

## Chapter 12 Petroleum Management

### Section I Off-Post Purchase or Procurement of Petroleum Products for Convoy and Vehicle Refueling

#### 12-1. Use of military installations

When required for fueling convoys, obtain diesel fuel or gasoline from military installations en route. Coordinate projected requirements with the military installation in advance.

#### 12-2. Use of local purchase

When military installations are not available or cannot provide the requested service, local purchase is authorized for 10,000 gallons or less of each grade of product per delivery point. Local purchase procedures will be followed per the Federal Acquisition Regulation (FAR). Requirements of more than 10,000 gallons will not be divided in order to produce more than one local procurement of less than 10,000 gallons.

#### 12-3. Purchase or Procurement of Aviation Products

Petroleum required by DA aircraft will be obtained from:

- a. DOD facilities.
- b. Into-plane contracts established by DFSC.
- c. SF 149 (U.S. Government National Credit Card).
- d. SF 44 (U.S. Government Purchase Order-Invoice Voucher), in that order.
- e. Commercial airports with Into-plane contracts can be found in the AVFUEL and AVOIL Into-plane contact listing bulletin. Copies can be obtained from DFSC-O, Cameron Station, Alexandria, VA 22304-6160. Authorized use of the SF 149 can be found in the Government Vehicle Operators Guide (DFSH 4280.1).

#### 12-4. Use of DFSC contracts

When the required quantity for delivery at one point exceeds 10,000 gallons, submit a separate request to U.S. Army Petroleum Center (USAPC) to establish contractual sources of supply for motor convoys. Requests will be submitted telephonically and/or in writing when required quantity exceeds 10,000 gallons or if purchase of less than 10,000 gallons cannot be accomplished. Normally, such requests must be submitted at least 90 days in advance of the date required to allow sufficient procurement time. MILSTRIP channels will not be used for requisitioning bulk petroleum products. Do not divide requirements of more than 10,000 gallons in order to create more than one local procurement of less than 10,000 gallons. Information required on the request to USAPC is outlined in table 12-1.

**Table 12-1**  
**Information Required for Contractual Coverage of Motor Convoys**

**Information:** 1. Estimated date and time of delivery

**Example:** 1 August 19\_\_, 1100 hours.

- a. Product: Gasoline, automotive regular.
- b. Quantity: 10,000 gallons.
- c. Location: National Guard Armory, Armory St, Baltimore, MD.

**Information:** 2. Refueling equipment required

**Example:** Contractor to provide four tank wagons equipped with one 100-foot hose with dispensing nozzles for dispensing into individual vehicles.

**Information:** 3. Other applicable information

**Example:** Will notify contractor 48 hours in advance of delivery. Delivery tickets are required for each vehicle.

**Information:** 4. Point of contact and telephone number

**Example:** Self-explanatory.

#### 12-5. Use of SF 149 (U.S. Government National Credit Card)

When the dollar amount of the quantity required during a convoy

refueling is less than \$10,000, SF 149 may be used to purchase the required quantity. Instructions for obtaining and using SF 149 are found in section II of this chapter.

### Section II Instructions for Obtaining and Using SF 149

#### 12-6. Obtaining SF 149

a. The using unit forwards its request for SF 149 to the appropriate installation PBO.

b. The installation PBO forwards all requisitions for SF 149 to the embossing contractor as listed in the new ordering instructions. To obtain a copy, write GSA, Office of Federal Supply and Services, Office of Transportation, National Fleet Management Division, Washington, DC 22202-3503 or phone (703) 285-2178, FTS 285-2178. Regulations on the requisition and administrative control of SF 149 are in FPMR 101-26.406 and FPMR 101-38.12.

c. The format for ordering SF 149 is in GSA FPMR 101-388.

(1) The contractor processes manual orders by DD Form 1155 (Order for Supplies and Services/Request for Quotations).

(2) Computer capabilities of the contractor limit automated orders. To process orders by machine, the ordering activity must coordinate with GSA. GSA FPMR 101-388 provides details.

d. Prices are FOB origin. The ordering activity pays the costs to the contractor to assure safe, controlled shipments of all credit cards.

e. Activities review GSA FPMR 101-388 for any other charges properly allocated to the ordering activity: for example, minimum quantity costs.

f. Activities, according to FPMR 101-26.106, consolidate their orders whenever feasible to save money by avoiding multiple delivery charges.

g. Account for SF 149 according to instructions provided by paragraph 4-25 of this pamphlet.

#### 12-7. Using and securing SF 149

Use SF 149 according to procedures in DFSC 4280.1 and AR 710-2. Centrally control Government National credit cards by use of a custodian preferably at Director of Logistics (DOL) level. Commanders will publish explicit guidelines for the use and control of credit cards. Secure SF 149 in a locked container with restricted access. Government credit cards are authorized for use only when government contracts or installation support are not available. Credit cards will be issued on a temporary basis only. Control through the use of DA Form 5830-R by obtaining the signature and rank of the individual to whom the credit card was issued, list the credit card number, vehicle number and the date/time signed out and returned. Figure 12-8 depicts an example of DA Form 5830-R. DA Form 5830-R is authorized for local reproduction on 8 1/2- by 11-inch paper. A copy for reproduction purposes is located at the back of this issue. When the credit card is returned, the original credit card receipts will be turned in with the card.

a. Petroleum products/services will not be purchased within 25 miles of an installation with available POL, except under emergency conditions.

b. Off post purchases will be limited to one fill up per vehicle per trip (excluding tankers and convoy refuelers). If other fuel stops are required on the trip, the dispatch must be annotated to reflect the additional mileage and fuel consumption. Credit card purchases of package POL is for emergency use only and limited to \$25 per trip. Emergency repair/towing is limited to \$150 and will be authorized only when military support is not available. For products and services authorized to be purchased, see AR 710-2, paragraph 2-33e(1).

c. Separate charge slips must be used for each credit card and there will be only one vehicle per transaction.

d. The credit card may also be used to purchase aviation supplies and service at commercial airports only when Defense Fuel Supply Center established Into-Plane contracts do not exist (use aircraft indentaplate for contract fuel). Purchase of supplies and services is limited to the into tank/crankcase refueling of the consuming end

item of equipment. Bulk/multiple aircraft refueling using a single credit card transaction is expressly prohibited.

e. A fuel consumption report (POL Credit Card Report) will be submitted on a monthly basis to the using unit/activity management/funds issuing headquarters NLT the 15th of the month. Not less than twice annually, the using unit/activity will conduct a review/validation of credit card transaction against the commercial fuel billings.

### Section III

## Instructions for Obtaining and Using AVFUEL Identaplates

### 12-8. Obtaining AVFUEL Identaplates

Use AVFUEL identaplates, DD Form 1896 and DD Form 1897 to obtain servicing of Army aircraft. USAPC is the only authorized source for Army activities to obtain AVFUEL identaplates. Submit requirements on DA Form 4701-R (Request for AVFUELS Identaplates) through the appropriate PBO to Commander, USAPC (ATTN: STRGP-FM), New Cumberland Army Depot, New Cumberland, PA 17070-5008, (717) 770-7247, AUTOVON: 977-7247. USAPC accepts telephonic requests for emergency requirements, followed by a DA Form 4701-R. For newly assigned aircraft, submit DA Form 1352 (Army Aircraft Inventory, Status, and Flying Time) along with DA Form 4701-R to show ownership of aircraft. USAPC uses DA Form 1352 to validate aircraft ownership or assignment. Table 12-2 outlines required information when submitting requests. DA Form 4701-R is located at the back of this book for reproduction purposes.

**Table 12-2**  
**Request for AVFUEL Identaplates**

**Identaplate:** 1. Line 1, positions 1-3.  
**Field name:** Customer identification.  
**Remarks:** Required. USA preprinted on all plates.

**Identaplate:** 2. Line 1, position 4.  
**Field name:** N/A  
**Remarks:** Must be blank.

**Identaplate:** 3. Line 1, position 5-12.  
**Field name:** N/A  
**Remarks:** Preprinted. To be assigned by USAPC.

**Identaplate:** 4. Line 1, position 13.  
**Field name:** N/A  
**Remarks:** Must be blank.

**Identaplate:** 5. Line 1, positions 14-17.  
**Field name:** APC  
**Remarks:** Required. Automated Processing Code (APC) may be embossed after preprinted serial number at requestor's option.

**Identaplate:** 6. Line 2, positions 1-17.  
**Field name:** N/A  
**Remarks:** Must be blank.

**Identaplate:** 7. Line 3, positions 1-16.  
**Field name:** Billing DODAAC.  
**Remarks:** Required. "Bill To" DODAAC if other than home station DODAAC.

**Identaplate:** 8. Line 3, position 7.  
**Field name:** Signal Code.  
**Remarks:** Required. Enter "A" if the DODAAC of the home station is "Bill To" DODAAC. Enter "B" if the "Bill To" DODAAC is other than the user DODAAC.

**Identaplate:** 9. Line 3, positions 8-9.  
**Field name:** Fund Code.  
**Remarks:** Enter "AA" if aircraft is operated by Active Army; "AN" if operated by the National Guard; "AR" if operated by the Army Reserve; and "XP" if operated by other than the above. Instead of the above codes, activities using Army Industrial Funds (AIF) use the following codes as applicable:  
VA: MTMC, Eastern Area, Bayonne, NJ  
VD: Tooele Army Depot, Tooele, UT, (includes Fort Wingate, Pueblo, and Umatilla Army Activities)  
VE: Anniston Army Depot, Anniston, AL, (includes Lexington Depot

**Table 12-2**  
**Request for AVFUEL Identaplates—Continued**

Activity)  
VF: Letterkenny Army Depot, Chambersburg, PA, (includes Savannah Depot Activity)  
VG: New Cumberland Army Depot, New Cumberland, PA  
VH: Red River Army Depot, Texarkana, TX  
VI: Sacramento Army Depot, Sacramento, CA  
VJ: Sharpe Army Depot, Sacramento, CA  
VK: Tobyhanna Army Depot, Tobyhanna, PA  
VL: Seneca Army Depot, Romulus, NY  
VM: Sierra Army Depot, Herlong, CA  
VN: Corpus Christi Army Depot, Corpus Christi, TX  
VO: US Army Missile Command/Redstone Arsenal, Huntsville, AL VP: Pine Bluff Arsenal, Pine Bluff, AR  
VQ: Rocky Mountain Arsenal, Denver, CO  
VR: Watervliet Arsenal, Watervliet, NY  
VS: Rock Island Arsenal, Rock Island, IL  
VU: McAlester Army Ammunition Plant, McAlester, OK  
VV: Crane Army Ammunition Activity, Crane, IN

**Identaplate:** 10. Line 3, positions 10-17.  
**Field name:** N/A  
**Remarks:** Must be blank.

**Identaplate:** 11. Line 4, positions 1-17.  
**Field name:** N/A  
**Remarks:** Must be blank.

**Identaplate:** 12. Line 5, positions 1-4.  
**Field name:** Type Aircraft (Aircraft Mission Design Series and Model Number)  
**Remarks:** Required. UH1H, U8FC appear as UH1, U8f on identaplate.

**Identaplate:** 13. Line 5, positions 5-11.  
**Field name:** Type Aircraft (Aircraft Tail Serial Number)  
**Remarks:** Required. Complete tail/serial number (seven digits). Last four digits appear on identaplate. USAPC verifies tail numbers before issue of identaplates.

**Identaplate:** 14. Line 5, positions 12-17.  
**Field name:** Users DODAAC.  
**Remarks:** Required. Enter the DODAAC of the unit accountable for the aircraft.

### 12-9. DA Form 200 (Transmittal Record)

USAPC uses DA Form 200 to send AVFUEL Identaplates to the requestor. Sign DA Form 200 in block 22, and write the date in block 23 to show receipt of the AVFUEL Identaplates. Return to USAPC.

### 12-10. Security of AVFUEL Identaplates

Centrally control AVFUEL Identaplates by a custodian, preferably at Director of Logistics (DOL) level. Secure AVFUEL identaplates in a locked container with restricted access. Control through the use of DA Form 5830-R. Figure 12-8 depicts an example of DA Form 5830-R.

### 12-11. DD Form 1898 (AVFUELS Into-Plane Contract Sales Slip)

a. Use DD Form 1898 as the basic issue document for all aviation products issued to—

(1) Army aircraft at Army airfields other than home stations, Navy, and Air Force installations.

(2) Government agencies.

(3) Authorized civil or foreign aircraft issued fuel from Army owned inventory.

b. Obtain DD Form 1898 through normal publication supply channels.

c. The pilot or authorized representative ensures that product services are recorded on DD Form 1898 (See fig 12-1). This individual presents the proper AVFUEL Identaplate to the refueling operator to have essential sales data recorded on the DD Form 1898.

The following information applies to services recorded on DD Form 1898:

(1) When a regular issue, fill in the quantity issued beside the appropriate product code.

(2) When reserVICing, fill in the quantity beside the appropriate product code; circle the word RESERVICE.

(3) When defueling, fill in the quantity defueled beside the word "defuel;" circle the product defueled.

(4) When DD Form 1898 is not available, the contractor uses a commercial delivery form. If the contractor uses a commercial form, the pilot ensures that the sales data clearly shows the craft model/design/series (MDS) and tail number, as well as the home station and major command of the aircraft.

(5) The contractor, or refueling agency, may insist on using a commercial delivery form in addition to the DD Form 1898. If so, the pilot annotates the commercial form as follows: "Duplicate-DD Form 1898 accomplished."

*d.* When the pilot cannot produce either a current (unexpired) AVFUEL Identaplate or a completed DD Form 4701-R, the refueling operator

(1) Records the aircraft type and tail or serial number in the appropriate block of the DD Form 1898.

(2) Verifies the name and unit of the pilot by checking the officer's DOD identification card and aircraft logbook.

*e.* Use the information written on DD Form 1898 to prepare machine listings as supporting documents for billing purposes.

*f.* Disposition of the four part DD Form 1898 is as follows: (1) Forward the original to the finance and accounting office of the issuing activity for billing and collection purposes.

(2) Retain copy 2 for property accountability at the issuing activity.

(3) Present copies 3 and 4 to the pilot or aircraft commander requesting refueling. The pilot keeps copy 3 and forwards copy 4 to his finance and accounting office.

*g.* Purchase a mechanical imprinter locally to use with the DD Form 1898 to:

(1) Provide a rapid and positive means of identification.

(2) Expedite recording of issue data and billing between military services.

*h.* Samples of completed DD Forms 1896, 1897, and 1898 are in Figure 12-1.

#### **12-12. Disposition of AVFUEL Identaplates**

An AVFUEL Identaplate may become invalid because of excessive wear, mutilation, or a change in the DODAAC of the home station or supplementary (bill to) address. Destroy invalid AVFUEL Identaplates and submit a certificate of destruction with a completed DA Form 4701-R to USAPC, so that a new plate can be issued. Expired AVFUEL Identaplates need not be reported to USAPC. Retain a copy of the DA Form 4701-R until the new plate arrives. This enables the flight officer to furnish the information needed to refuel the aircraft. USAPC publishes and distributes semiannually a complete list of all lost plates. Report lost plates or those suspected of being misused immediately to USAPC, which declares the plates invalid. Army activities are authorized to confiscate and return to USAPC any AVFUEL Identaplate advertised as lost or misplaced. If a pilot, crew member, or others refuse to surrender any such AVFUEL Identaplate, advise USAPC immediately by message. Include the following information, if available, in the message:

*a.* Type (designation) of aircraft.

*b.* Tail number of aircraft.

*c.* Mission of aircraft.

*d.* Home station of aircraft.

*e.* Name of person refusing to surrender AVFUEL Identaplate.

*f.* Reason given for refusing to surrender AVFUEL Identaplate.

*g.* Other applicable information.

## **Section IV Bulk Petroleum Accountability**

### **12-13. Appointment of responsible individual**

Customer or using unit commanders designate in writing a responsible individual to maintain control of all fuels and to provide an audit trail.

### **12-14. Customer or using unit control of bulk petroleum**

Maintain audit trails on all fuel issued and received. Post all fuel received as a receipt, except fuel issued by the SSA directly into or specifically identifiable to a consuming end item of equipment.

### **12-15. Use of DA Form 3643 (Daily Issues of Petroleum Products)**

Regardless of the container, record receipts and issues on DA Form 3643. Figure 12-2 includes instructions for preparing DA Form 3643 and examples of different types of postings.

#### *a. Receipts.*

(1) For defueling operations, record fuel obtained from defueling operations as a receipt and identify by the vehicle/equipment USA/tail number. Figure 12-2, item A, is an example of a posting for fuel received from a defueling operation.

(2) For other operations, assign a document number for all other receipts (fig 12-2, item B).

#### *b. Issues.*

(1) Assign a document number for issues made outside the units organization if not issued directly into or specifically identifiable to a consuming end item. Such issues are considered as receipts by the recipient. Figure 12-2, item C, is an example of a posting for an issue made outside the unit's organization.

(2) Use the equipment or vehicle number for issues Made directly into or specifically identifiable to a consuming end item (fig 12-2, item D). Figure 12-2, item E, is an example of an issue made into an identifiable piece of equipment other than a vehicle.

(3) For expedient issues of convoy refueling, an Individual may be designated for all fuel received by the unit. Figure 12-2, item F, is an example of a posting of fuel issued to multiple vehicles, but signed for by one individual.

(4) Do not post fuel transferred within the unit's organization from one type of transporting vehicle or storage container to another as an issue. For such transfers, the issuer and receiver annotate on DA Form 3643 that the fuel was transferred (fig 12-3). Do not include this quantity in the total to be posted to the DA Form 3644.

### **12-16. Use of DA Form 3644 (Monthly Abstract of Issues of Petroleum Products and Operating Supplies)**

Post total issues and receipts daily from DA Form 3643 to DA Form 3644. Do not post transfers made within the unit's organization from one type of transporting vehicle or storage container to another as an issue. Assign a document number to the DA Form 3644 and post it to the document register. Figure 12-4 includes instructions for preparing DA Form 3644. Note: form may be generated electronically if the user has the automation capability available.

### **12-17. Alternate audit trails**

During a field exercise, if maintaining auditable records is not feasible, the unit commander:

*a.* Prepares a statement summarizing daily issues. Inventories are taken and documented on a daily basis to determine the amount of fuel issued. The opening inventory plus receipts minus the closing inventories is the amount of fuel issued that day. A sample statement summarizing daily issues is in figure 12-5.

*b.* Indicates that fuel was used in authorized Army equipment.

*c.* Completes the statement within three working days after completing the exercise.

*d.* Posts quantities to DA Form 3644 as of the last day of the exercise.

*e.* Files and maintains the statements as supporting documents to the DA Form 3644. Statements do not replace audit trails, but supplement auditable records.

f. Files DA Form 3643 and DA Form 3644 according to procedures in AR 25-400-2 for the property book and supporting document files.

### 12-18. Automated Fuel Dispensing Systems

a. Automated fuel dispensing systems offering controls and data collection capabilities equal to, or better than, manual methods described in AR 710-2 are authorized if:

(1) The system will be able to supply a printout of data equivalent to DA Form 3643 and DA Form 3644.

(2) The system will be able to print a month-end cumulative total showing individual issues, total issues, and issues of each type of fuel.

b. Locations dispensing fuel through an automated dispensing system need not have service station attendant on site, as long as the system includes the following:

(1) A requirement to identify the receiving vehicle.

(2) Positive identification, through the automated system, of the individual requesting fuel.

c. In an automated dispensing system, the daily issue record printout will be used instead of the DA Form 3643. A month-end cumulative data printout will be used instead of the DA Form 3644.

d. Proposed automated fuel dispensing systems will provide the capability for manual gaging of the requisite bulk storage tank.

e. Automated systems which are subsequently procured will be capable of transferring data in an ACSII format via communications modem.

### 12-19. Use of DA Form 4702-R (Monthly Bulk Petroleum Accounting Summary)

a. Use DA Form 4702-R, which is referred to as the "MBPAS" in this pamphlet, to maintain auditable records of monthly receipts, issues and inventory of petroleum products; and to adjust inventories. The MBPAS becomes the accounting record for petroleum products in using units.

*Note.* This form may be generated electronically if the user has the automation capability available.

b. Change of responsible individual requires closing of the MBPAS and start of a new MBPAS with the new designated responsible individual signature.

c. Figure 12-6 includes instructions for preparing the MBPAS. A copy of the MBPAS is found in the back of this book. Submit the report to the next higher commander within 3 working days of the end of the month.

### 12-20. Use of DA Form 2064

Establish a DA Form 2064 for posting and controlling documents. Use procedures described in chapter 2.

## Section V Inventory

### 12-21. Bulk fuel storage tanks

a. *Required inventories.* Inventories are required for both rigid-wall and collapsible-wall tanks and containers. Rigid-wall tanks and containers above or below ground are physically gaged according to the procedures in FM 10-18 and FM 10-69. Collapsible-wall tanks are physically inventoried by reconciling beginning inventory, issues, and receipts and by physically checking the tank couplings, fittings, and the surrounding area to ensure that no leaking occurred. If a collapsible-wall tank leaks because of rupture, remove the tank from service and document losses. Inventory adjustment is accomplished when the tank is returned to home station (see AR 200-1).

b. *Gaging.* Bulk fuel storage tanks that have either issues or receipts are gaged and reconciled daily. Bulk fuel storage tanks that do not have any issues or receipts are physically gaged and reconciled at least once a week. Record the gaging data on DA Form 3853-1 (Innage Gage Sheet (Using Innage Tape and Bob)). See figure 12-9. Obtain DA Form 3853-1 from DA publication centers. FM 10-18 and FM 10-69 contain detailed procedures for gaging

bulk petroleum products. Volume correction of daily and weekly reconciliation is optional, however, once established, volume correction must be continued.

c. *Monthly inventories.* In addition to the daily and weekly inventories, a monthly physical inventory is performed for each type or grade of bulk fuel on hand within the unit. Use DA Form 3853-1 to record inventory data. This inventory is documented on the MPBAS report, (DA Form 4702-R) per AR 11-27, and will reflect the quantity on hand as of 0800 hours local time, the last day of the month. In the event the last day of the month is a non-duty day and no issues or receipts are made, the monthly inventory may be conducted at the close of business the last work day of the month. Inventory all products on hand to include trucks, pipelines, hose lines, tanks, and any other fuel containers. Include in the total inventory the totals for each type and grade of product within that account. Activities using automated gauging/inventory systems, to include leak detection, must conduct end of month inventories by manually gauging all petroleum storage systems to verify the accuracy and integrity of the automated system. Volume correction of storage containers for monthly inventories is required.

d. *Volume correction.* Volume correction of quantities less than 3,500 gallons is optional. Correct measured volumes that equal or exceed 3,500 gallons. Use the volume correction factors referenced in American Society for Testing and Materials (ASTM) tables 5B and 6B. ASTM Tables 5A and 6A will be used for JP4 and may be obtained through normal publications channels as PMT volume I. ASTM tables 5B and 6B will be used for petroleum products other than JP4, and may be ordered as PMT volume II. Use ASTM tables 52, 53B, and 54B to correct measured volumes to gallons at 15 degrees Celsius. Correct the volume of residual fuel (FO#4, FO#5, FO#6) regardless of measured quantity.

e. *Reconciliation.* Reconcile inventories using DA Form 5831-R (Petroleum Product Inventory Control Sheet), or local equivalent form, to compare physical inventory data against daily issues as reflected on proper issue documents and the pump totalizer meter readings (if available). The responsible officer ensures that inventory is reconciled to identify shortages or overages and initiates corrective action. See figure 12-10. DA Form 5831-R is authorized for local reproduction on 8½- by 11-inch paper. A copy for reproduction purposes is located at the back of this issue.

## Section VI Allowable Losses or Gains for Bulk Petroleum

### 12-22. Losses or gains as management guides for Army-owned bulk petroleum products

a. Losses of volatile products vary somewhat for each type of product and for each individual case. Variance depends upon factors such as the volume handled, prevailing weather, and type and condition of tanks and equipment. Allowance loss percentages (para 12-21) are considered sufficient to accommodate normal product losses.

b. Gains (overages) of bulk petroleum products that exceed authorized allowances require the attention of management. Bookkeeping errors, systems manipulation, or failure to correct volume can cause gains. All of these are unacceptable in the audit trail.

c. At all units and activities handling bulk petroleum, allowable and actual losses and gains are a guide to improve the management of operations. Allowable loss and gain provisions do not relieve commanders of the responsibility to ensure that losses and gains are reduced to the minimum possible under existing conditions. Accountable officers should conduct detailed analyses of actual and allowable losses monthly.

### 12-23. Computation of losses or gains allowances

Use the MBPAS to compute maximum allowable losses and gains and determine necessary actions, if any, based on those losses and gains. Figure 12-6 outlines procedures for completing the MBPAS.

a. *Losses and gains for jet fuels (excluding JP8), AVGAS, and all other gasolines.* Compute allowable losses and gains for jet fuels excluding JP8, AVGAS and all other gasolines as 1 percent of the

total of the opening inventory plus receipts for the month. A sample MBPAS illustrating allowable losses and gains for jet fuel excluding JP8, AVGAS and gasoline is in figure 12-6.

*b. Losses/Gains for all other petroleum products.* Compute allowable losses and gains for all other petroleum products is computed as ½ of 1 percent of the total of the opening inventory plus receipts for the month. A sample MBPAS illustrating allowable losses and gains for other petroleum products is in figure 12-6.

*c. Inventory adjustment actions.*

(1) If the actual loss does not exceed the maximum allowable loss, no action is required.

(2) If the actual loss exceeds the maximum allowable loss and the dollar value of the total loss is equal to or greater than \$500, a statement such as "Loss of MOGAS is being investigated via report of survey" can be put in the remarks block of the MBPAS and a report of survey initiated for the entire amount lost.

(3) If the actual loss exceeds maximum allowable loss but the dollar value of the total loss is less than \$500, initiate causative research.

(4) If the total gain of a specific product is less than the authorized gain allowance, only the actual gain is allowable. When the gain exceeds the allowable limits, causative research is initiated.

(5) The approving authority may disapprove the adjustment of any item on the MBPAS that does not appear justified based on facts available and past experience. The approving authority's disapproval of any loss of the MBPAS automatically requires initiating of a report of survey. Disapproval of any gain requires an investigation under AR 15-6. Attach copies of any report of survey or causative research to the MBPAS as supporting documents.

## Section VII

### Ordering and Receiving Procedures for Bulk Petroleum Products From Commercial Sources

#### 12-24. Ordering procedures

Organizations with authority to order bulk petroleum from commercial contractors place orders according to guidance in this pamphlet, DOD 4140.25-M, DFSC contract bulletins, and the Federal Acquisition Regulation (FAR).

#### 12-25. Controls required to receive bulk petroleum from commercial contractors

*a.* Ensure that a qualified government representative, authorized by the accountable or responsible officer, physically determines and records the amount of fuel delivered for each delivery.

*b.* Establish entry and exit controls for commercial and military delivery conveyances.

*c.* Use DA Form 3857, (Commercial Deliveries of Bulk Petroleum Product Checklist) to ensure following the established procedures (see fig 12-7). A check mark on the form indicates that the individual signing and dating the form performed the function. All entries must be in ink. Retain DA Form 3857 as the supporting documentation to the appropriate receiving document, DD Form 250 or DD Form 1155. Direct special attention to:

(1) Review of shipping documents and delivery tickets ensuring that all data required by this pamphlet, the contract bulletin, and AR 710-2 are properly recorded and legible.

(2) Ensure that all seals are intact and that serial numbers of seals match delivery ticket data.

(3) Check each vehicle for water in each tank compartment. Delivery may be rejected if any measurable amount of water is present.

(4) Take quality surveillance samples as required in AR 710-2 or when requested by the USAPC laboratory.

(5) Determine the quantity of fuel delivered according to paragraph 12-24 below. When receiving tank gage procedures are used, a copy of DA Form 3853-1 will reflect the opening and closing inventory data.

*d.* The delivery of small amounts of heating fuel to many small tanks at multiple locations by tank trucks is an exception to using

DA Form 3857. While it is desirable that a Government representative witness and verify all deliveries, it may not always be practical. Therefore, the following alternate procedures are required for less than truckload lots of heating fuel. These required procedures apply to military and civilian truck deliveries in CONUS and overseas. Commanders ensure that local SOPs include the following guidance:

(1) Establish entry and exit points.

(2) Have a check made by Government personnel competent to verify that fuel carried on the delivery truck is the proper fuel for the intended use. Take quality surveillance samples as required in AR 710-2 or when requested by the USAPC laboratory. Make this check before any discharge of deliveries on the installation.

(3) Develop specific procedures by activities receiving multiple drop deliveries of heating fuels. These procedures are necessary because of the unique conditions at each installation. These procedures ensure that control over heating fuel is as comprehensive as possible and consistent with personnel assets and local conditions. As a minimum, keep an audit trail of amounts delivered as compared with amounts billed. Vendors are required to provide a metered delivery ticket for each drop, identifying each drop by building or tank number. At a minimum, installations spot-check 10 percent of the commercial deliveries. Vendors must not know which deliveries will be checked so that they are "at risk" with every delivery. Additional control procedures may be:

(a) Comparison of mileage with odometer readings.

(b) Comparison of beginning and ending master totalizer readings with total quantity reflected on delivery tickets. Commanders must be able to demonstrate that procedures and controls are adequate.

*e.* Comply with physical security requirements in AR 190-51.

*f.* Report discrepancies noted in commercial or military bulk fuel deliveries to the accountable officer immediately.

#### 12-26. Quantity determination: FOB destination

Treat the FOB destination (acceptance at destination) bulk delivery of fuel, oil, diesel fuel, kerosene, solvent, and gasoline from regional contract bulletins and contract sources as follows. All deliveries that equal or exceed 3,500 gallons and all volumes of residual fuel (FO#4, FO#5, and FO#6) regardless of the measured quantity must be volume-corrected to 60 degrees Fahrenheit or 15 degrees Celsius to permit determination of net quantity (gallons) for each delivery of bulk petroleum products. The methods of determining net quantity of FOB destination deliveries in order of preference are:

*a.* Accept the quantity registered by the certified meter on the delivery vehicle. In case of an obvious meter malfunction, determine the quantity as detailed in *b* and *c* below.

*b.* Accept the quantity determined by weight or certified scales.

*c.* Accept the quantity determined by the Government representative from certified capacity tables for that delivery vehicle. Such tables permit conversion of inches of fuel measured in a compartment to gallons of fuel.

*d.* Accept the quantity registered by the meter on the receiving tank system if an obvious meter malfunction does not occur.

*e.* If one of the four methods above cannot be implemented, the activity may use the following procedure for the certified loading rack metered ticket after a written mutual agreement has been established with the contractor. The net quantity of fuel printed on the loading rack metered ticket may be accepted if:

(1) The loading rack metered ticket is mechanically printed showing API, temperature, gross and net gallons loaded.

(2) All accesses to the fuel compartments have had seals applied, and the seal numbers have been recorded on the delivery ticket.

(3) Receiving tanks have been gaged just before and immediately after the delivery to corroborate quantities received. Correct the volume measured to the net quantity at 60 degrees Fahrenheit using the DA Form 3853-1. Attach the DA Form 3853-1 to the DA Form 3857. If the quantity varies more than ½ of one percent (.005) of the total quantity loaded, initiate an investigation at once. If the investigation does not reveal the cause of the quantity variance, discontinue this method of quantity determination until the cause of the discrepancy is determined.

f. Record the net quantity of fuel received on all appropriate receiving documents and supply records.

g. Commanders ensure verification of all quantities of bulk petroleum received FOB destination.

h. If the contractor cannot or will not comply with the method of quantity determination, the activity's authorized representative may initiate default procedures as outlined in the contract.

## Section VIII Quality Surveillance Procedures

### 12-27. Packaged petroleum oils and lubricants

a. The majority of packaged petroleum products and many chemical products have a Type II extendable shelf life, which means that upon expiration the item may be extended for use after appropriate inspection and testing actions. A retest frequency is a prescribed item in months from the date of manufacture on the container or carton. The AMDF has a columnar heading "SLC" (Shelf Life Code). This one position code establishes the frequency which Type II items must be sampled/retested. The frequency or interval is the same as prescribed in MIL-HDBK-200. The following is a list of Type II Shelf Life Codes: 0-nondeteriorative, 1-3 months, 2-6 months, 3-9 months, 4-12 months, 5-18 months, 6-24 months, 7-36 months, 8-48 months and 9-60 months. A sample of shelf life coding on the AMDF is shown below:

- (1) Prime NSN 9150-00-402-2372.
- (2) SOS-S9G.
- (3) AAC-D.
- (4) UI-CN.
- (5) Unit Price—\$43.23.
- (6) SLC-6.

b. Products with expired shelf life may not be used pending assurance that the items suitability for use has been verified through laboratory analysis. AR 710-2, appendix C, requires all package products on hand/in storage be inspected every 90 days to determine if the product is within shelf life usability, and to determine container condition. User level procedures should prescribe inspecting products upon receipt for satisfactory shelf life and periodically thereafter to ensure outdated products are not issued for use.

c. Rotation of stocks will ensure that the oldest package products are issued/used first. When expired products are found in storage, personnel should use DA Form 5832-R (Packaged Petroleum, Oils, and Lubrications Submission Log) to report the NSN, contract number, lot/batch number, size of container, and quantity on hand to the installation petroleum manager/next higher supply level for consolidation. They should have in their possession, a copy of the Quality Status Listing (QSL). The QSL is a periodically updated listing of products that have been tested and the condition code. Information obtained from the QSL will be used to determine further actions to be taken regarding outdated products. Copies of the QSL may be obtained from Commander, Defense General Supply Center, (DGSC), ATTN: DGSC-QR, Richmond, VA 23297, AUTOVON: 695-4597. Items of concern that are not found in the QSL should be reported to USAGPMA, ATTN: STRGP-FT, New Cumberland, PA 17070-5008, AUTOVON: 977-6445 for sampling, testing, and disposition instructions. A sample of the DA Form 5832-R is provided in figure 12-12. DA Form 5832-R is authorized for local reproduction on 8½- by 11-inch paper. A copy for reproduction purposes is located at the back of this issue.

### 12-28. Bulk storage tanks

Samples taken from dormant storage tanks for cyclic testing (semi-annually) will be a representative one gallon, all levels or composite sample. A weighted bottle, weighted beaker, or other suitable sampling device will be used. Samples will be packaged and shipped to the supporting laboratory for analysis. A completed DA Form 1804 must accompany each sample. See figure 12-11.

### 12-29. Bulk petroleum products purchased in CONUS

a. Bulk petroleum supplied by commercial sources under DLA

regional type contract, procured locally, or received from Army, other military services, DLA depot stocks, or from a Defense Fuel Supply Point (DFSP) are sampled according to the following schedules:

(1) Submit a sample from each of the first 3 delivery days for every contract month SIOATH and then comply with sample submission schedule as shown in tables 12-3 and 12-4.

---

**Table 12-3**  
**To be Utilized for Diesel Fuels and all Fuel Oils**

---

**Total Number of Gallons on the Contract:** 10,001-50,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-0, Total-3

---

**Total Number of Gallons on the Contract:** 50,001-200,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-2, Total-5

---

**Total Number of Gallons on the Contract:** 200,001-500,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-4, Total-7

---

**Total Number of Gallons on the Contract:** 500,001-1,000,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-6, Total-9

---

**Total Number of Gallons on the Contract:** over 1,000,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-9, Total-12

---

---

**Table 12-4**  
**To be Utilized for Motor Gasolines, All Aviation Fuels, Kerosene and Solvents**

---

**Total Number of Gallons on the Contract:** 10,001-50,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-0, Total-3

---

**Total Number of Gallons on the Contract:** 50,001-200,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-1, Total-4

---

**Total Number of Gallons on the Contract:** 200,001-500,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-2, Total-5

---

**Total Number of Gallons on the Contract:** 500,001-1,000,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-3, Total-6

---

**Total Number of Gallons on the Contract:** over 1,000,000  
**Number of Samples to be Taken at Random After First Three:**  
Additional-4, Total-7

---

**Notes:**

Establish a random sampling schedule that is most representative for the entire contract period. For example, more samples on a heating fuel contract should be taken during the heating season.

---

(2) Installations or activities with petroleum contracts (DFSC or local purchase) of 10,000 gallon or less annually are not required to submit QS samples as outlined in this schedule. Although sample submissions for these smaller quantities of petroleum are not mandatory, commanders may establish local procedures, and at any time that fuel quality is in question, a sample submission is highly recommended.

b. The amount of product taken for a sample will vary depending up the type of product being sampled. All grades of fuel oil, solvent, and kerosene will require ½ gallon size samples. Diesel fuels, motor gasolines and all aviation fuels will require 1 gallon samples. See table 12-5. All samples must be taken in accordance with procedures outlined in FM 10-69, chapter 10, and FM 10-70, chapter 6. All samples must be taken through the top of the delivery conveyance utilizing either the all level or composite type sample. If there

are questions regarding sampling procedures, call U.S. Army General Materiel and Petroleum Activity, (USAPC) at AUTOVON: 977-6445.

**Table 12-5**  
**Sampling containers**

---

**Product:** Fuel oil, solvents and kerosene  
**Container:** ½ gallon rectangular  
**NSN:** 8115-01-090-0660 (Note 1)

---

**Product:** Diesel fuels  
**Container:** 1 gallon rectangular  
**NSN:** 8115-00-224-7935 (Note 1)

---

**Product:** Jet fuels, gasolines and other products with a flash point below 100F.  
**Container:** 1 gallon round  
**NSN:** 8115-01-192-0935 (Note 2)

---

Notes:

1. These products can be shipped by Parcel Post.
  2. These products require special packaging and should be shipped via UPS.
- 

### 12-30. Filter effectiveness

Samples are taken every 30 days, to determine the effectiveness of filter/separators in operational use. Containers and sampling equipment used must be clean and free from foreign materials (e.g. dirt, sand, water, rust). Once the fuel has been recirculated, and while the fuel is still flowing, these filter effectiveness samples are taken on the outlet (downstream) side of the filter separator.

*a.* The preferred method of collecting samples is through the use of the "quick connect" adaptor, installed permanently in the fuel line. Using this adaptor permits sampling with a Millipore sampling device, in the same manner as aviation fuels are sampled. The sampling valve connection is permanently installed in the fuel line on the down stream side of the filter separator. The following steps are taken to obtain a sample:

(1) Unscrew the top of the monitor casing on the sampling assembly. Remove the protective plug from the bottom side of the monitor. Place the monitor in the body of the monitor casing with the bottom side down.

(2) Remove the protective plug from the top of the field monitor. Put both plugs in a clean, safe place.

(3) Replace the top of the monitor casing with the monitor in the monitor body. Screw the top in place. Hand tighten only.

(4) Attach one end of the bypass flushing hose to the selector valve and the other end to the downstream side of the monitor casing.

(5) Connect one end of the sample line to the bottom of the monitor casing. Place the free end of the line in the sample receiver. If possible, use a graduated receiver that holds five liters.

(6) Remove the dust caps from the sampling valve connection in the fuel line and from the flexible pressure hose. Connect the sampling assembly to the sampling valve connection.

(7) Place the selector valve in the FLUSH position.

(8) Flush the sampling assembly with approximately one gallon of fuel when the proper fuel flow and line pressure are reached. The

pressure on the line must be at least 25 PSI. The fuel runs through the bypass flushing hose and not through the field monitor.

(9) Turn the selector valve to the SAMPLE position. Take a one gallon sample. When you have the required amount of fuel in the sample receiver, turn the selector valve to the OFF position.

(10) Disconnect the sampling assembly from the sampling valve connection. Replace the two caps (one on the sampling connection, and the other on the flexible pressure hose). Note: There is a tendency for electricity to build up during sampling. It is therefore recommended that 5 minutes be allowed to elapse to allow for dissipation of the charges prior to disconnecting the two halves of the monitor housing.

(11) Remove the field monitor from the monitor casing, place it with the spoked or gridded side towards the tubular fitting on the side of the syringe provided in the kit.

(12) Use the syringe to remove any fuel product inside the monitor. Pump the syringe two or three times to remove all of the fuel.

(13) Replace the protective plugs. Handle the monitor carefully. Do not open it. Send the monitor to the supporting lab for analysis.

*b.* A second system involves the collection of one gallon liquid samples from a point down stream from the filter separator. These samples must then be shipped to the supporting laboratory. Although this is acceptable, it is the least desirable method. The time involved in the collection and handling of such samples is far greater than when obtaining Millipore samples. In addition, the shipping and testing of such liquid samples is much more expensive than submission of the Millipore samples.

(1) Liquid samples are collected from the nozzle of the dispensing system, after the fuel has been recirculated. The containers to be used for each type of fuel are shown in table 12-5. Be certain that is no liquid or other foreign materiel in the can before you fill it with the sample.

(2) Once the can has been filled, seal it carefully, in accordance with instructions which have been provided with the can and outer container assembly. Pack the filled can in outer cardboard shipping container and label the container as required. Personnel responsible for shipping will use the labels required by the type of fuel enclosed.

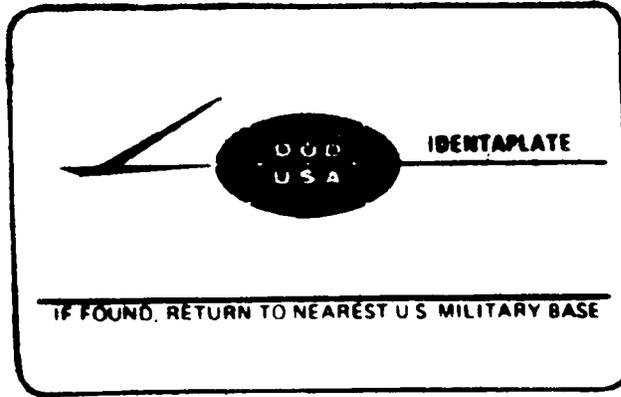
### 12-31. Sample tags (DA Forms 1804)

Sample tags must be prepared completely and correctly in order that the laboratory can properly identify and process your sample. Every block should have an entry or N/A if the block is not applicable. Instruction on completion of the sample tags may be found in figure 12-11. To prevent unnecessary delays in sample testing, it is imperative that tags be properly completed.

### 12-32. Sample submission log

Installations/activities submitting samples for laboratory analysis must establish a Quality Surveillance Sample Submission Log. Information recorded should include a sample number, product source of sample, person taking the sample, date sample was taken, pertinent remarks, laboratory results and the date on which the test results were received from the laboratory.

DOD AVFUEL IDENTAPLATES  
 (ARMY AND AIR FORCE)  
 White--DD Forms 1896--Jet  
 Purple--DD Form 1897--AVGAS



DD Form 1898--AVFUELS INTO-PLANE CONTRACT SALES SLIP

CUSTOMER ID <b>USA</b>			ENTER TEXT IN UNUSED COLUMNS PRECEDING QUANTITY			
SUPPLY ADDRESS (SEE FUND MTR) <b>A 71 R2</b>			AVFUEL	GALLONS	AVOIL	QUARTS
A M D S    TAIL SERIAL    DODAAC OF REQ <b>UHI    1234    W25GIT</b>			100 110 (130)		MIL-L-22851 (LA2)	
<b>C000096</b>			JP-4 (JA1) FSII	<b>XX 100</b>	MIL-L-7808 (LA7)	
			P-3 (PS)		MIL-L-6081 (LA6)	
			JP-8 (PB)			
			COM-JET A (JAA) FSII		REFUELING UNIT NO	<b>238</b>
			COM-JET A1 (JA1) FSII		REFUELER'S SIGNATURE	<i>James V. Wilson</i>
					I certify that the product listed herein was received in good condition and in quantity stated.	
					CUSTOMER'S SIGNATURE	<i>Donald S. Smith</i>
					PRINT NAME	<b>Donald S. Smith</b>
					GRADE	<b>CPT</b>
					ORGANIZATION	<b>12th AVN GP</b>
DATE <b>1 Jul XX</b>			DEFUEL			
			RESERVE			
DD Form 1898, AUG 86			AVFUELS INTO-PLANE SALES SLIP			INVOICE COPY

NOTES:

1. For use in recording issues from DFSC Into Plane Contract. For billing purposes, forward all delivery slips from Into-Plane Contracts to DFSC under DSA Stock Fund procedures.

2. For use in recording issues from Army-owned stocks at Army installations made to Army aircraft, aircraft of other military services, Government agencies, domestic civil and authorized civil or foreign aircraft. Forward all delivery slips from Army-owned inventory to the appropriate specified billing code/address as indicated on the customer's DOD AVFUEL Identaplate (DD Form 1896 or 1897) or as otherwise specified, for reimbursement purposes.

Figure 12-1. Samples Forms, DD 1896, 1897, and 1898

DAILY ISSUES OF PETROLEUM PRODUCTS For use of this form, see AR 703-1; the proponent agency is DCSLOG							PAGE NO. /	NO. OF PAGES /
VEHICLE USA REGISTRATION NUMBER  a	TYPE, GRADE AND UNIT OF ISSUES FOR EACH PRODUCT ISSUED						ORGANIZATION AND ADDRESS  (Indicate Service: A, Army; AF, Air Force; N, Navy; M, Marine Corps)  h	SIGNATURE, GRADE  i
	ISSUES (GAL)			RECEIPTS (GAL)				
	DF2 (Diesel Fuel) b	MOBAS c		DF2 (Diesel Fuel) e				
(A) 2F4187				61			CTRP, 27th ACR (A)	B. Xavier, SP4
2B1132	52						A Co (A)	B. Thomas, 1LT
(B) 5034-9801				2500				B. Xavier, SP4
5B3264	78						354th AT (AF)	J. Dornier, AC1
(C) 5034-9010	600						CTRP, 27th ACR (A)	K. Kaur, SSG
(D) 6H3121	126						3D Maint Co (A)	Z. Monday, SGT
2G1221	29						B Co (A)	J. Brewer, SP4
(E) #1 M2 Burner Unit		5					HHC (A)	M. Walker, SGT
#3 30KW Generator	20						A Co (A)	N. Brown, PFC
5034-9002				2500				B. Xavier, SP4
(F) 753112	32						C G (A)	M. J. Dornier, SP4
1F5124	57							
3D4321	89							
5V1212	60							
2T4000	43							
TOTAL RECEIPTS				5061				
TOTAL ISSUES	1186	5						
POST, CAMP OR STATION 221st Tank Bn				DATE 15 Jun XX		SIGNATURE OF ATTENDANT Bob Xavier, SP4		

DA FORM 3643  
APR 85

EDITION OF 1 OCT 70 IS OBSOLETE.

GPO : 1985 O - 478-213

Figure 12-2. Sample of a DA Form 3643

Legend for Figure 12-2;

Completion instructions by block or column for DA Form 3643 (Daily Issue of Petroleum Products).

**(Page Number.)** Enter page number.

**(Number of Pages.)** Enter number of pages indicating total number of pages used for that day.

**(Vehicle USA Registration Number, Column "a".)** For retail issues, enter vehicle registration number of vehicle being refueled. For individual containers, enter the USA number or nomenclature of the consuming item of equipment. For bulk issues and receipts, enter the document number.

**(Type, Grade and Unit of Issue for Each Product Issued.)** Indicate type fuel, such as MOGAS, diesel, or JP4. Also indicate unit of issue by the words "Issues" and "Receipts". (Columns "b" thru "g".) Indicate in gallons, the quantity of fuel issued or received.

**(Organization and Address, Column "h".)** For issues and transfers, enter the organization and address of the unit receiving the fuel.

**(Signature, Grade, Column "i". )** Enter signature/grade. The individual receiving the fuel signs.

**(Total Receipts/Total Issues.)** Total all receipts and issues for each column daily. When using additional sheets, include each page total in the final total.

**(Post, Camp or Station.)** Enter the name of the post, camp or station where issues and receipts occur.

**(Date.)** Enter actual date of issues and receipts. Issues and receipts carried over.

**(Signature of Attendant.)** Enter signature of attendant issuing and receiving the fuel.

**(Examples)**

**(a)** Posting of fuel received from a defueling operation. SP4 Xavier received 61 gallons of DF2 from vehicle #F4187, C Trp, 27th ACR.

**(b)** Posting of a normal receipt. A document number (5034-9001) is assigned. SP4 Xavier received 2,500 gallons of DF2 from his supply source.

**(c)** Posting of an issue made outside the units organization. SP4 Xavier issued 600 gallons of DF2 to SSG Koor, C Trp, 27th ACR. Document number 5034-9010 assigned from C Trp's document register. SSG Koor signs for the fuel.

**(d)** Posting of issues made directly into or specifically identifiable to a consuming end item. SGT Monday received 126 gallons of DF2 directly into his vehicle, bumper number 6H3121. SP4 Reeves received 129 gallons of DF2 directly into his vehicle, bumper number 2G1221.

**(e)** Posting of issues made into an identifiable piece of equipment other than a vehicle. SGT Walker, HHC, received 5 gallons of DF2 for the #1 M2 burner unit. PFC Brown, A Co, received 20 gallons of DF2 for the #3 30KW generator.

**(f)** Posting of issues made to multiple vehicles, but signed for by one individual. SP4 John signed for fuel received by 5 vehicles in C Company convoy.



MONTHLY ABSTRACT OF ISSUES OF PETROLEUM PRODUCTS AND OPERATING SUPPLIES <small>For use of this form, see DA PAM 710-2-1; the proponent agency is DCSLOG</small>				POST, CAMP OR STATION 221st Tank Bn, Fort XXX, VA			MONTH JUNE 19XX		VOUCHER NO				
DATE	ISSUES (GALS)						RECEIPTS (GALS)						
	MC a	JP b	DF c	OTHER d	OTHER e	OTHER f	MG g	JP h	DF i	OTHER j	OTHER k	OTHER l	OTHER m
1	1,000	787	2,500					2,500					
2	800	788						2,500					
3	1,200	787	2,500						5,000				
4	1,400	788					5,000						
5	953	787	2,500										
6													
7													
8	787	788	2,500										
9	1,542	787					5,000						
10	930	788	2,500					15,000					
11	752	787							30,000				
12	255	788	2,500										
13													
14													
15	1,145	1,000	3,808				5,061						
16	993	550	3,808						25,000				
17	485	125	3,808				5,000						
18	1,012	75	3,808										
19	222	225	3,808										
20													
21													
22	2,105	1,180	18,980				5,000						
23	2,106	1,180											
24	2,113	1,180							12,500				
25	2,000	1,180	18,980										
26	250	200						5,000					
27													
28													
29	343	987	433				500						
30	112	483	141										
31													
TOTAL	22,505	16,240	72,574				25,561	25,000	72,500				
TOTAL GAL <sup>1</sup>	22,505	16,240	72,574				25,561	25,000	72,500				
SIGNATURE OF ACCOUNTABLE PROPERTY OFFICER BARNEY C. SMITHFIELD				GRADE 1LT, AR		POSTED TO STOCK RECORD ACCOUNT BY				DATE 30 Jun XX			

<sup>1</sup> To convert oil lubricating, to gallons, divide total quarts by 4. To convert gear lube to gallons, divide total pounds by 7½.

DA FORM 3644, APR 85

REPLACES DA FORM 117, 1 JUN 80, WHICH WILL BE USED

GPO : 1981 O - 424-0301

Figure 12-4. Sample of a DA Form 3644

Legend for Figure 12-4;

Completion instructions by block or column for DA Form 3644 (Monthly Abstract of Issues of Petroleum Products and Operating Supplies).

**(Post, Camp or Station.)** Enter the name of the post, camp or station where issues and receipts occur.

**(Month.)** Enter month and year.

**(Voucher Number.)** Assign a document number from the using unit document register.

**(Columns "a" thru "m".)** For each product, enter the total issues and receipts each day from DA Form 3643.

**(Total.)** After all entries for the month have been posted, total each column.

**(Total (Gal).)** Convert total in column e to gallons, if necessary.

**(Signature of Accountable Officer.)** Enter signature of responsible individual.

**(Grade.)** Enter pay grade of responsible individual.

**(Posted to Stock Account By.)** Enter signature of person posting information to the MBPAS.

**(Date.)** Enter date posted to the MBPAS.

---

ATSM-XYZ

MEMORANDUM FOR RECORD

SUBJECT: Petroleum Accountability During Field Exercises

This statement summarizes daily petroleum issues during the 3rd Signal Bn FTX, 1-5 Jun XX.

<u>DATE</u>	<u>UNIT</u>	<u>PRODUCT</u>	<u>QUANTITY (GALS)</u>
1 Jun XX	3rd Sig Bn	MOGAS	156
		DF-2	711
2 Jun XX	3rd Sig Bn	MOGAS	23
		DF-2	137
3 Jun XX	3rd Sig Bn	DF-2	74
4 Jun XX	3rd Sig Bn	MOGAS	68
		DF-2	81
5 Jun XX	3rd Sig Bn	MOGAS	18
		DF-2	138

Fuel was used in authorized Army equipment.

JOHN R. SMITH  
CPT, SC  
Commanding

---

Figure 12-5. Sample of a memorandum prepared as a Summary of Daily Issues

---

M		TAB			TAB		
MONTHLY BULK PETROLEUM ACCOUNTING SUMMARY							
For use of this form, see DA PAM 710-2-1; the proponent agency is DCSLOG							
POST, CAMP OR STATION				PROPERTY ACCOUNT NUMBER		PERIOD OF REPORT	
555th S&S Co. (DS), Fort XXX, VA 23801				WRY5AA		FROM: 30 Jun XX TO: 31 Jul XX	
PRODUCTS	Stock Number	9130-00-148-7103	9130-00-256-8613	9130-00-286-5283			
	Nomenclature	MOGAS	JP-4	DF-2			
OPENING INVENTORY		18,752	28,750	53,873			
RECEIPTS		25,000	32,500	75,000			
ISSUES		22,861	18,533	68,633			
CLOSING BOOK BALANCE (Lines a + b - c)		20,891	42,697	60,240			
PHYSICAL CLOSING INVENTORY		20,454	42,083	60,948			
MONTHLY GAIN/LOSS (Lines d-e)		(-) 437	(-) 614	(-) 708			
MAXIMUM ALLOWABLE GAIN/LOSS	GASOLINE & JP-4 (a + b x .01)	438	613				
	OTHER FUELS (a + b x .005)			644			
REMARKS							
MOGAS within the allowance of AR 710-2. DF-2: exceeded allowable with gain of 708 gallons, causative research initiated according to AR 710-2. JP-4: exceeded the allowable with a loss of 614 gallons plus a value of \$521.90. R/S initiated according to AR 710-2.							
NAME & GRADE OF ACCOUNTABLE OFFICER			SIGNATURE			DATE	
John Smith, 1LT, QM							
NAME & GRADE OF ACCOUNTABLE OFFICER			SIGNATURE			DATE	
Jane Doe, 1LT, OD							
DA FORM 4702-R, APR 85				EDITION OF 1 JUN 78 IS OBSOLETE.			

Figure 12-6. Sample of a DA Form 4702-R

Legend for Figure 12-6;

Completion instructions by block or column for DA Form 4702-R, (Monthly Bulk Petroleum Accounting Summary)

**(Post, Camp or Station.)** Enter the name of the post, camp or station where inventory occurred.

**(Property Account Number.)** Enter the unit identifier code.

**(Period of Report.)** Enter the beginning date (From) and the ending date (To) for this inventory period.

**(Products.)** Enter the NSN and product nomenclature for each product to be reported.

**(Opening Inventory.)** The number is the physical inventory quantity from the previous month's closing inventory block.

**(Receipts.)** This number is the total of the RECEIPT (GALS) column (including defuels) on DA Form 3644.

**(Issues.)** This number is the total of the ISSUE (GALS) column on DA Form 3644.

**(Closing Book Balance.)** Calculate this balance by taking the Opening Inventory (block a) plus the total Receipts (block b) minus the total Issues (block c).

**(Physical Closing Inventory.)** Obtain this quantity by taking a physical inventory of all bulk petroleum products on hand.

**(Monthly Gain/Loss.)** Obtain this figure by calculating the difference between the Physical Closing Inventory (block e) and the Closing Book Balance (block d). Reflect losses with a minus sign and reflect gains with a plus sign.

**(Maximum Allowable Gain/Loss.)** (See Section VI, paragraph 12-22 in this chapter.) Calculate the Maximum Allowable Gain/Loss of AVGAS, MOGAS, and jet fuels by adding the Opening Inventory (block a) to the Receipts (block b) and multiplying this total by .01. The maximum allowable gain/loss for all other products is calculated by adding the opening inventory (block a) to the receipts (block b) and multiplying the total by .005.

**(Remarks.)** Use this block to record any explanations that the accountable/responsible officer makes to clarify data on this form.

**Name/Grade of Accountable Officer.)** Type or print in this block the name and grade of the responsible individual.

**(Signature.)** Enter signature of the responsible individual.

**(Date.)** Enter date signed by the responsible individual.

**(Name/Grade of Approving Officer.)** Type or print in this block the name and grade of the approving authority.

**(Signature.)** Enter signature of the approving authority.

**(Date.)** Enter date signed by the approving authority.

COMMERCIAL DELIVERIES OF BULK PETROLEUM PRODUCTS CHECKLIST	
For use of this form, see AR 703-1: the proponent agency is DCSLOG.	
<b>1. PREPARING FOR DELIVERY.</b>	
a. Has gaging, sampling, and measuring equipment been cleaned and checked?	✓
b. Has receiving tank been gaged to ascertain if there is sufficient space to receive the scheduled quantity?	✓
<b>2. PRIOR TO ACCEPTANCE OR UNLOADING.</b>	
<i>NOTE: Receiving personnel will not allow the driver of the delivery conveyance to perform, on their behalf any of the required functions or inspections.</i>	
a. Has the vendor's delivery ticket been checked for completeness, to include product and grade, API gravity, temperature, quantity, seal numbers, and consignment? (Be sure cargo is consigned to your activity.)	✓
b. Has the delivery conveyance been spotted at the correct fill pipe, all motors turned off, and the wheels blocked? (This is a driver function.)	✓
c. Have adequate fire extinguishers and No Smoking signs been positioned?	✓
d. Has the delivery conveyance been properly grounded and inspected for leaks or other defects?	✓
e. Have cargo hatch and valve seals been inspected for defects? (Serially numbered seals should be affixed to the cargo hatches and valves and numbers recorded on the delivery ticket.) (See Remarks)	✓
f. Have cargo hatches been opened to see if the product level is up to the reference mark?	✓
<i>NOTE: Personnel should guard against loose objects falling from pockets or clothing into the tank.</i>	
g. Is product clear and bright, as viewed through a clean jar? (If product appears to be cloudy, hazy or sediment is visible, notify appropriate commanders.)	✓
h. Has the delivery tank been checked for water, using water finding paste on the gage stick or tape? (If bottom sediment or water is present, drain it off through the sump and recheck the tank.) (See Remarks)	✓
i. Has cargo temperature been established at the time of delivery? (Important in volume correction)	✓
j. Has the cargo tank been gaged to determine the quantity, using the certified capacity tables identified with the delivery conveyance?	✓
<i>NOTE: If cargo is to be discharged through a meter on the delivery conveyance, record the meter reading before and after unloading and correct the quantity to the standard 60° F.</i>	
k. Has the measured quantity been corrected to the standard temperature of 60° F? (Method can be found in paragraph 95.)	✓
l. Have quality surveillance samples been taken? (Only if scheduled or considered necessary.)	✓
<i>NOTE: The cargo will be accepted or rejected in accordance with paragraph 120a, b, and c. In the event the driver or delivery personnel cannot agree on quantity, quality or any other point which results in nonacceptance of cargo, the appropriate commander and the purchasing and contracting officer will be notified immediately.</i>	
<b>3. DURING UNLOADING OPERATIONS</b>	
a. Are receiving personnel and the driver of the delivery conveyance standing by? (Never leave an unloading operation unattended.)	✓
b. Is traffic being controlled to avoid the unloading area as much as possible?	✓
c. Are dispensing operations discontinued during unloading operations?	✓
<b>4. AFTER CARGO IS UNLOADED.</b>	
a. Has the delivery conveyance been inspected to see that the cargo tank is completely empty?	✓
b. Has the vehicle ground been disconnected, discharge hose secured, and the fill pipe covered?	✓
c. Has the driver delivery ticket been signed and the Government's copy retained for appropriate records?	✓
d. Has the area and equipment been secured and product spills washed down or covered?	✓
e. Has the receiving tank been gaged?	✓
REMARKS 2e. Hatch No. 2 SEAL WAS broken, but specified quality of fuel on hand. 2h. No water finding paste available. Checked for water by cracking drain valve in the sump. No water present.	
DATE 4 May 1987	SIGNATURE James B. Harris Post Petroleum Officer

DA FORM 3857  
1 APR 72

Figure 12-7. Sample of a completed DA Form 3857



<b>INNAGE GAGE SHEET</b> (USING INNAGE TAPE AND BOB) <small>For use of this form, see FM 10-69: the proponent agency is TRADOC.</small>			
UNIT <i>Company C 2/158th Inf Bde</i>		DATE <i>1 Jan 89</i>	TIME <i>0810</i>
LOCATION <i>Fort Jones, PA</i>		API GRAVITY <i>56.5 @ 86°F</i> <i>53.4 @ 60°F</i>	<input checked="" type="checkbox"/> OPENING <input type="checkbox"/> CLOSING <input type="checkbox"/> INVENTORY
TANK NO. <i>1</i>	NOMINAL TANK CAPACITY <i>5,000 gallons</i>	PRODUCT AND GRADE <i>Gasoline, Unleaded, Regular</i>	
LINE NO.	PROCEDURE	LINEAL READING	VOLUMETRIC EQUIVALENT (Gallons)
<i>1</i>	<i>Tape reading (innage)</i>	<i>4' 7½"</i>	<i>4199</i>
<i>2</i>	<i>Bob reading (bottom sediment and water)</i>	<i>½"</i>	<i>38</i>
<i>3</i>	<i>Net volume of product, uncorrected for temperature (line 1 minus line 2)</i>	<i>-</i>	<i>4161</i>
<i>4</i>	<i>Average temperature</i>	<i>58°F</i>	<i>-</i>
<i>5</i>	<i>Multiplier</i>	<i>1.0013</i>	<i>-</i>
<i>6</i>	<i>Net quantity of product at 60° F. (U.S. gallons) (line 3 multiplied by line 5)</i>	<i>-</i>	<i>4166</i>
REMARKS (Include sample number)			
NAME AND GRADE OF OPERATIONS OFFICER (Print) <i>John Doe, CPT</i>		NAME AND GRADE OF GAGER (Print) <i>George Smith, WGOB</i>	
SIGNATURE OF OPERATIONS OFFICER <i>CPT John Doe</i>		SIGNATURE OF GAGER <i>George Smith</i>	

**DA FORM 3853-1**  
1 MAY 72

U.S. GOVERNMENT PRINTING OFFICE : 1985 O - 489-016

Figure 12-9. Sample of a DA Form 3853-1, Innage Gage Sheet



(6c) Closing Balance, Column j. Enter measured quantity of fuel in tank (Total quantity in tank minus water volume).

(6d) Difference plus/minus, Column k. Enter difference between book value (column 5d) and closing physical inventory balance (column 6c).

**DA FORM 1804**  
1 NOV 87  
PETROLEUM SAMPLE  
(TM 10-1105)

REPLACES EDITION OF 1 DEC 62, WHICH IS OBSOLETE. USE REVERSE SIDE FOR REMARKS.

PRODUCT  
*TURBINE FUEL, AVIATION, GRADE JP4*

FROM (Installation)  
*364th S+S COMPANY*

SAMPLE NO.  
*89-13*

LABORATORY NO.

PRODUCT  
*TURBINE FUEL, AVIATION, GRADE JP-4*

SPECIFICATION NO.  
*MIL-T-5624L*

AMT PRODUCT SAMPLE REPRESENTS  
*115,000 GAL*

FROM (Installation)  
*364th S+S COMPANY*

MANUFACTURER/SUPPLIER

SAMPLE SOURCE	TRUCK NO.	TANK NO. <i>1B</i>	OTHER (Specify)
SAMPLED BY (Name) <i>SP4 JOHN JONES</i>		ARMED SERVICES PROCUREMENT NO. <i>N/A</i>	
STOCK NO. <i>9130-00-256-8613</i>		DATE SAMPLED <i>2 JAN 89</i>	
QUALIFICATION NO. <i>N/A</i>		BATCH NO. <i>N/A</i>	
FILL DATE <i>N/A</i>		SHIPMENT DELIVERY DATE <i>2 JAN 89</i>	
CONTRACT BULLETIN NO. <i>N/A</i>		ITEM NO. <i>N/A</i>	

FUEL BULK STORAGE   
 ROUTINE SURVEILLANCE   
 FUEL PACKAGED   
 PROCUREMENT ORIGIN  
 ALLIED PRODUCTS   
 PROCUREMENT   
 FILTER EFFECTIVENESS  
 SPECIAL   
 QUAL CONTRACT   
 DEPOT

TYPE SAMPLE   
 TOP   
 MIDDLE   
 BOTTOM  
 COMPOSITE   
 OTHER (Specify) *ALL-LEVEL*

REVERSE SIDE

DA FORM 1804

PRODUCT RECEIVED FROM  
MULTI-PRODUCT PIPELINE

NAME AND TELEPHONE NUMBER OF PERTINENT PERSON TO CONTACT IF ADDITIONAL INFORMATION IS NEEDED

*SP4 JOHN JONES  
364th S+S COMPANY  
EXT. 1476*

STORAGE SITE ROUTINE IDENTIFIER CODE

Figure 12-11. Sample of a DA Form 1804

Legend for Figure 12-11;

Completion Instructions by column or block for DA Form 1804.

**Product.** Enter product nomenclature.

**From (Installation/Activity.)** Installation/Activity submitting sample.

**Sample Number.** Sample Identification Number

**Laboratory Number.** No entry. Reserved for use by laboratory.

**Specification.** Applicable specification of product.

**Amount of Product Sample Represents.** Gallons of product within the container (e.g., storage tank, tank truck) represented by the sample.

**Manufacturer/Supplier.** Company that supplied the product.

**Source of Sample.** Tank number, truck number, tank car #, cans drums, pails.

**Sampled By.** Person that obtained sample.

**Armed Services Procurement Number.** Applicable contract number.

**Stock Number.** Applicable National Stock Number.

**Date Sampled.** Date sample was taken.

**Qualification Number.** Applicable qualification number. (For certain type lubricants only).

**Batch Number.** Applicable batch number.

**Fill Date.** Date container was filled with product (applies only to cases, cans, pails, and drums).

**Shipment Delivery Date.** Date delivery of shipment was made.

**Contract Bulletin Number.** Applicable DFSC contract bulletin number.

**Item Number.** Applicable DFSC bulletin item number.

**Program.** X in the applicable box.

**Type Sample.** X in the applicable box. When "X" is entered in the box titled "Other", specify type of sample taken (e.g., all level).

**Reverse Side.** Any remarks pertinent to expedite the analysis/review of the sample being tested (e.g., weather conditions, visual analysis of product). Annotate name, address and telephone, (preferably AUTOVON) of person to contact for sample information.

Note: Any special samples submitted for immediate analysis should have the Sample Tag outlined in red for immediate processing by the laboratory.

