

## **14 FAH-1 H-300 RECEIPT AND STORAGE**

### **14 FAH-1 H-310 RECEIPT AND STORAGE PROCEDURES FOR POSTS**

*(CT:PPM-1; 08-11-2004)  
(Office of Origin: A/LM)*

### **14 FAH-1 H-311 RECEIVING**

*(CT:PPM-1; 08-11-2004)  
(Uniform State/USAID)*

a. Receiving is an important function in the property management cycle. It is with receiving that the post's accountability responsibility begins. Property is delivered because an earlier action was initiated to acquire it; and to complete the acquisition process, delivery must be acknowledged and documented, including items ordered with a purchase card, as appropriate.

b. An employee shall be designated, in writing (see 6 FAM 223.1), to serve as receiving clerk, and detailed written procedures covering the receiving and inspection function must be established by the accountable property officer (APO) and provided to the receiving clerk. Generally, the position description serves as the written designation. In instances where an employee is occasionally assigned to receive, e.g., in emergencies, and authorization does not exist in the form of a position description, the employee shall be given a memorandum authorizing him or her to receive property. Employees without written authorization shall not be permitted to sign for property deliveries.

c. Written internal operating procedures should establish a specific time frame for processing all incoming shipments, and should include provision for a periodic written status report to the APO on all material remaining in the receiving area beyond the time frame specified in the written procedures.

## **14 FAH-1 H-312 RECEIVING AREAS**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

To the extent feasible, the receiving activity at each post abroad shall be centralized (see 6 FAM 223.2). Central receiving provides more effective control of U.S. Government property through the efficient use of qualified receiving personnel (the senior receiving clerk should be located in the centralized receiving area). Enforcing procedures to ensure that deliveries are properly documented upon receipt is more effective with centralized receiving.

### **14 FAH-1 H-312.1 Sub-Receiving Area**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The designation of a central receiving area does not preclude receiving and inspection at other locations when advantageous to the U.S. Government. When diversified activities make total centralization of receiving activities impractical, sub-receiving areas may be established at the most beneficial locations (e.g., the accountable property officer (APO) may elect to have smaller packages delivered to the general services office instead of to the central receiving area). However, in those instances, there should be a minimum number of sites, and as many shipments as practicable should be routed to the central receiving area.

### **14 FAH-1 H-312.2 One-Time Receiving**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If it is necessary that delivery be made, on a one time basis, to a location that is not one of the normal sub-receiving areas (e.g., delivery of a generator directly to a residence), the accountable property officer (APO) must ensure that the shipment is properly received and signed for, and that the appropriate receiving and inspection document is prepared and distributed.

## **14 FAH-1 H-312.3 Receiving Responsibility**

### **14 FAH-1 H-312.3-1 Central Receiving Area**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

To ensure effective control and protection of all incoming property, the accountable property officer (APO) designates, in writing, a specific individual to serve as the primary receiving clerk who will function in the main receiving area. The function of the receiving clerk is to inspect and sign for incoming property, and to prepare and distribute copies of receiving reports. The number of clerks is kept to a minimum. If a post has just one receiving clerk, provision should be made for an alternate to serve in the receiving clerk's absence. The alternate shall sign for shipments only in the absence of the primary receiving clerk.

### **14 FAH-1 H-312.3-2 Sub-Receiving Area**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

When establishing a sub-receiving area, the accountable property officer (APO) should coordinate with the head of the office where the sub-receiving area is located to designate an employee in that office to function as a receiving clerk. Provision should also be made for an alternate to serve in that employee's absence. The APO must then provide the receiving clerk with a memorandum authorizing him or her to perform the receiving duties. A set of written instructions on how these duties should be performed (e.g., required time frame for processing incoming deliveries, how to prepare receiving reports, receiving report copy distribution, and how to report discrepancies) shall also be provided.

## **14 FAH-1 H-313 RECEIVING FILES**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The control of documents used in the receiving process is essential to effective receiving operations. Pending order files of acquisition documents (copies of purchase orders, contracts, transfer documents, or requisitions) must be established at each receiving area. Copies of all advance bills of lading should also be forwarded to the receiving area. As shipments are received and each acquisition document is completed (i.e., receiving reports are on file confirming that all items listed on the acquisition document have been received, or actions on damaged or missing property have been completed), all documents in that file are transferred to a

completed file. If a sub-receiving area has been established, the completed receiving files for the sub-receiving area should be combined with the central receiving area's completed files.

## **14 FAH-1 H-313.1 Receiving File Documents**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. It is the responsibility of the property management officer (PMO) to make certain that written procedures ensure that copies of requisitions, purchase orders, shipping notices, bills of lading, and any other shipment related documents are sent to the appropriate receiving area so that a "due in" file can be established. Should the appropriate receiving clerk not receive copies of these documents, he or she will not know what or how much property is expected. If all receiving reports are to be prepared at the central receiving area, the central receiving area must also receive a copy of the acquisition document for shipments consigned to the sub-receiving area.

b. Written instructions must be made available to the receiving clerk to provide for those times when an acquisition document may not reach the receiving area.

## **14 FAH-1 H-313.2 Establishing Files**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

A separate folder must be set up for each acquisition document (and related shipping documents) and the folders filed in numerical order, in accordance with the acquisition document number, by fiscal year.

## **14 FAH-1 H-313.3 Receiving Reports**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The receipt of all property at post must be documented by using Form DS-127, Receiving and Inspection Report, unless the entire order is received at one time. If all of the property on the order is received in the same shipment, the receiving section on the acquisition document Form OF-347, Order for Supplies or Services, can be used to certify receipt. A copy of the report is attached to the acquisition document and retained as part of the receiving file.

## **14 FAH-1 H-313.4 Completed Files**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Completed centralized receiving files should be established and maintained in the central receiving office and, when delivery is complete, the pending file is transferred to the completed files. The receiving clerk in the sub-receiving area should forward completed copies to the central receiving area for permanent filing. A completed file may be disposed of three years after the final delivery to the order has been made.

## **14 FAH-1 H-313.5 File Reconciliation**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The receiving clerk should periodically inform the procurement office of any pending orders, or partial orders, in the "due in" file for which the delivery date has already passed. The status of these orders should be researched and resolved.

## **14 FAH-1 H-314 RECEIVING ACTION**

### **14 FAH-1 H-314.1 Checking the Seal**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If the carrier has been sealed, the seal must be checked for condition and serial number before the carrier is opened. If the seal is broken, missing, or shows evidence of having been tampered with, or if the serial number does not agree with that listed on transportation documents, a notation shall be made on Form DS-127, Receiving and Inspection Report, or appropriate block on Form OF-347, Order for Supplies or Services, and transportation documents (e.g., delivery receipt, bill of lading, manifest, etc.) and, in the case of sensitive/classified cargo, the post security officer is notified.

### **14 FAH-1 H-314.2 Unloading**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The method of entry into the carrier (see 14 FAH-1 Exhibit H-314.2, Loading Dock Equipment) depends upon the type of carrier, type of material received, and the physical characteristics of the receiving area. If unloading

is to be accomplished at a warehouse platform, a bridge plate or some type of mechanical or hydraulic dock leveler may be used to permit entry of materials handling equipment into the carrier. If no raised platform exists, a portable platform ramp may be used to allow entry of material handling equipment into the carrier. However, if materials handling equipment is to enter the truck, the floor strength of the truck must be checked to ensure that the floor can support the weight of the equipment and the load.

b. When containers are fully packed with quantities indicated on the outside, they need not be opened during the inspection process, unless there is evidence of having been tampered with, or of damage. If large quantities of the same kinds of such items are to be stored in a palletized bulk storage area, it is generally beneficial to palletize these items while they are still in the carrier or as they are off loaded from the carrier.

c. Immediately report ruptured or damaged containers of hazardous supply items to the warehouse supervisor in order to insure proper handling and to avoid any risk of injury to personnel. When damaged material involves leaking containers of flammable liquids, it shall be safeguarded to prevent the development of a serious fire hazard.

### **14 FAH-1 H-314.3 Checking Material**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Prior to signing for delivery, each shipment must be physically checked against the incoming transportation documents (e.g., freight bill, bill of lading, etc.), to verify receipt of the correct number of pieces, and must be inspected for external damage. This action should be concurrent with the unloading operation. When a shipment has not been initially received by a U.S. Government consolidation or freight forwarding contractor, the signature of the receiving clerk acknowledges initial receipt by the U.S. Government and incurs liability for payment. Therefore, all shipments must be accurately checked to fully protect the interests of the U.S. Government.

b. The following steps should be taken when checking material:

(1) Remove any packing slips attached to containers;

(2) Check the packing slip and shipping document(s) for a purchase order number, contract number, requisition number, or any number that can be matched against the acquisition document in the "due-in" file;

(3) Count the number of pieces listed on the carrier's transportation document and compare that count with the pieces unloaded from the carrier. If the count agrees, sign for the shipment and release the carrier;

(4) In cases where the total quantity of pieces tallied on the shipment does not conform to the quantity listed on the shipping document, bill of lading, and/or packing list covering the shipment, the pieces should be recounted before indicating the quantity actually received;

(5) External damage can be caused by mishandling, cargo shifting, dropping, tampering, or from natural causes (rain, etc.). Where external damage is evident, containers (packages, cartons, cases, etc.) should be opened to determine the extent of the damage or shortage. It is preferable that this inspection be performed in the presence of the carrier's or shipper's representative. List the specific details of the damage on the carrier's copy and the receiving office's copy of the delivery document. If damage to technical equipment or parts is suspected, arrangements should be made for a technician to examine the property. If possible, this should be accomplished before the carrier's delivery document is signed. Any damaged container should be retained until an agreement with the shipper or carrier has been reached. Digital photographs are extremely valuable and should be used when details of the discrepancy cannot be adequately explained in writing or can be more fully supported by such evidence. The date that the photographs were taken, along with the delivery document number and carrier identification, should be noted on the back of the photographs;

(6) The extent of any discrepancies discovered, such as damage or shortage, must be noted on the carrier's copy and receiving office's copy of the transportation document that is then signed and dated by the receiving clerk. If space is lacking on the transportation document, include the statement, "SEE REVERSE SIDE," on the face and provide the information in detail on the reverse. The carrier operator should be requested to initial any discrepancy notations on the receiving office copy. Failure to do so may jeopardize the right to recovery from the carrier in the event it is determined that damage was sustained in transit;

(7) Verify that all items delivered are addressed to the post; and

(8) If it is not possible to make an internal inspection while the carrier waits, include the statement, "Complete acceptance of this shipment is contingent on an internal inspection," on the carrier's copy and the receiving office copy of the delivery document.

## **14 FAH-1 H-314.4 Concealed Shortage/Damage**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

In instances where concealed loss or damage is not discovered until after the shipment has been accepted, the carrier's agent should be notified immediately, and be given an opportunity to inspect the property. Oral notification should be confirmed, in writing, listing the items in question and indicating any identifying markings. The carrier should be provided with copies of the delivery documents, and should be requested to inspect the property. A copy of the carrier's inspection report is retained in the shipping office files.

## **14 FAH-1 H-314.5 Holding Damaged Property**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Damaged property should not be processed and picked up on property records, but should be segregated and held by the warehouse staff for disposition, pending final determination of liability. Warehouse personnel should exercise the same care of such property as given regular stocks, until time of disposal by the carrier or other responsible party. All damaged property returned to the carrier, or otherwise disposed of in accordance with instructions from the carrier or other responsible party, must be properly documented to record actions taken.

## **14 FAH-1 H-314.6 Inspection and Tally-In Record**

### **14 FAH-1 H-314.6-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

a. Immediately after delivery has been made, material received should be completely checked against the covering acquisition document and the packing list to verify commodity, quantity, and condition. Expendable supply items received in unopened cartons, with the quantity clearly marked on the outside, need not be opened, unless there is evidence of having been tampered with or of damage. Otherwise, cartons should be opened and inspected. Appliances should be tested to ensure they are in operating condition.

b. Check the packing list to make certain that everything shipped has been received. The tally may not always agree with the acquisition document. If the tally comes up short of the acquisition document, using

the packing list may avoid wasting time on a futile search for something that may have been back ordered.

c. If inspection reveals damages or overages, the property in question should be set aside until disposition instructions are received from the general services office.

#### **14 FAH-1 H-314.6-2 Tally-In Record**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

Concurrent with the inspection of the shipment, a count or "tally" of the items received should be made and a record of the quantity count by line item kept. In many cases, the due in copy of the acquisition document may be used as a worksheet or "tally in" record for recording this receipt data. In larger shipments or other instances where sufficient space on such documents is not available, a separate worksheet should be used.

#### **14 FAH-1 H-314.6-3 Delayed Inspection**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

If inspection is not immediately possible, the material should be placed in a "holding area" near the receiving area until receiving action can be accomplished. In this instance, the shipment should be kept intact, completely separated from other material, and protected from pilfering. If possible, the holding area should be a secured area.

#### **14 FAH-1 H-314.6-4 Technical Material**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

When shipments contain material of a technical nature, a specialized inspection may be required. If necessary, the receiving clerk should arrange for a prompt inspection by a qualified technical expert. In these instances, both the receiving clerk and the technical expert should sign the receiving report.

#### **14 FAH-1 H-314.6-5 Over-the-Counter Purchases**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

On over-the-counter purchases, the person making the petty cash purchase performs the initial inspection at the time the purchase is made.

## **14 FAH-1 H-314.6-6 Cash-on-Delivery Shipments**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

Cash-on-delivery (C.O.D.) shipments may be received and paid for prior to examination, and any necessary quality, quantity, or condition adjustments may be settled later with the vendor. However, when receiving such shipments, a statement is made, in writing, on the delivery document to the effect that the receipt is subject to inspection and verification.

## **14 FAH-1 H-315 REPORTING RECEIPTS**

### **14 FAH-1 H-315.1 Receiving Document**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. In order that a working document is available for completion of purchase/requisition files, payment of invoices, and updating property records, reports on the quantity and condition of all property received (including damaged or otherwise unusable property) must be prepared. The report is prepared in English, the item cost is indicated in U.S. currency, and the report is signed by the person who inspects and tallies the shipment. Reports must be prepared for individual items, not for sets, such as "set of furniture." Form DS-127, Receiving and Inspection Report, is the Department's and USAID's official document for recording the receipt of incoming property.

b. When a total expendable or nonexpendable property order is received in a single delivery, the acquisition document, e.g., Form OF-347, Order for Supplies or Services, may be signed and used as the receiving report. In that event, extra copies are made to accommodate copy distribution needs. If partial deliveries are made, Form DS-127, Receiving and Inspection Report, must be used. Form OF-347 is signed after Form DS-127 is prepared for the final partial delivery.

### **14 FAH-1 H-315.2 Receiving Report Criteria**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Because of the need for different offices to use Form DS-127, Receiving and Inspection Report, as an action document, the report must be prepared in a way that will service all action offices. For example, if material ordered on separate acquisition documents is delivered in the

same shipment, a separate Form DS-127 must be prepared for each document.

b. When creating receiving reports:

(1) Information from the acquisition document can be used for proper nomenclature and descriptive data;

(2) Do not combine items from more than one acquisition document on a single report;

(3) Do not include property received on different days on a single report. The exact date of receipt must be reported;

(4) Do not mix property that belongs to more than one agency on a single report. If quantities are commingled on the same report, the property records clerk cannot identify ownership; and

(5) Do not mix expendable and nonexpendable property on a single report.

### **14 FAH-1 H-315.3 Prompt Payment**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The receiving report must be executed promptly, and immediately furnished to the designated payment office. Once the shipment is signed for, the vendor is free to submit an invoice for payment. The paying office's authority for paying the invoice is the receiving report. Therefore, it is important that little time elapse between the signing for property receipt and the processing of a receiving report. For items received by the U.S. despatch agent (USDA), payment is due to the contractor based on the USDA receipt, rather than receipt of the item(s) at the post.

### **14 FAH-1 H-315.4 Partial Deliveries**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

As partial deliveries are received at various times, several receiving reports are sometimes prepared for items on a single acquisition document. Since there is a need to add incoming property to the property records as soon as possible, and an obligation to pay the invoice promptly, receiving reports must also be prepared for partial deliveries as they are received.

## **14 FAH-1 H-315.5 Automated System**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

In an automated receiving environment, a system generated receiving report may be used in lieu of Form DS-127, Receiving and Inspection Report. At a minimum, the data included on such a report must include:

- (1) Consignor and/or contractor;
- (2) Purchase order/contract/transfer document number;
- (3) Ordering document funds data (when appropriate);
- (4) Stock number (when appropriate);
- (5) Description;
- (6) Quantity received by line;
- (7) Unit of issue;
- (8) Unit cost;
- (9) Total cost by line;
- (10) Serial numbers of items, if applicable;
- (11) Certification of receipt;
- (12) Signature of receiving clerk; and
- (13) Date of receipt.

## **14 FAH-1 H-315.6 Receiving Reports**

### **14 FAH-1 H-315.6-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Any deviations from the acquisition document copy in the receiving file and what was actually received must be noted on the receiving report. All property received in a damaged condition must also be noted on the report.

b. In addition to the description, all identifying numbers (stock numbers, model numbers, serial numbers, and nonexpendable property application (NEPA) numbers, etc.) should be included on the report.

c. When they can be identified, transportation charges must be included on the receiving report. If possible, they should be broken down by line, and listed as a separate item under each line.

d. Data fields are identified in 14 FAH-1 Exhibit H-315.6-1, an example of Form DS-127, Receiving and Inspection Report, for the receipt of nonexpendable property. Form DS-127 replaces Form OF-127 of the same title.

### **14 FAH-1 H-315.6-2 Sub-Receiving Area**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. When a sub-receiving area has been established, the individual assigned to perform receiving duties at the sub-receiving area will prepare and sign the receiving report.

b. **Partial delivery:** If a partial delivery is made and the order remains incomplete, one copy of Form DS-127, Receiving and Inspection Report, should be kept with the pending copy of the acquisition document and distribution made of the remaining copies. When the final delivery has been made on the order, the file should be transferred to the completed files at the main receiving area.

c. **Complete delivery:** If the order is delivered in total, the receiving section on Form DS-127 or Form OF-347, Order for Supplies or Services, is prepared and distributed, and the file transferred to the completed files at the main receiving area.

### **14 FAH-1 H-315.6-3 Copy Distribution**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

At a minimum, distribute copies of Form DS-127, Receiving and Inspection Report, or Form OF-347, Order for Supplies or Services, as follows:

(1) Send the original copy to the accountable property officer (APO) for signing field **[27]**, and subsequently for the file to support the property records. The APO reviews the report when received to determine whether discrepancies (shortages, overages, or damages) exist and were properly reported;

- (2) If Form OF-347, send one copy to the contracting officer;
- (3) Send one copy to the budget and fiscal office or USAID controller, as appropriate. Each agency official will direct the distribution of his or her own agency reports;
- (4) Place one copy in the receiving office files; and
- (5) For USAID security property, send one copy to SEC/PSP: Picture Captions.

## **14 FAH-1 H-316 POST RECEIVING ACTIONS**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

After completing the receiving action, additional actions will be required. Label incoming nonexpendable property with the agency identification. For those posts using the nonexpendable property application (NEPA) property system, label accountable, nonexpendable property (see 6 FAM 224.1-1 for accountability criteria), including all leased nonexpendable property, with the nonexpendable property application (NEPA) bar code label, and prepare a nonexpendable property application (NEPA) worksheet for each item labeled.

### **14 FAH-1 H-316.1 Labeling**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

All nonexpendable property shall be marked to indicate ownership, which is the agency that funded the purchase, as soon as possible after receipt. Such labeling should be accomplished by the receiving clerk, before the property is delivered to the user office or moved to a storage location in the warehouse. Bar-code labeling and preparation of worksheets (for State, see 14 FAH-1 Exhibit H-316.2) for automated property systems should also be done by the receiving clerk. This will ensure that any accountable property received, which will be held in the warehouse as stock, will be reflected on the property records.

#### **14 FAH-1 H-316.1-1 Agency Identification**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Incoming nonexpendable property may belong to different agencies. Therefore, property must be easily identified. To prevent commingling and to facilitate identification, the property should be marked to show agency

ownership. This can be done with tags or labels bearing the agency name. When marking the property, care should be taken to not ruin the appearance of the item. The mark should be inconspicuous but easily located. Avoid putting the identification on removable parts such as drawers.

b. Leased property should not be labeled with agency identification.

c. Property received in a damaged or otherwise unusable condition should not be labeled immediately, because it might be returned to the supplier. It should be set aside until instructions are received from the accountable property officer (APO).

#### **14 FAH-1 H-316.1-2 Bar-Code Label (State and USAID)**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. All accountable property received at post must be entered on the property records. At those posts using the nonexpendable property application (NEPA) or USAID's automated property system, each accountable nonexpendable property item must be labeled with the appropriate bar-code label.

b. The receiving clerk should be provided with a supply of pre-numbered bar-code labels, procedures that include the identification of items to be labeled, and instructions on the placement of the labels. When selecting bar-code labels, the receiving clerk should select numbers in sequence. Numbers should not be selected at random.

c. To facilitate the physical inventory, proper placement of bar code labels is important. The labels should be placed in a location that is easily found and conveniently accessible for bar-code scanning. However, discretion must be used so that the appearance of the property is not adversely affected. Placing the label should be consistent with each item, (i.e., always in the same place on all office tables, always in the same place on all dining room chairs, etc.) so that the inventory teams will know where to look. For example, place the label on the lower inside of the right front leg of all office side chairs; on the lower right rear (drawer side) of desks; on the upper right front of file cabinets; etc. Avoid putting the label on removable parts such as drawers.

d. In some instances a nonexpendable property item can be inspected without taking it completely out of the carton. Often, however, a bar-code label cannot be properly affixed to the property while it is still in the carton. If the property is to remain in the carton to be stored, a property number must be assigned so that the item can be picked up on the property records. In this case, assign a property number, mark the property number

on the case with a felt marking pen, place the label in a small plastic bag or an adhesive backed packing list envelope, both of which are available from the General Services Administration (GSA), and affix the bag or envelope to the carton. At the time the property is removed from the carton to be issued, the label should be affixed. If the bag is accidentally knocked off and lost during storage, the stenciled number will allow access to the item's nonexpendable property application (NEPA) or USAID's automated property system file, in order to assign a new number.

e. Property received in a damaged or otherwise unusable condition should not be labeled immediately. Such property might be returned to the supplier. It should be set aside until disposition instructions are received from the accountable property officer (APO).

## **14 FAH-1 H-316.2 State Nonexpendable Property Application (NEPA) Worksheet Preparation**

*(CT:PPM-1; 08-11-2004)*  
*(State Only)*

a. As each bar code label is affixed to the property item, a Form DS-1955, Receiving Worksheet for Nonexpendable Property (14 FAH-1 Exhibit H-316.2), should be prepared. Although preparation of the worksheet is recommended, receiving clerks may, alternatively, include the necessary information for data entry on the receiving report.

b. The exhibit shows those worksheet fields that could be completed at the receiving area.

c. Upon completion of Form DS-1955, the receiving clerk should attach it to the original of the receiving report and send it to the general services office for entry into the property records.

d. So that the data entry person is provided with all the necessary information, the accountable property officer (APO) should ensure that the worksheet is reviewed and that as many of the remaining required data fields as possible be completed before data entry. This is especially true when the APO reviews information for capitalized property to ensure the accuracy of the fund, cost, and other pertinent data.

e. Form DS-1955 should not be immediately prepared for property received in a damaged or otherwise unusable condition. Such property might be returned to the supplier. It should be set aside until disposition instructions are received from the APO.

## **14 FAH-1 H-316.3 USAID Automated Property System Worksheet Preparation**

*(CT:PPM-1; 08-11-2004)*  
*(USAID Only)*

USAID's automated property system does not require a completed worksheet; in fact, the data entry can be done directly from one receiving report. However, the mission may want to develop a form for data entry prior to completion of the final receiving report. Information required for data entry includes:

- (1) Vendor name;
- (2) Funding source;
- (3) Procurement number;
- (4) Receiving report number;
- (5) Date;
- (6) Object class;
- (7) Control number;
- (8) Quantity; and
- (9) Price.

A sample worksheet is included in the USAID Automated Property System User's Guide.

## **14 FAH-1 H-317 REPORTING SHIPMENT DISCREPANCIES**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The importance of recording all of the details related to shipment discrepancies becomes apparent when it is necessary to file a claim for missing or damaged property. The decision to file a claim should be based on whether the administrative costs for such an action are commensurate with the value of the property received. In some instances it might be more economical to dispose of the property or to have it repaired.

b. Timely reporting of the discrepancies to the supplier is critical, but must be made within 30 days from date of delivery/receipt at post.

## **14 FAH-1 H-317.1 Shipping-Type Discrepancies**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

A shipping-type discrepancy is any variation in quantity, quality, or condition of goods received from that shown on the packing list or acquisition document.

### **14 FAH-1 H-317.1-1 General Services Administration (GSA)/Department of Defense (DOD) Shipments**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. If the shipment is from a General Services Administration (GSA) supply distribution point or is directed by GSA from a vendor, a report should be made, regardless of the cost. Form SF-364, Report of Discrepancy (ROD), should be prepared and the original and two copies should be sent within 15 calendar days from receipt of shipment to the GSA Discrepancy Reports Center, 1500 E. Bannister Rd., Kansas City, MO 64131. A copy of Form GSA-1348-1, Shipment Order, or the vendor's shipping documents should be attached.

b. If the shipment is from a Department of Defense (DOD) activity or is directed by DOD from a vendor, a report should be made if the value of the discrepant material is one hundred dollars or more (or regardless of cost if a DOD vendor ships directly). Form SF-364, Report of Discrepancy (ROD), should be prepared and the original and one copy should be sent to the DOD activity to which the original order was submitted. If the shipment was from a vendor, attach a copy of the vendor's shipping document. Two copies of Form SF-364, with a copy of Form GSA-1348-1 or other authorized shipping document, should also be sent to the DOD shipping activity, when applicable.

### **14 FAH-1 H-317.1-2 U.S. Government Agencies Other than General Services Administration (GSA) or Department of Defense (DOD)**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If the supplier is a U.S. Government agency other than the General Services Administration (GSA) or the Department of Defense (DOD), the

discrepancy must be reported directly to that agency. If the problem is not satisfactorily resolved and assistance is needed, a request for assistance may be submitted to your regional logistics liaison officer co-located at the U.S. Despatch Agency.

### **14 FAH-1 H-317.1-3 Commercially Originated Shipments (Other than General Services Administration (GSA)/Department of Defense (DOD)-Directed)**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If the shipment is from a commercial source, the discrepancy must be reported directly to the supplier.

### **14 FAH-1 H-317.1-4 Narcotics**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The loss of narcotics, regardless of the dollar value, must be reported immediately to the supplier with a request that the supplier inform the Drug Enforcement Administration (DEA), if required.

## **14 FAH-1 H-317.2 Transportation-Type Discrepancies**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

A transportation-type discrepancy, as shown below, is any variation in quantity, as it relates to package count in pieces of freight or condition of material received from that shown on the bill of lading or other transportation document. When reporting transportation-type discrepancies, photographs are extremely valuable and should be used when details of the discrepancy cannot be adequately explained in writing or can be more fully supported by such evidence.

### **14 FAH-1 H-317.2-1 Shipments through a Consolidated Receiving Point**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Determine where the discrepancy occurred. To determine the proper action to be taken when loss or damage to incoming shipments is discovered, the post must establish whether the damage occurred before or after the shipment arrived at the port of entry. Refer to the bill(s) of lading and/or the delivery receipts to ascertain where the first notation concerning

the loss or damage was made. The first notation will place the responsibility, and the post shall act accordingly.

b. **Loss or damage before arrival at port of entry:** If the initial discrepancy note was made by the ocean carrier upon receipt of the shipment, contact the despatch agent. If the initial notation was made by an inspector at the port of entry, a claim should be filed with the carrier. If this is not possible, or if assistance is required, contact the despatch agent.

**NOTE:** If loss of narcotics occurs, inform the U.S. Despatch Agency immediately and request that they inform the supplier and request the supplier to notify the Drug Enforcement Administration (DEA), if required.

c. **Loss or damage after arrival at port of entry:** The post is responsible for initiating and effecting settlement of claims directly with the parties responsible for loss or damage occurring after arrival of shipment at the port of entry. These claims will be handled in accordance with local laws and customs. The assistance of a post at the port of entry will be enlisted by inland posts whenever such aid is necessary or will be helpful in reaching a prompt settlement.

#### **14 FAH-1 H-317.2-2 Shipments Direct to Posts not in a Consolidation Program**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. **General Services Administration (GSA)/Department of Defense (DOD) shipments:** If the shipment is made or directed by GSA or by DOD, discrepancies shall be immediately reported to GSA or DOD.

b. **Supply source other than GSA or DOD:** If the shipment was ordered from a supply source other than GSA or DOD, claims for losses or damages should be pursued with that source. Visible damage is generally the result of in-transit damage. If the post is unable to resolve the matter, the regional logistical liaison officer will assist. Loss of narcotics will be reported immediately to the supplier with a request that the supplier inform the Drug Enforcement Agency (DEA), if required.

## **14 FAH-1 H-318 WAREHOUSE OPERATIONS AT POST**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The post's property management officer (PMO) shall implement an efficient, secure, and economical warehousing program. It is the policy of the Department that property in any warehouse be accounted for at all times, and protected against loss or damage. Management controls should be in place to prevent loss from damage, theft, or pilferage during receipt, storage, and shipment of U.S Government property.

b. The generally accepted basic fundamentals of modern warehousing are:

- (1) Use of one story type building;
- (2) Use of pallets and materials handling equipment; and
- (3) Use of an effective warehouse and storage plan.

### **14 FAH-1 H-318.1 General Purpose Warehouse**

#### **14 FAH-1 H-318.1-1 Facility Makeup**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. General purpose warehouses house such activities as loose issue and/or bulk storage, receiving, packing, and shipping. The building is usually a single story building with a loading dock at truck bed level. Cantilever support canopy over a dock may also be provided. In addition to the efficiency and speed typical of the one-story operation, the cost is an important factor to be considered. A one-story structure generally affords more usable space per dollar of investment than any other, partly because of the space requirements for elevators and stairs, and partly because of the higher cost of a structure of sufficient mechanical strength to support upper-level loads. In a new single-story building, be mindful of floor-load capacity. Ensure that the floor will adequately support the weight of your planned racking, stock, and material handling equipment.

b. A truck dock of sufficient width on one side of the general purpose warehouse provides for the loading/unloading of truck hauled supplies. The matching dock and warehouse floor permit direct access of materials handling equipment to and from the warehouse interior, and to and from the interior of carrier conveyance.

## 14 FAH-1 H-318.1-2 Space Allocation

(CT:PPM-1; 08-11-2004)  
(Uniform State/USAID)

a. **Receiving area:** An area large enough to accommodate incoming shipments, and to be used as a work area during the receiving process, should be established at the loading dock area. If possible, this area should be physically secured (locked) so that only designated employees can gain admittance.

b. **Holding area:** An area large enough to accommodate at least an average sized incoming shipment should be established as a "holding area," adjacent to the receiving area, so that shipments which cannot be properly inspected and received immediately can be set aside to prevent being mixed with other property. If possible, this area should be physically secured so that only designated employees can gain admittance.

c. **Driver's waiting area:** Truck drivers must be directed to a secure room/area while stock is being off loaded. Drivers shall not have access to the warehouse facility without sufficient justification, and must be accompanied by authorized personnel.

d. **Office space:** Office space in a general purpose warehouse is strongly discouraged. Offices require physical protection based on requirements in 12 FAH-6, OSPB Security Standards and Policy Handbook, necessitating additional protection beyond that required for warehouses without offices. Office space requires a two-hour fire resistive construction separation between the hazardous storage area and the office area depending on the size of the hazardous storage areas.

e. **Limited-access area:** A limited-access area must be established for the protection of sensitive, or highly pilferable property. Depending on the type and quantity of property being protected, a security area may be a steel cabinet, cage, room, or vault.

f. **Flammable-items room:**

(1) In warehouses intended to include storage of flammable paints or other flammable liquids, special provision for safe storage of these potentially dangerous materials should be made. Ideally, these supplies should be stored in a separate building equipped with a sprinkler system. However, if this is not possible and these supplies are stored in a general purpose warehouse, they should be stored in a sprinkler equipped enclosure separated from other supplies by full-height parapeted firewalls and openings equipped with approved fire doors. To provide maximum segregation from other stocks, such a fire resistant enclosure should be located in a remote section of the building. The room should be in

compliance with the latest version of National Fire Protection Association (NFPA) Code 30. The location must have immediate access to exterior doors and be readily accessible for firefighting purposes. Adequate explosion venting and ventilation should be provided in storage areas containing flammable liquids that give off flammable vapors when containers become ruptured or leaky. Provision should also be made for manual or automatic roof venting. The use of roof vents will allow the smoke and heat to be vented so that firefighters can approach the fire;

(2) Flammable storage may require fire-rated construction to segregate it from the rest of the warehouse. Separations of one-hour fire resistive construction are required if the storage area is less than 150 square feet and two hours if more than 150 square feet. An automatic fire extinguishing system is required for areas classified as Hazardous Group, Divisions 1, 2, 3, and 7. A standpipe is not required. Storage quantities for Combustible Liquids Class II, III-Am and III-B are 130, 330, and 13,200 gallons respectively. Storage quantities of up to 120 gallons are allowed for Class I-A, I-B, and I-C flammable liquids. These amounts may be increased by 100 percent when approved storage cabinets are supplied. The quantity allowed in sprinkled buildings is unlimited. Spill control is required when the aggregate quantity exceeds 1,000 gallons or individual storage vessels have 55-gallon capacities. Other requirements may be applicable by NFPA Code 30 or Overseas Buildings Operations (OBO) Architectural Engineering Design Guidelines. Consult OBO's Design and Engineering Division (OBO/PE/DE) for specifics.

g. **Climate-controlled room:** In high temperature, high humidity conditions, conventional storage facilities do not afford adequate protection to certain types of supplies against damage and deterioration. This is particularly applicable where supplies are to remain in storage for extended periods. If such conditions exist, consideration should be given to a climate-controlled storage room. Depending on the size of the post and the severity of the problem, the use of a window air conditioner might be adequate. In other areas the problem may require an additional dehumidifying unit or a larger cooling system.

h. **Charging area:** Electric powered materials handling equipment are powered by industrial storage batteries that will require periodic charging. If such equipment is to be used, a charging area should be established. The charging area should be in an area where traffic (workers, equipment) is minimal but accessible to equipment that needs charging. The area and ventilation requirements must conform to the latest edition of NFPA Code 70. Safety features of the charging area must include:

(1) An eyewash station in the area capable of providing at least 15 minutes of running water;

(2) Battery leads being kept off the floor, with retractable cable units recommended;

(3) Acid spill clean-up absorbent materials or acid neutralizers along with pH paper for testing in case of a spill or leak from a battery; and

(4) Label chargers to match the circuit breaker they are connected to and ensure that the power source capacity matches that of the chargers.

i. **Aisles:**

(1) Aisle layout is determined by the structure of the warehouse; quantity, nature, and activity of materials to be stored; and by the types and capacity of materials handling equipment available. They should be planned with a view towards providing sufficient access to stores stock, loading and unloading facilities, and fire protection equipment, and should be wide enough to provide maneuvering room for the materials handling equipment. They should be planned to provide straight and clear passageways unobstructed by support columns, elevators, heaters, or other such construction features;

(2) Normally, one or two main aisles run the length of the general purpose warehouse. These aisles allow materials handling equipment or supplies to move straight through the length of the building. Typically, these main aisles are connected by cross aisles that are working aisles and allow material to be placed into and removed from storage. Aisles at least 2.39 m (8 ft) wide are needed to help restrict the spread of fire across aisles (even when sprinklers are present) and to provide a means of egress and firefighting access. Aisle widths specified below for materials handling equipment are not to be construed as the absolute limitation for all operations. They represent the dimensions under which most operations may be conducted. The aisle widths specified are based upon a load of 40 inches:

- (a) 2,000 pound trucks      2.85 m (9 ft 6 in);
- (b) 4,000 pound trucks      3 m (10 ft);
- (c) 6,000 pound trucks      3.45 m (11 ft 6 in);

(3) Aisle widths for different load lengths will be determined on the basis that a variation of 20 cm (8 in) in the load length will have a corresponding variation of 15 cm (6 in) in the aisle width. For example, a 1.2 m (4 ft/48 in) load length will increase the aisle widths indicated above by 15 cm (6 in);

(4) The width of aisles in bin and shelving areas should permit easy movement of stock selector trucks through the storage area. Generally this requires an aisle of 75 to 90 cm (30 to 36 in) in width.

## **14 FAH-1 H-318.2 Storage Management**

### **14 FAH-1 H-318.2-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The prime objective of storage planning is maximum utilization of available space. When practicable, planning should provide for full utilization of cubic footage, and items with similar handling requirements should be stored together or on lower shelves for stability and to minimize lifting hazards to employees. Grouping similar items facilitates storage and issue, and contributes to effective care of supplies. Many bulky and heavy materials, which are difficult to handle, should be stored, when practicable, near doors, aisles leading directly to doors, or shipping/receiving areas. The quantity of material on hand also affects the amount of space required. It will frequently be desirable to increase the amount of space assigned to an item in a single location in order to eliminate the need for two locations. On small lots, other space savers, such as pallet racks and bins, should be utilized. Some property must be protected from dampness and extreme changes in temperature. Other property must be stored away from light and odors or protected from infestation of vermin and other pests. Property subject to pilferage requires special protection, and all property must be protected from fire.

b. Some items referred to as "shelf-life" items possess deteriorative or unstable characteristics to the degree that a storage time period must be assigned to ensure that they will perform satisfactorily when issued. Normally, shelf-life items are issued on a first-in, first-out basis. The accountable property officer (APO) must ensure that these items are properly identified in storage-area locations and that first-in, first-out procedures are in place.

### **14 FAH-1 H-318.2-2 Bulk Supplies**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The storage of any large quantity of supplies, usually in original containers, is referred to as bulk storage. It is recommended that all bulk supplies be palletized using 1 m x 1.2 m (40 x 48 in) pallets. Supplies should be uniformly arranged on pallets and, whenever possible, pallet loads should be uniform in quantity. To take advantage of cubic space, the pallets are stacked one on another as illustrated in 14 FAH-1 Exhibit H-

318.2-2. The height of the stacking depends on the crushability of the supplies, stability and safety of the stack, the maximum lifting height of the materials handling equipment, the floor load capacity of the storage areas, and the fire protection height limits.

b. Partially loaded pallets should be stored in pallet racks or on top of stacks. A full load should not be superimposed on a partial load, and a large load should not be superimposed on a small load. Heavy loads should not be stored on top of material that could be broken or damaged.

c. When the building is equipped with an automatic sprinkler system, the stack clearance below the sprinkler deflectors should be:

(1) At least 45 cm (18 in) when stack heights do not exceed 4.5 m (15 ft);

(2) At least 90 cm (3 ft/36 in) when stack heights exceed 4.5 m (15 ft); and

(3) At least 90 cm (3 ft/36 in) when hazardous commodities are involved, regardless of stack height.

c. If the minimum water flow density is not achieved for rack storage, in-rack sprinklers may be required.

e. The stack clearance below joists, rafters, and beams should be:

(1) Forty-five cm (18 in) when stack heights do not exceed 4.5 m (15 ft);

(2) Ninety cm (3 ft/36 in) when stack heights exceed 4.5 m (15 ft); and

(3) Ninety cm (3 ft/36 in) in buildings without sprinkler systems, regardless of stack height.

f. Around light or heating fixtures, a 45 cm (18 in) clearance should be maintained.

### **14 FAH-1 H-318.2-3 Pallet Loading**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

It is recommended that, because of the extreme importance of assuring stability of pallet loads, the following loading practices be followed:

(1) **Use proper order:** Place the inner containers of a layer first and then work out to the edges of the pallet;

(2) **Distribute unused space:** When loading containers which, because of their size or shape, do not completely cover the pallet's surface, the unused or vacant space should be distributed evenly throughout the pallet load;

(3) **Distribute overhang:** When containers or items overhang the pallet, they should be evenly distributed on the pallet;

(4) **Cross tie containers on pallets:** Where possible, the containers should be cross tied on the pallet in order to obtain maximum stability. Alternating the direction of containers on the pallet ties the containers together in a compact unit load. The method of cross tying varies according to the size, shape, and crushability of the container; and

(5) **Align the strongest edges of cartons:** Most cartons have four edges, which are either reinforced, or more strongly constructed than the other four. For this reason the cartons should be placed with the strong edges positioned as vertical support for additional cartons and upper tier pallet loads.

#### **14 FAH-1 H-318.2-4 Storing Bulk Supplies**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. There are two basic methods of storing bulk supplies:

(1) **Row stacking:** The stacking of supplies from the wall or from any imaginary line to the aisle, leaving sufficient space between the stacks so that any row of pallet stacks can be withdrawn without interference. Other factors being equal, the layout of row stacks in an individual storage bay or area, bounded by two aisles, should be arranged so that the rows extend across the shortest dimension, since vacant space existing in a partially filled long row cannot be utilized for storage of other items until all the supplies stored in the row are completely exhausted. In large storage blocks surrounded by aisles, the stack should start at an imaginary or floor marked line running parallel to the longest dimension of the block. This arrangement provides for the storage, in back-to-back pallet rows, of different commodities and conserves aisle space as only one end of each row requires accessibility. See figure 1 of 14 FAH-1 Exhibit H-318.2-4 for row stacking example; and

(2) **Block stacking:** Block stacking is the stacking of supplies in rows so that each row contacts another. In other words, there is no clearance or wasted space between the rows. Block stacking conserves space but should be used only when storing large quantities of an item, as illustrated by figure 2 in 14 FAH-1 Exhibit H-318.2-4. Extreme care should be

exercised in block stacking to avoid interlocking pallets. Interlocked pallets create a hazard to operating personnel during stock withdrawal operations.

b. Unless local applicable fire regulations require otherwise, clearance between stacked, stored supplies, and exterior or interior brick or masonry, or other approved fire resistant walls, need not be maintained for fire fighting purposes except:

(1) Clearance for exceedingly large quantities of individual flammable or hazardous item lots should be 90 cm (3 ft/36 in) between the wall and stored supplies; and

(2) At least a 60 cm (2 ft/24 in) clearance should be maintained around interior fire doors.

c. Provided applicable local fire regulations do not stipulate otherwise, at least a 60cm (2 ft/24 in) clearance should be maintained between any wood or other substandard exterior or interior wall and stacked, stored supplies.

#### **14 FAH-1 H-318.2-5 Honeycombing**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Honeycombing is a storing term that denotes the practice of storing and withdrawing supplies in such a manner that the empty space resulting from withdrawing is not usable for the storage of additional items. Material should be withdrawn row by row starting from the aisle and working back to the wall or imaginary line, and not across the whole front of the stacks. Withdrawals across the front of the stacks merely widen the aisle and do not create additional space for the storage of new commodities. Honeycombing also includes void spaces within the arrangement of materials on pallets, which results in space loss. When supplies are stored in more than one location in the warehouse, withdrawals should be concentrated against one specific location until stock is exhausted, thus creating space for new receipts. See 14 FAH-1 Exhibit H-318.2-5 for examples of honeycombing and how to correct them.

#### **14 FAH-1 H-318.2-6 Small and Loose Issue**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The use of various types of racks for storing small and loose issue supplies is an efficient means of obtaining maximum stock accessibility and cube space utilization. The use of pallet racks, for example, is particularly

useful for the storage of large items of irregular shape not adaptable to pallet stacking.

b. Generally, small items (e.g., pencils, paper clips, staplers, staples, etc.) or items that are issued in less than standard package amounts (e.g., forms) require storage on open shelving, in shelving boxes, or in bins. Repetitive issue of small quantities of binnable type items from bulk storage can rarely be justified. Proper use of bins will minimize the inventory and security problems found where there are broken cases of binnable type items in bulk storage locations. When establishing a shelving/bin area, a somewhat central location is recommended with due regard to security, location of bulk storage, and shipping assembly areas. This will facilitate bin replenishment, reduce internal hauling, and lessen the work of consolidating bin items processed for issue with bulk quantities. Fast moving binnable items must be assigned space adequate to minimize replenishment frequency, time, and effort.

#### **14 FAH-1 H-318.2-7 Sensitive and Pilferable Items**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. A limited access area shall be established for the protection of sensitive property (property which requires a high degree of protection and control, and property which is of a high value) and pilferable property (property having a ready resale value or personal appeal). Depending on the type and quantity of property to be protected, the area may be a steel cabinet, locked room, wire cage, or vault. The area should be located in heavily trafficked locations most easily observed by staff and security personnel.

b. The codes of combination built in locks or padlocks must be strictly controlled and issued to authorized personnel only. A record must be kept indicating who has each combination.

#### **14 FAH-1 H-318.2-8 Climate Control**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The storage life of many items may vary according to the geographical location of a warehouse, and storage temperature and humidity conditions. Pressure sensitive tapes are considered semi-perishable items, heat being the most detrimental factor. In general, the lower the storage temperature condition, the longer the life of the tape. Ideal temperature conditions are 18 to 24 degrees Celsius (65 to 75 degrees Fahrenheit). As the temperature rises above 24 degrees Celsius (75 degrees Fahrenheit), the life of the tape will be correspondingly shortened.

Although relative humidity is not too important with respect to paper backed tapes, it is extremely important to the cellophane backed tapes.

b. The deterioration of many fabric items, subsistence, and leather stocks is accelerated when temperature exceeds 21 degrees Celsius (70 degrees Fahrenheit) and relative humidity is greater than 40 per cent. High temperatures also may cause certain plastics and similar materials to flow and change shape.

c. Posts in high-temperature, high-humidity locations should consider storing items such as transparent tape, rubber bands, machine ribbons, and other items that may be damaged by these conditions, in a climate controlled room.

d. The control of humidity within storage structures is a method of protection, not a method of rejuvenation. Controlled humidity storage will not remove rust that is already present, nor will it otherwise restore material that has deteriorated prior to storage. Material placed in this type of storage in a condition other than clean may continue to deteriorate, particularly when contamination is of a corrosive nature.

e. Climate control also needs to be considered to protect employees from exposure to extreme temperatures. Warehouses in cold climates are usually heated. In climates where hot weather is the norm, air conditioning for employee health and safety is often not provided. In those cases, supervisors need to schedule work so that employees do not experience heat stress or exhaustion. Techniques such as scheduling heavy material handling tasks during cooler times of the day, frequent rest breaks, and working in teams should be employed.

#### **14 FAH-1 H-318.2-9 Plywood**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Plywood should be stored in a closed shed, particularly when the plywood has interior glue lines. For prolonged storage, a heated storage building is recommended. Under humid conditions, there is some tendency for edges to swell because of exposed end grain, and this swelling causes dishing, especially in the upper panels of high piles. Dishing can be minimized by placing stickers (a wooden stick or strip placed between boards or plywood sheets to hasten drying and reduce warping—also called "crosser") in the pile at intervals. Enough stickers should be used so that plywood will not bend between them. Dry one-inch strips are suitable for plywood.

## **14 FAH-1 H-318.2-10 Dry-Cell Batteries**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Dry-cell batteries are a perishable commodity and should be stored in the coolest practicable dry, ventilated storage space. The chemical activity that causes battery deterioration is lessened considerably as the storage temperature is lowered. Open storage in buildings with metal roofs is highly discouraged for storage of batteries since these types absorb and conduct heat to a high degree. When possible, batteries should be stored in refrigerated space or in a warehouse having constant or controlled temperature. Wide temperature variations are as damaging as high temperatures.

b. Batteries removed from original containers must never come in contact with steel, steel shelving, or other metal objects that can cause short circuits or discharging.

c. Some dry-cell batteries generate small quantities of gas, particularly during the first few months after manufacture. To avoid the possibility of an accumulation of gas, adequate ventilation in the storage area must be provided.

## **14 FAH-1 H-318.2-11 Tires**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Rubber tires for trucks, automobiles, etc. tend to dry rot quicker when stored in locations subject to excessive daylight, heat, air in motion, and ozone. Unmounted, stored tires should be kept in a closed, clean, dark, cool, dry room. A tarpaulin or other heavy, tightly woven fabric placed over the tires tends to curtail the effect of light, moving air, and dirt. To reduce the destructive effect of heat, the temperature of the storage room, ideally, should not exceed 21 to 27 degrees Celsius (70 to 80 degrees Fahrenheit).

b. Tires (tube or tubeless) should be stored in a vertical position. They may be grouped by size on standard 1 m by 1.2 m (40 in by 48 in) pallets and stored on pallet racks or by use of pallet adapters.

c. Stored tires should not be kept in rooms in which electric motors, generators, or battery chargers are operated. When operated, these devices release into the air oxygen and ozone that have a very destructive effect on rubber. Nor should tires be stored in the same or adjoining rooms with gasoline and lubricants because the solids, fluids, or vapors from gasoline and lubricants are readily absorbed by rubber causing tires to rot.

## **14 FAH-1 H-318.2-12 Furniture**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Ideally, furniture should be stored in cool dry storage areas to prevent warping and disintegration of glue. The use of cantilever rack or pallet rack is recommended for the storage of furniture, and furniture should be stored in original cartons when possible (even when stored on rack). To facilitate stock issue and physical inventory, similar items should be stored together (sofas together, dining room chairs together, etc.). If storage rack is not available, and furniture is still in original cartons, it may be stacked one on top of the other. The height of the stacking depends on the stability and safety of the stack.

b. Some furniture items removed from cartons can be stacked, if proper care is taken. Furniture pads should be used to protect flat surfaces that come in contact with each other (e.g., one desk inverted, and stacked on the top surface of another), or plywood, heavy cardboard, or similar material should be placed under each leg of a desk if stacked upright on top of another.

c. A furniture item not in the original carton should be covered with heavy paper, plastic, blankets, or some other suitable covering to protect it from dust, dirt, etc.

## **14 FAH-1 H-318.2-13 Machines and Air Conditioners**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Office machines and air conditioners are susceptible to rust and corrosion and are easily damaged by dust. They should be stored in original cartons, preferably on steel shelving for light units and on storage rack for larger heavier units. If a machine or air conditioner has been removed from the carton, it should be covered with plastic or other appropriate covering. To prevent moisture from forming and causing rust or mildew, the covering should be loosely hung so that air can get to the item.

## **14 FAH-1 H-318.2-14 Paint**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. In addition to the special hazardous materials handling and storing practices required, other precautions are also needed when storing paint. Most paints are subject to deterioration by age. Old stocks must be moved out first. Some paints require special handling to retard settling. Periodic

inspection of all paints and related products (thinners, removers, etc.) should be performed.

**b. When storing paint, consider the following:**

(1) **Temperature:** Water based paint and resin emulsion paints may be damaged through freezing. Since all paints are prepared for application at moderate temperatures, excessive heat may cause expansion through creation of gases, and result in the bursting of container seals;

(2) **Dampness:** Storage of paints in excessively damp storage areas should be avoided to prevent rusting of containers;

(3) **Inspection:** When paints have reached the end of shelf life storage periods, periodic inspections should be performed (see 14 FAH-1 H-418.2, paragraph b for shelf life periods). For normal paint storage life, the containers should be opened and inspected, and a record kept of the date the paint was inspected. A sampling inspection is generally adequate. However, if doubt exists as to condition, a large number of cans should be opened. Subsequent inspections should be conducted every three months; and

(4) **Turning paint:** The storage life of certain paints may be increased substantially by regular turning of the containers (in some instances on a monthly basis).

## **14 FAH-1 H-318.2-15 Hazardous Commodities**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

**(A) General**

a. All hazardous material received must have a Material Safety Data Sheet (MSDS) which explains what the material is, its health and physical hazards, how to handle it safely, and what should be done in the event of a spill or other accident. Supervisors should ensure that all employees are well versed in the hazardous materials that are handled in the warehouse.

b. Hazardous materials must not be stored on upper shelves that require employees to lift them over their heads. Extreme care should be taken in the handling and stacking of hazardous materials to prevent rupture or leakage of containers. All containers should be thoroughly inspected for leaks before being placed in storage. To provide for an adequate distribution of water or other fire extinguishing agent in case of fire, and to provide easy accessibility to supplies for frequent and effective inspection, the stacking height should be limited to 3.6 m (12 ft), the clearance between the top of the stack and the sprinkler head should be at

least 90cm (3 ft/36 in), and the clearance between the stacks and the warehouse walls should be at least 90 cm (3 ft/36 in).

c. Drum quantities of hazardous materials are discouraged and should only be purchased as a last resort. Storage of drums in a horizontal position should be avoided. Deterioration of drums, or damage to dispensing valves, can result in uncontrolled leakage.

d. Signs should be posted to identify hazardous storage areas and access should be restricted.

### **(B) Flammables**

a. Flammable commodities generally bear Interstate Commerce Commission red labels. Such commodities should be stored in a specially prepared room. The room construction, capacity, and electrical wiring will be in accordance with NFPA Code 30, 1990 (Flammable and Combustible Liquid Code).

b. Volatile liquids and other highly flammable materials having a flashpoint (flashpoint is the lowest temperature at which vapors above a volatile combustible substances ignite in air when exposed to ignition source, such as flame, spark, etc.) of less than 26.6 degrees Celsius (80 degrees Fahrenheit) should not be stored in segregated enclosures within a warehouse together with other flammable supplies such as paints, varnishes, oils, and solvents, unless the quantity involved is small and other segregated storage facilities are not available. The highly flammable material must be segregated from other flammable stocks in accordance with NFPA Code 30, 1990. Many older warehouses may not meet the requirements of NFPA Code 30, 1990. In that case, it is better to attempt to store material in an approved flammable liquids cabinet. This is particularly important for the Class I liquids which are characterized by flashpoints below 22.7 degrees Celsius (73 degrees Fahrenheit).

c. Extreme care should be taken in the handling and stacking of all flammable commodities to prevent rupture and leakage of the containers. All containers should be inspected for leaks prior to being placed in storage, and at frequent intervals thereafter in order to detect leaks that may occur while in storage. Where quantities of individual item lots are exceedingly large and the required space is available, a clearance of approximately 90 cm (3 ft) should be maintained between lots, and between exterior and interior walls.

### **(C) Corrosive Chemicals**

Products that are corrosive may be either acid or caustic. Typical products at post that are acids are used for filling batteries, some cleaning products, concrete etchers, etc. Caustic materials are used as pool

chemicals, cleaners, and drain openers. To avoid violent reactions if spilled or leaked, these products must not be stored together. Corrosives should be stored on lower shelves and not directly on top of metal shelving. They should also be stored within an extra container, such as a plastic bin, so that if a leak occurs it will be contained in that bin and not spread over other items in the warehouse.

## **14 FAH-1 H-318.2-16 Material Control**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

### **(A) Policy**

Written procedures must ensure proper control over the care, storage, and movement of all property in the facility. Such procedures must also ensure that damaged or missing property be reported in accordance with regulation; that stock issues and changes in stock location are documented and pre-approved; and that stock locator records are appropriately updated. Carrier loading of all material leaving the facility, such as material being sent to a commercial packer, must be checked to ensure that correct items and/or pieces are loaded and a facility copy of the controlling document should be initialed by the supervisor responsible for loading activities. The carrier representative should also sign a facility copy of the document.

### **(B) Stock Location System**

a. For small bulk storage areas a formal stock location system usually is not necessary. Items may be organized in any order that makes it easy to locate them. In facilities with large bulk areas, a manual or automated central stock locator system to pinpoint an exact storage location should be established and properly maintained. A specific individual should be designated, in writing, the responsibility to serve as stock locator clerk and be responsible for maintaining the location records.

b. The location record should be kept in the facility in which the stock is located. In an automated environment, the record should be part of the inventory manager's data base.

c. Manual stock locator records or location data on automated systems should be secured against unauthorized access at all times.

#### **d. Site identification:**

(1) In order to establish a locator system for bulk storage areas, the area should be subdivided and individual locations assigned a location code. Numbers or letters are assigned for each row, and rack or stack

level. In 14 FAH-1 Exhibit H-318.2-16(B), for example, the location number of a given item might be "1-1-3" (located in row 1, stack 1, level 3);

(2) A good locator system is necessary for a bin storage area, and the above system can be used for bin areas also. Assign a number or letter to each row, column/unit, level, and bin. The marking can then be consecutive throughout the bin area, such as 1 through 205, or consecutive on each row level. For example, in 14 FAH-1 Exhibit H-318.2-16 (B), the six bins on level D would be assigned numbers 1 through 6. The location number for a given item in this instance might be "12-40-D-3" (located in row 12, column/unit 40, level D, and bin 3);

(3) Depending upon the size of the operation and the supply distribution volume, it is sometimes expedient to number pallet rack and bins in stock number sequence.

e. **Stock location:** To facilitate recording stock locations in large facilities, a stock locator record should be used and its use addressed in written internal procedures (14 FAH-1 Exhibit H-318.2-16 (B) is an example of a stock location form).

f. **Receiving:** If a stock location system is being used, written receiving procedures should ensure that, upon acceptance and storage of incoming stock, the stock locator clerk receives a document indicating the stock placement location(s). The stock location form can be utilized, or the location code can be noted on the receiving report and a copy forwarded to the stock locator clerk.

g. **Location changes:** When re-warehousing or making other stock location changes, it is necessary that new stock location changes be reported, in writing, to the stock locator clerk within 24 hours.

h. **Stock issue:** When filling orders, where the selection of stock unexpectedly exhausts the supply in a designated location, or when it is determined that stock is not stored in the location shown on the locator records, a stock location form should be prepared by appropriate personnel and forwarded to the locator clerk.

i. **Verification:** To obtain maximum accuracy, all stock locator records should be reconciled periodically. The frequency and manner of such a total reconciliation will be at the discretion of the facility manager. At larger facilities, an interim at random or "spot reconciliation" should also be performed.

### (C) Material Release

a. The release of material from the facility must be controlled by documentation and written authorization. Material released will generally be either stock (material stored to meet future requests and replenished as quantities are depleted) or storage (material held in storage temporarily at the ordering activities request and not routinely replenished).

b. **Stock issue:** Written warehouse operating procedures should ensure that:

(1) No stock is issued unless a stock issue document, properly approved, is in hand; and

(2) The general services office is notified in writing by annotating the stock issue document in instances where a stock shortage will not permit filling the amount requested.

c. **Storage:** Release of material stored for another agency should be requested in writing by the owning agency. At the discretion of the accountable property officer (APO), emergency requests for such material may be made by phone. However, in that event, the facility staff should prepare documentation to be signed by the ordering activity upon delivery of material.

d. **Shipments:** Carrier loading of all outgoing shipments must be checked to ensure that correct items and number of pieces are loaded. A facility copy of the bill of lading or other control document should be initialed by the supervisor responsible for loading activities.

### (D) Tracking

a. Warehouse operating procedures should include a system for controlling and tracking property in various stages of change and movement such as:

(1) In transit property (i.e., property that will not be kept in the facility but will be forwarded to other locations);

(2) Property that has temporarily left the facility but is still the responsibility of the facility (e.g., property sent to a commercial packing facility);

(3) Stock issue orders being assembled; and

(4) Property being held for shipment.

b. Such a tracking system should indicate location, time in place at that location, estimated time final action is to be completed, and procedures for follow-up if action is not completed by that time.

## **14 FAH-1 H-318.2-17 Housekeeping**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Proper housekeeping practices are essential for the protection of supplies in storage. Some of the major benefits of good housekeeping are:

- (1) Conservation of space, equipment, operating materials, time, and effort;
- (2) Protection of merchandise;
- (3) Elimination of accident and fire hazards; and
- (4) Increased employee morale.

b. The existence of poor housekeeping generally reflects negligence and carelessness. In most cases, this condition is traceable to inadequate supervision. For maximum operating efficiency and for employee health and safety purposes, the highest standards of housekeeping and orderliness should be enforced in the warehouse at all times.

c. A fundamental rule of good housekeeping is that cleanup action should be considered as a part of the operation itself. In other words, the proper time to clean up debris, scrap, etc. is as soon as practicable after such has accumulated. This does not eliminate the need for a periodic inspection and systematic cleanup such as a regular sweeping of the entire warehouse and a periodic dusting of bin shelves.

d. Recommended good housekeeping practices are as follows:

(1) Remove foreign articles such as paper, short pieces of strapping, twine or rope, dunnage, pieces of scrap lumber, or pieces of boxes from warehouse floors. These constitute an operational hazard and may cause personnel to slip or fall, resulting in serious injury. Also, such items are a constant menace to forklift truck operations and may cause serious accidents;

(2) Immediately remove and properly store truck blocking and bracing dunnage. Pieces of dunnage, when struck by a forklift truck wheel, may jar the truck to such an extent that materials being transported may be thrown from the truck or may cause the operator to lose control of the truck to the extent that it may crash into other stored materials or walls;

(3) Distribute sufficient waste containers throughout the storage areas to facilitate the disposal of all accumulated waste;

(4) Keep disposal containers closed at all times;

(5) Store loose burnable packing supplies such as excelsior, sawdust, and shredded paper in covered metal containers or in storage bins lined with metal;

(6) Keep all aisles clear of obstructions such as pieces of dunnage, pallets, boxes, or other items that will prevent efficient operations in these areas;

(7) Remove oil, grease, or other liquids that would make floors slippery, and treat the area with an oil removing compound to remove all slipperiness from the floor. Do not use flammable liquids as a cleaning agent;

(8) Provide adequate light, ventilation, and heat for proper working conditions. Replace lights, as required, for safe operation;

(9) Provide adequate facilities for the disposal of cigarette butts, matches, and other such items in designated smoking areas;

(10) Maintain sanitary washrooms and lavatories;

(11) Initiate immediate action, when necessary, to obtain utility repairs and maintenance services and carry out immediate follow-up action to insure that equipment, building facilities, etc., are kept in good operating condition;

(12) Properly segregate and store all salvageable scrap and junk material pending final disposition. Nonsalvageable refuse, garbage, and debris should be disposed of daily; and

(13) Inspect all storage areas regularly for cleanliness or any unsafe operating conditions and take immediate action to correct any unsafe conditions noted.

### **14 FAH-1 H-318.3 Storage Aids**

*(CT:PPM-1; 08-11-2004)*

*(Uniform State/USAID)*

The generally accepted term "storage aid" includes various types of devices, implements, equipment, and materials used to facilitate the storage and handling of supplies, and designed specifically to provide maximum accessibility and space utilization with minimum handling. Typical examples of items referred to as storage aids are steel bins, open shelving, shelf boxes, pallet storage racks, pallets, and skids.

## **14 FAH-1 H-318.3-1 Bins and Open Shelving**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Bins and open shelving come in a variety of shapes and sizes, are usually constructed of metal, and may or may not have adjustable shelves and dividers. Metal shelving is preferable to any type of combustible shelving material. In a fire, metal shelving is apt to maintain its integrity whereas combustible shelving will contribute to the fire and is prone to weakness and collapse making extinguishing difficult, often resulting in a more severe fire (see 14 FAH-1 Exhibit H-318.3-1).

## **14 FAH-1 H-318.3-2 Shelf Boxes**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. A shelf box is a storage box that is placed within the bin and is used for storing various small loose items, which because of their shape, etc., are difficult to keep on shelves. The shelf boxes provide retainer walls on four sides of the material being stored, thereby eliminating stock sloping which wastes usable cube space. Shelf boxes can also be double stacked on a bin shelf to facilitate use of cubic space. When relocation of the item is required, it can be accomplished by moving the shelf box with contents. The result is reduced handling of loose stock.

b. Basic types of boxes are:

- (1) Small, one compartment;
- (2) Small, two compartment;
- (3) Large, metal, one compartment; and
- (4) Large corrugated.

c. The standard small one and two compartment boxes are 11.25 cm (4 in) high, 13.75 cm (5 in) wide, and 42.5 cm (17 in) deep.

d. The standard large, metal, one compartment box is 25 cm (10 in) high, 27.5 cm (11 in) wide, and 42.5 cm (17 in) deep.

d. The standard large corrugated box is 20 cm (8 in) high, 25 cm (10 in) wide, and 40 cm (16 in) deep.

## 14 FAH-1 H-318.3-3 Metal Storage Racks

(CT:PPM-1; 08-11-2004)  
(Uniform State/USAID)

The use of metal storage racks is an efficient means of obtaining maximum stock accessibility and cube space utilization. You can acquire it in light to heavy-duty strength and in a variety of sizes. It can accommodate many different items of various sizes and weights, as shelves are adjustable. For high seismic risk locales, metal storage racks shall be designed and anchored to resist earthquake forces. Metal storage racks are of two types:

(1) **Pallet racks:** A storage rack can be used where pallet loads of material to be stored are not strong enough to stack one on another; are irregular in shape and not adaptable to pallet stacking; are too small for pallet storage (generally four pallet loads or less) and too large for bin storage; or where it is desirable to remove pallets from a lower tier without disturbing upper tiers. The size of the pallet to be used in warehouse operations must be determined prior to acquiring storage rack, as the dimensions and capacity of rack for pallet storage will be determined by the size of pallets used and weight of the pallet load to be stored. The rack can be obtained in the single pallet opening type or the multiple pallet opening type. Since it is constructed with adjustable beds or shelves, it provides the necessary flexibility for pallet load height adjustments without wasting cube space. The most suitable height of a pallet rack (i.e., number of pallet tiers) should be determined by load capacity of the floor, available floor-to-ceiling stacking height, average height of pallet load, and capacity and lifting range of forklift trucks (14 FAH-1 Exhibit H-318.3-3(1) shows a single pallet opening rack and a single pallet opening rack in use). Metal storage racks are also ideal for storing air conditioners and are recommended for those posts that find it necessary to maintain a backup stock of air conditioners for emergencies. Vendor catalogs will generally indicate the weight capacity per shelf; and

(2) **Cantilever racks:** Because cantilever racks are long and open, and storage is not obstructed by the uprights, cantilever rack can be used for storing odd shaped and sized items that are too long or bulky for standard pallet rack. It is an ideal rack for storing furniture (e.g., chairs, sofas, mattresses, box springs etc.—see 14 FAH-1 Exhibit H-318.3-3(2)).

## 14 FAH-1 H-318.3-4 Pallets

(CT:PPM-1; 08-11-2004)

(Uniform State/USAID)

### a. **General-use pallet:**

(1) A pallet is a low portable platform constructed of wood, metal, or fiberboard, built to specified dimensions, on which supplies are placed in unit loads to facilitate vertical stacking and handling by mechanical lifting equipment such as forklift trucks. Some of the advantages of using pallets are that you can move a greater number of pieces at one time, increase the speed of handling material, and permit higher stacking faster and with less danger. One disadvantage is that palletizing consumes more cube space than does hand stacking;

(2) Normally, pallet dimensions are determined by the size, weight, shape, and packaging of the items to be palletized, type of materials handling equipment available, and to some extent the center to center column dimensions existing in the storage area. Two of the most popular general purpose pallet sizes in use today are the 1 m x 1.2 m (40 in x 48 in) and the 1.2 m x 1.2 m (48 in x 48 in) sizes. The 1 m x 1.2 m (40 in x 48 in) is recommended for storing general supplies;

(3) Flat pallets are either single faced or double faced. Single-faced pallets have one platform with stringers underneath on which the weight of the load rests. Double-faced pallets have two platforms separated by stringers. Pallets may afford two-way or four-way entry. The two-way entry pallet is so constructed that the forks of the forklift truck may be inserted from either the front or rear of the pallet. The four-way pallet is so constructed that the forks of the forklift truck may be inserted from any of the four sides. Flat pallets are constructed of either softwood or hardwood. The 14 FAH-1 Exhibit H-318.3-4 provides examples of 1 m x 1.2 m (40 in x 48 in) two-way and four-way entry pallets;

(4) Softwood, two-way, flush, and two-way wing pallets are intended for use in storage operations. Four-way (partial) wing is intended for use in storage, except where palletized material is contained by means of pallet support sets, and for shipment worldwide regardless of the mode of transportation.

b. **Skid:** The skid (see 14 FAH-1 Exhibit H-318.3-4) is the forerunner of the pallet. It is a wood or metal platform with two sled-type runners or legs. The skid differs from the pallet in that the construction design does not as a rule permit the tiering of loaded skids.

c. **Box pallet:** The box pallet (see 14 FAH-1 Exhibit H-318.3-4) is an adaptation of a standard double-faced pallet. A simple superstructure is

built on the pallet to give the general appearance of a crate. It can be used for storage of odd sized or weak containers, which will not support a superimposed load and, therefore, cannot be stacked.

d. **Pallet adapters:**

(1) There are various types of pallet adapters available which, when used with conventional pallets, provide an economical means of storing various types of supplies that otherwise would require rack storage. One of the more commonly used adapters is the pallet stacking frame (also referred to as a support set);

(2) The pallet stacking frame/support set is used to form a metal superstructure (box effect) when assembled onto a flat wood pallet, to allow for stacking of pallets containing odd-sized or weak containers which will not support a superimposed load and, therefore, cannot be stacked. These aids are recommended for use in lieu of the box pallet.

#### **14 FAH-1 H-318.3-5 Mezzanine**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Prefabricated mezzanines are commercially available for a variety of storage uses. A mezzanine can be used to take advantage of the cubic space in storage areas where pallet rack is not appropriate and stacking is not possible or not desired. It can be used, for example, over shelving or bin storage areas or over an area where appliances are stored (see 14 FAH-1 Exhibit H-318.3-5). For high-risk locales, prefabricated mezzanines shall be designed to resist earthquake forces.

#### **14 FAH-1 H-318.4 Materials Handling Equipment**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Employees must receive training on the materials handling equipment they will be using that describes:

- (1) How the equipment operates;
- (2) Differences between equipment;
- (3) Safety pre-use checks that must be done, if any;
- (4) Personal protective equipment that must be used when working with the equipment, if any;
- (5) Limitations of the equipment; and

(6) What to do in case of an emergency.

Some countries require operators of powered industrial vehicles to obtain operating licenses or receive specific training. Posts must ensure that any local requirements are met.

b. In most warehouse operations, at least some materials handling equipment, either powered or nonpowered, is necessary to move material from one operation (e.g., receiving to storage) to another, for loading and unloading carriers, and for stacking pallets. Some of the materials handling aids used in a general purpose warehouse are forklift truck, electric hand-pallet truck, hydraulic hand-pallet truck, electric straddle-arm walk-type, electric straddle-arm stand-up ride-type, platform truck, utility handtruck, dolly, and bridge plate.

c. Power-operated materials handling equipment shall not be used in atmospheres containing hazardous materials, particularly explosive gases or volatile vapors, unless specifically designed and approved for use in these atmospheres.

#### **14 FAH-1 H-318.4-1 Forklift Trucks**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. A forklift truck is a vehicle designed to pick up, carry, and stack unit loads of supplies and equipment. The trucks are equipped with telescopic masts that permit loads to be lifted beyond the height of the collapsed mast. They can be obtained in many different designs and models with a variety of rated capacities for various applications. The lifting or rated load capacity is usually defined as the maximum load that the truck is designed to safely transport and/or stack to a specified height. The rated capacities should never be exceeded. Overloading causes excessive wear of equipment and creates additional accident potential.

b. Electric-powered forklift trucks are equipped with solid rubber or semisolid tires for indoor use only. Gasoline-powered forklift trucks may be equipped with pneumatic tires for use in outdoor storage areas.

c. Proper selection of forklift equipment requires a careful and thorough analysis of the work to be performed, and background information on the different types, makes, and features, and their cost, so that the relative merits of each may be compared. For example, the size of the pallets used determines the length of forks required. If the volume is small, low-cost units such as walk-type trucks should be considered. The physical characteristics of the warehouse facility are also important determining factors, especially in a warehouse that was not originally designed to accommodate forklift truck equipment. Where the floorload capacity and

available aisle space are restricted, consideration should be given to trucks having minimum overall weight and a short turning radius, such as a walk-type straddle-arm or a lightweight counterbalance forklift truck. Type and condition of floors must also be considered as small-wheel forklift trucks, particularly straddle-arm trucks, are generally not suitable where floors are irregular, rough, and heavily cracked.

#### **(A) Counterbalance Design**

The conventional counterbalance truck carries the load ahead of the front axle and must, therefore, have sufficient weight back of the wheels to more than counterbalance the weight of the load lifted to the maximum lift height of the forks; 14 FAH-1 Exhibit H-318.4-1(A) shows two trucks with a capacity of 4,000 to 6,000 lbs. Others available include:

(1) A 900 kg (2,000 lb) rated truck with a 2.5 m (100 in) lift: This is an electric-powered, light-duty forklift designed for use in areas where low overhead clearance requires the use of a truck with a low collapsed mast height. It can operate in a 2.85 m (9 ft 6 in) aisle with a 1 m (40 in) load length and is also suitable for truck loading/unloading activities;

(2) An electric-powered, 1,800 kg (4,000 lb) rated truck with a 2.5 m (100 in) lift: It also has a low 1.7 m (68 in) collapsed mast and can operate in a 3 m (10 ft) aisle with a 1 m (40 in) load length;

(3) A gasoline or electric-powered, 1,800 kg (4,000 lb) rated truck with a 3.6 m (144 in) lift, and also with a higher collapsed 2.28 m (91 in) mast: It can operate in a 3 m (10 ft) aisle with a 1 m (40 in) load length; and

(4) A gasoline or electric-powered, 2,700 kg (6,000 lb) rated truck with a 3.18 m (127 in) lift. This is a basic heavy-duty truck for indoor storage operations. It is used when additional lifting capacity is required to handle heavy loads. It can operate in a 3.45 m (11 ft 6 in) aisle with a 1 m (40 in) load length.

#### **(B) Straddle-Arm Design**

a. The forks on the straddle forklift are located between two outriggers, or straddle arms, that extend forward in a plane at floor level, parallel to that of the forks, to straddle the pallet load. Because the straddle arms have contact with the floor, they support the elevated load and no counterweight is required. For this reason, the overall weight of the straddle type forklift is generally less than a conventional counterbalance truck having the same rated lifting capacity. It is more maneuverable than the standard forklift truck and can generally operate in 1.8 m (6 ft) aisles. The straddle arm design is generally a stand up ride type or a walk type (the truck is controlled by an operator who walks with the movement of the

truck). Figures 1 and 2 in 14 FAH-1 Exhibit H-318.4-1(B) are examples of each.

b. Within the straddle arm design there is also a reach type truck in which the forks travel forward to "reach out" for the load. Outriggers provide stability, however, and do not straddle the load. The forks move forward to engage the load, lift it, and then retract to the mast for travel. The reach truck is designed for operation in narrow aisles and congested areas.

### **(C) Forklift Attachments**

a. **Fork extensions:** If large pallets or large crates and boxes are sometimes handled, fork extensions may be used. The lower photograph in 14 FAH-1 Exhibit H-318.4-1(C) shows fork extensions installed on a forklift truck.

b. **Fork truck ram:** The ram is a solid, pole-like device that can be attached to the forklift truck and used for handling coils of wire or cable, rolls of paper or carpet, or other cylindrical or open-center items. The upper image in 14 FAH-1 Exhibit H-318.4-1(C) shows a ram for a forklift truck.

## **14 FAH-1 H-318.4-2 Pallet-Type Handlift Truck**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. The pallet-type handlift truck is available in a hydraulic, hand-operated, hand-propelled model and an electric-powered, hand-operated model. The truck is equipped with two load carrying forks that can be raised about 10 cm (4 in) to carry palletized loads. It is used to move pallet loads that do not have to be tiered, and where short hauls are required. It may also be used for the movement of pallet loads into carriers. It works well in conjunction with forklift trucks and can be operated where a forklift cannot, because of space limitations.

b. The electric-powered model is used whenever the distance the load is to be moved, the size of the load, the presence of grades or inclines along the route, or other considerations require the use of powered equipment.

c. The hydraulic, hand-operated model is used whenever the operating conditions do not require a hand truck with the special characteristics of the powered model. It may be used to advantage in the loading of carriers. 6 FAH 1 Exhibit H-318.4-2 shows examples of both the electric and hand-operated models.

## 14 FAH-1 H-318.4-3 Hand Trucks

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Hand trucks are useful in all types of storage installations, particularly where mechanical equipment cannot be employed because of space limitations. Some models are capable of transporting several hundred pounds. They are often preferable to, and more economical than, a piece of mechanical equipment for the movement of a single item. Examples of two of the more common hand trucks, the two-wheeled upright truck and the four-wheeled platform truck, are shown in 14 FAH-1 Exhibit H-318.4-3 and are described below:

(1) **Two-wheel upright truck:** Consists of two handles, a platform on which the load rests, and a pair of wheels attached to the bottom of the framework. A blade extends at an angle from the bottom of the platform to retain the load. Some truck models include a carriage with casters in the back to help bear the load when moving. Normally this equipment is used with low-volume handling and bulky items such as large cartons. Since these trucks are hand operated, they should be used for short hauls only; and

(2) **Platform truck:** A four-wheeled platform that can be used to advantage for any operation involving short hauls. This truck is an important piece of materials handling equipment for use in small warehouse operations, particularly where the volume of merchandise handled is not sufficient to justify the use of pallets and mechanical equipment.

## 14 FAH-1 H-318.4-4 Dolly Truck

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

The dolly is a platform mounted on small rollers or casters, used for moving awkward and heavy items or pallet loads short distances. They are useful in a variety of warehouse operations from re-warehousing to unloading. In the unloading operation, for example, the palletized load on the roller can be pushed manually to the tailgate of the truck where it can be picked up by a forklift truck (14 FAH-1 Exhibit H-318.4-4 shows various general-purpose dollies).

## 14 FAH-1 H-318.4-5 Loading Dock Equipment

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

There are many different types of equipment designed to bridge the gap between carrier vehicles and the loading dock to facilitate entry of materials handling equipment into trucks. The two basic types are the portable type and the fixed or permanently installed type. The most modern permanently installed type is the automatic self-leveling, push-button control, powered equipment that may be obtained in almost any desired capacity. Listed below are types of loading-dock equipment:

(1) **Bridge plate:** A bridge plate is a metal plate used to span the gap and compensate for the difference in height between the truck and the loading dock. The bridge plate will allow the movement of materials handling equipment in and out of the truck. These plates are usually made of steel or magnesium and are usually equipped with chains or recessed lifting hooks for pickup positioning by a forklift truck. The lightweight feature of the magnesium plate is a distinct advantage over heavier steel plates, particularly where plates are manually hauled for positioning;

(2) **Mechanically operated ramp:** The mechanically operated adjustable ramp is vertically adjustable to the height of truck floors so that movement of materials handling equipment in and out of the truck is permitted. These ramps are either permanently installed in the dock or located in front of the dock;

(3) **Flip-ramp dockboard:** A flip-ramp dockboard is a manually operated dockboard mounted to the front of the loading dock; and

(4) **Mobile-vehicle loading ramp:** A mobile-vehicle loading ramp is a portable ramp used for loading and unloading with forklift trucks from ground level.

## 14 FAH-1 H-318.5 Pest Management

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Responsible officials at all posts abroad must implement an integrated pest management (IPM) program at all facilities, which is mandatory under 6 FAM 616.8.

## **14 FAH-1 H-318.6 Warehouse Safety**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. An accident occurs when there is an unwanted release of energy in some form, be it electrical, chemical, kinetic, or mass biologicals. A hazard is a combination of factors that may cause an accident. Management is responsible for the control of hazards and the effectiveness of the safety program. The control of hazards may be accomplished through engineering solutions, guarding, proper supervision, warnings, and adequate training. Adequate training includes educating the employees about the hazards, how to avoid the hazards, and how to recognize changes that may increase a workplace hazard.

b. No supervisor or worker should ever walk past a potentially hazardous situation without either correcting it or notifying higher authority about the situation.

c. Following are some of the basic safety practices that should be observed in a general purpose warehouse operation.

### **14 FAH-1 H-318.6-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Review 6 FAM 610 to ensure that warehouse operations are managed according to the policy set by the Department's Safety, Health and Environmental Management Division (OBO/OM/SHEM). The post occupational safety and health officer (POSHO) will inspect the warehouse twice a year. Warehouse supervisors are responsible for regular hazard inspections of their workplaces on a daily or weekly basis, depending on the nature of their work.

b. Keep the edges of loading/unloading platforms clear of obstructions such as tools, warehouse trucks, bridge plates, and dunnage. Although this kind of equipment needs to be on the dock, it should be kept neatly stowed out of the way when not in use.

c. Eliminate tripping hazards such as telephone, light, and power cables. If a tripping hazard cannot be eliminated, mark it plainly.

d. Provide adequate lighting. Bulb covers or similar devices must be installed around any bare bulb lighting fixtures located at the height of seven feet or below or in locations where the bulbs are subject to physical damage.

- e. Remove broken straps, exposed nails, or wire from containers.
- f. Clean up any liquid spill immediately so long as it is safe to do so. If the spill is of a hazardous material such as a strong corrosive or toxic material, report it and follow procedures for clean up of the material.
- g. When the warehouse is handling hazardous materials, ensure that the Material Safety Data Sheets (MSDSs) for the material are available and that the supervisor alerts the other employees of the potential hazard.

## **14 FAH-1 H-318.6-2 Materials-Handling Equipment**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. From a safety standpoint, electric materials-handling equipment (MHE) should be used in warehouse operations whenever possible. If internal combustion MHE is used, the order of choice is diesel, propane, and gasoline. The use of internal combustion presents a problem with carbon monoxide. The carbon monoxide hazard's solution requires building ventilation. The only way to be assured that the ventilation is adequate is to have an industrial hygienist from the Overseas Buildings Operations Safety, Health and Environmental Management Division (OBO/OM/SHEM) survey for carbon monoxide. Preferably, the survey should be done during cold or inclement weather when the warehouse doors are most likely to be closed and when building ventilation is adversely affected. The present limit of carbon monoxide for an eight-hour day is 25 PPM (parts per million). Surveys should be made regularly, since conditions of engines may change.

b. Power-operated industrial trucks shall not be used in atmospheres containing hazardous materials, particularly explosive gases or volatile vapors, unless specifically designed and approved for use in these atmospheres. Propane-, diesel-, and gasoline-powered vehicles emit combustion by-products (particulates, carbon monoxide, nitrogen dioxide, sulfur dioxide, etc.) that can pose health hazards to employees when used inside buildings, truck trailers, and other areas with inadequate ventilation. Adequate general ventilation must be provided to space where these vehicles are used inside to prevent accumulation of hazardous pollutants. OBO/OM/SHEM should be contacted to assist post in determining if there is adequate ventilation or to evaluate any health risks from exposure to combustion by-products during warehouse operations. All equipment must be maintained on a regular basis to assure its safe operation.

c. Ensure that employees are properly trained in the operation, maintenance, and care of forklifts or other powered-materials handling equipment (battery charging, refueling, etc.).

- d. Only trained and authorized personnel should be allowed to operate forklifts.
- e. Do not drive forklift trucks with the forks elevated; have them just high enough to clear any obstructions (normally 10 cm/4 in) above the floor.
- f. When parked, the forks should be allowed to rest on the floor.
- g. Check pallet loads before lifting to insure proper loading and balance.
- h. Tilt load back properly before hoisting.
- i. Never lift with one fork.
- j. Never add counterweights to the fork truck to increase lifting capacity.
- k. Never allow anyone to ride a load being handled by forklift truck.
- l. Use proper-size (length) forks for each handling operation and slip-on extensions for extra-long loads.
- m. Stacks should not be bumped or pushed with forklift trucks to straighten or move the stack.
- n. Do not stand under loads being hoisted.

### **14 FAH-1 H-318.6-3 Tools**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

- a. Inspect all tools before use. Report broken or defective tools immediately.
- b. To prevent serious injury to eyes, hands, or face, replace chisels, hammer faces, and pliers that have burred, chipped, or badly worn working surfaces or edges.
- c. Sharp edged tools should be stored in safe places.
- d. Do not carry unshielded sharp edged tools in pockets.
- e. Portable plates, used to bridge the space between truck doors and platforms, should be immobilized to prevent shifting or falling.

## **14 FAH-1 H-318.6-4 Ladders**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Always inspect ladders before use. Do not use ladders with broken, splintered, or defective rungs, side rails, or feet. Such ladders should be reported to a supervisor.

b. Use the 4:1 rule when using extension or straight ladders. The base of the ladder must be placed one foot away from the vertical surface (wall, rack, etc.) for every four feet of elevation (i.e., the height where the top of the ladder will rest on the surface).

## **14 FAH-1 H-318.6-5 Lifting and Carrying**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

- a. Size up the object to determine if it can be lifted and carried safely.
- b. Determine if nails, wire, or rough edges must be avoided or removed before picking up the object.
- c. Wear gloves when necessary.
- d. Ask for help when handling objects of excessive weight, bulk, or odd shape.
- e. Get a good handhold. Wipe greasy or other slippery substances from hands or object to be lifted.
- f. Be sure to have good footing, then lift with a smooth, even motion.
- g. If a lift requires an awkward position, especially if it involves twisting the back or leaning to the side, get help with the lift.
- h. If the view is blocked, when carrying a load, get help with the load.
- i. When lifting from the floor or ground, keep the arms and back as straight as possible, bend the knees, and then lift with the leg muscles. Lifter should be able to see the ceiling throughout the lift.
- j. When lifting from bench, table, shelf, or other elevated surface, bring the object as close to the body as possible to avoid an unbalanced position. Keep the back as straight as possible and lift with the leg muscles.

k. When carrying an object, keep the load close to the body and avoid carrying the load long distances without resting.

l. Ensure that there is a clear path between the locations that an item will be moved to and from.

## **14 FAH-1 H-318.7 Security**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Security is important in any warehousing operation. U.S. Government property shall be both protected in proportion to the value and sensitivity involved, and in accordance with the Overseas Security Policy Board's (OSPB) 12 FAH-6, OSPB Security Standards and Policy Handbook, regarding physical security standards for unclassified warehouses (storage only) in the current post-specific level of crime threat. Other security measures as outlined below should be applied to the maximum extent feasible. Two of the most important protection measures are the prevention or detection of unauthorized entry and the control of authorized entry.

### **14 FAH-1 H-318.7-1 Preventing and/or Detecting Unauthorized Entry**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Use measures such as fences, protective lighting, barriers, guards, and monitored alarm systems to prevent or detect unauthorized entry.

b. Post "No Trespassing" signs so that they are visible from any approach on all fences, boundaries not enclosed by a fence, and buildings not inside a security fence.

c. Provide adequate outside lighting of perimeter walls and/or fence lines.

d. Close dock doors at all times, unless trucks are loading or unloading. An employee must be within sight of any door that is open. Use locked sliding or rolling gates, grilles, or screens across openings in lieu of doors during a workday, provided they are sufficient to prevent access by outsiders into the facility. Control access to the warehouse to prevent entry by unauthorized personnel. Close and lock all outside bay and pedestrian doors through which unauthorized access can be made.

e. Before departure at the end of the day, assign a staff member the responsibility for inspecting all doors authorized to be open during that day, to ensure that the doors are secure.

## **14 FAH-1 H-318.7-2 Controlling Authorized Entry**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. Direct the access of employees, delivery personnel, and other visitors through a central reception area. Post interior and exterior signs indicating where visitors are to report and points beyond which they are not permitted.

b. Establish and maintain a record of all keys to the facility. In the record, include the names of all individuals having keys, their office and home phone numbers, and the area or door each key will open. Use a safe or a barlock file cabinet with a combination padlock to store Unicode keys.

c. Designate the exits through which all employees will be required to exit the building. If other than a central reception area is used for exiting, limit the exits to the minimum necessary to be observed by authorized personnel.

d. Require employees to obtain appropriately executed property passes if they wish to carry containers or packages, other than lunch boxes, from the facility (see 14 FAH-1 H-425).

e. Personnel will use the size and type of lunch boxes and other food containers brought into the facility consistent with the size and type normally used for that purpose.

f. Lunch room and other break areas will not be adjacent to any area used for storage of pilferable items.

## **14 FAH-1 H-318.8 Fire Safety**

### **14 FAH-1 H-318.8-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Fire safety awareness cannot be overemphasized and should be integrated into everyday warehouse operation. Warehouse personnel are generally fire conscious to the same degree as that shown by the warehouse chief, and the chief's degree of fire safety awareness is generally commensurate with that shown by management. In the event that a fire does occur, prompt and proper protective action minimizes the seriousness of the fire. Therefore, the accountable property officer (APO) will insure that adequate fire safety awareness exists in the warehouse (see 6 FAM 780 and/or contact Overseas Buildings Operations Fire Protection Division (OBO/OM/FIR)).

## **14 FAH-1 H-318.8-2 Emergency Action Plan**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. An emergency plan to ensure the safe and rapid evacuation of building occupants shall be developed and all personnel thoroughly briefed on the plan. The briefing should address:

- (1) Firefighting equipment installed in the building and its exact location and intended use;
- (2) How to identify and give a fire alarm promptly on discovery of a fire;
- (3) How to use the various types of fire extinguishers;
- (4) Each employee's participation in evacuation or firefighting activities; and
- (5) How to evacuate the building.

b. All personnel must be properly trained, and the emergency action plan must be rehearsed twice a year.

## **14 FAH-1 H-318.8-3 Emergency Exits**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

All exits to be used in an emergency must be clearly identified and are not to be obstructed by storage or locks or bolts during working hours.

## **14 FAH-1 H-318.8-4 Fire Alarms**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Preferably the building should be equipped with a fire alarm system. The alarm system may be activated by smoke/fire detectors or the sprinkler system if the building is so equipped. The alarm system should also have pull stations. The employees should know how the system works, whether it is a local alarm system or if it is a central system, and the proper telephone procedure for reporting a fire.

## **14 FAH-1 H-318.8-5 Fire Extinguishers**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If the area is used for paper storage, for example, the extinguisher should be a Class A or ABC extinguisher that is properly sized for the potential fire threat. When flammables or combustible liquids are the fuel source, the extinguisher should be a Class B, or B/C extinguisher, properly sized for the potential fire threat. There should be a fire extinguisher within 23 meters (75 feet) of every point in the warehouse. The distance is measured by travel route, not straight line. When fire extinguishers are positioned on the walls, a bright red circle or square bordered by a narrow white stripe shall be used as a background. If they are positioned on posts or columns, a bright red band shall be painted on the floor beneath the location of the extinguishers to indicate that access to the equipment shall not be blocked. The columns should also be painted to indicate extinguisher locations. Refer to the Bureau of Overseas Buildings Operations OBO Fire Protection Guide for the proper types of fire extinguishers and their replacement.

#### **14 FAH-1 H-318.8-6 Smoking**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

A designated smoking area shall be assigned. There is **no smoking allowed** in general storage areas of any facility and "No Smoking" signs shall be prominently displayed throughout such areas. Refer to the Overseas Buildings Operations OBO Fire Protection Guide for proper types of fire extinguishers and their placement.

#### **14 FAH-1 H-318.8-7 Storage**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. When the building is equipped with an automatic sprinkler system, the stack clearance below the sprinkler deflectors should:

- (1) Be 45 cm (18 in) when stack heights do not exceed 4.5 m (15 ft);
- (2) Be 90 cm (3 ft/36 in) when stack heights exceed 4.5 m (15 ft); and
- (3) Be 90 cm (3 ft/36 in) when hazardous commodities are involved, regardless of stack height.

b. The stack clearance below joists, rafters, and beams should:

- (1) Be 45 cm (18 in) when stack heights do not exceed 4.5 m (15 ft);
- (2) Be 90 cm (3 ft/36 in) when stack heights exceed 4.5 m (15 ft); and

(3) Be 90 cm (3 ft/36 in) in buildings without sprinkler systems, regardless of the stack height.

c. Around light or heating fixtures, a 45 cm (18 in) clearance should be maintained.

## **14 FAH-1 H-318.8-8 Aisles**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

Aisles should be kept clear. Clear and easy access to all interior storage areas is essential for fire fighting purposes.

## **14 FAH-1 H-318.9 Shared Facility**

### **14 FAH-1 H-318.9-1 General**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

If the warehouse belongs primarily to the Department but is shared by other agencies that maintain stock inventories or have property stored, the custodial responsibilities generally rest with the Department. That is, the care and safekeeping of the property should be the responsibility of the Department accountable property officer (APO), just as is the responsibility for the Department's property. In these instances, an agreement, under the International Cooperative Administrative Support Services (ICASS) program, should be reached between State and each of the other agencies with regard to the responsibilities of each agency. All warehouse activities should be addressed in the agreement and it should be signed by officials of all agencies involved. Each ICASS agreement should be reviewed periodically, but not less than every three years, and the review documented in the files.

### **14 FAH-1 H-318.9-2 Activities to Address in the ICASS Agreement**

*(CT:PPM-1; 08-11-2004)*  
*(Uniform State/USAID)*

a. **Space allocation:** Space control and allocation should be the responsibility of the Department. Other agency requests for storage space should be submitted in writing to the accountable property officer (APO). If the agreement involves property to be stored temporarily, the agreement should include the approximate storage time required.

b. **Receiving and inspection:** Inspecting, tallying, and preparing receiving reports for shipments consigned to the warehouse should be the

responsibility of the Department. The Department will be responsible for providing other agencies with copies of receiving reports in a timely manner.

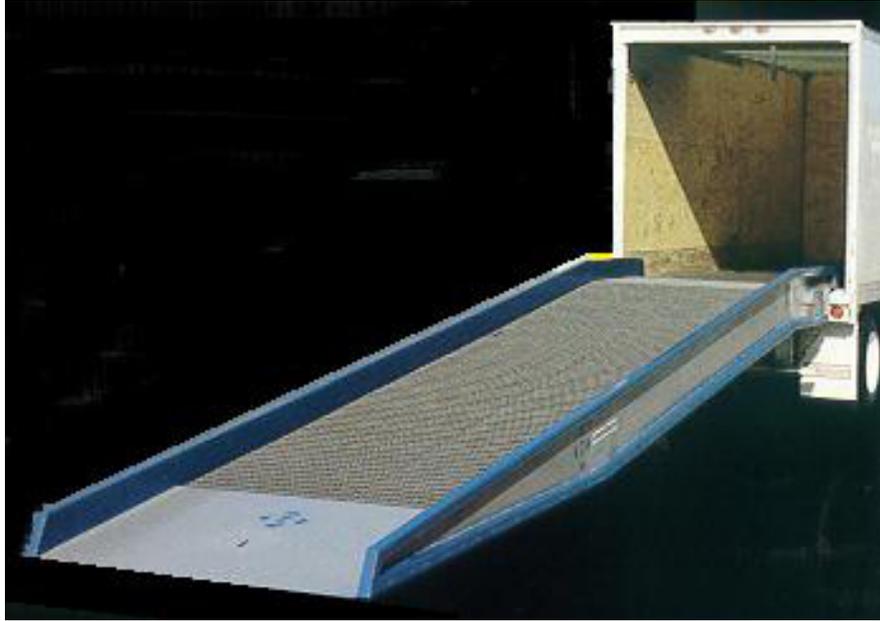
c. **Storage:** Proper care and protection of property being stored in the warehouse should be the responsibility of the Department. To avoid unnecessary storing of temporarily stored property, the Department should provide each agency with a semi-annual report of all property being held beyond the agreed upon storage period and request that the agency provide the Department with a justification for continued storage or with disposition instructions.

d. **Security:** It should be the Department's responsibility to insure that classified, sensitive, and pilferable property receives proper handling and storage in accordance with Department regulation.

## **14 FAH-1 H-319 UNASSIGNED**

## 14 FAH-1 Exhibit H-314.2 LOADING DOCK EQUIPMENT

*(CT:PPM-1; 08-11-2004)*



**Continuation—14 FAH-1 Exhibit H-314.2**





## **Continuation—14 FAH-1 Exhibit H-315.6-1**

### **Data Field Preparation Instructions for Form DS-127**

#### **Data Field**

##### **[1] Page**

Enter the number of the page of the report and the total number of pages in the report. For example, the first page of a three page report would be entered page 1 of 3 pages.

##### **[2] Office or Foreign Service Post**

Enter the name of the post preparing the report and the name of the agency for which the report was prepared.

##### **[3] Name and Address**

Enter the name and address of the supplier from which the property was acquired. This can generally be obtained from the acquisition document.

##### **[4] Point of Shipment**

Enter the name of the place from which the shipment originated. This can generally be obtained from the bill of lading or other transportation document.

##### **[5] GBL Number**

Enter the U.S. Government and/or commercial bill of lading covering the shipment.

##### **[6] Method of Acquisition**

Place an "X" in the appropriate box to indicate how the property was acquired. If "other" is used, the method should be explained.

##### **[7] Appropriation**

Enter the appropriation symbol. This can be obtained from the funds data indicated on the acquisition document.

##### **[8] Allotment**

Enter the allotment. This can be obtained from the funds data indicated on the acquisition document.

## **Continuation—14 FAH-1 Exhibit H-315.6-1**

### **[9] Object Class**

Enter the object class code. This can be obtained from the funds data indicated on the acquisition document.

### **[10] Report Number**

Enter the receiving report number here. Receiving reports must be numbered by fiscal year. For example, the thirty first number in fiscal year 2002 would be 02-31. So that all numbers assigned will remain consecutive, reports prepared for other agencies should be assigned numbers within the State numbering sequence and the agency identification included as part of the number (e.g., 00-32/AID).

### **[11] P.O. Number**

Enter the purchase order number here.

### **[12] Requisition Number**

If a requisition is the acquisition document (e.g., General Services Administration (GSA) requisition 19ZX23-0144), enter the number here.

### **[13] Transfer Document Number**

If the property acquisition is a transfer from another post or agency, enter the transfer document number here.

### **[14] Contract Number**

If a contract is the acquisition document, enter the contract number here.

### **[15] Job Number**

If a job number is associated with the item(s) delivered, enter the job number here. For example, incoming material might have been ordered for a construction or maintenance project, to which a job number was assigned. Another use for this field is to record the USDA reference number on shipments that were handled by the despatch agency.

### **[16] Item Number**

The item number is simply the number of each line item on the report. Line items should be sequential beginning with the number 1.

## **Continuation—14 FAH-1 Exhibit H-315.6-1**

### **[17] Description**

Enter the item description. Since the report will be a working document for posting to the property records, it is important that the item be clearly identified. The item description on the property records is arranged with the main descriptive noun in the first position followed by qualifying adjectives, e.g., desk, metal, double pedestal, 66in X 40in, etc. The receiving report should be completed in the same way. Refer to the acquisition document to assist in formulating a description. However, the description should not be routinely copied from the acquisition document without first verifying that the item received is the exact item listed on the acquisition document. If a stock number is associated with the item, the stock number should also be entered as part of the description. For USAID: Enter the Control Number preceding the description and use only the standard descriptions developed by AID/W, which are listed in the Nonexpendable Guide.

### **[18] Quantity**

Enter the quantity of each unit of issue received. Since all property received must be accounted for, even damaged or otherwise unusable property should be included in the reported quantity received. Damaged property must become a matter of record. Therefore, the extent of damage must be included in comments immediately beneath the appropriate line item entry or at the end of the report. If an overage is received (more items received than ordered), only the quantity ordered should be entered. A separate line entry, indicating the amount of the overage, should be made at the end of the report. If a shortage exists, (a lesser quantity received than what was indicated on the packing list), a comment should be made at the end of the report indicating the line item and quantity short.

### **[19] Unit**

Enter the unit of issue for each item ordered. Generally, the unit of issue indicated on the acquisition document may be used.

### **[20] Unit Price**

Enter the unit price of each item. Because price changes sometimes occur, the price of an item delivered may differ from the price listed on the acquisition document. Generally, the current price can be found on the packing list.

### **[21] Amount**

Enter the total dollar amount (quantity times unit price) of the line item here.

## Continuation—14 FAH-1 Exhibit H-315.6-1

### [22] Certification of Receipt (Name and Title)

Print or type the name of the person who inspected and tallied the shipment and that person's title and phone number.

### [23] Certification of Receipt (Signature and Date)

The person whose name appears in field [22] signs and dates here.

### [24] Certification of Receipt (Mailing Address)

The business address of the person whose name appears in field [22] is entered here.

### [25] Order Delivery Status

**Date delivered** is the date on which the shipment was delivered. This may not necessarily be the same date that the property was inspected and accepted.

**Complete** indicates that all property ordered on the acquisition document has been received. If the total quantity of a line item has been received, even though some of the material has been damaged or otherwise unusable, the order must be treated as complete. The vendor will make no further deliveries. When additional shipments are made as a result of a damage claim, additional documentation is normally generated.

**Partial** indicates that the order is not complete and further shipments are expected.

**Defective** indicates that some of the material indicated on the report was received in a damaged or otherwise unusable condition. An explanation should be included in the report.

**Short** indicates that, although the packing list or other documentation states that all material was shipped, **not** all was received.

**Over** indicates that more material was received than was ordered.

**Final** indicates that a previous partial delivery(s) was received and this is the final delivery.

## **Continuation—14 FAH-1 Exhibit H-315.6-1**

### **[26] Property Records**

The person who enters the property in the property records initials here.

### **[27] Accountable Property Officer**

The accountable property officer initials here, indicating that he or she accepts accountability for the property.

# 14 FAH-1 Exhibit H-316.2

## FORM DS-1955

### RECEIVING WORKSHEET FOR NONEXPENDABLE PROPERTY

(CT:PPM-1; 08-11-2004)



U.S. DEPARTMENT OF STATE  
**RECEIVING WORKSHEET FOR NONEXPENDABLE PROPERTY**

(1) DATA ENTERED BY <i>(Last, First, Middle)</i> Tate, Ronald T.		(2) DATE ENTERED <i>(mm-dd-yyyy)</i> 07-07-2000	
(3) *PROPERTY NUMBER 248732		(4) ITEM CODE 24221	(5) AGENCY CODE State
(6) *SERIAL NUMBER 1G7852		(7) MODEL/PART NUMBER L-7785	
(8) PROCUREMENT NUMBER 4215-012345	(9) MANUFACTURER Smith and Company	10. **INVOICE COST	
(11) DATE RECEIVED <i>(mm-dd-yyyy)</i> 07-07-2000	12. DATE ISSUED <i>(mm-dd-yyyy)</i>	13. **OTHER COSTS	
14. *REPLACEMENT YEAR	15. DAYS AT TEMP. LOCATION	(16) *CONDITION N1	
17. ORG. CODE	18. BLDG	19. UNIT	20. ROOM
21. SUB-ROOM			
22. RESPONSIBLE OFFICER			
23. DESCRIPTION (Second Line)			
24. RISK FLAG	25. CHIEF OF MISSION FLAG	26. QUANTITY RECEIVED <i>(Group Property Only)</i>	
27. COMMENTS			
<b>FOR CAPITALIZED PROPERTY ONLY</b>			
28. DEPRECIATION LIFE		29. SALVAGE VALUE	30. GENERAL LEDGER ACCOUNT
31. APPROPRIATION		32. ALLOTMENT	
<i>*(Not Entered for Group Property)</i> <i>** (For Group Property, This is the Cost for the Entire Group)</i>			

DS-1955  
8-1999

## **Continuation—14 FAH-1 Exhibit H-316.2**

### **Data Field Preparation Instructions for Form DS-1955**

The data field numbers below correspond to the circled numbers on the form.

#### **Data Field**

##### **[1] Data Entered by**

Enter the name of the individual who prepares the worksheet.

##### **[2] Date Entered**

Enter the date that the worksheet is prepared.

##### **[3] Property Number**

Enter the six digit property number shown on the bar code label that was affixed to the property (not entered for Group Property).

##### **[4] Item Code**

Enter the item code here. If the receiving clerk is to complete this field, the accountable property officer (APO) should provide the receiving clerk with a listing of the item codes contained in nonexpendable property application (NEPA) along with written instructions for preparing the NEPA worksheet. The APO should ensure that the receiving clerk understands the appropriate terminology applied to residence property and other nonexpendable property, and can assign the correct item code to property. It is suggested that photographs of property items bearing appropriate item code numbers be made part of the written instructions. Written receiving procedures should also include instructions to be followed when an item cannot be matched with an item code. For example, instructions might advise, if a particular kind of residence property chair cannot be matched, to use a code that represents more of a miscellaneous category (e.g., "15215" for "chair, household, other"), or to use a code that represents the first and broadest category (e.g., "61200" for "glassware, crested").

## **Continuation—14 FAH-1 Exhibit H-316.2**

### **[5] Agency**

Enter the abbreviation for the agency that funded the purchase of the property. Normally standard abbreviations such as STATE, USAID, etc. are used. The code used here, however, must have been previously entered in the "AG" table of the FLEXTAB, otherwise the system will not take the entry. Identification of the funding agency can be obtained from the acquisition document. If desired, this field can be used to designate different parts of an agency. For example, if a post wishes to have a separate listing for property in one part of the agency because that part has its own budget and its own inventory, it can be done by adding a numeric code (e.g., STATE1, STATE2). The APO should ensure that the receiving clerk is aware of the codes available for use in this field.

### **[6] Serial Number**

If the item has a serial number, enter that number.

### **[7] Model/Part Number**

Preferably, the model number should be entered. If the model number is not available but the part number is, enter the part number.

### **[8] Procurement Number**

Enter the number of the acquisition document.

### **[9] Manufacturer**

This can be obtained from the acquisition document.

### **[10] Date Received**

Enter the date that the property arrived at post.

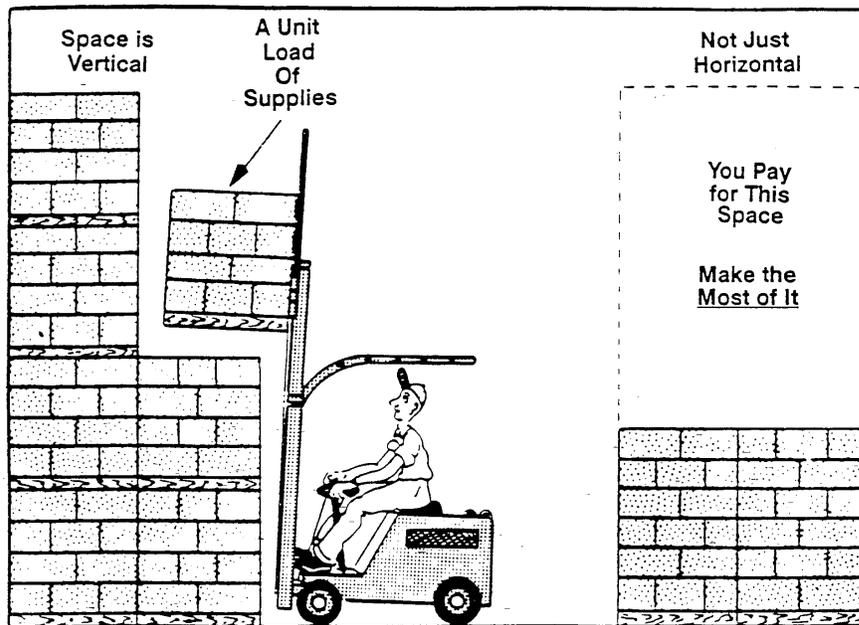
### **[16] Condition (not for Group Property)**

Enter the condition code. The condition code describes the current condition of the property. Two sets of condition codes are available for use in NEPA. One set is listed in the NEPA User Manual and the other set is contained in 14 FAH-1 Exhibit H-621.3. The APO should instruct the receiving clerk on which set to use and provide him or her with the appropriate listing.

# 14 FAH-1 Exhibit H-318.2-2 PALLETS

(CT:PPM-1; 08-11-2004)

## Bulk Storage Using Cubic Space



*Space is three-dimensional*

**Think of Cubic Space, Not Just Square Footage**

# 14 FAH-1 Exhibit H-318.2-4 STACKING

(CT:PPM-1; 08-11-2004)

## Stacking Palletized Supplies

Figure 1: Row Stacking

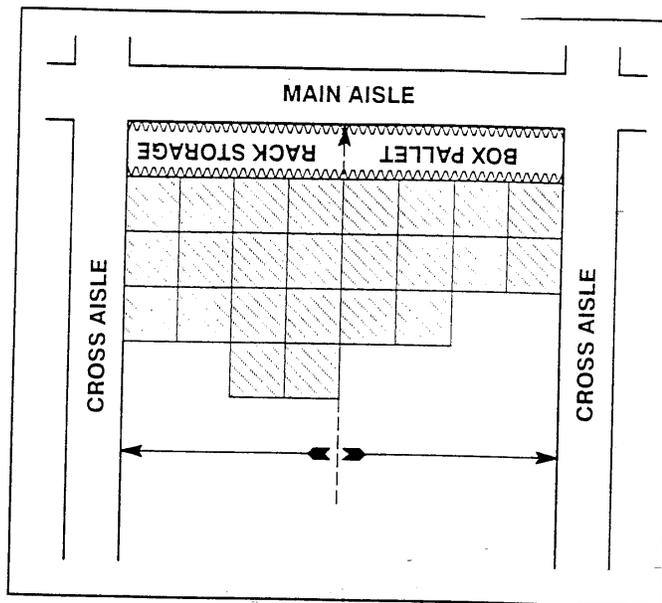
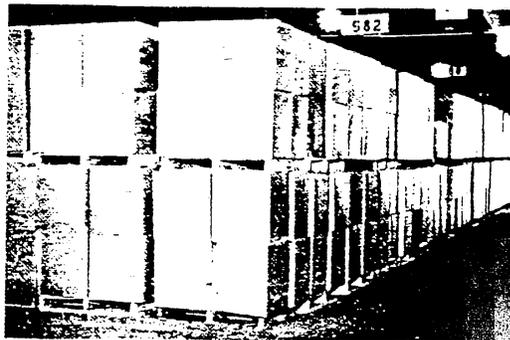


Figure 2: Block Stacking

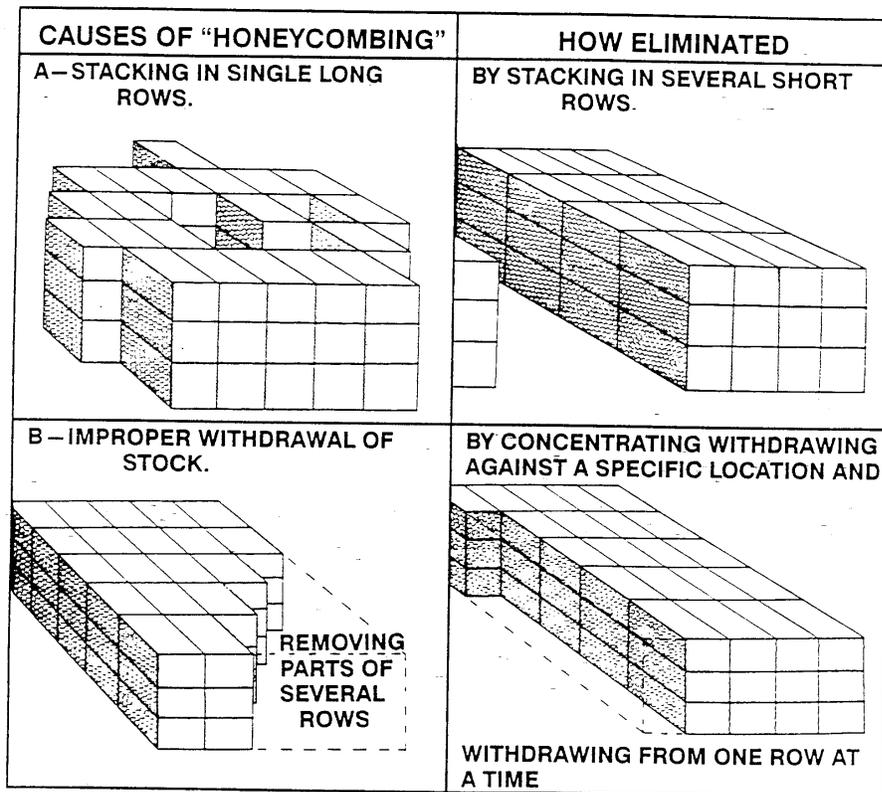


# 14 FAH-1 Exhibit H-318.2-5

## HONEYCOMBING

(CT:PPM-1; 08-11-2004)

### Honeycombing: Its Cause and Cure

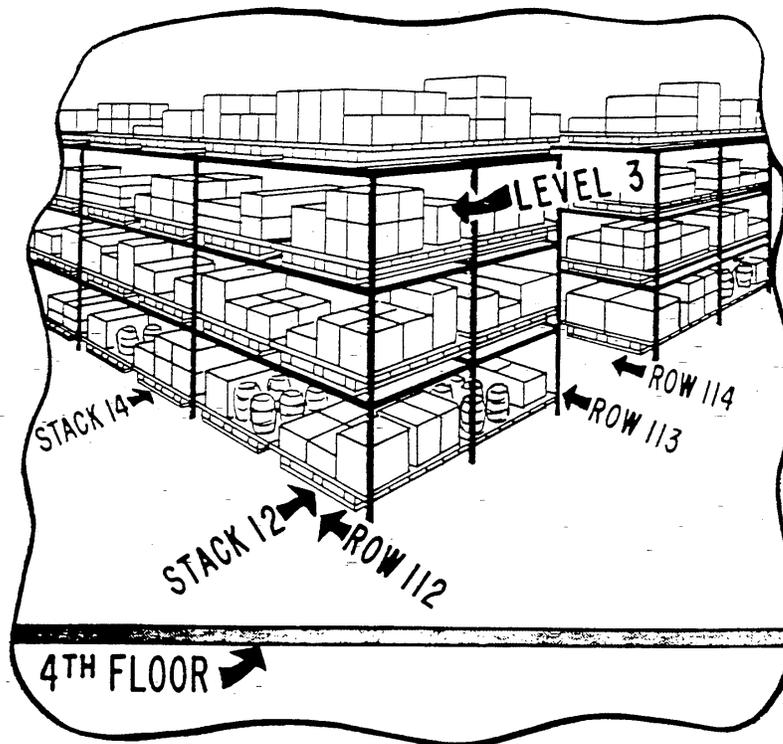


# 14 FAH-1 Exhibit H-318.2-16(B) STOCK LOCATOR SYSTEM

(CT:PPM-1; 08-11-2004)

## Storage Site Identification

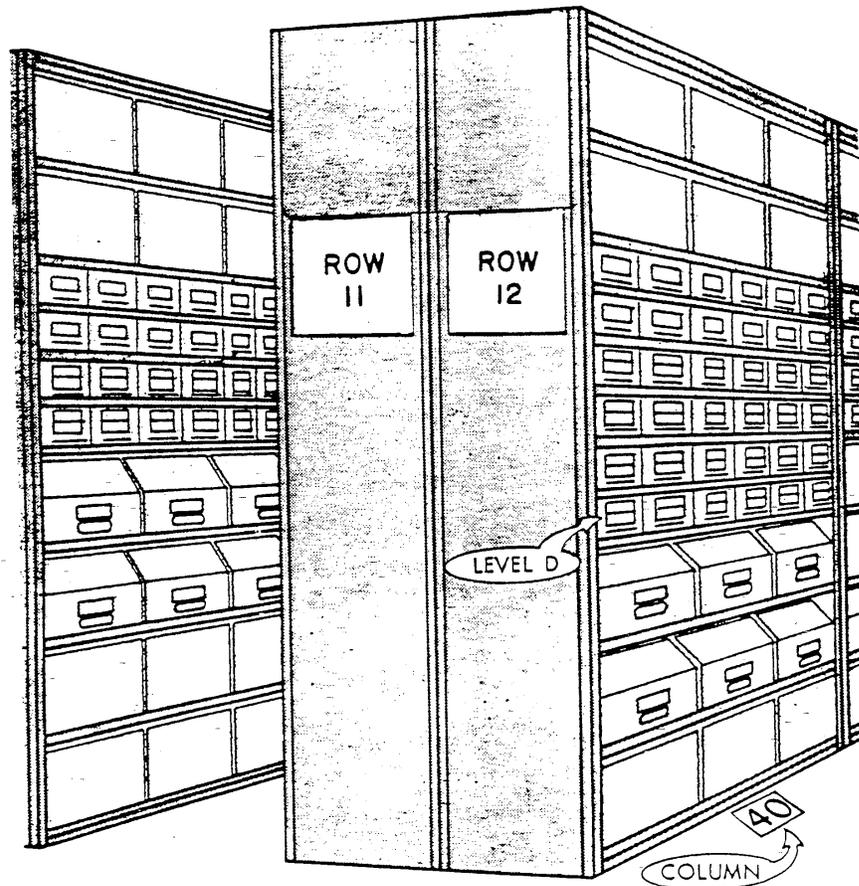
Pallet Rack Area



## Continuation—14 FAH-1 Exhibit H-318.2-16(B)

Storage Site Identification, continued

Example of Bin Location Descriptive Pattern



## Continuation—14 FAH-1 Exhibit H-318.2-16(B)

### Stock Location Format

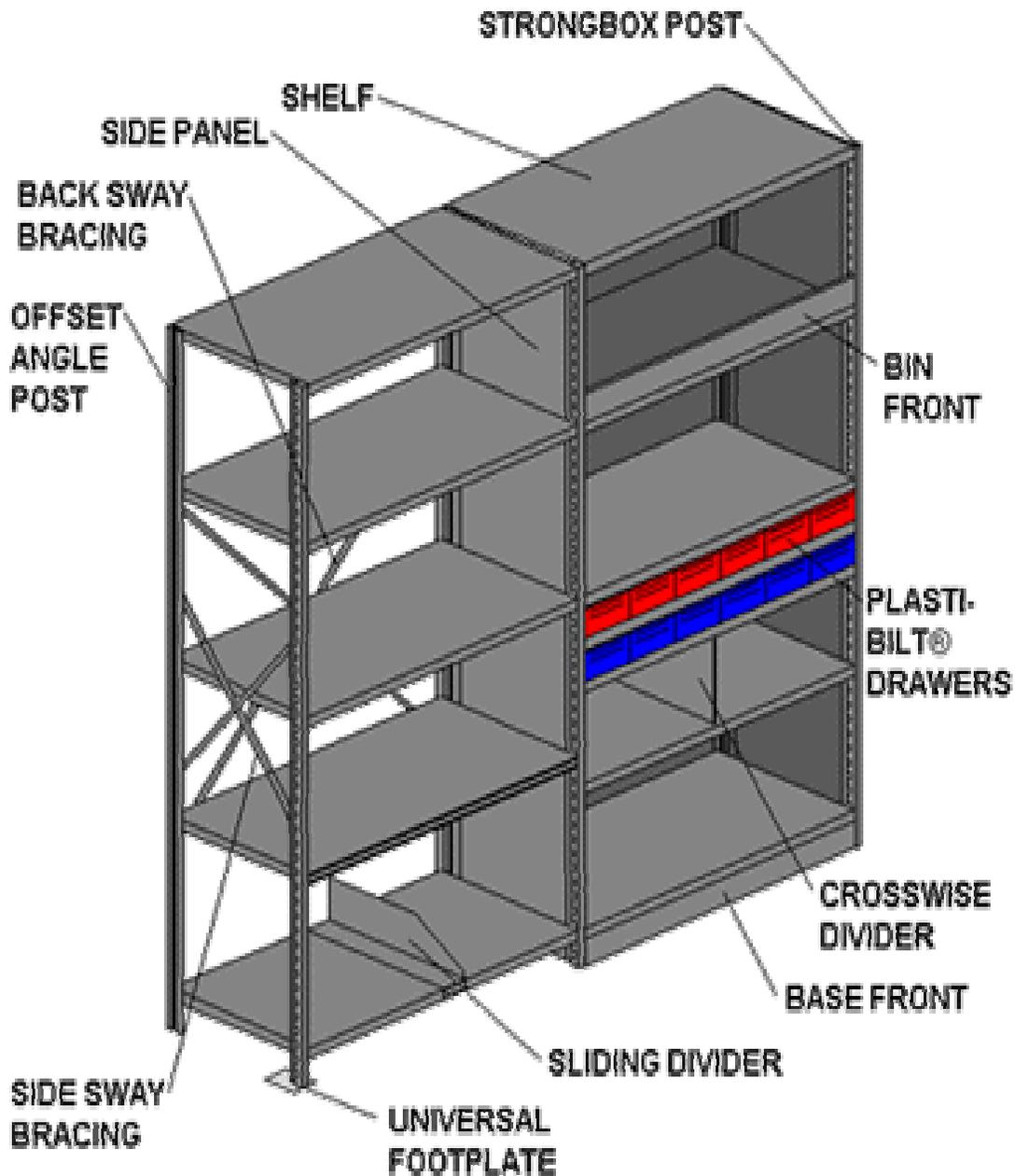
#### Stock Location Form

STOCK LOCATION FORM	
Date _____	Quantity _____
Stock/Part No. _____	U/I _____
Description _____	
Old Location _____	New Location _____
Action Authorized By _____	
Action Taken By _____	
Posted to Location Record By _____	

## 14 FAH-1 Exhibit H-318.3-1 STORAGE BINS AND OPEN SHELVING

(CT:PPM-1; 08-11-2004)

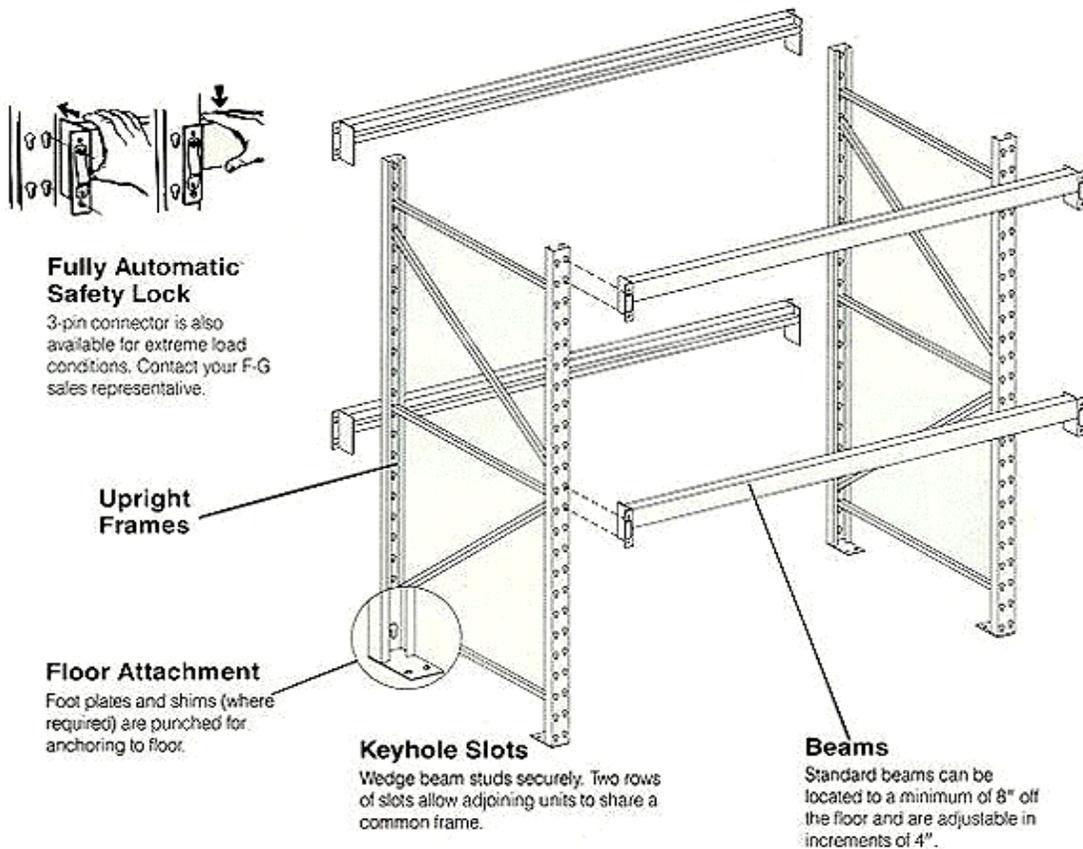
[NOTE: For high seismic risk locales, storage bins and open shelving shall be designed and anchored to resist earthquake forces.]



# 14 FAH-1 Exhibit H-318.3-3(1) PALLET RACK

(CT:PPM-1; 08-11-2004)

[NOTE: For high seismic risk locales, storage bins and open shelving shall be designed and anchored to resist earthquake forces.]



**Continuation—14 FAH-1 Exhibit H-318.3-3(1)**

**PALLET RACK IN USE**



## 14 FAH-1 Exhibit H-318.3-3(2) CANTILEVERED RACKS

*(CT:PPM-1; 08-11-2004)*

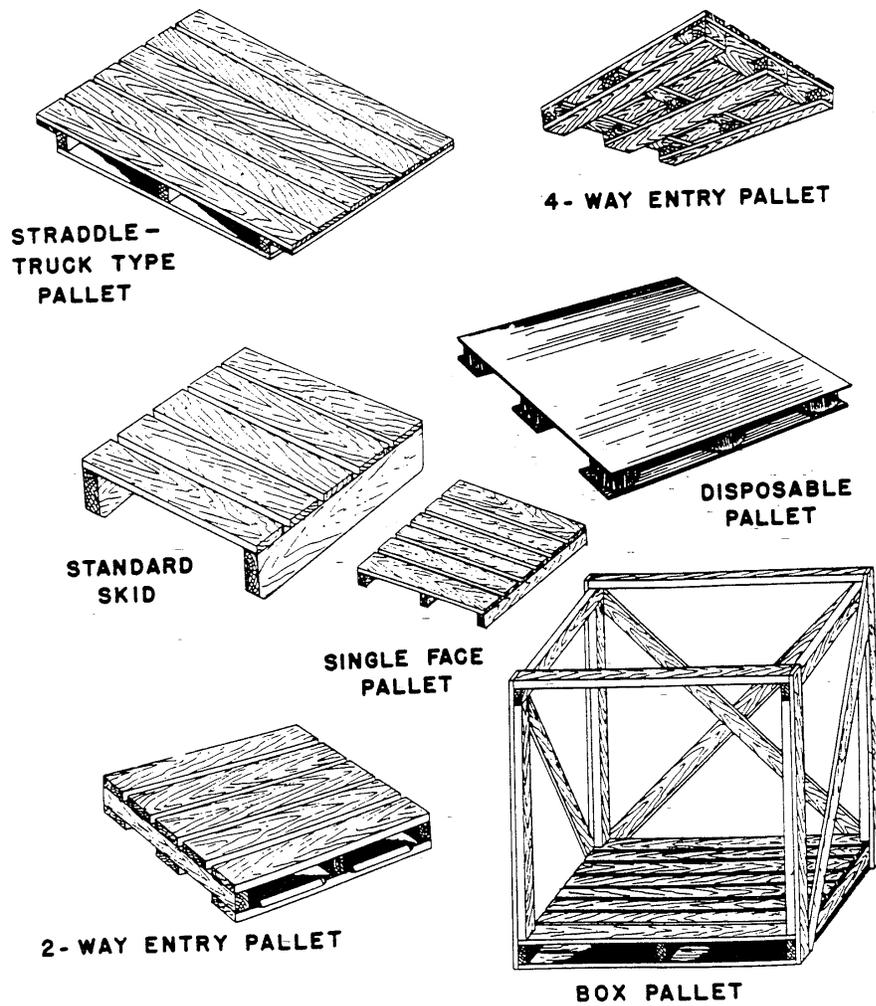


# 14 FAH-1 Exhibit H-318.3-4 PALLETS, BOX PALLETS, AND SKIDS

(CT:PPM-1; 08-11-2004)

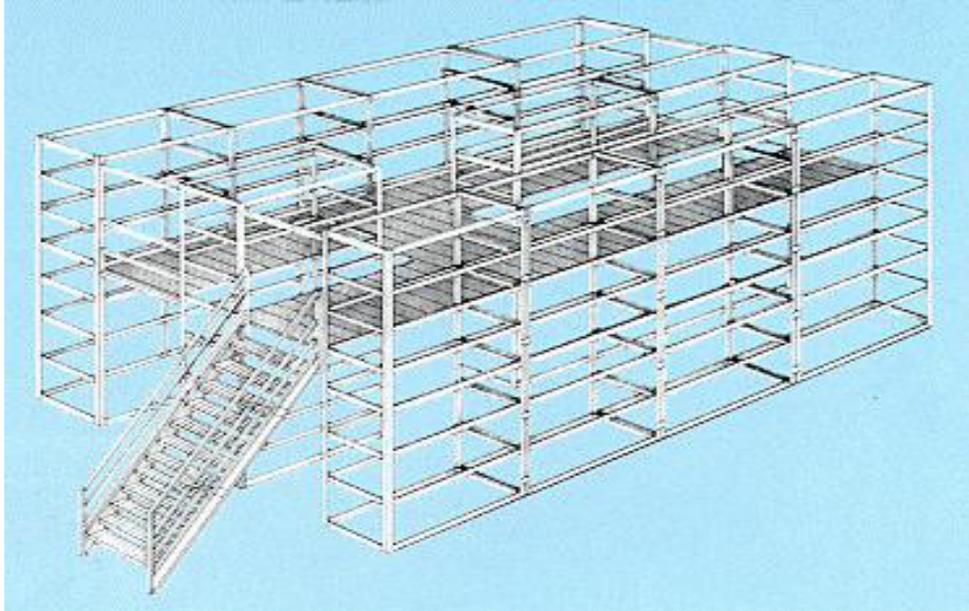
## Storage Aids

*Pallets, Box Pallets, and Skids*



## 14 FAH-1 Exhibit H-318.3-5 SHELVING MEZZANINES

*(CT:PPM-1; 08-11-2004)*



# 14 FAH-1 Exhibit H-318.4-1(A) COUNTERBALANCE FORKLIFT TRUCKS

*(CT:PPM-1; 08-11-2004)*



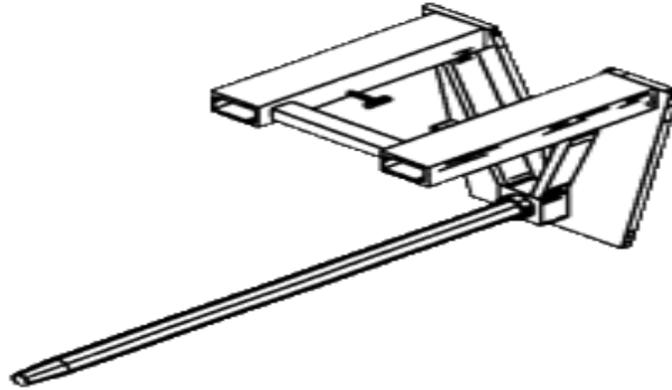
## 14 FAH-1 Exhibit H-318.4-1(B) STRADDLE-ARM FORKLIFT TRUCKS

*(CT:PPM-1; 08-11-2004)*



# 14 FAH-1 Exhibit H-318.4-1(C) FORKLIFT TRUCK ATTACHMENTS

*(CT:PPM-1; 08-11-2004)*



## 14 FAH-1 Exhibit H-318.4-2 PALLET-TYPE HANDLIFT TRUCKS

*(CT:PPM-1; 08-11-2004)*



## 14 FAH-1 Exhibit H-318.4-3 HAND TRUCKS

*(CT:PPM-1; 08-11-2004)*



## 14 FAH-1 Exhibit H-318.4-4 DOLLY TRUCKS AND CARTS

*(CT:PPM-1; 08-11-2004)*

