DLA Troop Support-FTSA 23 Nov 10

APP E DLA Troop SupportH 4155.2

FOREWORD (Supplementation is permitted.)

Appendix E is an aid for the inspection of the Food Packet, Survival Aircraft, Liferaft. It provides guidelines for sampling, inspecting, classifying defects, and determining lot serviceability.

Users of this publication are encouraged to submit comments and recommended changes to improve this publication, through channels, to DLA Troop Support, ATTN: DLA Troop Support-FTSA. Changes will be coordinated with the Defense Security Cooperation Agency and implemented as appropriate.

BY ORDER OF THE COMMANDER

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Chief, Administrative. Support &

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Office of Base Support Services

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DLA Troop Support- FTR, FTRB, FTRE, FTRA, FTSA, FTW VETCOM

This DLA Troop Support Handbook 4155.2, App E, supersedes DSCP Handbook 4155.2, App E Sep 08

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I. GENERAL.

<u>Background Information:</u> Food Packet, Survival, Aircraft, Liferaft comes in two Types. Type I consists of two packages of hard candy, 2 packages of chewing gum and twine. Type II consists of 2 to 6 survival food bars. Ensure to deterime which Type of food packets you have before proceeding any further in this Appendix.

- **A.** <u>Purpose and Scope.</u> This inspection guide is a reference for the inspection of the Food Packet, Survival Aircraft, Liferaft. It was written to assist food inspection personnel and standardize the inspection evaluations when performing an inspection of the rations for surveillance or special inspections.
- **B.** Explanation of Inspection Concept. This Appendix incorporates the concept of "Condition Coding" a lot based on the serviceability of the various components contained within the food packet and their estimated remaining shelf life. It involves a two step process: (1) Determine if any components exceed an action number. (2) Determine the Condition Code.
- **C.** Receipt Inspection Guidance. For receipt inspections, use the same sampling criteria and defect tables as for surveillance. In addition, inspectors shall advise DLA Troop Support when containers/products fail to comply with other essential receipt criteria identified in the appropriate monographs. Notification should be by the most expeditious means when there is a possibility that warranty action can be initiated. Inspectors will be provided guidance concerning additional requirements for warranty action.
- **D.** <u>Inspection Test Date (ITD) Extension.</u> Food packets estimated shelf life is 84 months (7 years) at 80 degrees Fahrenheit. Inspectors may extend an ITD based on their estimate of the lot's remaining shelf-life. Remarking of the unitized loads/cases with a revised ITD will be accomplished in accordance with DLAM 4155.2, Appendix S, and/or the appropriate service regulation. Posting of extensions can be accomplished by posting stickers containing updated ITD information to each pallet or case.
- **E.** <u>Disposition Recommendations.</u> At the completion of inspection, the inspector will recommend one of the following condition codes, based upon inspection findings:
- 1. Condition Code A (issuable without qualification). Food packets have more than 6 months shelf life remaining. If product is more than 7 years old, it cannot be placed in Condition Code A.
- 2. Condition Code B (issuable with qualification). At least 3-6 months shelf life remaining.
- 3. Condtion Code H (unserviceable). Food packets are unserviceable and/or unfit for human consumption.
 - 4. Condition Code L (Warranty Action). Food packets on hold pending warranty action.

- 5. Condition Code J (Laboratory Testing, Rework, Pest Activity). Food packets are on hold pending laboratory testing or rework.
- **F.** <u>Inspection Equipment.</u> The items listed below are recommended for performing the inspection of the food packets. However, this list is not intended to be all encompassing.
 - 1. Adequate lighting.
 - 2. Magnification lens (3 to 5 power recommended) is optional.
 - 3. Metal ruler (32nd inch graduation).
 - 4. Paper plates.
 - 5. Paper cups.
 - 6. Paper towels.
 - 7. Scissors, general use (must be strong enough to easily cut menu bags and retort pouches.
 - 8. Tape (for re-taping menu bags and cases).
 - 9. Sharpie Pen.
 - 10. Number 2 stylus.
 - 11. Sharp knife, box cutter, or scalpel that can be sanitized.
 - 12. Alcohol swabs.

G. <u>Definitions</u>.

- 1. <u>Monograph</u>. An information and instruction sheet that provides the inspector with a description of the food packet component, to include normal characteristics and signs of deterioration; as well as special instructions on how to examine the item. Special notes concerning inspection techniques are also included in some monographs.
- 2. <u>Component Classification</u>. The monograph index indicates the classification for each component. Component classification has been determined by Natick Research, Development and Engineering Center, Ration Development Branch, using DLA Troop SupportH 4155.2, Appendix A and AR 40-25, "Nutrition Allowances, Standards, and Education" as guidance.
- a. **Primary.** Any individual component in the food packets which, if unserviceable, will make the meal nutritionally inadequate for any method of intended use.
- b. <u>Secondary</u>. Any individual component in the food packets which, if unserviceable, will reduce the nutritional value of the meal, but will not render the meal unfit for its intended purpose.
- c. <u>Ancillary</u>. Any component in the food packets which contributes little or no nutrient value to the meal and if found unserviceable, will not constitute the meal as nutritionally deficient for its intended purpose.

3. <u>Major A Defect</u>. This classification should be used for defects that are likely to cause hazardous or unsafe conditions for individuals using, maintaining, or dependent upon the product. The words "are likely to" are important. They do not mean "could possibly" since it is

always possible to develop grand scenarios that transform trivial happenings into major catastrophes. Therefore, the use of this classification requires experience, prudence and sound judgment.

- 4. <u>Major B Defect</u>. These are defects that are not hazardous or unsafe. However, they may restrict the use of the product or make its consumption unlikely under the conditions for which the rations were originally designed. Examples: Extreme color (darkening). odor (rancidity), or flavor (bitterness) changes in primary components of a ration that make them unlikely to be consumed under normal field conditions where resupply or alternative feeding strategies are available. However, under more restrictive conditions the components could be consumed without concern that illness could be produced.
- 5. <u>Minor Defect</u>. These are defects that make the product less useful than it should be, but not seriously so. Minor defects usually do not affect serviceability. However, their identification is important since they often reveal early signs of deterioration and can be detected before the item reaches a condition that makes its consumption unlikely under conditions of normal use. Their early detection may lead to a predictive intervention by the accountable officer to ensure consumption before the component or menu loses its serviceability.

6. Product Codes.

- a. <u>Assembly Code Information</u>. Contract and component identification markings found on the shipping container, and/or food packet that reflect ration assembly information only (e.g. assembly contractor, date of pack, assembly lot numbers, Inspection Test Date (ITD), etc.).
- b. <u>Component Code Information</u>. Item identification markings found on the primary food packet that reflect the component producers name, the USDA Establishment Number, the production lot number of the component, the nomenclature, etc.
- 7. <u>Action Number (AN)</u>. A number which, when reached or exceeded, normally indicates additional inspection is necessary or indicates a component is deteriorated beyond acceptable limits and the menu that contains it must be evaluated for serviceability.
- 8. <u>Condition Codes</u>. These codes have, traditionally, been based primarily on an estimate of the remaining shelf life. Serviceability of the food packets will be determined based on the useability status of the individual ration.
- 9. **Food Packet Lot Serviceability.** Based on usability and condition code, the integrity of the packaging and packing is also considered.

- 10. **Food Packet, Survival, Aircraft, Life Raft.** The Food Packet, Survival Aircraft, Liferaft is used by the Navy to sustain personnel that survive aircraft disaters. The packet, along with other essential equipment, is supplied in the emergency kit carried aboard naval aircraft.
- 11. **Food Packets with Limited Components.** If a component of the food packet are revealed by inspection or laboratory analysis to be less than desirable in terms of quality, but are wholesome and can be consumed without any deleterious effects, DLA Troop Support contracting should be contacted.
- 12. <u>Food Packets with Restricted Components</u>. These are food packets in which some components are found to be unwholesome, repulsive or otherwise unusable. Restricted components must be removed from the ration prior to issuing them to the consumer. Since the food packet only has two food components, destruction may be more advantageous to the government than reworking the food packets identified with problem components.
 - 13. **Abrasion**. A break or crack in the outer lamination of the retort pouch.
- 14. <u>Foldover wrinkle</u>. Pouch material is overlapped on itself in the seal area that reduces the closure seal to less than 1/16 inch.
- 15. **Entrapped Matter**. Foreign material may be trapped in the seal area, when the pouch is sealed or bonded. Entrapped matter weakens the seal, but as long as there is 1/16 inch of continuous seal all the way across the seal area (i.e. from one side of the pouch seal to the other), then the seal is considered acceptable.
- 16. **<u>Delamination</u>**. Delamination is the separation of laminated films in a flexible laminated pouch.
- 17. <u>Stress Crack</u>. It is possible that the foil barrier layer in the food packet pouch material may break, but the outer layer (lamination)of polyester is still intact. This would be called a stress crack and it is not scored as a defect.
- 18. **Barrier Layer**. For an food packet retort pouch this is the lamination (foil) that prevents transmission of light, water vapor, or oxygen into out of the retort pouch.
- 19. **Product Contact Layer**. For an food packet retort pouch, this would be the inner lamination (polypropylene) which is in contact with the food.
- 20. <u>Adhesive</u>. Bonding material that binds the laminations (thin sheets of Polypropylene, foil, polyester, or nylon) that make up the retort pouch material.

II. ROUTINE INSPECTION GUIDANCE.

A. STEP 1: Cursory or Full Inspection. A complete receipt inspection is required unless:

- 1. The Survival Aircraft, Liferaft rations are delivered to the installation directly from the assembly plant, a full receipt inspection is not required. Inspect these deliveries only for transportation damage/obvious defects.
- 2. Normally, rations received will receive a full destination inspection. If the depot that the rations were received from performed a cursory inspection, then a full receipt inspection shall be performed at destination. The Survival Aircraft, Liferaft rations are delivered from a depot or other installation and a current (within the last 30 days) inspection report, completed at the point of origin (for example, a depot, not another installation that received the same lot) accompanies the shipment. The accompanying inspection report should match the lot number and manufacturer/assembler information on the shipping container, plus the delivery origin.

B. STEP 2: Evaluation of Storage Conditions.

- 1. Storage conditions vary significantly. Food packets may be stored in small quantities, but it is more likely that these rations will be maintained in a warehouse until shipped to support a national emergency, military exercise or engagement. Food packet storage areas should be clean, dry, and not subject to extreme temperatures. The facility should be free of pests in accordance with:
- a. MIL-STD-904B, Detection, Identification, and Prevention of Pest Infestation of Subsistence.
- b. TG-38 Protecting Meals Ready-To-Eat Rations (MREs) and Other Subsistence During Storage.
- 2. When multiple pallets of food packets are warehoused, the storage facility should meet the additional standards of MIL-STD-3006C, Requirements for Food Establishments (Appendix A, Only). Food packets cannot be stacked more than 4 pallets high without the use of storage aids, pallet racks/pallet sets, etc. These pallet racks/pallet sets should support the full weight of any additional pallet(s) above, and shall not be in contact with or supported by the pallets beneath. Temperature history of storage locations must also be considered when recommending final condition codes and dispositions.
- 3. All cases opened for inspection or damaged, shall be recouped or repaired in a manner sufficient to ensure protection of the products during subsequent storage and handling. Cases will be back filled so that no more than one case will have less than the required number of packets as indicated on the shipping container marking/labeling.
- 4. All ration food components are shortened by high temperatures. Food packet storage temperatures in excess of 80°F should be reported to DLA Troop Support-FTR and DLA Troop Support-FTRE.

C. STEP 3: Determine Lot Size.

- 1. Lot size is expressed as the total number of food packets within the contractor or grand lot.
- 2. Determine how many cases/shipping containers there are in the lot; multiply that number by the number of packets as indicated in the marking of the shipping container (i.e. 1,000 cases x 36 packets per case = 36,000 packets), if applicable.
- 3. If the food packets are no longer packed in the original shipping conatiners the inspector will count the number of packets, if applicable.
 - 4. Lotting procedures will be as follows:
- a. <u>Contractor's lots</u> are composed of rations from the same assembly contractor, having the same contract number and lot number/pack year, and stored under substantially similar storage conditions.
- b. <u>Grand lots</u> for the purpose of food packets inspections will be composed of rations from the same assembly contractor with the same contract number or pack year. Grand lots may contain rations from more than one contractor's lot as long as the contractor and contract numbers or pack year are the same. Additionally, the food packets must have been stored under substantially similar storage conditions. Samples from grand lots must represent all contractor's lots, even if the next highest sample size needs to be used. Identity of samples from each sublot must be maintained throughout the inspection.

<u>NOTE</u>: At no time will Type I and Type II food packets be comingled into Grand lots. You may Grand lot multiple lots of Type I together, then Grand lot multiple lots of Type II together for two distinct Grand lot inspections.

- c. Defective contractor's lots will be segregated from grand lots and inspected individually when one or more of the following occurs:
 - (1) A Major A defect is found in the contractor's lot.
- (2) A Major B or Minor defects found seem to be concentrated in one or more of the contractor's lots comprising the grand lot.
- (3) The inspector determines for any reason, based on initial inspection results, that inspection of the contractor's lot solely is justified.
- d. Grand Lotting is encouraged (to conserve inspection resources) whenever it is considered appropriate by the inspection activity. Grand Lotting will not be used when performing warranty inspections or on inspections of lots reported as possibly having wholesomeness deficiencies.

D. STEP 4: Inspect Shipping Containers and Selection of Samples.

- 1. Aircraft, Life raft Survival Food Packets are procured and issued by packets not cases. The shipping container sample size will depend upon the packet lot size (see Table A, footnote 4). The number of packets per shipping container is indicated on the markings of the shipping container. Shipping containers will be selected proportionally to represent all contractors' lots.
- 2. IAW Table A, select appropriate sample size for shipping container examinations. Damaged shipping cases should not be selected unless they are truly representative of the lot.

In addition damaged cases should be set aside and the contents should be inspected to determine the extent of damage to the food packets.

- 3. Using the defects listed in Table C, the inspectors should check each sample case for loose straps, different type straps on one or more cases than those on the majority of the lot, or previously opened boxes. While these indicators may be the result of tampering, each may also be due to other reasons (e.g., a wholesale rework of a lot). Inspectors should contact their supervisors for guidance if pilferage or tampering is suspected.
- 4. Using defects listed in Table C, observe each case for signs of rodent damage or insect infestation. If either condition is observed, annotate the findings on the inspection report accordingly. The notes should include the following:
 - a. Whether or not the pests were alive or dead.
 - b. Pest Identification (preferably entomological/laboratory identification).
- c. Probable origin of Pests (see DLA Troop Support Handbook 4155.2, paragraph XIII.).
- d. Probable movement of pests. For example, from outside the shipping container into the food packets or vice-versa.
- 5. Classify each defective case by the most serious defect it possesses. List each defect in the inspection report. If the Action Number is not reached or exceeded, the lot passes the shipping container inspection.
- 6. If the food packets are in loose packets, without original shipping containers, disregard the shipping container inspection and proceed immediately to STEP 5.

E. <u>STEP 5: Perform Closed Package Inspection (CPI) of Food Packets, Components and Contents.</u>

- 1. IAW Table D, select the appropriate number of food packets to be inspected being sure the samples are proportionally representative of the lot. Open the shipping container, if applicable, and collect the sample packets.
- 2. The packets will be inspected for aplicable defects IAW Table F. The components will be inspected IAW Table G.

- 3. Inspect the food packet for integrity, seal, cleanliness, markings and damage. Open the food packet by cutting off one seal.
- 4. Thoroughly examine the components within the food packets. Perform this inspection under a good light source and, if available, with the aid of a magnification lens. When a component exhibits more than one defect, it will be classified by the most serious

defect it possesses. However, for the purpose of gathering additional information, the lesser defects will also be noted. Record the following information for all defective components:

- a. Ration name/nomenclature.
- b. Assembler's lot number.
- c. Component nomenclature and code (if applicable).
- d. Processor's and/or plant name (if available).
- e. Defect number.
- f. Specific defect code (if applicable).
- g. Narrative descripition of defect (if necessary).
- h. Tally defects (Major A, Major B, Minor) according to type of component.
- 5. All components observed during the inspection with Major A or Major B defects will be discarded (whether they are part of the sample or not). Components not exhibiting defects or those exhibiting only minor defects may be reassembled into the lot.
- 6. Component packages with a Major A or Major B packaging defect should be opened to evaluate the effect the defect has on the product. Any findings should be recorded as a note on the inspection record. This inspection should in no way be confused with the normal open package inspection. Open package inspection is a phase of inspection during which only those components that did not show any external Major A or Major B packaging defects are examined.
- 7. Classify each defective unit by the most serious defect it possesses. Record all defects on the inspection report. If none of the Action Numbers are equaled or exceeded the lot passes. CPI inspection does not require a second sample or "Special Inspection" unless requested by the accountable officer or directed by the inspector's chain-of-command.

F. STEP 6: Perform Destructive Open Package Inspection (DOPI).

- 1. Open package inspection will be performed in accordance with Table H and those defects listed in Table J.
- 2. Only those closed package sample units that did not exhibit any external Major A or Major B defects will be examined for DOPI. A new sample packet must be drawn to replace those with previous Major A or B defects and utilized for DOPI only.
 - 3. Inspectors should refer to the component monographs for information relative to

the product's normal characteristics, the most likely deteriorative conditions to be observed and any unique inspection information and special notes concerning the item. For the monographs, https://www.dscp.dla.mil/subs/support/qapubs/appe/index.asp, then check for the specific combat ration being inspected. If monographs are not available for a particular item, contact DLA Troop Support-FTSA for information. (Comm: (215)737 8342 DSN: 444 8342).

- 4. Each component of the food packet will be opened and inspected. If no Major A or Major B defects are noted and the action number for minor defects is not exceeded during normal open package inspection, this phase of the inspection should be considered complete.
- 5. Classify each defective by the most serious defect it possesses. If the action number is not reached or exceeded, the lot passes DOPI.

G. STEP 7: Determine if Special Inspection is Required.

Special inspection is required when any action number is reached or exceeded. If a special inspection is deemed necessary; go to Section III for procedures.

H. STEP 8: Determine Disposition of the Lot.

- 1. Disposition based on routine inspection results will be determined when no Major A or Major B defects were noted or the action number for minor defects combined has not been reached.
- 2. If the lot passes all three inspections (Shipping Container, CPI, DOPI), the lot is fully useable and placed in Condition Code A, unless the food packets are 7 or more years old. Food packets in excess of 7 years old may be annotated no higher than Condition Code B.
- 3. If the lot fails the shipping container inspection for minor defects, but has no major defects, the lot may be judged to be Condition Code A, if the inspector deems the lot to be fully serviceable.
- 4. If the lot fails for defects to ancillary components, the lot may be placed in Condition Code B, so long as the food packets are serviceable.
- 5. The Condition Code of a lot may only be downgraded based on special inspection results.
- 6. If deemed necessary, samples may be submitted to the appropriate supporting laboratory for testing. The lot will then be placed in Condition Code J pending results of the lab testing.

- 7. Otherwise recommend destruction, Condition Code H to the accountable officer. If the lot may be unwholesome notify the supervising Veterinary Corps Officer, Vet Svcs Warrant Officer, or Air Force Preventive Medicine Officer for final disposition approval.
 - 8. Complete Inspection Report.

I. STEP 9: Provide Results and Recommendations to Accountable Officer/Agency.

- 1. Complete DLA Troop Support Form 5117 and provide copy of report to accountable officer.
 - 2. Locally file DLA Troop Support Form 5117.
 - 3. DO NOT post the inspection report in the Lotus Notes database.
- 4. For instructions on filling out DLA Troop Support Form 5117, see website https://www.dscp.dla.mil/subs/support/qapubs/appa/5117inst.pdf.

J. STEP 10: Scheduling the Next Surveillance Inspection.

- 1. Condition Code A Reinspect in 6 months if this lot is in stock, If average storage temperatures are between 80-100F, inspect within 3 months. If average storage temperatures are in excess of 100F, inspect within 1 month.
- 2. Condition Code B Reinspect within 3 months if this lot is still in stock, If average storage temperatures are between 80-100F. If average storage temperatures are in excess of 100F, inspect within 1 month.

III. SPECIAL INSPECTION GUIDANCE.

Background Information: When a special inspection is performed, the inspector may choose to inspect all of the components in a food packet during the special inspection if he/she deems it necessary to ascertain the true condition of the lot. Otherwise, only the component(s) that exhibited the defects that initiated the special inspection will be inspected. All defective samples will be classified by the most serious defect they possess. Inspection is based on double sampling for verification of lot condition.

A. STEP 1: Determine Lot Size.

- 1. Lot size is expressed as the total number of individual suspected defective components/packet as determined during routine inspection (reached/exceeded Action Number). Each defective component/packet will be inspected as a separate lot.
- 2. To determine component lot size, you must determine the contents of the food packet utilizing Table S and the previous inspection results.

3. All defective samples will be classified by the most serious defect they possess.

B. STEP 2: Determine Sample Size for Each Component and Select Sample Cases.

- 1. Sample size will be determined IAW Tables B, E or I.
- 2. Inspect IAW applicable defect table (Table F, G or J).
- 3. For special inspections, good sample representation of the lot is extremely important to help preclude unnecessary destruction. Grand lots shall be subdivided and a special inspection

will be performed on each sublot/contractor's lot. If routine inspection defects tend to be associated with a certain lot or lots, these should be inspected as a single unit(s).

C. STEP 3: Determine Disposition of the Lot.

- 1. If none of the action numbers are reached or exceeded, the food packets are considered to be fully useable and the Condition Code of the lot may remain unchanged.
 - 2. For each action number reached or exceeded, determine the condition code of the lot.

D. STEP 4: Provide Results and Recommendations to Accountable Officer/Agency.

- 1. Complete DLA Troop Support Form 5117 and provide a copy of the report to the accountable officer.
 - 2. Locally file DLA Troop Support Form 5117.
 - 3. DO NOT post the inspection report in the Lotus Notes database.
- 4. If food packets are placed in less than condition code A, notify DLA Troop Support FTRE/FTSA telephonically @ (215) 737-7773/4477/7771 (DSN 444).

IV. SAMPLING AND EXAMINATION TABLES.

TABLE A 1/2/3/4/ SAMPLING CRITERIA FOR INSPECTION OF SHIPPING CONTAINERS (NORMAL INSPECTION)

LOT SIZE (Packets)	SAMPLE SIZE (Cases)	DEFECT CLASS	ACTION NUMBER
Under 150	2	Major B	1
		Minor	2
151-500	3	Major B	2
		Minor	3

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501-3200	3	Major B	3
		Minor	4
Over 3201	3	Major B	5
		Minor	6

1/ For use with Table C.

- $\underline{2}$ / American National Standard ANSI/ASQC Z1.4-2003 was the basis for the sampling tables within this appendix.
- 3/ If the lot size is six cases or less all the cases will be selected as the sample.
- <u>4</u>/ Example: Lot size is 175 packets, packed 12 to a case, the shipping container sample size is 3 shipping containers with a defect class and action numbers: Major B–2 amd Minor-3.

TABLE B 1/
SAMPLING CRITERIA FOR INSPECTION OF SHIPPING CONTAINERS
(SPECIAL INSPECTION)

LOT SIZE (PACKETS)	SAMPLE SIZE (CASES)	DEFECT CLASS	ACTION NUMBER
Under 90	2	Major B	1
		Minor	1
91-150	3	Major B	1
		Minor	2
151-280	3	Major B	2
		Minor	3
281-500	3	Major B	2
		Minor	3
501-1200	4	Major B	2
		Minor	3
1201-3200	5	Major B	3
		Minor	4
Over 3200	5	Major B	3
		Minor	4

^{1/} For use with Table C.

	CATEGORY	DEFECT
MAJOR B	MINOR	
501		Evidence of rodent or insect infestation on or in the shipping container. <u>2</u> /
502		Container damaged, contents exposed or affected.
	601	Container damaged, contents not exposed or affected.
	616	Missing TTI. <u>3</u> /

- 1/ For use with Table A and B.
- 2/ Requires immediate corrective action according to local Pest Management Program.
- 3/ Defect number 616 does not apply to survival rations at this time.

TABLE D 1/2/3/ SAMPLING CRITERIA FOR INSPECTION OF FOOD PACKETS/ COMPONENTS AND CONTENTS (NORMAL INSPECTION)

LOT SIZE (PACKETS)	SAMPLE SIZE (PACKETS)	DEFECTS CLASS AND ACTION NUMBERS		
		MAJ A	MAJ B	MIN
Under 150	5	1	1	1
151-500	8	1	1	2
501-3200	13	1	2	2
Over 3200	20	1	2	3

- 1/ For use with Table F and G.
- $\underline{2}$ / Sample packets will be selected from the shipping containers selected for the **Table A** examination.
- $\underline{3}$ / All defects noted on packets and contents will be combined and compared to the normal inspection action numbers.

TABLE E 1/ SAMPLING CRITERIA FOR INSPECTION OF FOOD PACKETS/ COMPONENTS AND CONTENTS (SPECIAL INSPECTION)

LOT SIZE (PACKETS)	SAMPLE SIZE (PACKETS)	DEFECTS CLASS AND ACTION NUMBERS		
		MAJ A MAJ B MIN		
Under 150	5	1 1 1		
151-500	8	1 1 2		
501-3200	13	1 2 2		
Over 3200	20	1 2 3		

 $[\]underline{1}$ / For use with Table F and G.

CATEGORY	DEFECT
MAJOR MAJOR MINOR A B	
503	Rodent damage/insect infestation of packets. 2/
510	Less than 36 packets in a case. 3/

- 1/ For use with Table D and E.
- 2/ Requires immediate corrective action according to local Pest management Programs.
- 3/ Does not apply when packets are no longer packed in original shipping container.

	CATE	EGORY	DEFECT
MAJOR A	MAJOR B	MINOR	
401			Swollen Pouch. 1/
402			Tear/cut/hole/open seal in packet.
	505		Complete loss of packet. 2/
	507		Inadequate vacuum and/or delamination with moderate to extreme effect on product. 3/
		602	Visible tear/cut/hole/open seam in packet.
		605	Presence of delamination when multi-layered laminate is used. (not applicable to dehydrated components).
		609	Packaging exhibiting delamination or spreading that does not rupture when tested. Product not affected or only slightly affected.
		612	Missing tear notch on food packet.

1/ For use with Table D and E.

- $\underline{2}$ / Score defect 505 when one or more defective components cause the entire packet to be unserviceable. For example, one or more leaking, ruptured, or contaminated component may effect the other components.
- 3/ Aircraft/Life Raft Survival Food Packets are not vacuum packed.

TABLE H 1/2/3/ SAMPLING CRITERIA FOR DESTRUCTIVE OPEN PACKAGE INSPECTION (DOPI) (NORMAL INSPECTION)

LOT SIZE (PACKETS)	SAMPLE SIZE (PACKETS)	DEFECTS CLASS AND ACTION NUMBERS		
		MAJ A	MAJ B	MIN
Under 150	5	1	1	1
151-500	8	1	1	2
501-3200	13	1	2	2
Over 3200	20	1	2	3

1/ For use with Table J.

- $\underline{2}$ / Sample packets will be selected from those shipping containers selected for the **Table A** examination.
- 3/ All defects noted will be combined and compared to the normal inspection action numbers.

TABLE I 1/ SAMPLING CRITERIA FOR DESTRUCTIVE OPEN PACKAGE INSPECTION (DOPI) (SPECIAL INSPECTION)

LOT SIZE (PACKETS)	SAMPLE SIZE (PACKETS)	DEFECTS CLASS AND ACTION NUMBERS		
		MAJ A MAJ B MIN		
Under 150	5	1 1 1		
151-500	8	1 1 2		
501-3200	13	1 2 2		
Over 3200	20	1 2 3		

^{1/} For use with Table J.

CATEGORY		RY	DEFECT	
MAJOR A	MAJOR B	MINOR		
403			Evidence of rodent damage/insect infestation in product. 2/	
404			Product off conditions as evidenced by abnormal odor, color, flavor or texture suggesting contamination and/or spoilage for no apparent reason (e.g., package failure not evident).	
405			Foreign material present, affecting wholesomeness (e. g., glass, metal, wire).	
	508		Moderate to extreme texture, odor, color or flavor change in a primary component not affecting wholesomeness (product unlikely to be consumed under conditions of intended use).	
	509		Mechanical damage to primary component significantly affecting serviceability.	
		611	Slight texture, odor, color or flavor change in a primary component not affecting wholesomeness.	
		613	Moderate to extreme texture, odor, color or flavor change in a secondary or ancillary component not affecting wholesomeness.	
		614	Evidence of mechanical damage to secondary or ancillary component significantly affecting serviceability (e.g., crushed gum).	

1/ For use with Table H and I.

- 2/ Requires immediate corrective action according to local Pest Management Programs.
- $\underline{3}$ / Specify defect(s) observed. Enter all specific defect codes that apply and a narrative description when appropriate.

TABLE K SPECIFIC DEFECT CODES

A. INSECT	T/RODENT			
A1.	Rodent.			
A2.	Insect.			
A3.	Other (describe).			
B. PACKAGING, PACKING, MARKING, LABELING AND UNITIZATION				
B1.	Essential case markings missing.			
B2.	Essential case markings illegible.			
В3.	Essential case markings incorrect.			
B4.	Essential Labeling missing.			
B5.	Essential Labeling illegible.			
B6.	Essential labeling incorrect.			
B7.	Improperly unitized load.			
B8.	Unit load failure.			
B9.	Missing tear notch.			
B10.	Tear notches ripped or torn.			
B11.	Sifter (see Monographs).			
B12.	Inadequate vacuum.			
B13	Delamination (separation of layers in laminate material).			
B14.	Other (describe).			
C. TEXTU	RE CHANGES			
C1.	Too thick or pasty.			
C2.	Chewy / gummy.			
C3.	Mealy.			
C4.	Tough / stringy.			
C5.	Caked or hardened.			
C6.	Brittle.			
C7.	Crumbly, cracking.			
C8.	Excessively dry.			
C9.	Loss of crispness.			
C10.	Soft / mushy.			
C11.	Curdled.			
C12.	Gritty / grainy.			
C13.	Spongy / rubbery.			
C14.	C14. Syneresis (The contraction of a gel, or a homogeneous colloid system, when left			
	arates into two phases: a coherent gel and a liquid. A good example is the			
_	weeping of liquid of liquid from a gelatin mold when left sitting in a refrigerator			
too long.).				

C15.

C16.

complete loss of gel structure in jelly component).

Caramelized.

Liquefaction (passing from dry, solid, or semi-solid) to a liquid state (e.g.,

APP E

DLA Troop SupportH 4155.2

	DLA Troop SupportH 4155.2				
C17.	Watery gravy or excessive product juices (probably due to product formulation				
and/or time-temperature abuse).					
C18.	Honeycombing.				
C19.	Coagulation/gelation (beverage base).				
C20.	Other (describe).				
D. ODOR	D. ODOR CHANGES				
D1.	Medicinal, vitamin-like.				
D2.	Chemical odor, solvent-like/turpentine/paint-like.				
D3.	Plastic-like.				
D4.	Hay-like (oxidized).				
D5.	Fermented.				
D6.	Scorched/burnt.				
D7.	Sulfur-like.				
D8.	Musty, moldy, mildew.				
D9.	Overripe.				
D10.	Not ripe.				
D11.	Stale.				
D12.	Cardboard.				
D13.	Soured.				
D14.	Putrid.				
D15.	Acidic/vinegary.				
D16.	Other (describe).				
E. FLAVO	OR CHANGES				
E1.	Loss of flavor, flat, bland.				
E2.	Chemical flavor, solvent-like, turpentine/paint-like.				
E3.	Medicinal, vitamin-like.				
E4.	Plastic-like.				
E5.	Hay-like (oxidized).				
E6.	Bitter.				
E7.	Burnt.				
E8.	Soapy.				
E9.	Musty, moldy, mildew.				
E10.	Rancid.				
E11.	Stale.				
E12.	Fermented.				
E13.	Earthy.				
E14.	Tart, acidic.				
E15.	Overripe.				
E16.	Green, not ripe.				
E17.	Tobacco.				
E18.	Sweet, perfume like, flowery.				
E19.	Metallic.				
E20.	Excessively over-processed / scorched.				
E21.	• 1				
E22.					
E23.	Sour.				
•					

- E24. Excessively salty.
- E25. Other (describe).

F. APPEARANCE CHANGES

- F1. Darkened.
- F2. Bloomed, blotchy (e.g., chocolate).
- F3. Oily, oiled-off (partial disintegration of an oil in water emulsion whereby a film, pockets, or droplets of oil form on the surface of the product or within the product).
 - F4. Off-color (e.g., pink, off-white, reddish, green).
 - F5. Cloudiness (beverage bases except orange).
 - F6. Webbing (caffeine leeching).
 - F7. Other (describe).

G. FOREIGN MATERIAL

- G1. Potentially hazardous (e.g., glass, splinters, metal).
- G2. Not potentially hazardous.
- G3. Other (describe).

H. COMPLETE LOSS OF MENU (Does Not Consider Caloric Count)

NOTE: The purpose of this defect category is to enable inspectors and evaluators of the inspection data to properly identify menus that contained one (or more) leaking component that adversely affected the entire meal. For example, if an applesauce pouch leaks, the entire menu may be unfit for use because of the mold growth that would likely occur inside the menu bag.

- H1. Due to one leaking or ruptured component.
- H2. Due to more than one leaking or ruptured component.
- H3. Due to one or more components contaminated by insecticide/pesticide.
- H4. Due to one or more components contaminated by an unidentified substance.
- H5. Other (describe).

J. MISSING COMPONENTS/MENUS

- J1. Required component (s) missing from menu.
- J2. Required menus missing.

$\frac{\textbf{TABLE L}}{\textbf{CONTRACTOR ABBREVIATION (ABV)}}$

The listed contractor abbreviations are provided for use when completing the inspection records.

CONTRACTOR	ABBREVIATION
Ameriqual	AMQ
Wornick	WOR
Sopacko	SOP
Shelf Stable	SHE
Ft. Biscuit	FTB
Oklahoma League for the Blind	OLB
Sterling Bakery	STB
Thermo-Pak	TPI
Transpacker	TRA

^{1/} If the contractor/processor is not listed in Table I use the abbreviation OTH. If there are more than one contractor/processor that's not listed use numbers after the abbreviation (i.e. OTH1, OTH2, OTH3, etc.).

TABLE M COMPONENT AND CLASSIFICATION LIST

The listed abbreviations for each component are provided for use when completing the inspection records.

COMPONENT	ABBREVIATION	CLASSIFICATION
1. General		
a. General Packaging	PCK	NA
2. Components		
a. Candy, Hard Fruit	CFP	Primary
Tablets (Type IV)		
b. Candy, Hard Fruit Tablets (Type X)	CFT	Primary
c. Gum	GUM	Ancillary
d. Cereal Bar	CEB	Primary

TABLE N 1/2/3/4/5/ CONDITION CODE CRITERIA DEFECTS FROM SPECIAL INSPECTION RESULTS (COMPONENTS THAT EQUALS OR EXCEEDS AN ACTION NUMBER)

	CATEGORY		
CONDITION CODE A	MAJOR A	MAJOR B	MINOR
Primary	0	0	1
Ancillary	0	1	2
CONDITION CODE B			
Primary	0	0	2
Ancillary	0	2	3
CONDITION CODE H or J			
(see note 5)			
Primary	1	2	4
Ancillary	1	4	5

- $\underline{1}$ / Lots determined to be unwholesome will be classified Condition Code J until final disposition is made by the responsible medical officer.
- $\underline{2}$ / Each column lists the maximum number of components allowed to equal or exceed an action number for that category.
- $\underline{3}$ / Each row lists the maximum number of components allowed to equal or exceed an action number by component classification.
- 4/ Compare the number of components from the inspection that equals or exceeds the special inspection action numbers for each category. If the number in any row/column intersection is exceeded, the lot must be downgraded to the next lower Condition Code.

5/ For lots that fail inspection and do not meet a serviceable condition code, a condition code of J or H is assessed. If it is necessary to send samples to the lab for food safety or production-related defects, or to investigate the lot further; then assess a condition code of J. If condition J is assessed, this will need to revised once the lab evaluation or investigation is complete. Changing the condition code after the report is submitted is the responsibility of the report approver. If the defects have a readily explainable cause, such as heat stress, physical damage, or infestation, than Condition Code H (condemnation) is appropriate. Condition Code L means that warranty action is pending. Warranty inspections will be directed by the contracting officer and/or the chain-of-command. Inspectors who are asked to perform a warranty inspection will be supplied with specific sampling and inspection instructions.

TABLE S
CONTENTS OF FOOD PACKET, SURVIVAL, AIRCRAFT/LIFE RAFT

COMPONENT	ABBREVIATION
1. Components	
a. Candy, Hard Fruit Tablet (2)	CFP or CFT
b. Gum (2)	GUM
c. Cereal Bar (2-6)	CEB
2. Additional Contents	
a. Twine	NA
b. Instruction Sheet	NA

V. <u>INSPECTION RECORDS</u>.

- A. Inspection Form. All inspections will be entered on DLA Troop Support Form 5117. Local reproduction of DLA Troop Support Form 5117 is authorized.
- B. Database. There is currently no VETCOM database to report Survival, Aircraft, Liferaft inspection results.
- C. Distribution. For DLA owned/controlled stocks, one copy of DLA Troop Support Form 5117 will be provided to the accountable officer. Copies of all reports will also be maintained in the local quality history files. Inspections resulting in less than Condition Code A status must be telephonically reported to DLA Troop Support -FTRE/FTSA (215) 737-7773/4477/7771 (DSN 444). Other distribution will be according to the directives of the responsible inspection agency and/or Military Service.