APP B
DLA Troop SupportH 4155.2

DLA Troop Support -FTSA

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FOREWORD
(Supplementation is permitted.)

Appendix B is for the inspection of Unitized Group Ration (UGR) Heat and Serve (H&S) modules. It provides guidelines for sampling, inspecting, classifying defects, and determining lot serviceability. Prior to using this Appendix, inspectors should be thoroughly familiar with DLA Troop Support Handbook 4155.2, Inspection of Composite Operational Rations. 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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VETCOM

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I. GENERAL.

A. Purpose and Scope. This Appendix is a reference and guide for receipt and surveillance inspections of government-owned unitized modules. It was written and coordinated to facilitate use on both DLA/ DLA Troop Support controlled stocks and those controlled by the individual Services.

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 different modules and their estimated remaining shelf life. It involves a two step process: (1) Determine if any component(s) 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. Inspection Test Date (ITD) Extensions. Modules estimated shelf life is 18 months 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 4155.37, Appendix S, and/or the appropriate service regulation. Posting of extensions may be accomplished by placing stickers with the updated ITD information on each pallet or module.

E. Inspection Frequencies. Inspections of UGR H&S ration modules will be accomplished as follows:

1. At receipt:

a. If previous inspection/condition code information accompanies shipment and is less than 3 months old, a general inspection for transportation damage and identity will be performed.

b. If UGR H&S's possess obvious defects, mechanical damage, or are more than 3 months from the last receipt/surveillance inspection, perform a full inspection IAW this appendix.

2. Surveillance:

a. One month prior to ITD.

b. After ITD has passed, modules will be inspected at 3-month intervals for condition code A stocks, and 1 month intervals for all other condition codes.

F. Disposition Recommendations.

1. The accountable officer/agency will be informed of inspection results by the Veterinary/Medical Food Inspector. Inspectors will include (as a minimum): the condition code as determined by this appendix, estimated remaining shelf life, and a summary of general lot characteristics. Inspectors are also encouraged to provide additional comments that will assist the accountable officer/agency in determining a final disposition.

2. Final disposition instructions for lots placed on medical hold require review and approval by the local medical authority.

3. The points listed below should be considered when developing a disposition recommendation. This list is not all-inclusive and each point may not always apply.

a. Can the defective module(s)/component(s) be removed just prior to consumption?

b. How rapidly is the most defective component expected to deteriorate to the point that it is unlikely to be consumed?

c. Can the lot be issued and supplemented with similar commercial items, supply catalog items, or operational ration component(s)?

G. Inspection Equipment. The items listed below are recommended as the minimum necessary to perform the inspections of UGR H&S modules. However, this list is not intended to be all encompassing.

1. Adequate lighting.
2. Inspection trays and pans, white enamel or plastic.
3. Magnification lens (3 to 5 power recommended) is optional.
4. Metal ruler (32nd inch graduation).
5. Spatula(s).
6. Paper towels.
7. Paper plates.
8. Paper/styrofoam/plastic cups.
9. Scissors, general use.
10. Tape (for retaping modules).
11. Can opener.
12. Alcohol swabs/wipes.
13. Paper, wax impregnated, white roll.
14. Sharp knife, box cutter, or scalpel that can be sanitized.
15. Forceps/petri-dishes/5ml vials.
16. Sharpie pens.
17. Number 2 stylus.

H. Definitions:

1. **Monograph**. An information and instruction sheet that provides the inspector with a detailed description of an UGR H&S module/component, including 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. Monographs can be accessed at http://www.dscp.dla.mil/subs/support/qapubs/appb/mono-b.asp.

2. **Component Classification**. The monograph index indicates the classification for each component. Component classification is determined by coordination of the Surgeon General and the Food Service Headquarters of the Military Services.

a. **Primary.** Any individual component in the UGR H&S module that, if unserviceable, will make the meal nutritionally inadequate for any method of intended use.

b. **Secondary.** Any individual component in the UGR H&S module that, if unserviceable, will reduce the nutritional value of the meal but will not render the meal unfit for its intended purpose.

c. **Ancillary.** Any component in the UGR H&S module that 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. **Major A Defect.** 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. **Major B Defect.** These are defects that are not hazardous or unsafe. However, they may restrict product use 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 makes 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. **Minor Defect.** 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 module loses its serviceability.

6. **Module**. The unit of issue for UGR H&S menus is a single module (3 boxes). A module consists of 3 boxes (boxes 1, 2, and 3) and will contain everything needed to feed 50 individuals one complete meal.

7. **Product Codes**.

a. **Assembly code information**. Contract and component identification markings found on the shipping container, modules, and/or components that reflect ration assembly information only (e.g., assembly contractor, date of pack, assembly lot numbers, Inspection Test Date (ITD) etc.).

b. **Component code information**. Item identification markings found on the primary package and, when applicable, the secondary package (e.g., thermostabilized trays) that reflects the producer's name, the USDA Establishment Number, the production lot number of the component, the nomenclature, etc.

8. **Action Number (AN)**. A number which, when reached or exceeded, normally indicates additional inspection is necessary or indicates a component has deteriorated beyond acceptable limits and the menu that contains it must be evaluated for serviceability.

9. **Condition Coding**. Traditionally, condition codes have been based primarily on estimates of remaining shelf life. Serviceability will be determined based on the usability status of the complete module. However, to aid accountable officers in choosing the best disposition option, inspectors will provide them the best possible estimate of remaining shelf life. A list of applicable condition codes and their descriptions are as follows:

a. **Condition Code A** (issuable without qualification): Refer to Table N. Modules have more than 6 months shelf life remaining.

b. **Condition Code B** (issuable with qualification): Refer to Table N (usually 3-6 months shelf life remaining). Accountable Officers are required to determine what qualifications will be specified in order to issue Condition Code B stock (e.g., issue with instructions to consume within 60 days; issue with instructions to supplement, etc.).

c. **Condition Code H** (unserviceable). Refer to Table N. Modules are unserviceable and/or unfit for human consumption. This classification will be used only when the entire lot has been deemed unserviceable.

d. **Condition Code L** (warranty action). Any item placed on hold pending warranty action.

e. **Condition Code J** (laboratory testing, medical hold, rework, pest activity, or reclassification hold. Any item on hold pending laboratory testing, rework, or awaiting authority for disposal.

10. **Unit load packing list.** A list attached to a unit load of modules that lists the components (including contractual identification information) contained in the module.

11. **UGR H&S Lot Serviceability.** Two factors are considered when determining the overall serviceability of a UGR H&S lot. First the lot is condition coded using Table N and then the integrity of the packaging and packing is considered. It is recognized that the status of a UGR H&S lot initially declared unserviceable may change as the result of a rework effort or special instructions provided by the accountable officer at/prior to issue.

12. **Entrapped Matter**. Foreign material may be trapped in the seal area, when the tray and/or pouch is sealed or bonded. Entrapped matter weakens the seal, but as long as there is 1/8 inch of continuous seal all the way across the seal area (i.e. from one side of the pouch/tray seal to the other), and then the seal is considered acceptable.

13. **Adhesive**. Bonding material that binds the laminations (thin sheets of Polypropylene, foil, polyester, or nylon) that make up the retort pouch material.

14. **Abrasion**. A break or crack in the outer lamination of the retort pouch.

15. **Foldover wrinkle**. Pouch material is overlapped on itself in the seal area that reduces the closure seal to less than 1/16 inch.

16. **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), and then the seal is considered acceptable.

17. **Delamination**. Delamination is the separation of laminated films in a flexible laminated pouch.

18. **Stress Crack**. 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.

19. **Barrier Layer**. For a food packet retort pouch this is the lamination (foil) that prevents transmission of light, water vapor, or oxygen into out of the retort pouch.

20. **Product Contact Layer**. For a food packet retort pouch, this would be the inner lamination (polypropylene) which is in contact with the food.

21. **Inspection Module**. In Operational Rations, 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 soldiers. For the purposes of UGR H&S inspection, we will refer to 3 boxes (box 1, 2, & 3) an inspection module. This is meant to minimize confusion. The unit of issue is a single module (3 boxes). In order to make sure that inspection covers all the menus/components during

inspections, inspectors will make use the term “inspection modules”. An inspection module is 3 boxes (box 1, 2, & 3).

22. **Commercially Sterile**. Food that is free of all pathogens and those spoilage organisms capable of growth during normal storage and transportation conditions. Normal transportation and storage temperature is defined as 80F or less.

II. ROUTINE INSPECTION GUIDANCE.

A. STEP 1: Evaluation of Storage Conditions.

1. Storage conditions vary significantly. As a minimum UGR H&S module storage areas should be clean and dry and not subject to extreme temperatures. UGR H&S modules should not be stored directly on the floor. 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. Although this is primarily written for MREs it is still applicable to UGR H&S.

2. When UGR H&S modules are warehoused, the storage facility should meet the additional standards of MIL-STD-3006C, Requirements for Food Establishments (Appendix A, only). UGR H&S modules cannot be stacked more than 2 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 pallets. The pallet (s) above 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 modules opened for inspection, or damaged, shall be recouped or repaired in a manner sufficient to ensure protection of the product during subsequent storage and handling.

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.

B. STEP 2: Determine Lot Size.

1. The lot size for modules shall be the total number of modules by menu number. The sample unit is one complete module (3 boxes, box 1, 2, & 3).

2. Lotting procedures will be as follows:

a. Assembler’s lots are composed of rations from the same assembler that

have the same contract number, lot number/DOP, menu number, and stored under substantially similar conditions.

b. Grand lots for the purpose of UGR H&S inspections will be composed of rations from the same assembler, and the same menu number, but will contain more than one lot number/DOP. Grand lots will be limited to a 120 day DOP window (earliest to latest DOP shall not exceed 120 days). Additionally, the rations must have been stored under substantially similar storage conditions. Samples from grand lots must represent all individual lots proportionally, even if the next highest sample size must be used. Identity of samples from each sublot must be maintained throughout the inspection.

c. Defective assembler'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 an assembler's lot.

(2) The Major B or Minor defects found seem to be concentrated in one or more of the assembler's lots comprising the grand lot.

(3) The inspector determines for any reason, based on initial inspection results, that inspection of an individual assembler's lot is justified.

d. Grand lotting is encouraged (to conserve 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.

C. STEP 3: Inspect Modules and Selection of Samples.

1. IAW Table A, select appropriate sample size for module examinations. Damaged modules should not be selected as samples unless they are truly representative of the lot. In addition, damaged modules should be set aside and the contents inspected to determine the extent of damage to the food components.

2. Routine inspections will be conducted using a single sampling plan.

3. Using the defects listed in Table E, the inspectors should check each sample Module for previously opened boxes. While this may indicate evidence of tampering, each may also be due to other reasons (e.g., a wholesale rework of a lot). Inspectors shall contact their supervisors for guidance if pilferage or tampering is suspected.

4. Using defects listed in Table E, observe each Module for signs of rodent damage or insect infestation. If either condition is observed, annotate the findings on 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 modules or vice-versa.

5. Classify each defective module by the most serious defect it possesses. List each defect in the inspection report. If the action number (AN) is not reached or exceeded, the lot passes the module inspection.

D. STEP 4: Perform Closed Package Inspection (CPI) of Module Contents.

1. IAW Table A, select the appropriate number of modules being sure the samples are proportionally representative of the modules in the lot.

2. Open the sample modules.

3. Module components will be inspected for defects in accordance with Tables F thru K.

4. Thoroughly examine all components within the module. 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. Menu number/name.
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 description 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.

E. STEP 5: Perform Destructive Open Package Inspection (DOPI) of Module Contents.

1. IAW Table A, select the appropriate number of modules being sure the samples are proportionally representative of the modules in the lot.

2. Open the sample module(s).

3. Module components will be inspected for defects in accordance with Table L.

4. Thoroughly examine all items within the module 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. Menu number.
b. Assembler's lot number.
c. Component nomenclature and code (if applicable).
d. Processor's and/or plant name (if available).
e. Defect number (Table L).
f. Specific defect code (if applicable).
g. Narrative description of defect (if necessary).
h. Tally defects (Major A, Major B, Minor) according to type of component.

5. 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. Monographs can be accessed at http://www.dscp.dla.mil/subs/support/qapubs/appb/mono-b.asp. If monographs are not available for a particular item, contact DLA Troop Support -FTSA for information. (Comm: (215) 737-8342, DSN: 444-8342).

6. 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.

7. Classify each defective by the most serious defect it possesses. If the action number is not reached or exceeded, the lot passes DOPI.

F. STEP 6: Determine if Special Inspection is Required.

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

G. STEP 7: Determine Disposition.

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 (Module, CPI, DOPI), the lot is fully useable and placed in Condition Code A.

3. If the lot fails the module 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.

H. STEP 8: Provide Results and Recommendations to Accountable Officer/Agency.

1. Input data to the appropriate Lotus Notes (LN) database, and provide a copy of inspection report to accountable officer.

2. If LN access is not available, complete local DLA Troop Support Form 5117, and provide copy of
report to accountable officer.

3. Local DLA Troop Support Form 5117 can be found at, http://www.dscp.dla.mil/subs/support/qapubs/appa/index.asp.

4. For instructions on filling out local DLA Troop Support Form 5117, see website https://www.dscp.dla.mil/subs/support/qapubs/appa/5117inst.pdf.

III. SPECIAL INSPECTION GUIDANCE.

Background Information: When a special inspection is performed, the inspector may choose to inspect all of the components in a module 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 plan.

A. STEP 1: Determine Lot Size.

1. Lot size is expressed as the total number of individual suspected defective components as determined during routine inspection (reached/exceeded Action Number). Each defective component will be inspected as a separate lot. To determine component lot size, you must determine which modules contain the defective component(s) utilizing the inspection results. These modules will be the only modules selected for the special inspection.

2. 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 Modules.

1. Sample size will be determined in accordance with Table B for Module inspections and for module component inspections.

2. Inspect IAW applicable defect tables (Tables E thru L).

a. For special inspections, good sample representation of the lot is extremely important to help preclude unnecessary destruction. If routine inspection defects tend to be associated with a certain lot or lots, these shall be inspected separately.

b. The sample size for each component involved will normally dictate the minimum number of modules that must be selected for special inspections. The inspector may increase the number of modules from which samples are drawn for cogent reasons.

C. STEP 3: Determine Disposition of the Lot.

1. If none of the action numbers (ANs) are reached or exceeded, each module is considered to be fully useable and the Condition Code of the lot may remain unchanged.

2. For each action number equaled or exceeded, determine the Condition Code of the lot. Refer to Table N.

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

1. Input data to the appropriate Lotus Notes database and provide a copy of inspection report to accountable officer.

2. If LN access is not available, complete local DLA Troop Support Form 5117, and provide copy of report to accountable officer.

3. Local DLA Troop Support Form 5117 can be found at, http://www.dscp.dla.mil/subs/support/qapubs/appa/index.asp.

4. For instructions on filling out local DLA Troop Support Form 5117, see website https://www.dscp.dla.mil/subs/support/qapubs/appa/5117inst.pdf.

5. If rations are placed in *less than condition code A* and not entered into the LN database, notify DLA Troop Support -FTR telephonically @ (215) 737-7802 (DSN 444).

IV. SAMPLING AND DEFECT TABLES.

TABLE A 1/
SAMPLING CRITERIA FOR INSPECTION OF MODULES AND MODULE CONTENTS (NORMAL INSPECTION)

LOT SIZE	SAMPLE SIZE	ACTION NUMBERS		
(Modules)	(Modules)	MAJ A	MAJ B	MINOR
50 or less	2	1	1	2
51------500	3	1	1	2
501----35,000	5	1	1	3
35,000 or more	8	1	1	4

1/ **For use with Table E thru L.**

TABLE B 1/
SAMPLING CRITERIA FOR INSPECTION OF MODULES AND MODULE CONTENTS (SPECIAL INSPECTION)

LOT SIZE	SAMPLE SIZE	ACTION NUMBERS		
(Components)	(Components)	MAJ A	MAJ B	MINOR
150 or less	5	1	1	3
151------1,200	20	1	2	8
1,201----10,000	32	1	3	11
10,001 or more	50	1	4	15

1/ **For use with Table E thru L.**

TABLE E 1/ 2/
INSPECTION OF MODULE BOXES

CATEGORY		DEFECT
MAJ B	**MINOR**	
501		Evidence of rodent or insect infestation on or in the shipping container. 2/
502		Container damaged, contents exposed or affected.
	601	Container damaged, contents not exposed or affected.
503		Essential Markings: a. Missing
	602	b. Illegible/Incorrect

1/ **For use with Table A and B.**
2/ Requires immediate corrective action according to local Pest Management Programs.

TABLE F 1/ 2/ 3/
INSPECTION OF POLYMERIC TRAYS

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	

417			Swollen Container.
418			Tear, crack, cut, hole, or if a multi-layered laminate is used, abrasion through more than one layer of the tray or through the barrier (e.g. foil) layer of the lid
419			material or leakage through any seal or surface.
420			Abrasion on the lid material within 1/16 inch of the food product edge of seal.
421			Closure seal not continuous along tray flange surface.
			Closure seal width less than 1/8 inch.
422			Foldover wrinkle extending into the seal such that the closure seal is reduced to less than 1/8 inch.
	524		Presence of entrapped matter within 1/16” of the food product edge of seal or entrapped moisture or vapor within 1/16” of the food product edge of seal that results in less than 1/16” of defect free seal width at the outside edge. 2/
	525		
	526		Presence of delamination when a multi-layered laminate is used.
		622	Unclean container.
		623	Any impression or design on the seal surfaces which conceals or impairs visual detection of seal defects.
		624	Presence of delamination when a multi-layered laminate is used.
		625	Presence of delamination when a multi-layered laminate is used.
			Color does not contribute to Woodland Camouflage.
			Presence of any permanent tray body deformation, such that deformed area is discolored and roughened in texture.

	Presence of any seal defect or anomaly (i.e.: entrapped moisture, gases, etc.) within 1/16" of food product edge seal.

1/ **For use with Table A and B.**

2/ The following shall be scored as minor defects if present within 1/16 inch of the food product edge of seal:

a. Small concave impressions or cavities indicating slight tray imperfections or hard particulates affixed to the seal head and contact the lid and tray.

b. Small (i.e. 1/32 inch or less in any direction) convex bumps or points on the seal area indicating small imperfections on the seal head. NOTE: this anomaly is typically visible on successive trays coming off the heat sealer.

c. Minor impressions or scorching of the top layer of the lid material on the seal area indicating soft particulates on the seal head being "burned-off" during sealing. NOTE: This anomaly is typically visible on successive trays coming off the heat sealer.

d. Areas of "wave-like" striations or wrinkles along the seal area indicating slight tray imperfection, improper lid tensioning, or vacuum release prior to lid cooling/setting.

e. Anomalies caused by entrapped moisture or vapor (which typically appear as concave spots on the tray flange surface) that result in less than 1/8" of defect free seal width at the outside edge of these spots.

3/ Delamination Defect classification:

a. Major A – Evidence of outer ply delamination such that the adjacent ply in the lid body is exposed or evidence of multi ply delamination such that the food contact layer is exposed. Any evidence of outer ply delamination of the tray body or internal layer separation with the tray body due to, (for example) poor adhesion between layers.

b. Major B – Delamination of the outer ply in the lid seal area that can be propagated to expose the adjacent ply at the food product edge of the lid. The separated outer ply shall be grasped between thumb and forefinger and gently lifted toward the food product edge of the seal or if the separated area is too small to be held between thumb and forefinger, a number two stylus shall be inserted in the delaminated area and a gentle lifting force applied against the outer ply. If separation of the outer ply can be made to extend to the product edge of the seal with no discernible resistance to the gentle lifting, the delamination shall be scored as a Major B defect. Additionally, spot delamination of the outer ply in the body of the lid that can be propagated beyond its initial borders is also a Major B defect. To determine if the delaminated area is a defect, use the following procedure: Mark the outside edges of the delaminated area using a bold permanent marking pen. Open the tray and remove the contents. Cut the lid on opposing sides of the delaminated area not closer than 3/16 inch from the delaminated area. Hold the delaminated area between the thumb and forefinger of each hand with both thumbs and forefingers touching each other. The delaminated area shall than be rapidly flexed 10 times by rotating both hands in alternating clockwise-counter clockwise directions. After flexing, the separated outer ply shall be grasped between thumb and forefinger and gently lifted away from the lid surface or if the separated area is too small to be held between thumb and forefinger, a number two stylus shall be inserted into the delaminated area and a gentle lifting force applied against the outer ply. Any propagation of the delaminated area, evidenced by the delaminated area exceeding the limits of the outlined borders, shall be scored a Major B defect.

c. Minor – Minor delamination of the outer ply in the lid seal area is acceptable and shall not be classified as a minor defect unless it extends to within 1/16 inch of the food product edge of the seal. Isolated spots of delamination in the body of the lid that do not propagate when flexed shall be classified as minor. Post-retort wrinkling of the outer ply in the lid seal area shall also be scored as a minor defect. **NOTE:** Post-retort wrinkles of the outer play are typically perpendicular to the flange direction, in a straight line, and extend from within the food product area to the outer edges of the lid.

TABLE G 1/
INSPECTION OF METAL CONTAINERS

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
407			Swell, springer, or flipper (not applicable to gas or pressure packed product).
408			Leaker or blown container.
	509		Closure incomplete, incorrect or not sealed, crimped, or fitted properly.
			Corrosion Defects:
		609	a. Rust stain.
	510		b. Pitted rust.
			Dents:
		610	a. Materially affecting appearance but not affecting usability.
	511		b. Materially affecting usability.
			Buckled Containers:
		611	a. Not involving end seam.
	512		b. Extending into the end seam.
	513		Collapsed container.

1/ **For use with Table A and B.**

TABLE H 1/
INSPECTION OF PLASTIC/GLASS/FIBERBOARD CONTAINERS

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
409			Broken and leaking container.
	514		Closure not sealed, crimped, or fitted properly.
		612	Chip in glass.

1/ **For use with Table A and B.**

Table I 1/ 2/ 3/
INSPECTION OF FLEXIBLE POUCHES

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
409			Broken and leaking container.
410			Tear, hole, or open seal.
411			Swollen pouch.
	515		Rupture of pouch when kneaded IAW the package instructions or monograph. 2/
	516		Pouch exhibits delamination and ruptures when tested. 3/
	517		Objectionable odor.
		613	Not clean.

1/ **For use with Table A and B.**
2/ Pouches exhibiting delamination in the body of the pouch will be examined for rupturing as follows: lay the pouch on a flat surface and apply moderate downward pressure with hands on both sides of the delaminated area.
3/ Pouches exhibiting delamination in the seal area will be examined as follows:

a. Test for spreading of the delamination by holding the pouch between the thumb and forefinger of each hand with the delaminated area located at the contact point between the thumbs and forefingers. Flex the delaminated area rapidly while exercising care not to tear the pouch with your fingernails.

b. Test for rupturing by laying the pouch on a flat surface and applying moderate downward pressure with one hand on the product side of the delaminated area.

TABLE J 1/
INSPECTION OF ENVELOPES (PACKETS)

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
	518		Tear, hole, or open seal.
	519		Objectionable odor.
		614	Not clean.

1/ **For use with Table A and B.**

TABLE K 1/
INSPECTION OF NONFOOD COMPONENTS

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
	521		Damaged/torn/crushed materially affecting usability.
	524		Nonfood Component Missing a. Completely.
		622	c. Partially/count not as specified.

1/ **For use with Table A and B.**

TABLE L 1/ 2/ 3/
DESTRUCTIVE OPEN PACKAGE INSPECTION (DOPI)

CATEGORY			DEFECT
MAJOR A	**MAJOR B**	**MINOR**	
412			Evidence of rodent damage/insect infestation in product.
413			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).
414			Foreign material present, affecting wholesomeness (e. g., glass, metal, wire).
	520		Component missing a. Completely.
		615	b. Partially/count not as specified.
	522		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).
	523		Component fails to rehydrate or dissolve (extreme).
		616	Slight texture, odor, color or flavor change in a component not affecting wholesomeness.
		617	Component fails to rehydrate or dissolve (slight to moderate).
		618	Internal container defects a. Detinning.
		619	b. Flaking/scarring of enamel
		620	c. Faulty coating (tray)

621	d. Damaged coating (tray)
622	e. Other

1/ **For use with Table A and B.**
2/ Requires immediate corrective action according to local Pest Management Programs.
3/ Specify defect(s) observed. Enter all specific defect codes that apply and a narrative description when appropriate.

TABLE M
SPECIFIC DEFECT CODES

A. INSECT / 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.
B3. Essential case markings incorrect.
B4. Essential Labeling missing.
B5. Essential Labeling illegible.
B6. Essential labeling incorrect.
B7. Pitted rust.
B8. Rust stains.
B9. Dents.
B10. Flat tray (Low vacuum).
B11. Loose lid (Flipper).
B12. Paneling-Affects double seam.
B13. Paneling-Not affecting seam.
B14. Incomplete/False seam tray closure.
B15. Hard sweller.
B16. Soft sweller.
B17. Leaker-pinhole.
B18. Leaker-blown/ruptured container.
B19. Leaker-seam area.
B20. Collapsed container-other than trays.
B21. Incomplete closure-other than trays.
B22. Sweller, springer, flipper-other than trays.
B23. Buckled containers-other than trays.
B24. Chip in glass.
B25. Broken of leaking glass/plastic container.
B26 Tear, hole, leaker-flexible pouches/envelopes/poly trays.
B27. Swollen flexible pouch.

B28. Pouch ruptures when kneaded.
B29. Unclean pouches/envelopes/poly trays.
B30. Delamination.
B31. Objectionable odor-flexible pouches/envelopes.
B32. Damaged/missing food components.
B33. Damaged/missing non-food components.
B34. Shipping container damaged, contents exposed.
B35. Shipping container damaged, contents not exposed.
B36. Abrasion of lid material-poly trays.
B37. Foldover wrinkles-poly trays.
B38. Seal defect or Amanoly-poly trays.
B39. Tray body deformation-poly trays.
B40. Color not contributing to Woodland Camouflage-poly trays.
B41. Impression concealing visual detection of seal defects-poly trays.
B42. Other, describe.

C. TEXTURE 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/soft/mushy.
C10. Lumpy.
C11. Curdled.
C12. Gritty / grainy.
C13. Spongy / rubbery.
C14. Syneresis (The contraction of a gel, or a homogeneous colloid system, when left standing separates into two phases: a coherent gel and a liquid. A good example is the separation or weeping of liquid of liquid from a gelatin mold when left sitting in a refrigerator too long).
C15. Liquefaction (passing from dry, solid, or semi-solid) to a liquid state (e.g., complete loss of gel structure in jelly component).
C16. Caramelized.
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 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. Green, not ripe.
D11. Stale.
D12. Cardboard.
D13. Soured.
D14. Putrid.
D15. Acidic/vinegary.
D16. Metallic.
D17. Rancid.
D18. Ammonia.
D19. Loss of spice or product aroma.
D20. Other, describe.

E. FLAVOR 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. Canned.
E22. Putrid.
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.

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

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

Ancillary	1	4	NA

1/ Lots determined to be unwholesome will be classified Condition Code J until final disposition is made by the responsible veterinarian.
2/ Each column lists the maximum number of components allowed to equal or exceed an action number for that category.
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.

V. INSPECTION RECORDS.

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 a VETCOM database to report UGR H&S inspection results. This will be the primary means for documenting 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.