Supply Management

PHYSICAL INVENTORY TECHNIQUES

This pamphlet has been prepared to provide information and guidance to the department’s supply activities in conducting physical inventories. The information outlined herein is not intended to provide an in-depth presentation of all known physical inventory techniques. It is intended as a guide for the development of local physical inventory procedures in accordance with CFOP 45-6, Physical Inventories.

BY DIRECTION OF THE SECRETARY:

(Signed original copy on file)

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SUMMARY OF REVISED, DELETED, OR ADDED MATERIAL

Provides for the use of portable computers and lasers in conducting inventories. Deletes the use of form 265, Item Adjustment Document. Changes dollar amount and approval authority on Inventory Adjustment Documents. Deletes the use of form 263, Count Card.
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PHYSICAL INVENTORY TECHNIQUES

1. General. This pamphlet has been prepared to provide information and guidance to the department’s supply activities in conducting physical inventories. The information outlined herein is not intended to provide an in-depth presentation of all known physical inventory techniques. It is intended as a guide for the development of local physical inventory procedures in accordance with CFOP 45-6, Physical Inventories.

2. Definitions.

   a. Cut-off Date. The date established by supply that movement of supplies (issues and receipts) and all computer transactions could cease until the physical inventory is complete.

   b. Cyclic Inventory. A physical inventory schedule established on segments of supply groups to assure that all items of supply re counted not less than once each year. It is recommended that all inventories be completed and reconciled by April 30th of each fiscal year.

   c. Inventory Reconciliation. The matching of physical counts and recorded balances to identify disagreements and adjust records. It includes reconciliation of dollar value to recorded balance with accounting for those supply activities not using the computerized Supply Inventory Management System (SIMS).

   d. Inventory Team.

      (1) SIMS Computerized Inventory Accounts. Supply accounts utilizing bar codes will appoint staff other than those providing accountability entries into SIMS.

      (2) Non-SIMS Inventory Accounts. Staff appointed from functions other than supply who are responsible for counting the quantities of supplies on hand.

   e. Inventory Adjustment Document (form CF 1373). A form used to document discrepancies (overages and shortages) between the physical count and the stock record card or computerized inventory master file accountable balance.

   f. Physical Inventory. The process of counting the quantity of an item on hand.

   g. Special Inventory. A scheduled inventory of specific items of supply.

   h. Spot Inventory. An unscheduled physical inventory caused by warehouse denial or to verify the quantity of materials by lot number or similar identification which does not pass laboratory testing.

   i. Standard Stock Record. A form developed to record supply accountability transactions which includes receipts, issues, due-ins, due-outs and adjustments.

   j. Standard Inventory Master Files. A computer record which indicates the on hand balance, due-ins, due-outs, levels, unit price and usage data.

   k. Warehouse Denial. Notice that a specific item required for issue is not available.

3. Physical Inventory Methods. Three methods used in conducting physical inventories are the bar code system, two count card method and pre-printed list method.

   a. Bar Code System. This system provides instant identification of commodities with the use of bar codes. The system also:
(1) Reduces data gathering time by 60 percent. Each item is provided a bar code that identifies the stock number and is read with a laser.

(2) Eliminates clerical errors. The laser reads the stock number and the quantity counted is entered in the portable computer.

(3) Reduces the cost of conducting an inventory since only one person is required to count and enter data in the portable computer.

(4) Provides instant update of inventory records by using terminals to transmit the data in the portable computer to the host computer.

b. Two Count Card Method. This method provides:

(1) Two independent counts which result in greater accuracy.

(2) An ability to correct count discrepancies through a recount before forwarding to inventory control for posting.

(3) Assurance that all items in the supply group have been counted. This is accomplished by the placement of count card sets at every location and consolidating the quantities of items with multiple locations upon completion.

(4) The advantage of less time to complete the inventory. Each count team performs the count in a straight line, each starting at opposite ends of the storage area and continuing from one location to the next adjacent location without regard to the item or its location on an alphabetical or numerical sequence list.

(5) An easy method to investigate major discrepancies between the recorded balance and physical count since the location of the questioned item can be furnished.

(6) An ability for a post-inventory survey to be made to assure that all items have been counted.

c. Prepared List Method. This method:

(1) Normally involves a single count which does not allow for comparison of results.

(2) Is normally prepared from stock record cards which are filed in stock number sequence. This method requires inventory staff to find alphabetical locations on pages as each item is counted or to wander through the storage area to locate the next item. Additionally, no provisions are made for multiple locations which increase the possibility of error through oversight.

(3) Makes the investigation of discrepancies difficult since storage locations are not provided on the listing.

4. Pre-Inventory Function. An integral part of the physical inventory process is the preparation necessary before the actual counting process. This preparation is necessary to ensure that the physical inventory is completed in the least time possible with the highest degree of accuracy and the least disruption to client service oriented functions. The specific tasks which should be performed and the supply function which should be delegated these tasks are listed as follows:
April 6, 1998

a. **Inventory Control.**

(1) Coordinate a schedule for cyclic inventories. Consideration should be given to completing the inventory, including reconciliation, to coincide with monthly close of business by accounting. The schedule should include an allowance for approximately ten percent of all groups per month.

(2) Request that an inventory team be appointed as appropriate.

(3) Publish the cyclic inventory schedule with distribution to affected functions. A notice of the cut-off dates for the physical inventory should be distributed approximately 30 days before the inventory date to permit receipt of supplies for use during the inventory period. Instructions regarding obtaining valid emergency issues during the inventory period should be included in the notice.

(4) Provide staff to assist in the preparation of physical inventory count cards.

(5) Freeze the inventory master record if on SIMS.

b. **Warehouse Supervisor.**

(1) Establish a training program for the inventory team members to include:

   (a) Completion of the count card or training on the portable computer and laser.

   (b) Method of inventory.

   (c) Recount process.

   (d) Unit of measure abbreviations.

   (e) Container markings.

   (f) Location system.

   (g) Necessity for accuracy.

   (h) Recording of emergency issues during inventory.

   (i) Identification of materials in the supply group scheduled for inventory.

   (j) Quantities on pallet.

(2) Survey the storage area scheduled for inventory to assure that:

   (a) Pallet loads are uniform and binnable items are arranged in a manner to expedite the counting.

   (b) Open containers are sealed, initialed and dated if they are full, or the contents removed and re-warehoused to bin locations if the quantity is less than indicated on the container.

(3) Provide assistance to inventory control in the preparation of the count cards.
(4) Place the prepared count cards with the applicable item and insert the location on each count card. Separate count cards will be prepared for each item stored in more than one location.

(5) Assign warehouse staff to each team to furnish necessary assistance.

(6) Assure that ladders, wheeled stands and similar aids required for the team are in a safe working condition.

(7) Establish a segregated area to place materials received during inventory.

5. Conducting Inventory by Bar Code System. Each bin, pallet, or large box is marked with a bar code. Example bar code:

<table>
<thead>
<tr>
<th>MEN’S TROUSERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(bar code appears here)</td>
</tr>
<tr>
<td>8415-840-3091-7</td>
</tr>
</tbody>
</table>

a. The laser is scanned across the bar code to record the stock number of the item being counted.

b. The operator verifies the count and enters it into the portable computer.

c. After the inventory has been completed, the portable computer is given to the SIMS operator, who will transmit the data into the computer.

d. Recount of all variances must take place immediately after the loss/gain report is printed.

e. After the recount, all remaining variances are reconciled, documented and computer records corrected in accordance with CFOP 45-6, Physical Inventories.

6. Conducting Inventory by Two Count Card Method.

a. Actual Count. In the two count card method, each team should start the count in a different row. For four rows, a recommended method is:

<table>
<thead>
<tr>
<th>TEAM 1 SEQUENCE</th>
<th>TEAM 2 SEQUENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Row 4</td>
</tr>
<tr>
<td>Row 2</td>
<td>Row 1</td>
</tr>
<tr>
<td>Row 3</td>
<td>Row 2</td>
</tr>
<tr>
<td>Row 4</td>
<td>Row 3</td>
</tr>
</tbody>
</table>

b. Teams. Each team should consist of a person to count (counter) and a person to maintain the cards and record the count (recorder).

(1) The counter removes the card numbered the same as the team designation and checks the unit of issue (U/I) block on the card. This step is necessary to assure the proper conversion of quantity per case to cans, jars, etc.

(2) The counter, in pallet loads, counts the number of cases per tier and the number of tiers, then multiplies to obtain the total cases. The counter then multiplies the results by the unit per case and announces the total. Computations may be written on the reverse side of the count card or on scratch paper.
(3) The recorder verifies the location on each count card, if entered on the count card, or inserts the location on each count card as instructed in pre-inventory training.

c. **During Inventory.** Periodically, supply staff should collect the completed count cards from each team recorder.

   (1) Count cards should be reviewed for completeness and then placed in stock number sequence.

   (2) When two or more count cards are received with the same stock number, the indicated location must be identical, and both count cards 1 and 2 received before the quantities are compared. Receipt of more than one set of cards for the same stock number indicates that an item is in more than one location.

   (3) When quantities agree, the “Checked By” block on the count card should be initialed and dated, the matched cards stapled together and the cards placed back in stock number sequence.

d. **Unmatched Quantities.** When compared and the quantities on the number 1 and 2 count cards do not agree, a supply supervisor will take both count cards and conduct a recount. If the recount agrees with one count card, correct the erroneous card and initial the correction. The number of recounts required is a measure of the accuracy of the inventory team.

e. **Multiple Locations.** When an item of supply is stored in more than one location, the quantity on each set of count cards will be compared for equality. If in agreement, the quantities on all sets will be totaled and the total entered on the face of the top number 1 and number 2 count cards. Unmatched quantities of a set of count cards will be handled as set forth in paragraph d above.

f. **Stock Record Reconciliation.** When all count card sets have been completed and quantities matched, all count cards will be forwarded to the inventory control unit for posting.

   (1) The physical inventory quantity will be posted in red on the next line on the stock record card as follows:

      (a) Date -- enter date of inventory.

      (b) Transaction column -- enter “INV”.

      (c) On hand balance column -- the physical count quantity.

   (2) The physical count quantity will be compared with the last recorded on hand balance.

      (a) The total dollar value of each item will be posted in red in the appropriate column of the stock record card. The total dollar value of each stock number should be entered in red in the quantity issued column, adjacent to the recorded inventory quantity. The average unit price effective at the time of inventory will be multiplied by the inventory quantity to obtain the total dollar amount entry.

      (b) If the two balances are in agreement, the count card should be placed in file by object code in stock number sequence for audit purposes.

      (c) If the balances are not in agreement by a significant quantity, the inventory control unit supervisor should request warehouse staff to perform a spot inventory. While the spot
inventory is in progress, the mathematical accuracy of the stock record should be checked, beginning with the last recorded inventory entry.

(3) Inventory control should prepare an Item Adjustment Document (IAD), for each line item which has an overage or shortage. Each IAD will be assigned a separate document number from the IAD log. The assigned number will be entered in the remarks section of the count card as a cross-reference for audit purposes.

(4) Before posting the IAD to the stock record card, it must be approved as provided in CFOP 45-6, Physical Inventories.

(a) Inventory discrepancies with a line value of $100 or less, may be approved by the first line supervisor in charge of the supply function, district general services manager, or institutional manager for administrative services/business manager.

(b) Inventory discrepancies with a line value exceeding $100 must be approved by the district manager for administrative services, institutional superintendent or administrator, or their designee.

(5) The inventory adjustment document (IAD) will be posted as follows:

(a) Date column -- the date of the IAD.

(b) Document number -- the number assigned to the IAD.

(c) Transaction -- “INV ADJ”.

(d) Qty. Rec. -- Post the quantity of the overage and add to the balance on hand to agree with the inventory quantity.

(e) Qty. Issued -- Post the quantity of the shortage in this column and subtract from the last recorded balance to agree with the inventory quantity.

(6) Posted IADs will be filed in document number sequence for audit purposes.

7. Conducting Inventory by Prepared List Method.

a. Physical Inventory List. The list should be typed on lined paper for clarity and ease of recording the count. It may be prepared in alphabetical sequence or stock number sequence with only one object code per listing.

b. Listing Requirements. The following entries and column headings should be on each prepared list:

(1) Object code.

(2) Inventory date.

(3) Stock number.

(4) Description of item.

(5) Unit of issue.
(6) Recorder’s initials on each page.

(7) Quantity counted -- more than one column should be provided under this heading for multiple locations.

(8) Recorded balance.

(9) Quantity gain.

(10) Quantity loss.

(11) Average unit price.

(12) Dollar gain.

(13) Dollar loss.

(14) Subtotal dollar value on each page.

(15) Total dollar on last page of the listing.

(16) Net gain or (loss).

(17) Counter’s signature line.

(18) Recorder’s signature line.

(19) Approving authority signature line.

(20) Inventory adjustment document number.

c. Entries. Items (2), (6) and (7) above are completed during the inventory. Items (17) and (18) above are completed at the conclusion of the inventory and prior to forwarding to inventory control. Items (8) through (16) and (20) above are completed by inventory control after receipt of the signed, completed inventory. Item (19) above is signed by the approving authority before a copy of the listing is forwarded to financial accounting for further processing.

d. Actual Count.

(1) The inventory team should consist of a person to count (counter) and a person to record the count (recorder).

(2) The counter proceeds to the first item and identifies it to the recorder by description or by the stock number if the stock number is indicated on the container or location. The recorder locates the item on the listing and is then prepared to record the quantity.

(3) In bin locations, the counter counts the quantity and announces the result. The recorder enters the result in the quantity counted column.

(4) In pallet loads, the counter counts the number of cases per tier, the number of tiers and then multiplies to obtain the total cases. The total cases is then multiplied by the number of units per case, to obtain the total units. The counter announces the result to the recorder, who enters the result in the quantity counted column. Computations may be made on scratch paper.
Upon completion of the inventory of all listed items, the counter and recorder both sign the prepared listing and insert the date in the designated space. The completed listing is then forwarded to inventory control for further processing.

e. Multiple Locations. When an item of supply is stored in more than one location, the quantity counted at each location will be entered in the next column for the item. If all columns are not used, the sum of the quantities should be entered in the right hand column under the heading “Quantity Counted” and the letter “T” placed after the entry. If all quantity columns have entries, the sum of the columns should be placed in the right column above the last entry, a letter “T” placed on the right and the entry circled.

f. Stock Record Reconciliation. The completed prepared list will be forwarded to the inventory control unit for posting.

(1) The physical inventory will be posted in red on the next line on the stock record card as follows:

(a) Date -- enter date of inventory.

(b) Transaction column -- enter INV.

(c) On hand balance column -- the physical count quantity.

(2) Inventory control staff will complete the entries on the prepared list from information extracted from the stock record card. Necessary computations will be made and entered in the appropriate columns on the listing. The total dollar value of each item will be posted in red in the appropriate column of the stock record card. The total dollar value of each stock number will be entered in red in the quantity issued column, adjacent to the recorded inventory quantity. The average unit price effective at the time of the inventory will be multiplied by the inventory quantity to obtain the total dollar amount entry. This price will be used to complete the dollar gain or dollar loss columns on the prepared list.

(3) An inventory adjustment document number will be assigned to the prepared list to be used as a cross-reference for audit purposes. Before posting to the stock record card, adjustments must be approved as provided in CFOP 45-6, Physical Inventory. When adjustment approval has been received, the stock record card will be posted as follows:

(a) Date column -- the date of the approval.

(b) Document number -- the number assigned to the prepared list.

(c) Transaction -- “INV ADJ”.

(d) Qty. Rec. -- Post the quantity of the overage (gain) and add to the balance on hand to agree with the inventory quantity.

(e) Qty. Issued -- Post the quantity of the shortage (loss) in this column and subtract from the last recorded balance to agree with the inventory quantity.

(4) Reproduce the necessary copies of the completed list, including the recap of the gains and loss and dollar value of each and forward these copies to the office of financial support (ASFMF).

(5) Complete posting of the adjustments and file the prepared list for audit purposes.
8. Instructions for Handling Receipts and Issues.

a. Receipts Before Inventory. All receipts of material scheduled for inventory should be processed expeditiously. Material should be placed in storage and in a two count card method, count cards should be prepared and placed with the material. The receiving report should be processed to the inventory control unit as well as to financial accounting to permit necessary actions to be accomplished. All paperwork dated prior to the established cut-off date must be processed to avoid discrepancies and the possibility of a double entry (IAD and receipt).

b. Receipts of Material During Inventory.

(1) Inventory material received after the cut-off date will be placed into a holding area and identified as not part of the inventory. Receiving reports should be annotated “During Inventory” and processed to the applicable administrative units.

(a) Supply should file the receiving report with the purchase order.

(b) Financial accounting should initiate the vendor payment process, if the invoice has been received. Measures should be taken to assure that the financial records of the supply account are not adjusted until after completion of the inventory and reconciliation of the value of the inventory account.

(c) Inventory control should assure that the quantities received are NOT posted to the stock record card until after completion and reconciliation of the inventory. All other steps necessary may be accomplished.

(2) Materials received which are not in inventory will be processed in the normal manner.

c. Emergency Issues During Inventory.

(1) Inventory control should process a bona fide emergency issue during inventory. The entry to the stock record card should be on the next line after the line reserved for the inventory entry. The balance on hand should not be adjusted until the inventory is complete.

(2) SIMS activities will code the Supply Issue Document, form CF 1370, with action type “SH” and hold the document until the bar code inventory has been completed. After the data from the portable computer has been transmitted to the host computer, all “SH” documents will be processed.

(3) Warehouse staff should pull the quantity from stock and initiate the delivery process.

(4) The issue document should be turned in to the location established for the accumulation of the count cards. The supervisor should check the location of the item to determine if the item had been inventoried by either team, by both teams, or had not been inventoried. The following actions should be taken:

(a) If the item has been inventoried by both teams, the issue document should be annotated “After Inventory”. No adjustment is necessary to the count cards.

(b) If one team has inventoried the item, the quantity issued should be added to one count card to assure agreement of inventoried quantities. The appropriate count card should be annotated with the issue document number and the issue document should indicate the count card number adjusted.
(c) If neither team has counted the item, the quantity issued should be added to both count cards when returned for comparison. The issue document number and the quantity issued should be annotated on count card one.

(d) In each case in (b) and (c) above, a notation should be made on the cards to identify the cause of quantity changes. The issue document number should be entered on the appropriate card.

(e) The issue document should be returned to inventory control to be posted after inventory and reconciliation.

9. **Document Processing.** After completion of the reconciliation of the inventory, process all issues and receipts that have been held during the inventory.