. Facility justification requirements

- a. Projects for modification, rehabilitation or construction of new storage facilities to be included in the annual MCA program will be submitted in accordance with AR 415–15. Within the format of DD Form 1391 (Military Construction Project Data), certain items of information must be included for storage and warehousing projects.
- b. When requesting storage facilities in connection with the annual MCA program, the following information will be provided in paragraph 2 data (Accommodations Now in Use) of the supplemental justification submitted in conjunction with project submissions on DD Form 1391 (see AR 420–1):
- (1) ACOMs/ASCCs/DRUs reporting under section II of this chapter will provide a list of depots, depot activities, and other type activities comprising the Command Distribution System for Peacetime Operating Stock (POS), War Reserve Materiel APS, and project stocks (PS). The list will be limited to those facilities reporting storage space as required by table 4–2. Show the installation identity code from table 4–2 and provide a mission statement for each installation listed. Capacities for each depot and depot activity listed will also be shown. Capacities will be shown separately for open and covered storage. Show ammunition, medical, and APS storage space capacities separately from general supplies space.
- (2) Storage facilities at posts, camps, stations, and general and direct support units will provide a mission or functional statement, for storage organization at the installation concerned and compute and show capacity of existing covered and open storage facilities.
- c. When requesting storage facilities in connection with the annual MCA program, the following information will be provided in paragraph 3, of the supplemental justification submitted in conjunction with project submissions on DD Form 1391, per AR 420–1.
- (1) Total storage objectives (tonnage to be stored) for the command or country(s) concerned with depot storage facilities will consist of three separate groups. These groups are War Reserve, PS, and POS. Each of these groups will be broken down by classes of supply. These classes of supply are general supplies, medical supplies, and Class V. The above data will permit identification of all tonnage to be stored in the theater, command, countries, and installations concerned. The total storage objective will be stratified and assigned to each depot listed in paragraph 2 of the detailed justification accompanying the DD Form 1391, per AR 420–1. This figure then represents the storage objective for each depot and forms the basis for determining the storage capacity deficit on a depot by depot basis. Using capacities determined for each depot and depot activity listed in paragraph 2 of the detailed justification accompanying the DD Form 1391, per AR 420–1, compute and show capacity deficits or excess capacity for each type of storage space concerned for each depot. Compute and show the actual and/or gross storage space requirement by type of space for each depot concerned. Gross space will be involved only when covered storage space is required.
- (2) The total storage objective of storage facilities at posts, camps, stations, and general and direct support units stratified by general supplies, medical, and ammunition will be shown using those capacities for posts, camps and stations, and so forth, listed in paragraph 2 of the detailed justification accompanying the DD Form 1391 per AR 420–1. Compute and show capacity deficits for each type of storage space concerned. Also compute and show the "actual" and/or "gross" storage requirement by type of space.
- (3) When required by AR 11–18, prepare an economic analysis for each construction project in accordance with the instructions provided therein.
  - d. In addition, justification provided should document and explain the requirement in such terms as-
  - (1) Requirement for dispersion of stocks.
- (2) Requirements, capabilities and shortfalls in support of wartime operations, for both individual depots and the overall systems.
  - (3) Overcrowding and over concentration of depots in confined, heavily populated areas.
- (4) Requirement to reposition stocks that may be stored to eliminate conflict with operational and tactical plans. The justification provided should be specific and must spell out, as strongly as possible, the consequences that may be expected if facilities are denied.
- e. The DD Form 1391 (item 25) contains the only written justification for construction furnished to the Office, Secretary of Defense, Office of Management and Budget, and Congress. Item 25 of DD Form 1391 is an important part of the justification of a facilities project and cannot be prepared until all of the facts and figures for the project have been written into the supporting paragraphs of the supplemental justification attached as backup to the DD Form 1391.
- f. Additionally, what item 25 is to Congress, the supplemental justification is to the program review process up to and including the Army witness during his or her appearance before the congressional committees in support of each project. The need for accurate and concise data on DD Form 1391 is extremely important. To provide accurate storage oriented data suitable for use in defense of requests for storage facilities projects, the major commander will insure that persons directly involved in storage functions will be major contributors to development of all data including backup data, to be used in preparation of DD Form 1391. The major commander will ensure that these persons review the final submission of DD Form 1391 prior to forwarding to higher headquarters.

Report	Installation	Installation identity code	Location
	Overseas installa	ations	
	England		
L	Hythe Depot Activity (Burtonwood AD)	LGXX	Hythe
	Germany		
Α	Army Publications and Training Aids Center, Europe	GYRW	Frankfurt Main
Α	Baumholder Storage Area	MLAO	Baumholder
Α	East Camp and Training Area	JEMW	Grafenwehr
Α	EES General Depot	JUPP	Giessen
Α	European Exchange Service Facility	JMST	Gruenstadt
Α	Giessen Sub-Post Activity	HWYZ	Giessen
Α	Grossauheim, Kaserne	JRRR	Hanau
Α	Hale Supply Area	FAWH	Darmstadt
L	Kaiserslautern Army Depot	LXPH	Kaiserslautern
Α	Miesau	QEYK	Miesau
L	Pirmasens Depot Activity, Germersheim	TGYC	Pirmasens
Α	Quartermaster Facility	SPVU	Kaiserslautern
L	Rhine Barracks	UDJC	Kaiserslautern
Α	Smith Barracks	AZEN	Baumholder
Α	South Camp	XZCD	Vilseck
Α	Storage and Range Area	AFVD	Bamberg
Α	Sullivan Barracks	VYYX	Mannheim
Α	Taylor Barracks	XYGO	Mannheim
Α	Training Area, Hohenfels	KVPD	Hohenfels
L	Weilerback Depot Activity	YQXM	Weilerback
	Italy		
L	Leghorn Army Depot	ERSM	Livorno
	Japan		
Α	Sagami Army Installation	UQGA	Sagamihara
Α	Yokohama Activity, Sagami Army Installation	ZLNQ	Yokohama
А	Camp Zama Akizuki Storage Area Hiro Storage Area	EVKB	Zama-Machi Akizuki Hiro
	Korea	L	1
L	US AMC Support Center–Korea	YFEB	Waegwan
L	Pusan Storage Facility	TVJG	Pusan
	Okinawa	L	1
L	Chibana Army Depot	DPKL	Okinawa City
L	Kenoko Army Deport	KLXG	Kenoko
	CONUS installat		ı
	JMC (AMC)		

port	Installation	Installation iden-	Location
		tity code	
L	Blue Grass Depot Activity (Lexington-Blue Grass AD)	BVJS	Richmond, KY
L	Letterkenny Army Depot	NDAM	Chambersburg, PA
L	Hawthorne Army Depot	KHSH	Hawthorne, NV
L	Red River Army Depot	UAUM	Texarkana, TX
L	Sierra Army Depot	VRES	Herlong, CA
L	Tobyhanna Army Depot	WXVE	Tobyhanna, PA
L	Tooele Army Depot	XABS	Tooele, UT
Α	Holston Army Ammunition Plant	KXXK	Kingsport, TN
Α	Iowa Army Ammunition Plant	LNLM	Burlington, IA
	Lone Star Army Ammunition Plant Lake City Army Ammunition Plant		Texarkana, TX Independence, MO
А	Louisiana Army Plant	NSNZ	Shreveport, LA
Α	Milan Army Ammunition Plant	QFNJ	Milan, TN
Α	Picatinny Arsenal	TFCT	Dover, NJ
А	Pine Bluff Arsenal	TGAW	Pine Bluff, AR
	Radford Army Ammunition Plant		Radford, VA
Α	Rock Island Arsenal	UJHQ	Rock Island, IL
Α	Watervliet Arsenal Crane Army Ammunition Activity Includes Letterkenny Munitions Center (LEMC) Hawthorne Army Depot McAlester Army Ammunition Plant Includes Red River Munitions Center	YNKR	Watervliet, NY Crane, IN Chambersburg, PA Hawthorne, NV McAlester, OK Texarkana, TX
	AMCOM (A	MC)	
Α	Redstone Arsenal	UBHS	Redstone Arsenal, AL
	SBCCOM (A	AMC)	
A	Aberdeen Proving Ground Anniston Chemical Activity Bluegrass Chemical Activity Deseret Chemical Depot Edgewood Chemical Activity Newport Chemical Depot Pine Bluff Chemical Activity Pueblo Chemical Depot Umatilla Chemical Depot	AAMP	Aberdeen, MD Anniston, AL Richmond, KY Stockton, UT Aberdeen PG, MD Newport, IN Pine Bluff, AR Pueblo, CO Hermiston, OR
	ATEC		
Α	Dugway Proving Ground	FMGN	Dugway, UT
Α	White Sands Missile Range	YVZN	Las Cruces, NM
Α	Yuma Proving Ground	ZRCF	Yuma, AZ
	FORSCO	ОМ	
Α	Fort Bragg	HCTL	Fayetteville, NC
Α	Fort Campbell	HDBL	Clarksville, TN
Α	Fort Carson	HDDL	Colorado Springs, CO
Α	Fort Devens	HEHL	Ayer, MA
Α	Fort Drum	EUVG	Watertown, NY
Α	Fort Gillem	AQMV	Forest Park, GA

Table 4–2 Installation ide	entity codes—Continued				
Report	Installation	Installation identity code	Location		
Α	Fort Hood	HFTZ	Killeen, TX		
Α	Fort Lewis	HGUH	Tacoma, WA		
Α	Camp McCoy	ETMB	Sparta, WI		
Α	Fort McPherson	HHQL	Atlanta, GA		
Α	Fort Polk	HJVH	Leesville, LA		
Α	Fort Riley	HKBN	Junction City, KS		
Α	Fort Stewart	HKUZ	Hinesville, GA		
Α	Yakima Firing Center	ZLJW	Yakima, WA		
	TRA	DOC			
Α	Fort Benning	HCML	Columbus, GA		
Α	Fort Bliss	HCRL	El Paso, TX		
А	Carlisle Barracks	DCWX	Carlisle, PA		
Α	Fort Eustis	HERT	Lee Hall		
А	Fort Gordon	HFDZ	Grovetown, GA		
А	Fort Huachuca	HFVZ	Sierra Vista, AZ		
А	Fort Jackson	HGBZ	Columbia, SC		
А	Fort Knox	HGFZ	Louisville, KY		
А	Fort Leavenworth	HGNC	Leavenworth, KS		
А	Fort Lee	HGQH	Petersburg, VA		
А	Fort Leonard Wood	HGSH	Waynesville, MO		
А	Fort Rucker	HKFN	Dalesville, AL		
А	Fort Sam Houston	HKHN	San Antonio, TX		
А	Fort Sill	HKNN	Lawton, OK		
А	Fort Story	HKVZ	Virginia Beach, VA		
	USA	RPAC			
А	Fort Kamehameha	HGFQ	Honolulu, HI		
А	Fort Greely	HFFZ	Delta Junction, AK		
А	Fort Richardson	HJZH	Anchorage, AK		
L	Fort Shafter	HKJN	Honolulu, HI		
L	Kipapa Storage Site	YFKW	Wahiawa, HI		
L	Schofield Barracks	VCHR	Wahiawa, HI		
	MEC	СОМ			
А	Fitzsimons General Hospital	GRRY	Denver, CO		
А	Walter Reed Army Medical Center	YJQF	Washington, DC		
	M	DW			
А	Fort Lesley J. McNair	HHNL	Washington, DC		
А	Fort Myer	HJCQ	Arlington, VA		
А	Fort Belvoir	HCHL	Accotink, VA		
А	Fort George G. Meade	HEZQ	Odenton, MD		
А	U.S. Military Academy	YDHZ	West Point, NY		

#### Notes:

In view of mechanization, any change that has not been confirmed as of the report cutoff will be shown under "Remarks" only, citing the basis and date of the request.

Table 4–3
Type of storage facilities required for supplies

Supplies									
Area	General	Medical	Ammunition						
Noncombat CONUS and oversea depots, posts, camps, and stations <sup>1</sup>	Covered storage will be provided. Open storage may be used only for those items determined as suitable for open storage. In the absence of a list of material comprising the storage objective, the percentage of the storage objective to be provided covered and open space for posts, camps, and stations will be 80 percent covered and 20 percent open. The percentage of storage objective provided covered and opens for all others will be 90 percent covered and 10 percent open.	Covered storage will be provided.	Covered storage will be provided. Ope storage may be used only for those items that normally are provided open storage. In the absence of a list of material comprising the storage objective, the percentage to be provided covered and open space will be 95 percent covered to 5 percent open.						
Noncombat CONUS and oversea depots <sup>2</sup>	The percentage of the storage objective to be provided covered storage and open space will be 60 percent covered to 40 percent open. Covered storage requirements will be met by using demountable structures such as transitory shelters.	Covered storage will be provided.	For short term requirements, open storage, supplemented by use of demountable structures as applicable.						
Active combat OOTW oversea depots, posts, camps, and stations.	The percentage of the storage objective to be provided covered and open space is 60 percent to 40 percent open. Demountable structures, such as transitory shelters, should be used to meet covered storage requirements.	Covered storage will be provided.	The percentage of the storage objective to be provided covered and open space is 95 percent open to 5 percent covered. Demountable structures should be used to meet covered storage requirements.						

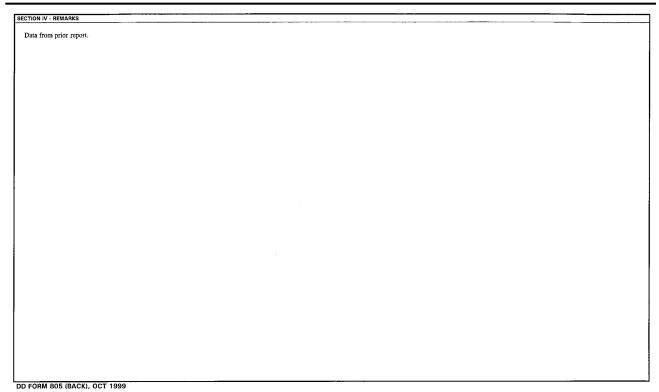
#### Notes:

<sup>&</sup>lt;sup>1</sup> Long-term storage.

<sup>&</sup>lt;sup>2</sup> Temporary or short-term storage.

STORAGE SPACE MANAGEMENT REPORT	2000-Jun-30	)	VRES	DOD COMPONEN USA		FINSTALLATION Sierra Army		CITY NAME He	rlong	STATE/COUNTRY CA	USA		(SA)1337
OUTGRANTED TO	OUTGRANTED GSF 56 K Covered		INGRANTED FRO	М	0 K Covered	0 K Open	LEASED FROM		0 K Covered	0 K Open	ANNUAL LEASIN	ig cost 0.00	
POINT OF CONTACT DENNIS CLEMMAN	DSN 855-4502					NERAL PURPO	SE STORAGE					OPEN STORAGE	
a. ITEM (Unit of measure in thousands)	b. TOTAL COVERED	c. HEATED	d. UNHEATED	e. CONTROLLED HUMIDITY	f. FLAMMABLE HAZARD	g. CHILL	h. FREEZE	i. SHED	j. OTHER	k. IGLOO/ MAGAZINE	I. UNAPPROVED	m. IMPROVED	n. UNIMPROVED
SECTION I - GROSS SPACE AVAILABLE	(GSF = Gross Squ	uare Feet)											
1. TOTAL GSF PRIOR REPORT	4,233	6	2,480	T	11					1.736		1,297	14
2. TOTAL GSF THIS PERIOD	4,233	6	2,480		11					1,736		1,297	14
3. UNUSABLE GSF	0												
4. SF IN STANDBY	0												
5. OUTGRANTED GSF (NON-DoD)	0			1 41100									
6. OUTGRANTED GSF (DoD)	56		45		11							24	
7. TOTAL GSF OUTGRANTED (5+6)	56		45		11							24	
8. TOTAL INGRANTED GSF (8e + 8b)	0												
a. INGRANTED GSF	0												
b. LEASED GSF	0												
9. TOTAL AVAILABLE (2+8 less 3, 4, & 7)	4,177	6	2,435		0					1,736		1,273	14
10. AISLES, STRUCTURAL LOSS, AND SUPPORT SPACE (GSF)	1,563	4	1,206							363		36	
SECTION II - NET SPACE AVAILABLE (N	SF = Net Square	Feet, TCF = 7	otal Cubic Feet,	ACF = Attainal	ole Cubic Feet)								
11. NSF IN BIN AREA	, 2	2		I									
12. NSF IN RACK AREA	23		23										
13. NSF IN BULK AREA	2,589		1,206							1,383		1,237	14
14. TOTAL NSF (11 + 12 + 13)	2,614	2	1,229							1,383		1,237	14
15. TCF IN BIN AREA	16	16		-									
16. TCF IN RACK AREA	276		276										
17. TCF IN BULK AREA	34,278		17,682							16,596		12,370	2,13
18. TOTAL TCF (15+16+17)	34,570	16	17,958							16,596		12,370	2,13
19. ACF IN BIN AREA	14	. 14											
20. ACF IN RACK AREA	246		246										
21. ACF IN BULK AREA	30,507	•	15,737							14,770		12,370	2,13
22. TOTAL ACF (19+20+21)	30,767	. 14	15,983							14,770		12,370	2,13
SECTION III - OCCUPIED STORAGE SPA	CE (NSF = Net Sq	uare Feet, AC	F = Attainable	Cubic Feet)									
23. TOTAL NSF OCCUPIED	1,960	2	881							1,077		1,077	14
24. TOTAL ACF OCCUPIED	17,204	8	8,580							8,616		10,770	2,13
25. TOTAL VACANT NSF	654	0	348	0	0	0	0	0	0	306		160	
26. VACANT ACF IN BIN AREA	6	6						[	i				
27. VACANT ACF IN RACK AREA	46		46										
28. VACANT ACF IN BULK AREA	13,511		7,357							6,154		1,600	
29. TOTAL VACANT ACF (26+27+28)	13,563	6	7,403							6,154		1,600	
30. UNOBLIGATED VACANT NSF	654		348							306			
31. UNOBLIGATED VACANT ACF	13,563	6	7,403							6,154			
TOTAL BIN LOCATIONS:	TOTAL RACK LO	CATIONS:		OCCUPIED BIN	LOCATIONS:	OCCUF	IED RACK LOC	ATIONS:	BIN - PERCENT	OCCUPIED:	RACK	PERCENT OCC	JPED:
DD FORM 805, OCT 1999					2051110110 50	TION MAY BE U	000		·				

Figure 4–1. Sample of completed DD Form 805, Storage Space Management Report, with completion instructions (by item, column and line)



Legend for Figure 4-1;

Date: Enter the two digits of "day," "month" and "year" to represent the as of date.

Installation code: Enter a four-character alpha identity code.

**DOD component:** (Army, DLA, Navy, and so forth)

Name of installation: Enter the name of the installation.

City Name: Enter the name of the city in which the installation is located.

State/Country: Enter the state/country code in which the installation is located.

#### RCS DD-AT&L (SA) 1337

Outgranted to: Enter the name(s) of the service or organization receiving the outgrant as defined in the glossary. Additional entries will be annotated in the remarks section.

Outgranted GSF: Enter the amount(s) of gross storage space outgranted as defined in the glossary. The entry should be in thousands unless otherwise noted. Additional entries will be annotated in the remarks section.

Ingranted from: Enter the name(s) of the DOD component which storage space has been ingranted from as defined in the glossary. Additional entries will be annotated in the remarks section.

Ingranted GSF: Enter the amount(s) of gross storage space ingranted as defined in the glossary. The entry should be in thousands unless otherwise noted in the remarks section.

Leased from: Enter the name(s) of the private or commercial source which space is being leased from. Additional entries will be annotated in the remarks section.

Leased GSF: Enter the amount(s) of gross storage space leased. Entry should be in thousands unless otherwise noted. Additional entries will be annotated in the remarks section.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

Annual leasing cost: Enter the annual cost charged for the leased space.

**Point of contact:** Enter the point of contact for the Storage Space Management Report. This should be the storage specialist completing the installation report.

DSN: Enter the Defense Switching Network (DSN) telephone number of the report POC.

Column a. Item: Is list of line data as defined in the glossary?

Column b. Total covered: Is the sum of columns c through k.

**Column c. Covered general purpose, heated:** Is the amount of space in buildings designed for storage purposes in which the temperatures can be controlled within specified limits by applications of heat? It does not include space equipped with operating humidity control devices, areas specially designed for storage of flammable or hazardous materials (conforming storage).

**Column d. Covered general purpose, unheated:** Is the amount of space, other than controlled humidity and flammable/hazardous in buildings designed for storage purposes that are not equipped with a heating capability?

Column e. Covered general purpose, controlled humidity: Is the amount of space equipped with operating humidity control equipment?

**Column f. Covered general purpose, flammable or hazardous:** Is the amount of space designed specifically for the storage of hazardous and/or flammable materials excluding, explosives, ammunition and ammunition components.

**Column g. Covered general purpose, chill:** Is the amount of space in refrigerated warehouses in which the temperature can be controlled within a 32–50 degrees "F" range (0–10 degrees "C")?

**Column h. Covered general purpose, freeze:** Is the amount of space in refrigerated warehouses in which the temperature can be controlled below a level of 32 degrees "F" (0 degree "C")?

**Column i. Covered general purpose, shed.:** Is the amount of space in non-warehouse buildings without complete side and end walls? Exclude transitory-type shelters.

**Column j. Covered general purpose, other:** Is the amount of space assigned for storage operations within a structure designed for other than storage purposes? It includes, but is not limited to, barracks, dry tanks, hangars, transitory shelters, and quonset buildings. A transitory shelter is a prefabricated sectional, metal structure, normally with complete sides and ends, but without utilities, classified as a storage aid rather than a real property facility.

**Column k. Covered general purpose, igloo/magazine:** Is the amount of space in a warehouse or igloo-type structure, used for the storage of explosives, ammunition, or loaded ammunition components.

**Column I. Open storage, unapproved:** Is the amount of space in open storage occupied by assets not approved for open storage, i.e., assets in open storage, which require covered storage. Entries will be in lines 23 and 24 only. Note: When assets are stowed in areas such as docks, roadways, etc. that require or should be in covered storage, annotate in lines 23 and 24 that invalid storage space is utilized. Place a note in the remarks block stating where the stock is located.

**Column m. Open storage, improved:** Is the amount of space in open storage, which has been graded and hard surfaced or prepared with topping of some suitable materials to permit effective materials handling operations?

Column n. Open storage, unimproved: Is the amount of space in open areas which has not been surfaced or improved, but is used for storage purposes.

Section I – Gross space available (GSF = gross square feet): All data reported in Section I are in thousands of GSF.

Line 1. Total GSF prior report: Enter total space reported in the prior report. (Total of lines 2 and 6 from prior report.)

Line 2. Total GSF this period: Enter the gross storage space at the installation or activity, which is assigned or used for any operation concerning storage or the support of storage functions. Include all storage space, regardless of its location, or the purpose for which it was designed or is designated. This total includes all gross space except ingranted or leased space.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

Line 3. Unusable GSF: Enter the amount of gross SF included in the categories defined below.

Space so deteriorated that it fails to provide a sufficient protective environment for the storage of material.

Space that is unsafe for storage operations or its use would be in violation of regulatory guidance.

Space restricted from use because of inadequate physical security protection.

Space that is temporarily removed from storage operations due to building construction, modification, or upgrade as well as storage aid erection or removal, fixed material handling equipment (MHE) erection or removal.

Space that is totally vacant, pending the turn-in to the host activity.

**Line 4. SF in standby:** Enter the amount of gross storage space in standby status that is contained in completely empty covered structures, or open improved areas which are not required to support the installation's mission and which have been secured. This entry will not include vacant Y-sites (sites with earthen barricade on four sides). Igloos currently used as fallout shelters will be included and identified under "Remarks." Space in completely empty sections of covered structures that can be isolated and locked may be placed in standby.

Line 5. Outgranted GSF (non-DOD): Enter the amount of gross storage space, which is outleased, licensed, or permitted, to private or non-DOD, Government (Federal, State, County, Local, or Foreign) agencies for their operations. This is storage space identified under support agreement(s) and not available for the reporting activity's operation. This includes all space that is allocated, assigned or used for the storage of material other than that owned by the Army, Navy, Air Force, Marine Corps, or the Defense Logistics Agency. For purposes of this report, material or supplies belonging to other defense agencies will be treated as non-DOD material. Include space leased to private industry on a landlord-tenant basis for which the lessee pays rent. Also, include space classified as storage space at the time it was leased, licensed, or permitted, even though it is now not being used for storage purposes. When a change occurs since the last reporting period, show under "Remarks" the complete agency name(s), the company or companies concerned, and the amount of gross space (covered and open, separately) used by, assigned to, or allocated to each.

Line 6. Outgranted GSF (DOD): Enter the amount of gross storage space licensed or permitted to another DOD component for its operation. This is storage space identified under support agreement(s) and not available for the reporting activity's operation. Include space classified as storage space at the time it was licensed or permitted even though it is not currently being used for storage purposes. When a change occurs since the last reporting period, indicate under "Remarks" in section IV, the component's name and the amount of gross storage space, covered and open shown separately, indicating licensed or permitted to each.

Line 7. Total GSF outgranted (5 + 6): Enter the sum of lines 5 and 6.

Line 8. Total ingranted GSF (8a + 8b): Enter the total gross square feet of storage ingranted and/or leased to the installation, i.e., total of lines 6a and 6b.

Line 8a. Ingranted GSF: Enter the amount of inter/intr service space operated, which is ingranted by license, support agreement, or permit from one of the DOD or Government components.

Line 8b. Leased GSF: Enter the gross square feet of leased storage space. This is space leased by an installation from a private or commercial source and is not part of, or connected to the installation.

Line 9. Total available (2 + 8 less 3, 4, and 7): Enter the sum of lines 2 plus 8, less lines 3, 4, and 7.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

Line 10. Aisles, structural loss, and support space (GSF): Enter the sum of the SF used for aisles, the SF lost due to structural features and the SF used for support space.

Aisles are defined as the amount of SF used in storage areas for the movement of material to and from storage locations. Material conveyor systems are excluded.

Structural loss is defined as space not usable for storage because of construction features or physical characteristics. Within covered storage areas, such items as columns, firewalls, elevator shafts, ramps, stairwells, ramps, steam pits, switch panels, loading wells, and door clearances will be considered as structural loss. Within improved open storage areas, such additional items as firebreaks, streambeds, railroad tracks, and clearances maintained for utility lines will be considered as structural loss.

Support space is defined as the amount of space used in support of storage operations. Support space includes all space used for preservation and packaging, assembly, packaging and crating, container manufacturing, receiving, inspection and identification, shipping, and material conveyor systems. Also includes supervisory and/or administrative storage offices located in warehouses or other facilities used for storage operations, employees rest rooms, locker rooms, tool rooms, time clock areas, mechanical equipment rooms in refrigerated and controlled humidity warehouses, battery charging stations located in warehouses, and similar support functions. Support space also includes civil engineering/public works functions that are in support of storage operations and are located in warehouses or other facilities used for storage operations. Work aisles that are contiguous to these support areas are classified as part of such support areas. Support space does not include general administrative offices.

Section II - Net space available (NSF = Net Square Feet, TCF = total cubic feet, ACF = attainable cubic feet)

Line 11. NSF in bin area: Enter the net SF of space occupied by erected bins. The NSF is determined based on the outside dimensions, length times width, of the bin storage aids.

Line 12. NSF in rack area: Enter the net SF space occupied by erected racks. The square feet is determined based on the outside dimensions, length times width, of the rack storage aids.

Line 13. NSF in bulk area: Enter the net SF of storage space designated for bulk storage.

Line 14. Total NSF (11 + 12 + 13): Enter the sum of lines 11, 12 and 13. Check the total of lines 10 and 14; must equal line 9.

**Line 15. TCF in bin area:** Enter the TCF in storage areas occupied by erected bin storage aids. The TCF in the bin area is computed by multiplying the bin area net SF, line 11, by the unobstructed stacking height. The unobstructed stacking height is defined as the distance between the floor and the lowermost point of overhead obstructions, for example, sprinkler heads, joists, rafters, beams, roof trusses, lighting fixtures, duct work, etc., less the following safety clearances:

When the vertical distance between the floor and lowest obstruction does not exceed 15 feet, a safety clearance of eighteen inches is required.

When the vertical distance between the floor and the lowest obstruction is greater than 15 feet, a clearance of 36 inches is required.

When hazardous materials are involved or when storing in areas not equipped with sprinklers, a safety clearance of 36 inches is required.

There is one exception to the above. A clearance of only 14 inches is required for reclaimed drum storage, regardless of stacking height, provided the building is of all metal construction and contains no electric wiring. The unobstructed stacking height, as defined above, is an indicator of only the theoretical capacity of a facility. It does not allow for limitations which may be imposed by existing MHE, or floor load capacity; therefore, the TCF also is an indicator of theoretical capacity.

**Line 16. TCF in rack area:** Enter the TCF of storage areas occupied by erected rack storage aids. The TCF for the rack area is computed by multiplying the rack area net SF, line 12, by the unobstructed stacking height as defined above.

Line 17. TCF in bulk area.: Enter the TCF of storage areas designated for bulk storage. The TCF in the bulk area is computed by multiplying the bulk area net SF, line 13, by the unobstructed stacking height as defined above. The TCF of improved open storage will be computed using an average stacking height of 10 feet. However, where local conditions and actual commodity characteristics dictate a specific stacking height, the latter will apply. In unimproved open storage, report only cubic space actually occupied by multiplying net SF occupied by a representative of a sample stacking height.

Line 18. Total TCF (15 + 16 + 17): Enter the sum of lines 15, 16 and 17.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

Line 19. ACF in bin area: Enter the attainable cubic feet (ACF) in storage areas occupied by erected bin storage aids. The bin area ACF is computed by multiplying the bin area net SF, line 11, by the height, in feet from the floor to the top of the bin storage aid or to the height which can be reached by existing MHE, whichever is less.

Line 20. ACF in rack area: Enter the ACF of storage areas designated for rack storage. The rack area ACF is computed by multiplying the rack area net SF, line 12, by the height in feet from the floor to the top shelf of the rack plus the additional height to which material can safely be stacked. For example, if the height from the floor to the top shelf is 12 feet and material can be stacked on the top shelf to a height of 4 feet, the attainable stacking height is 16 feet for that specific set.

Line 21. ACF in bulk area: Enter the ACF in storage areas designated for bulk storage. The bulk area ACF is computed by multiplying the bulk area net SF, line 13, by the stacking height limitations, and attainable with available MHE. Cubic space beyond the reach of available MHE lift height and floor load limitations will not be reported even though safety limitations or permissible stacking heights have not been attained. The cubic capacities reported on line 21 are limited to those attainable under present storage arrangements and achievable with available equipment. The cubic capacity of improved open storage space will be computed by using an average stacking height of 10 feet. Where local conditions and actual commodity characteristics dictate a specific stacking height, the latter shall apply. In unimproved open storage, report only cubic space actually occupied, by multiplying occupied SF by a representative sample of the stacking height.

Line 22. Total ACF (19 + 20 + 21): Enter the sum of line 19, 20 and 21.

Section III - Occupied storage space (NSF = net square feet, ACF = attainable cubic feet)

Line 23. Total NSF occupied: Enter the total amount of net SF of areas designated for bin storage, line 11; rack storage, line 12; and bulk storage, line 13; which is actually occupied by material.

Line 24. Total ACF occupied: Enter the total amount of net ACF of areas designated for bin storage, line 19; rack storage, line 20; and bulk storage, line 21 which is actually occupied by material.

Line 25. Total vacant NSF: Enter the result of line 14, minus line 23. Check the total of lines 23 and 25; must equal line 14.

Line 26. Vacant ACF in bin area: Enter the total amount of vacant ACF in the bin area.

Line 27. Vacant ACF in rack area: Enter the total amount of vacant ACF in the rack area.

Line 28. Vacant ACF in bulk area: Enter the total amount of vacant ACF in the bulk area.

Line 29. Total vacant ACF (26 + 27 + 28): Enter the sum of lines 26, 27 and 28. Check the total of lines 24 and 29; must equal line 22.

Line 30. Unobligated vacant NSF: Leave blank, not used.

Line 31. Unobligated vacant ACF: Leave blank, not used.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

Section IV - remarks: The following types of remarks will be submitted when appropriate:

Last report. A remark will be provided which indicates the current report submission is the last that will be made by that installation. The reason for the report termination will be explained.

Significant data changes. Explanation to changes in total covered or improved open storage from one report period to the next which exceed 50K gross square feet (GSF) for activities reporting 1 million or more GSF. Activities reporting less than 1 million GSF will explain changes of 5K GSF or more of covered space or 20K or more of open improved space.

Significant required space changes. Report known future changes in requirements which are expected within the next 12 months. Changes in required TCF, either upward or downward of 500K CF or more for any column (type of storage space) will be reported. The remark will include the amount of the requirement, the reason for the change, and the expected effective date.

Significant ACF changes. Installations with firm knowledge of changes in ACF which are expected upward or downward for 500K CF or more for any column (type of storage space) or any decreases, which will inhibit mission, performed. The remark will include the amount of the change, the reason, and the expected effective date.

Contingency or wartime storage requirements. From contingency or wartime scenario planning documents, estimate the total covered storage requirements in thousands of CF if significantly different from the requirements previously reported. Installations without firm knowledge of such plans may defer to the component headquarters for input.

Initial report. Installations reporting for the first time will cite the date of activation of the installation, its primary function, and a brief description of the types of material to be stored.

Inactivation. An installation or activity scheduled for inactivation will cite the proposed date. When known, the actual effective date and the authority will be shown. When an installation or activity is to be completely closed-out, the last report submitted will be marked "Final Report." If an installation is to be completely closed-out between reporting periods a special report marked "Final Report" will be submitted to reflect any changes.

Standby. List the amount of space placed in or taken from standby status.

Special situations. Report explanations of data submitted or conditions of which management should be cognizant. For example, if storage space of a particular type such as humidity controlled is currently occupied by material, which can be safely stored outside or in storage affording less protection, the amount of such space should be identified.

Stock located in non-storage areas. Material stowed on docks, roadways, etc. that are not valid storage areas. The remarks should include NSF and CF of the stock as well as the type of valid storage needed to store the material.

Number of bin and rack locations available and occupied. Annotate the total number of bin and rack locations available and annotate the number of bin and rack locations occupied.

Figure 4-1. Sample of completed DD Form 805 with completion instructions (by item, column, and line) - continued

# **Chapter 5 Quality Control and Reliability Management**

# 5-1. General

This chapter prescribes basic objectives and responsibilities governing the Army quality control and reliability management of supplies and equipment, except class V, within Army depots and supply activities (for class V, see chapter 3). Each activity will establish and maintain a quality control and reliability management program that will be managed independently of other functions at the activity. These programs will be designed to ensure that all supplies stored are suitably maintained to meet the standards established for their intended purpose.

# 5-2. Objectives

The major objectives of quality control and reliability management are—

- a. To ensure responsibilities for accomplishing quality control and reliability management are assigned.
- b. To provide for periodic quality inspections to evaluate supplies to ensure their readiness.
- c. To improve quality and reliability of material and product by application of improved management techniques, engineering methods, and statistical techniques.

## 5-3. Functions

- a. The Department of the Army Deputy Chief of Staff, G-4-
- (1) Issues policy directions in connection with the application and use of quality control and reliability management at Army storage depots. In promulgating such policies, DCS, G-4 (DALO–SUS) will collaborate with the Office, Chief of Research and Development and Acquisition (DAMA), to insure coordination and compatibility with the Quality Assurance Program (Budget Program Allocation 2210.2300). All new quality control policy changes will be sent through DCS, G-4 (DALO–SUS).
- (2) Manages the quality control and reliability management program in coordination with U.S. Army major commanders operating Army storage depots, depot activities and supply installations.
- (3) Reviews and proposes appropriate recommendations to DOD with respect to policy, improvement or adjustments to the quality control and reliability management at Army depots.
- (4) Promulgates DOD instructions and policy Armywide on quality control and reliability management at Army storage depots and supply activities.
  - b. Major Army commanders responsible for the operation of Army depots and depot activities—
- (1) Develop and instill a quality control and reliability management program for Army depots within the parameters of the definition of quality control in the glossary and in accordance with the policies and objectives prescribed in this chapter.
- (2) Make recommendations to DCS, G-4 (DALO-SUS) for improvement of the quality control and reliability management program at Army depots.
- (3) Evaluate the quality control and reliability management program to ascertain that the program objectives are being accomplished effectively, efficiently, and economically.
  - c. The Commanding General, AMC-
- (1) Develops and promulgates commodity oriented policy and technical guidance concerning quality control and reliability management at Army depots. In carrying out this responsibility, the CG, AMC, is authorized direct communication with other Army commands, GSA, and DLA, as necessary.
- (2) Establishes storage serviceability standards for Army managed items of supply, including shelf-life items, (but excluding medical items, perishable subsistence, and bulk petroleum commodities which are covered by standards published in AR 702–18 and Class V supplies covered by SB 742–series). These standards will be applicable to Army depots and depot activities in CONUS and overseas and will be used as a guide by general and direct support units and posts, camps, and stations worldwide. Standards will be prepared in accordance with AR 702–18.

*Note.* See table 5–1 for frequency of inspections for life expectancies and shelf life codes for shelf–life items; inspection and test procedures; criteria for determining compliance with prescribed standards; and criteria for determining restoration action required for type II shelf life items.

- d. The commander of each Army depot worldwide is responsible for-
- (1) Ensuring that all supplies stored are subjected to quality control and reliability management. Also, that the results of inspections, examinations, tests, and investigations are promptly furnished, through command channels, to the responsible Army item manager for corrective action in improving product quality and reliability.
- (2) Determining the adequacy of resources in terms of personnel, measurement and test equipment, and facilities to perform the various quality control functions specified in DFAS-IN Regulation 37-1.
- (3) Making periodic quality control checks, on a sampling basis, of overhauled material received at Army depots from contractor's plants to determine the adequacy of the work performed by the contractor.
- (4) Arranging to use the quality control skills and facilities of another DOD component when more economically feasible (DODI 4000.19).
- (5) Using joint service training facilities in accordance with AR 351–8, to the maximum extent practicable, in the training of DA personnel in quality control and reliability policies, procedures, and techniques.
- (6) Evaluating periodically and systematically the quality of shelf-life items to detect material deterioration and degradation in product reliability and readiness.
- (7) Providing, as part of the quality control and reliability function, an internal system for calibration of inspection measuring gages and test equipment, in accordance with AR 750–43. Calibration will be done at established intervals against certified standards, which have known relationships to National Standards.
- (8) Ensuring that quality control and reliability functions provide for complete and reliable records of inspections and tests performed, and appropriate analysis of these data. These records and analyses will be used for identification of nonserviceable stocks, detection of causes of deficiencies, determination of restorative action, and subsequent determinations relative to adjustment of shelf life.
- (9) Ensuring that quality control and reliability functions make use of statistical sampling procedures and tables provided in MIL-STD-1916 and ANSI/ASQC Z1.4.
- (10) Ensuring that quantitative, qualitative and reliability data generated from the quality control function are used to identify and segregate deficient supplies from serviceable material and to establish economical inspection cycling.

Table 5-1 Inspection frequencies

Type Storage	Interval (months)
Controlled humidity, or equivalent when such rating has been approved by higher authority.	60
Controlled temperature warehouse	30
Non-controlled temperature warehouse	24
Shed	12
Open	6

#### Notes:

# Chapter 6 Class V Ammunition Storage and Transportation Procedures

# 6-1. Scope

This section establishes policy and procedures for unitizing, handling, storing and shipping (outloading) of class V material and for handling and shipping of guided missile/large rocket ground support equipment. It applies to all commands and activities having responsibilities for handling, storing and shipping ammunition commodities and related ground support equipment.

# 6-2. Objectives

The objectives of this chapter are—

- a. To provide safe, economic and standardized methods for the orderly grouping of an ammunition commodity or commodities in approved storage structures.
- b. To ensure safe, economic and standardized procedures for the handling and transport of ammunition commodities and related ground support equipment.
- c. To provide cost effective standardized methods for the unitization of ammunition items to minimize and facilitate handling operations and to provide stability in the grouping of these items for storage or shipping operations.
- d. To assure the conduct of appropriate tests of unitization, storage and transport methods prior to the issue of approved methods for use.
- e. To preclude damage to ammunition and ground support equipment as well as personal injury or property damage through improper methods of unitization, handling, storage and transport.
  - f. To use AIT to the fullest extent possible in conducting receive, store, issue, and transport functions.

## 6-3. Storage and transportation policies

- a. The DCS, G-4 will establish a program for the development and preparation of approved storage and outloading procedural drawings for distribution and utilization by their subordinate installations and activities. These drawings are official documents and are applicable throughout the ammunition supply system of the U.S. Army. In addition, these drawings are available for use by other DOD agencies and private industry as appropriate. Program management is delegated to the Commander, AMC.
- b. The material developer for any class V item will identify project requirements for preparation of storage and outloading drawings for ammunition commodities and missile/rocket ground support equipment by specific method of storage or mode of transport. Requirements will specify information that must accompany items and/or assemblies and placement of AIT labeling or devices that will carry this information.
- c. The USADAC will develop and prepare unitization, storage and outloading drawings and obtain approvals from applicable regulatory agencies. Engineering tests including instrumented trial shipments will be conducted as required to validate the storage and outloading procedures. Engineering data generated during the tests will be recorded and maintained in support of the DOD Engineering for Transportability Program.
- d. CONUS installations and activities having responsibility for handling, storing and shipping munitions and missile/rocket ground support equipment will utilize methods depicted in applicable approved drawings to the maximum extent possible in performance of operations. Drawings may be requisitioned from the Director, USADAC at the address in paragraph e below.
  - e. Oversea commands and subordinate elements having responsibility for handling, storing and shipping munitions

<sup>&</sup>lt;sup>1</sup> "Frequencies cited here may be varied as follows: Variances may be made for Type II shelf–life items, items containing radioactive material, items having inspection frequencies which are based on safety considerations such as aircraft. Includes items normally packaged in hermetically sealed containers, items normally stored in metal reusable containers and items, by reason of their composition, requiring less frequent inspection than cited here. Proposed variances exceeding 25 percent of the prescribed frequency require written approval by the item manager, prior to implementation by submitting activity.

<sup>&</sup>lt;sup>2</sup> Variances in inspection frequencies cited above, if required, will be made on an item-by-item basis and will be noted as being an exception in the storage serviceability standard concerned.

and missile/rocket ground support equipment will utilize methods depicted in applicable approved drawings to the maximum extent possible. When specific approved drawings are not available, principles of approved methods will be used as guidance when these methods are not specifically applicable to the storage structures/transporting equipment available for use in accomplishing the operations. Technical assistance can be obtained from supporting QASAS organizations. Drawings may be requisitioned from Director, Defense Ammunition Center (SJMAC–DET), 1 C Tree Road, Bldg. 35, McAlester, OK 74501–9002.

# 6-4. Functions

- a. The DCS, G-4 is responsible for developing, maintaining, and supervising a program to standardize and control ammunition storage and transportation procedures in support of the Army Ammunition Program. Authority for execution and evaluation of this program is delegated to the Commander, AMC.
- b. All Class V material developers and AMC commodity commands, including the U.S. Army Space and Missile Defense Command, will define and identify project requirements to USADAC for new/revised storage, outloading, AIT labeling, and unitization drawings for ammunition commodities, missile/rocket, and ground support equipment items.
- c. The Director, USADAC will develop and prepare storage, outloading, and unitization drawings for projects assigned by the commodity commands. USADAC will also obtain approvals from other agencies and is delegated authority to perform final approval action for Headquarters, AMC, on all drawings. USADAC will conduct tests in support of storage, outloading, AIT labeling, and unitization drawing development, as required, and will reproduce and distribute approved drawings to users designated by the commodity commands.

# Appendix A References

## Section I

# **Required Publications**

#### AR 702-6

Ammunition Stockpile Reliability Program (ASRP) and Army Nuclear Weapons Stockpile Reliability Program (ANWSRP). (Cited in para 3-2.)

#### SB 742-1

Inspection of Supplies and Equipment - Ammunition Surveillance Procedures. (Cited in para 3-2, 3-3, 5-3.)

## Section II

## **Related Publications**

A realated publication is merely a source of additional information. The user does not have to read it to understand this publication.

# AR 11-18

The Cost and Economic Analysis Program

#### AR 50\_6

Nuclear and Chemical Weapons and Material, Chemical Surety

## AR 75-1

Malfunctions Involving Ammunition and Explosives

# AR 210-20

Master Planning for Army installations.

# AR 220-1

Unit Status Reporting

#### AR 351-8

Defense Management Education and Training Program

# AR 405-45

Real Property Inventory Management

# AR 405-80

Management of Title & Granting Use of Real Property

# AR 420-1

Army Facilities Management

# AR 690-950

Career Management

## AR 700-19

U.S. Army Munitions Reporting Systems

# AR 702-12

Quality Assurance Specialist (Ammunition Surveillance)

# AR 702-18

Materiel Quality Control Storage Standards

# AR 740-3

Care of Supplies in Storage (COSIS)

## AR 750-43

Army Test Measurement and Diagnostic Equipment

#### TB 9-1300-385

Munitions Restricted or Suspended

## TB 9-2300-278-20

Vehicle Protective Closures, Use and Disposition

#### TM 38-400

Joint Service Manual (JSM) for Storage and Materials Handling

#### TM 38-470

Storage and Maintenance of Army Prepositioned Stock Material

#### DFAS-IN 37-1

Finance and Accounting Policy Implementation (Available at https://dfas4dod.dfas.mil.)

#### MIL-STD-1916

DOD Preferred Methods for Acceptance of Product (Available at http://assist.daps.dla.mil/online.start.)

## ANSI/ASQC Z1.4

Sampling Procedures and Tables for Inspection by Attribute (Available at www.ansi.org.)

# Section III

## **Prescribed Forms**

Unless otherwise indicated, DA forms are available on the APD Web site (www.apd.army.mil); DD forms are available on the OSD Web site (www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm)

# DA Form 621

Strategic and Critical Material Stored in Army Installations. (Prescribed in paras 2-7, 2-8, 2-9, 2-10.)

# DD Form 805

Storage Space management Report. (Prescribed in chap 4 and app B.)

# Section IV

# **Referenced Forms**

## **DD Form 1391**

Military Construction Project Data

# RCS AMC-111

Strategic and Critical Material Stored in Army Installations

# RCS CSGLD-1339

Storage Space Management

# RCS DD-AT&L (SA) 1337

Storage Space Management Report

# Appendix B

# **Management Control Evaluation Process**

#### B-1. Function

The function covered by this checklist is the management of storage and supply operations for Army supply installations.

# B-2. Purpose

The purpose of this checklist is to assist installation managers and management control administrators at installations with Army storage and supply operations in evaluating the key management controls outlined below. It is not intended to cover all controls.

## B-3. Instructions

Answers must be based on the actual testing of key management controls such as document analysis, direct observation, interviewing, sampling, and simulation. Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These management controls must be evaluated at least once every 5 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11-2-R (Management Control Evaluation Certification Statement).

## B-4. Test questions

- a. Are accurate planographs available for storage facilities?
- b. Has space been reported on DD Form 805 within the required time frames outlined in AR 740–17? Does occupied space data appear to be similar to the previous report submitted? Why?
- c. Are correct clearances for material being maintained from sprinklers and firewalls (sprinklers: 1.5 ft up to and including 15 ft high stacks, 3 ft for over 15 ft stacks: firewalls at least 2 ft)?
- d. Is material being stored in unapproved open storage (material that requires covered storage)? Is material degradation evident?
- e. Has warehouse space been diverted or converted (structurally modified) without permission? Permission must be granted by the commander of the installation to divert space for other use or by headquarters, AMC to modify the facility. Permission is required even if modifications have been made. The improper conversion can usually be determined if the facility is listed on the Inventory of Real Military Property Listing and has a storage category code of 421, 422, 441, or 442.
  - f. Are aisles and bulk storage areas clearly striped?
  - g. Has the DD Form 805 been prepared and submitted utilizing electronic media?
- h. Does the person who is responsible for submitting the DD Form 805 have a good knowledge of their job, or do they require training?

# B-5. Supersession

This checklist replaces the checklist for the management of storage and supply operations for Army supply installations previously published in AR 740–1.

# **Glossary**

# Section I

# **Abbreviations**

# ACF

Attainable Cubic Feet

# **ACOM**

Army Command

# **AIT**

automatic identification technology

#### AMC

Army Materiel Command

# **AMCOM**

Army Aviation and Missile Command

#### ASCC

Army Service Component Command

# **ASMP**

Ammunition surveillance modernization program

# **ASP**

Ammunition Supply Point

# **ASRP**

Ammunition stockpile reliability program

# **AWRSPTCMD**

U.S. Army War Reserve Support Command

# **CDU**

Command destruct unit

# **CEG**

Combat Equipment Group

# **CEG-A**

Combat Equipment Group-Aviation

#### CH

Controlled humidity

# **COFC**

Container-on-flat-car

# **CONUS**

Continental United States

# **COSIS**

Care of supplies in storage

#### DA

Department of the Army

# **DNSC**

Defense National Stockpile Center

# DOD

Department of Defense

## DCS G-4

Deputy Chief of Staff, G-4

# DRU

Direct Reporting Unit

## **ESC**

Equipment serviceability criteria

# **FORSCOM**

Forces Command

# **GSF**

Gross square feet

# HQ

headquarter

## IPR

In-process review

# **JCS**

Joint service manual

## **JMC**

Joint Munitions Command

# **LOGSA**

Logistics Support Activity

#### LTAD

Logistics Testing and Evaluation Division

# **MCA**

Military Construction, Army

#### MHE

Material handling equipment

# **MTMC**

Military Traffic Management Command

#### NICP

National inventory control point

# **NSF**

Net square feet

# **OCONUS**

Outside continental United States

# **OMA**

Operations and maintenance, Army

# OOTW

Operations other than war

# PA

Procurement appropriation

## POL

Petroleum, oils, and lubricants

# POS

Peacetime operating stock

# PS

Project stocks

# **PSCC**

Packaging, Storage, and Containerization Center

# **QASAS**

Quality Assurance Specialist (Ammunition Surveillance)

# QD

Quantity distance

## **RCS**

report control symbol

## RH

Relative humidity

#### SB

Supply bulletin

# **SBCCOM**

Soldiers Biological and Chemical Command

#### SSMR

Storage space management report

# **SSRA**

Storage Space Reporting Administrator

# ST

Short ton

# **TCF**

Total cubit feet

# **TOFC**

Trailer-on-flat-car

# **TRADOC**

Training and Doctrine Command

## **USADAC**

U.S. Army Defense Ammunition Center

# **USATCES**

U.S. Army Technical Center for Explosives Safety

#### Section II

#### **Terms**

## Actual storage space

An area measured in square feet required for actual storage of material. This area includes net storage space plus aisles and structural losses and, in the case of ammunition, vacant space within storage structures caused by imposition of quantity-distance (QD) criteria. This term is not to be confused with gross space as defined in chapter 1 since gross space includes support space.

#### Alteration

Change to an existing facility so that it may be more effectively utilized for a designated purpose.

## AMC 19-48 series drawings

The official US Army documents depicting procedures for the safe and economical handling, dunnaging, blocking and bracing of ammunition commodities and missile/rocket ground support equipment for shipment by various transportation modes.

## **Ammunition commodities**

Conventional, chemical, guided missiles and rockets, and related components.

## **APS** material location

Locations other than depot, depot activity or depot dispersed storage area, where prepositioned material is stored.

## APS reserve equipment

Material stored at predetermined locations and maintained in a state of combat readiness for issue to designated units. This does not include material reserved by NICP under purpose codes reserving material for mobilization or APS.

# APS storage site

Predesignated site for storage of APS.

## Army prepositioned stocks (APS)

Material configured to equip specific TOE type units upon initial deployment to a designated theater of operations.

#### Block stowed

Storage of equipment in a block configuration without main or cross aisles.

#### Classified item

Material that requires protection in the interest of national security.

## **Combat Equipment Group**

A subcommand of AWRSPTCMD tasked with managing APS in a specific designated area.

## Combat ready material

Material that qualifies for issue under applicable serviceability standards.

#### **Demountable structure**

A portable, transportable, pre-engineered prefabricated structure composed of component parts which, in accordance with the manufacturer's specifications or instructions, can be bolted or clipped together to serve a useful purpose on an austere basis; and after being assembled, can be readily and completely disassembled, relocated and reassembled without substantial damage to its components (AR 420–18).

# **Density factor**

The average number of square feet of actual storage space necessary to store one short ton of material consistent with warehousing practices outlined in TM 38-400 and TM 743-200-1.

## Depot activity

An activity physically separated from the parent depot, which performs one or more wholesale supply or maintenance functions in support of the depot mission. It may be a separate installation or be located at another installation.

#### Disestablish

The discontinuance of a mission, function, or activity at an installation.

#### **DOD** components

Military services and agencies of DOD.

## Earth-covered igloos

Reinforced-concrete, earth-covered, arch-type magazines conforming to standard military department drawings, constructed on the surface of the terrain with an earth cover placed over the arch (minimum of 2 feet of earth cover should be over the arch) and rear of the structure. The storage chamber normally is 26 feet, 6 inches wide with semicircular cross-section. Lengths can vary; 40 feet, 60 feet, and 80 feet are normal.

# Equipment serviceability criteria (ESC)

Procedure for evaluating the readiness condition of equipment to perform satisfactorily its primary missions for 90 days with normal maintenance support.

## Equivalent controlled humidity warehouse space

Warehouse space geographically located in an area that, through a combination of annual climatic conditions and prudent control of warehouse open door time, will provide a relative humidity level of at least 50 percent.

#### **Facility substitute**

A structure used to satisfy a temporary need.

# **Ground support equipment**

The equipment used in firing and maintaining guided missiles and large rockets, such as launchers, handling and test equipment and radar(s).

## **Intermodal container (ISO Container)**

A container conforming to ISO specifications, and so designed to be transported as a container-on-flat-car (COFC); or secured to a wheeled chassis as a van trailer for motor transport or as a trailer-on-flat-car (TOFC); or transported aboard ships as a container without chassis or in containerships having compartments specifically constructed for stacking containers. The Department of Defense "MILVAN" container is classified as an intermodal container.

# Material developer

The material developer is defined as the AMC commodity command/project manager/product manager responsible for design, development, procurement, production and stock management of ammunition items included in the stockpile reliability program.

## Multicubicle magazines

Above ground magazines consisting of multiple cubicles located with their backs along a common wall in an arrangement similar to horse stalls.

## Net storage space

Floor area upon which bins or racks are erected, plus the floor area upon which material can be stored.

#### **Outloading**

The assembly and securing of loads for shipment by railroad or motor carrier equipment, including trailer/container-on-flat-car (T/COFC), intermodal containers, tactical vehicles, and ships.

# **Permit**

Temporary authority conferred on one Government agency to use property under the jurisdiction of another Government agency.

# Prepositioned material cycle

The sequence of three time periods (phases) through which material passes under prepositioned material concepts per TM 38-470.

- a. Phase I Prepositioned Material Cycle. The period starting when equipment is earmarked as APS and ending when the equipment is physically placed in APS storage location in a ready for issue condition.
  - b. Phase II Prepositioned Material Cycle. The period during which APS is in storage at APS storage locations.

c. Phase III – Prepositioned Material Cycle. The period between date of issue order and date of physical issue to using units usually prescribed in specific operations plans.

# Quality control

A function involving inspection, collection, and analysis of inspection results, corrective action, and defect prevention measures to insure that material received, stored, and issued conforms to established standards and is properly classified as to condition. Encompasses those functional tasks identified to quality control in DFAS-IN 37-1.

## Reaction time

The number of days allowed from date of alert for troop units to receive and ready APS for combat use.

## Safety clearance

Space which remains vacant due to restrictions prohibiting its use.

## Safety Site Plan

A package consisting of documents, drawings, maps/tables that provide the intended use of a facility, it's location, spatial relationship with other facilities (explosive and non-explosive), and the facility's design and construction.

# Secured space

Space placed in standby status in accordance with AR 210-17.

# Serviceability inspection

Physical examination and testing of material to determine whether material conforms to established serviceability criteria.

## Shelf-life item

An item of supply possessing deteriorative or unstable characteristics to the degree that a storage time period must be assigned to ensure that it will perform satisfactorily in service. There are two types of shelf-life items.

- a. Type I. An item of supply having a definite (non-extendable) storage period terminating on an expiration date established by the manufacturer, experience, or technical test data.
- b. Type II. An item of supply with an assigned storage time period, which may be extended after the completion of inspection/restorative action.

#### **Space diversion**

A change in the use of storage space from storage to non-storage purposes.

# Space or facility requirement

An established need justifying the allocation of space or a facility to accomplish an approved objective, mission, or task.

## **Space programming**

The forecasting of net space requirements for storage of material.

# Storage density factor

The average number of square feet of net storage space necessary to store one short ton of material.

## Storage and warehousing facilities

Structures or areas containing space used for storage activities and support activities pertaining thereto, for example, packing and crating areas, box and crate shops, receiving and shipping areas, and care of supplies in storage (COSIS) areas.

# Storage objective

The total number of short tons of mission stocks, including peacetime operating stocks, war reserve and project stocks to be stored.

## Storage periods

- a. Temporary-up to 90 days.
- b. Short term-90 days to 1 year.
- c. Long term-over 1 year

# Supply installations

Activities concerned primarily with supply and storage functions, for example, depots, storage activities, holding and reconsignment points, ammunition handling facilities, railroad ground storage yards, regulating stations, regional transportation offices and national inventory control points (NICP) excluding Army terminal (ports) where material is under the control of MTMC.

# Trailer/container-on-flat-car

The transport by rail on a specially designed flat car of an intermodal container with wheeled chassis or without chassis.

# Visual inspection

Visual examination of material in the storage location without the benefit of disassembly or performance tests.

# Wet storage space

Water space designated for the storage of floating equipment.

# Section III

# **Special Abbreviations and Terms**

This section contains no entries.