

SUBSISTENCE

INSPECTION OF COMPOSITE OPERATIONAL RATIONS

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FORWARD

(Supplementation is permitted)

This Handbook is an aid to inspectors of composite operational rations. This basic document and associated Appendices provide guidelines for sampling, inspecting, classifying defects, and determining lot disposition for the various types of composite operational rations. This Handbook has undergone extensive changes and should be reviewed in its entirety. Concurrence of the Military Services is contained in the enclosed letters. Users of this publication are encouraged to submit comments and recommended changes to improve the publication, through channels, to DLA Troop Support, Attn: DLA Troop Support -FTSA. Changes will be coordinated with Military Services and implemented as appropriate.

FOR THE COMMANDER



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**DISTRIBUTION
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TABLE OF CONTENTS

PARAGRAPH	PAGE
I. References	4
II. Purpose and Scope	4
III. Policy	4
IV. Responsibilities	5
V. Definitions	5
VI. Inspection Facilities and Equipment	7
VII. Serviceability	8
VIII. Types and Scheduling of Inspections	8
IX. Marking and Identification of Inspected Supplies	10
X. Laboratory Analysis	10
XI. Pest Infestation and Laboratory Support	10
XII. Quality History Records	11

APPENDICES (Incorporated as Separate Documents)

- A. Appendix A - Inspection of Meal, Ready-to-Eat (MRE) Rations
- B. Appendix B - Inspection of Unitized Group Ration (UGR) Heat & Serve (H&S) Modules
- C. Appendix C - Inspection of Meal, Cold Weather/Food Packet, Long Range Patrol (MCW/LRP)
- D. Appendix E - Inspection of Food Packet, Survival Aircraft, Liferaft
- E. Appendix F - Inspection of Food Packet, Survival, Abandon Ship
- F. Appendix G - Inspection of Food Packet, Survival, General Purpose - Improved
- G. Appendix H - Inspection of the Humanitarian Daily Rations (HDRs)
- H. Appendix J - Inspection of Unitized Group Ration (UGR) B
- I. Appendix K - Inspection of Unitized Group Ration – Express (UGR-E)
- J. Appendix L - Inspection of First Strike Rations (FSRs)

I. REFERENCES.

- A. DOD 4140.27-M, Shelf Life Management Manual
- B. DLAM 4145.12 / TM 38-400/NAVSUP PUB 572 / AFJMAN 23-210 / MCO 4450.14, Joint Service Manual (JSM) For Storage and Materials Handling, Section IV, Subsistence.
- C. AR 30-22, The Army Food Program
- D. AR 40-656 / NAVSUPINST 4355.10A / MCO 10110.48, Veterinary Surveillance Inspection of Subsistence
- E. AR 40-657 / NAVSUP 4355.4H / MCO P10110.31H, Veterinary/Medical Food Safety, Quality Assurance, and Laboratory Service
- F. DLAI 4155.2, Quality Assurance Program Instructions for DLA Inventory Control Points
- G. DLAD 4155.2, Quality Assurance Program for the DLA Inventory Control Points
- H. DLAM 4140.2, Supply Operations Manual
- I. DLAR 4155.37 / AR 702-18 / NAVSUPINST 4410.56A / AFJMAN 23-232 / MCO 4450.13A, Materiel Quality Control Storage Standards
- J. TB MED 263, Medical Service, Identification of Inspected Foods
- K. DLAI 4145.31, Integrated Stored Product Pest Management.
- L. MIL-STD 904B, Detection, Identification, and Prevention of Pest Infestation of Subsistence
- M. Armed Forces Pest Management Board, Technical Guide No. 38 (TG-38), Protecting Meals, Ready-To-Eat Rations (MREs) and Other Subsistence During Storage
- N. DLA Troop Support Manual 4155.6, Subsection 218.1, Destination Inspection
- O. DLA Troop Support Manual 4155.6, Subsection 218.2, Entomological Laboratory Identification Services

II. PURPOSE & SCOPE. This Handbook provides uniform guidance to all DOD personnel responsible for the inspection and technical management of operational rations under the control of the Military Services, DLA, and/or civilian organizations.

III. POLICY.

- A. Operational rations will be subjected to continual inspections and systemic quality evaluations. When quality deficiencies are noted that change the Condition Code of operational rations, prompt action will be initiated to identify affected stocks, possible cause of the deterioration, and to provide disposition recommendations to the accountable officer/agency.
- B. Storage facilities for operational rations will be selected, maintained and inspected in accordance with DLA and/or Service regulations as appropriate. Storage facilities will receive the same level of attention as the operational rations themselves during inspection.
- C. Rations showing physical signs of contamination (e.g., foreign odors, oily cases, etc.) or suspected to have been exposed to chemical, biological, and/or radioactive contaminants will

be inspected in accordance with directives of the controlling Service/agency specific to these types of situations.

IV. RESPONSIBILITIES.

A. The Supplier Support Division, DLA Troop Support (DLA Troop Support -FTS) is responsible for developing, maintaining, and coordinating this Handbook and any proposed changes with inspection and food service activities of the Military Services. In addition, the Operational Rations Division (DLA Troop Support -FTR) is responsible for providing contractual inspection guidance when requested by an inspection activity for warranty inspection purposes.

B. Inspection services shall be provided by either the USAF Public Health Services or the U.S. Army Veterinary Service as appropriate.

C. Storage and warehousing services necessary to provide adequate labor and materials handling to conduct sampling and recouping of operational rations shall be provided by the activity having custodial management of the rations.

D. Inventory shall be managed by the Operational Rations Division (DLA Troop Support -FTR), or the Ordering Officer; or the Accountable Officer having material management responsibility for the rations.

V. DEFINITIONS.

A. Action Number (AN). A number which, when reached or exceeded, indicates additional inspection is necessary or indicates a component is defective beyond acceptable limits.

B. Air Force Environmental Health Inspector. Individuals from the U.S. Air Force whose duties include the inspection of food to include rations.

C. Army Veterinary Food Inspector (AVI). Individuals from the U.S. Army Veterinary Services whose duties include the inspection of food to include rations.

D. Contractor's Lot. The collection (grouping) of units of a specific product limited, as much as possible, to units of identical characteristics as established by:

1. Stock number
2. Package size
3. Contractor
4. Contract number
5. Date of pack
6. Type of pack
7. Quality and storage history

E. Component. An item in a composite ration. Components have different levels of

importance/significance to the overall ration primarily based on their caloric value.

F. Composite Ration. An operational ration composed of several different components that undergo different rates of deterioration over time and temperature variations.

G. Customer Direct Vendor Deliver (DVD). Delivery of rations directly from the ration_assembler to the military installation/agency.

H. Date of Pack (DOP). Date on which the product was packaged in the unit or primary_container. DOP for operational rations is usually the date when components are assembled and packed into shipping containers.

I. Defect. An imperfection in component material, workmanship, quality or condition_which fails to meet established standards. Defects are normally classified according to their seriousness (i.e., Major A, Major B, or Minor).

J. Defective. A component with one or more defects.

K. Deterioration. A process of change occurring in a food item which affects the_product's normal appearance and/or wholesomeness; which will eventually limit its serviceability.

L. Grand Lots. An administrative procedure where two or more contractor lots from the_same assembly contractor are grouped into one grand lot. This can only be accomplished when contractor and assembly year are the same and the lots have been stored under similar storage history. Samples from grand lots must represent all individual lots proportionally.

M. Grand Lotting. Collecting or grouping two or more lots in order to decrease the cost_of surveillance inspections by reducing the number of samples destroyed during the inspection process.

N. Inspection Level. A factor that determines the relationship between the lot or batch_size, the sample size, and Acceptable Quality Levels (AQLs).

O. Inspection Test Date (ITD). A date occurring a specified number of months after the_Date of Pack (DOP). The ITD is related to the estimated shelf life of the composite ration under normal storage conditions. It is also used as an indicator for when inspection frequency of the composite ration should be increased.

P. Lot (Inspection Lot). A collection of modules, menus, or components from which a_sample is to be drawn and inspected.

Q. Lot Size. The total number of units of inspection modules, menus, or components as_appropriate in a lot.

R. Meal/Menu. A specific quantity of nutritionally balanced food provided one person during a scheduled serving period. A combination of meals/menus (breakfast, lunch, dinner) constitutes a daily ration.

S. Module. The word module typically means a set of boxes whose combined contents yield the components necessary to feed one meal to a given number of personnel. It usually is the unit of issue for Unitized Group Rations (UGRs).

T. Operational Ration. A ration used by the military services for field feeding.

U. Perishable Foods. Foods that require refrigeration during transportation or storage.

V. Ration. An allowance of food for the subsistence of one person for one day.

W. Semi-perishable (Shelf Stable) Foods. Foods that do not require refrigeration during transportation or storage.

X. Serviceability. The fitness of an item for its intended purpose; generally expressed in terms of Condition Codes. For composite operational rations, three factors are essential: estimated remaining shelf life; current quality and condition of the item and its components, and packaging and packing integrity.

Y. Shelf Life. The total elapsed time from the DOP to the date of issue for immediate consumption.

Z. Sublot. A collection of units of a product contained within a lot.

AA. Unfit for Human Consumption. Rations that present a clear potential or actual health hazard if consumed, as determined by local medical authority.

BB. Unfit for Intended Use. An item which can no longer be used as originally intended because of deterioration or other restricting factors.

VI. INSPECTION FACILITIES AND EQUIPMENT.

A. Inspection facilities are normally required at fixed storage locations (i.e., TISA, warehouse).

1. Location. A fully enclosed room convenient to the storage facility or location of the rations being inspected. Entrance shall be restricted to those involved in the inspection process. The area should be consistent with the extent of the operation, be heated/air conditioned, and be accessible by forklift.

2. Ventilation. Well ventilated and free from dust and odors of all kinds.

3. Lighting. The intensity of light needed for critical appearance examinations

should be at least 100-foot candles. Florescent lighting shall be restricted to the special daylight type.

4. Furnishings.

a. Inspection tables and/or counters should be approximately 36 inches high and 30-36 inches wide. The tops should be impervious (e.g., stainless steel, enameled steel, or pressure laminated plastic).

b. The sink (preferably three-compartment stainless steel) must have hot and cold running water, large enough to accommodate the largest equipment used, and must have at least a 1/2 horse power disposal system.

c. Storage cabinets or work counter shelves used for storing equipment and supplies should be provided with hinged doors and/or sliding drawers.

5. Automation.

a. Telephone lines with local and long distance capabilities.

b. Dedicated fax line.

c. Internet access, LAN or Cable access preferred. Dial-up as last resort.

VII. SERVICEABILITY.

A. Serviceability determinations have traditionally been made based on estimated remaining shelf life. This approach for composite operational rations is not practical as the sole means of determining serviceability. Operational rations are normally assembled into composite menus (e.g., MREs) or modules (e.g., UGRs) that contain numerous non-homogeneous products. Since components are different; packaged at different times, and deteriorate at different rates, condition coding based on shelf life alone is not practical or indicative of the overall serviceability of the rations.

B. In accordance with this Handbook, Condition Codes and estimated remaining shelf life for composite rations will be based on:

1. The condition of each component evaluated individually.

2. The importance of each component relative to the ration in which it is contained.

C. Condition Code criteria for each composite ration is contained in the appropriate Appendices.

VIII. TYPES AND SCHEDULING OF INSPECTIONS.

A. Receipt Inspection. An inspection upon delivery where a change of Accountable Officer occurs. All rations will be inspected at time of receipt or as soon as possible thereafter. A complete receipt inspection is required if current (within the last 30 days) inspection report/document does not accompany the shipment or is not found in the appropriate operational ration database. If current inspection is verified, a general examination (cursory) will be made for transportation damage/obvious defects. Additional information on receipt inspections can be found in the appropriate Appendices.

B. In-storage (Surveillance) Inspection. These are inspections performed on a routine schedule while the rations are in storage. Perishable operational rations (UGR-A) are not designed or intended for long storage periods, however UGR-A's will be inspected monthly to determine product condition once they have reached their ITD. DLA and Service owned semi-perishable operational rations should be inspected at six month intervals. Inspection frequency should be maintained as long as the ration inspection results do not indicate significant degradation, and the rations have not exceeded their serviceable storage life based on the criteria in DOD 4140.27-M, and appropriate appendix. The accountable officer may request inspection at any time. Semi-perishable rations will be inspected:

1. At six month intervals if lot is still in stock, as long as they are still in Condition Code A.
2. At three month intervals, once the rations have been placed in Condition Code B.

NOTE: Again, additional information can be found in appropriate appendix regarding scheduling next inspection due.

C. Warranty Inspection. A detailed inspection conducted within the contractual warranty period in accordance with acquisition contract criteria. A warranty inspection is performed at the first DOD destination to receive the rations from the assembly contractor (excluding commercial contract warehouses). Ideally, warranty inspections will be conducted between five and six months of the Date of Pack (DOP). Warranty inspections should not be performed on tray pack modules assembled at defense depots. Most Warranty inspections are directed or coordinated through Operational Rations Business Unit (DLA Troop Support -FTR).

NOTE: The quality assurance provisions and criteria of this Handbook are not to be interpreted as contractual. The acquisition activity will provide lotting procedures, guidance on sampling plans, tables of inspection, and other pertinent information needed by the inspection activity. For Air Force stocks, inspectors will contact the Air Force Services Agency (HQ AFSVA/SVOHT). AFSVA will coordinate requests with DLA Troop Support and the inspection activity.

D. Inspection Prior to Sale or Shipment (Surveillance) Inspection. These are inspections performed to detect obvious condition defects and/or damages that have occurred since the last

scheduled cyclic inspection (e.g., mishandling, water damage, temperature abuse). If scheduled inspections are not current or have not been performed, a more detailed inspection should be conducted at this time to preclude the movement of damaged/distressed stocks.

E. Special Inspections. A special inspection will be performed when determined necessary based on routine inspection findings, customer complaints, requests from DLA Troop Support or the Military Services, or whenever reasons exist for such an action. Additional information can be found in the appropriate appendix. For UGR-A's, special inspections are only requested by DLA Troop Support or the Accountable Officer.

IX. MARKING AND IDENTIFICATION OF INSPECTED SUPPLIES. Ration samples that are inspected and returned to storage will be identified as inspection samples in accordance with the procedures specified in TB MED 263 (Medical Service, Identification of Inspected Foods) or other appropriate means.

X. LABORATORY ANALYSIS.

A. When doubt exists as to the condition of a lot of operational rations and the inspection activity determines there is a need for a laboratory examination and/or test, samples will be submitted to the DOD Veterinary Food Analysis and Diagnostic Laboratory (FADL) or approved Air Force laboratory. Utilization of laboratories in the determination of serviceability is encouraged whenever it is deemed necessary by the inspection activity.

B. Laboratory guidance for sample submission is currently available in Handbook or doctrine format. Handbook for AVI is maintained by U.S. Army Veterinary Services. Air Force handbook/doctrine is maintained by Environmental Health Division.

XI. PEST INFESTATION AND LABORATORY SUPPORT.

A. Infestation, damage, or contamination by insect and/or rodent pests encountered during any operational rations inspection procedure will be immediately reported to the Product Quality Office (DLA Troop Support -FTSB). DSN: (215) 737-3876 (DSN 444). For Air Force stocks, this information will also be reported to AFSVA/SVOHT. In the case of insect infestation, the initial notification will be followed up by submission of a DD Form 1222, Request for Results of Tests or DA Form 7539, Request For Veterinary Laboratory Testing & Food Sample Record (or locally approved laboratory form) filled out and submitted-in accordance with DPSC Manual 4155.6, Subsection 218.2.

B. An in-depth facility inspection should be conducted by inspection personnel, storage facility manager, and the responsible pest control activity. Appropriate pest control actions should be taken, when necessary, using the guidance contained in DLAI 4145.31, MIL-STD 904B or applicable Service directives. If the current storage location is not the suspected source of infestation, the previous storage facility will be contacted and similar investigative procedures initiated. If the operational rations in question were received infested from a supplier or DLA storage site, contact DLA Troop Support -FTR immediately for follow-up action and appropriate recommendations.

C. Disposition recommendations for infested stocks will be based on MIL-STD 904B or applicable Service directives and, when applicable, laboratory identification results. Final decisions on the disposition of inspected rations should be made jointly by the inspection activity and the owner of the rations. In cases where rations are placed on “Medical Hold”, final disposition must be coordinated by the owner of the rations with the local medical authority.

XII. QUALITY HISTORY RECORDS (QHR).

A. Reports (QHRs) will be entered into the appropriate Lotus Notes (LN) inspection database. Where these databases are not accessible, DLA Troop Support Form 5117, as applicable will be completed and kept at the local level. A copy of the QHR (either LN printout or DLA Troop Support Form 5117) will be provided to the Accountable Officer. QHRs will also include reports received with a shipment from another location.

B. DLA Troop Support Quality Assurance personnel have access to Lotus Notes database information. Electronic transmissions of inspection reports in Lotus Notes are acceptable to DLA Troop Support and encouraged. However, if reports on deteriorating stocks are not entered into the appropriate database, faxed/mailed copies of less than Condition Code A stocks must be faxed/mailed to:

DLA Troop Support
ATTN: DLA Troop Support -FTR
or FTSA/B Building 6
700 Robbins Avenue
Philadelphia, PA 19111
FAX: (215) 737-7526 (DSN 444)

C. For stocks arriving without current quality history records, the local supporting veterinary activity, MACOM Veterinarian, or Air Force Environmental Health Division should be contacted for assistance.

D. Specific distribution of inspection reports may be addressed in the appropriate appendix.