# DLA TROOP SUPPORT SUBSISTENCE INSPECTION MANUAL 4155.6 DLA Troop Support 4155.6 SUBSECTION 218.7

### OCTOBER 2011

### DESTINATION VERIFICATION INSPECTION OF STANDARD/VARIABLE NET WEIGHT ITEMS

I. <u>PURPOSE AND SCOPE</u>. This Subsection documents procedures for performing destination verification inspection of standard or variable net weight subsistence items procured on DLA Troop Support contracts. These procedures are applicable to Destination Quality Assurance Representatives (DQARs) performing on delivery at purchase (destination) inspection (class 4).

#### II. POLICY.

A. DQARs shall perform a 100% inspection for verification of marked/required net weight whenever there is a suspicion that a grossly mismarked sampled unit may not be an isolated occurrence or at any time that 100% inspection does not impose too great a workload or cause unwarranted destruction of the product.

B. Required calculations shall be accomplished as follows:

Purchase Increment/ Marked Weight <u>Of Sample Units:</u>	Minimum Degree of Scale Sensitivity:	Weighing Increment QAR shall weigh/report to nearest:
Greater than 75 lb	1⁄2 lb	whole lb
Greater than 10 lb to 75 lb	1⁄4 lb	½ lb
Greater than 1 lb to 10 lb	1/8 lb	1⁄4 lb
Greater than 8 oz to 11b	1⁄2 OZ	1 oz
Greater than 1oz to 8 oz	<sup>1</sup> ⁄4 OZ	1⁄2 OZ
1 oz or less	1/8 oz	<sup>1</sup> ⁄4 OZ

C. Results of net weight verification inspections shall be recorded on DD Form 2393, Destination Verification Inspection of Standard/Variable Net Weight Items. Completed Form DD 2393 shall be filled with inspection records and not forwarded to the appropriate element performing the contract quality assurance function, (DLA Troop Support-FTW, DLA Troop Support-Pacific, or DLA Troop Support-Europe & Africa), unless specifically requested.

D. When calculating the average unit net weight shortage, the quotient (number obtained when a number is divided by another) shall be calculated to four decimal places which shall be considered as the unrounded value.

E. This Subsection does not apply net weight verification of fresh dairy products which is detailed in U.S. Army Health Services Command Regulation 40-28 or applicable Air Force directives.

III. DEFINITIONS.

A. <u>Actual Receipt</u>. The total quantity tallied-in by receiving personnel minus any shortage found. If no shortage is found, the quantity received is the same as the tally-in quantity.

B. <u>Average Unit Net Weight Shortage</u>. The total net weight shortage of all sample units weighed, divided by the number of sample units weighed.

C. <u>Grossly Mismarked Sample Unit</u>. A sample unit which is found to be 10% or more shortweight or overweight.

D. <u>Homogenous/Fluid When Filled Products</u>. Those products which are of uniform consistency throughout. "Fluid" at time of filling, refers to liquids or solid products (for example, shortening) which are heated and filled as a liquid.

E. <u>Insignificant Net Weight Shortage</u>. A shortage in which the average net weight shortage is within acceptable sampling tolerances. (Refer to Encl 1, table E.)

F. <u>Net Weight Per Contract Unit</u>. The specified/marked weight of the unit of purchase (e.g., item purchased in pounds, ounces, grams or containers of a standard of minimum weight).

G. <u>S-Factor</u>. An allowance for sample variation.

H. <u>Range</u>. The linear difference between the highest and the lowest numerical values in set of data, (e.g., the linear difference between + 3 and - 2 is 5).

I. <u>Significant Net Weight Shortage</u>. A shortage in which the total dollar value of the net weight shortage exceeds the maximum limits that are consistent with acceptable risk. (Refer to Enc 1, table E).

J. <u>Standard Net Weight Items</u>. Products packed in containers which have the same marked/required net weight (e.g., 60 pounds per shipping container, 5 pounds per package, etc).

K. <u>Tally</u>-In. A total sum or marked net weights of individual units, pieces, shipping containers, etc., or the sum of the total number of units, pieces, shipping containers, etc. received. Tally-in is performed by receiving personnel.

L. <u>Total Net Weight Shortage.</u> The total number of units in the lot, multiplied by the <u>unrounded</u> average unit net weight of a sample unit. A shortage exists when the actual net weight is less than the marked/required net weight, whereas an overage exists when the actual net weight is greater than the marked/required net weight.

M. <u>Variable Net Weight Items</u>. Products packed in units which do not have the same marked/required net weight.

# IV. SIGNIFICANT CHANGES: NA

# V. PROCEDURES.

A. Use of Scales.

1. Scales to be utilized in performing net weight verification inspections shall be placed on a solid foundation and the accuracy verified against test weights of known accuracy prior to use. Scales to be utilized shall also be formally calibrated at a minimum frequency of once each calendar quarter.

2. Scales with greater sensitivity than specified may be used if available, but the minimum degree of sensitivity of scales to be utilized in performing net weight verification inspections shall be as indicated in paragraph II.B.

3. If the pointer stops between two subdivisions to the scale and is midway or above, record the higher weight, otherwise, record the lower weight (e.g., on a scale graduated in pounds, pointer midway or more between 10 and 11 pounds is recorded as 11 pounds).

B. Determining Tare Weights.

1. If tare weights are furnished on shipping containers/documents or if tare weight information provided is suspected to be in error, the DQAR shall establish tare weight as follows:

a. If the item will not be rendered unserviceable, establish tare weight using a minimum of ten sample units unless otherwise specified in contractual documents. One hundred percent sampling shall be used for lots containing less than ten units.

b. If the item will become unserviceable, establish tare weight using one sample unit for lots of less than 8.500 units or two sample units for larger lots, unless a larger sample size is directed by the accountable officer of DLA Troop Support-Subsistence,, DLA Troop Support-Pacific, or DLA Troop Support-Europe & Africa, as applicable.

c. If the DQAR finds that the tare weight as determined per paragraph V.B.1.a. or V.B.1.b. is insufficient for use in verifying net weight as required in this Subsection, the DQAR shall contact DLA Troop Support-Subsistence, DLA Troop Support-Pacific, or DLA Troop Support-Europe & Africa, as applicable, for further instructions on inspecting the particular item/shipment.

2. Tare weights shall be consistent with the increment (degree of scale sensitivity) required for determining net weight.

3. Glaze on waterfoods shall be included in determine tare weights. Bandage packaging material in which cheeses are cured shall not be included as part of tare weight determinations when delivery is made in the intact bandage material type packaging.

4. Separate tare weights shall be established for each line item.

C. 100% Verification Inspection of Standard or Variable Net Weight Items.

1. Determine and record the actual net weight of each unit.

2. Determine and record the total actual net weight of all units.

3. Compare the total actual net weight of all units with the total marked/required net weight tallied by receiving personnel.

a. If the total actual net weight is equal to or greater than the total marked/required net weight tallied by receiving personnel, there is no net weight shortage and no further net weight verification is required.

b. If the total actual net weight of all units is less than the total marked/required net weight tallied by receiving personnel, determine the total net weight shortage and continue with step 4 which follows.

4. Round the total net weight shortage to the nearest weight increment.

a. If the rounded total net weight shortage is zero, there is no net weight shortage and no further net weight verification is required.

b. If the <u>rounded</u> total net weight shortage is not zero, refer to paragraph V.G. to determine if the total net weight shortage is significant.

D. <u>Developing Sampling Plans For Other Than 100% Verification Inspection of Standard Or</u> Variable Net Weight Items.

1. When contractual documents contain sampling criteria for verification of net weights, that criteria shall take precedence.

2. When contractual documents do not contain sampling criteria for verification of net weights, the following criteria shall apply:

a. The lot size and sample units shall be expressed in the number of shipping containers, primary containers, etc., as appropriate.

b. The sample size shall be the number of sample units indicated in Encl 1, Table C.

3. DQARs are cautioned that the sample size required by paragraph V.D.1. or V.D.2. are minimum sample sizes. DQARs may increase the sample size when, for their professional judgment, increasing the sample size aids in performing the net weight verification inspection.

4. Strict random sampling is not required; however, for results to be representative of the shipment, sample units shall be drawn from various locations throughout the load (i.e., rear, center, and front of load) and, if appropriate, from various locations within shipping and/or intermediate containers.

E. Verification of Standard Net Weight Items.

1. Determine and record the marked/required net weight, actual net weight, and the difference (over/short) between the marked/required net weight and actual net weight of each sample unit.

2. Determine and record the total marked/required net weight, actual net weight and the difference (over/short) between the marked/required net weight and actual net weight of all sample units.

3. Compare the actual net weight of all sample units with the total marked/required net weight of all sample units.

a. If the total actual net weight is equal to or greater than the total marked/required net weight, there is no net weight shortage and no further net weight verification is required.

b. If the total actual net weight is less than the total marked/required net weight, determine the average unit net weight shortage and continue with step 4 which follows.

4. Round the average unit net weight shortage to the nearest weight increment.

a. If the <u>rounded</u> average unit net weight shortage is zero, there is net weight shortage and no further net weight verification is required.

b. If the <u>rounded</u> average unit net weight shortage is not zero, continue with step 5 which follows.

5. Compare the average unit net weight shortage to the allowable limits in Encl 1, Table D.

a. If the average unit net weight is equal to or less than the allowable limits in Table D, there is no net weight shortage and no further verification is required.

b. If the average unit net weight shortage is greater than the allowable limits in Table D, continue with step 6 which follows.

c. When net weights are measured in increments other than pounds (ounces, grams), the average unit weight shortage must be converted to pounds in order to determine if it is within the allowable limits of this table.

6. Compute the total net weight shortage by multiplying the <u>unrounded</u> average unit net weight shortage by the total number of pieces (shipping containers, intermediate, primary containers) tallied by receiving personnel.

7. Round the total net weight shortage to the nearest equivalent weight increment.

8. Refer to paragraph V.G. to determine if the total net weight shortage is significant.

F. Verification of Variable Net Weight Items.

1. Determine and record the marked/required net weight, actual net weight, and difference (over/short) between the marked/required net weight and actual net weight of all sample units.

2. Determine and record the total marked/required net weight, actual net weight, and the differences (over/short) between the marked/required net weight and actual net weight of all sample units.

3. Compare the total net weight of sample units with the total marked/required net weight of all sample units.

a. If the total actual net weight is equal to or greater than the total marked/required net weight, there is no net weight shortage and no further net weight verification is required.

b. If the total actual net weight is less than the total marked/required net weight, determine the average unit net weight shortage and continue with step 4 which follows.

4. Round the average unit net weight shortage to the nearest equivalent weight increment.

a. If the <u>rounded</u> average unit net weight shortage is zero, there is no net weight shortage and no further net verification is required.

b. If the <u>rounded</u> average unit net weight shortage is not zero, continue with step 5 which follows.

5. Determine the range of differences between marked/required and actual net weights of all sample units.

a. If there are both overages and shortages, the range is from the greatest overage to the greatest shortages.

b. If there are shortages only, the range is from the greatest to the least shortages.

6. Determine the Sample Allowance (S-Allowance) by multiplying the range by the Sample Factor (S-Factor) indicated in Encl 1, Table A for the appropriate sample size selected.

- 7. For sample sizes larger than 104, S-Factor is applicable.
- 8. Round the S-Allowance to the nearest equivalent weight increment.
- 9. Compare the <u>rounded</u> average unit net weight shortage to the <u>rounded</u> S-Allowance.

a. If the <u>rounded</u> average unit net weight shortage is equal to or less than the <u>rounded</u> S-Allowance, there is no net weight shortage and no further net weight verification is required.

b. If the <u>rounded</u> average unit net weight shortage is greater than the <u>rounded</u> S-Allowance, continue with step 10 which follows.

10. Compute the total net weight shortage by multiplying the <u>unrounded</u> average unit net weight shortage by the total number of pieces (shipping containers, primary containers, carcasses, etc.) tallied by receiving personnel.

11. Round the total net weight shortage to the nearest equivalent weight increment..

12. Refer to paragraph V.G. to determine if the total net weight shortage is significant.

G. Determine If Net Weight Shortage Are Significant.

1. Compute the total dollar value of total net weight shortage by multiplying the <u>rounded</u> total net weight shortage by the contract unit cost (price per pound, package, gallon etc.,). DQARs are cautioned that for certain products (e.g., oil), it is necessary to convert the total weight shortage from pounds to the number of appropriate contract units short (e.g., gallons, quarts) prior to computing the total dollar value of the shortage.

2. Compare the total dollar value of the total shortage to the maximum limits in Enc 1, Table E. <u>Verification of Standard Net Weight Items</u>.

a. If the dollar value of the shortage is equal to or less than the maximum limits in Table E, there is no significant net weight shortage and DQARs need not increase the frequency of net weight verification inspections. DQARs would then report the <u>rounded</u> total shortage to the Receiving/Accountable Officer so that the shortage can be deducted from the contractor's invoice/manifest.

b. If the dollar value of the shortage is greater than the maximum limits in Encl 1, Table E, there is a significant net weight shortage which must be reported as a nonconformance in accordance with the procedures detailed in Subsection 209.1. Significant net weight shortages are sufficient cause to increase the frequency of net weight verification inspections in order to protect the Government's interests.

BY ORDER OF THE COMMANDER 2 Encl

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DISTRIBUTION Special

This Subsection supersedes Subsection 218.7, August 2010.