

# Armed Forces Pest Management Board



Technical Guide No. 38

## Protecting Meal, Ready-to-Eat Rations (MREs) and Other Subsistence During Storage

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**Disclaimer**

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**Foreword**

This Technical Guide (TG) implements guidance for the protection of Meal, Ready-to-Eat (MRE) Combat Rations owned or under the custody of military installations and forces consistent with the references listed at the end of this document.

Historically there have been few incidents of MRE infestation/damage by insects or rodents. However, the 10 mil polyethylene bags used to package MRE rations are susceptible to insect and rodent infestation and damage. Until different packaging is used for the rations, pest prevention measures must be taken ashore and afloat to protect them. Currently, MRE rations are stored in dry storage (ambient temperature) warehouses; refrigerated/cold storage facilities, both above and below ground; and aboard ships including the Maritime War Reserves (MWR). Furthermore, the rations are included in the Marine Corps Landing Force Operational Reserve Materials (LFORM) which, under the present situation, are stored for extended periods of time on board ships below deck and usually in areas inaccessible for thorough inspection. Since temperature and humidity conditions in shipboard storage are highly conducive to development of stored product pests, action must be taken to prevent infestation prior to and during storage aboard ship.

Parts I and II of this TG provide pest control measures for the two broad MRE storage situations: ashore and aboard ship. Although this TG concentrates on MRE storage, most of the information also applies to other stored subsistence.

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## **PART 1. INSTALLATION PROGRAMS**

### **I. Instituting an Integrated Pest Management Program.**

A. Develop and implement MRE rations protection program through integrated pest management (IPM), which involves a combination of chemical and non-chemical prevention and control strategies. Portions of the IPM program may not be applicable to cold storage facilities. The basic IPM program for MREs includes:

1. Initial inspection of goods and premises, identification of problem areas, and identification of pests present.
2. Application of pest management techniques:
  - a. Structural design and pest exclusion.
  - b. Sanitation and housekeeping.
  - c.. Stock handling practices.
  - d. Non-chemical control and exclusion methods.
  - e. Chemical control methods.
3. Frequent inspection of goods and storage areas and pest monitoring to continually evaluate the program and correct problem areas is essential. The success of any IPM program is dependent upon communication and cooperation between warehouse management, medical, veterinary and entomological personnel, and military or civilian pest control operators. The responsibilities for each element of the program overlap, thus, the breakdown of any element can jeopardize the program.

### **II. Initial Inspection**

A. Joint inspection between the pest management consultant (PMC), warehouse management and Veterinary Services personnel will be performed to identify problem areas and to review current practices. The PMC will discuss techniques for effective pest management and pinpoint deficient areas per Section I of DLAR 4155.37 (DLAR 4155.37; AR 702-18; NAVSUPINST 4410.56; AFR 69-10; MCO 4450.13) (Reference (f)). Immediately following the inspection, the PMC and warehouse management

personnel will discuss problem areas and develop a working plan and goals to correct deficiencies.

### III. Inspection/Survey/Monitoring Techniques

A. Conduct thorough veterinary/entomological/pest control commodity inspections for possible infestations. Emphasize receipt inspections of the product and method of conveyance to detect infested products before acceptance.

B. Conduct, at a minimum, monthly veterinary/preventive medicine/pest management inspections of sanitary conditions both inside and outside warehouses. If no critical deficiencies are reported, documented sanitary inspections are required quarterly (DSCP Handbook 4155.2). Sanitary problems shall be reported to the activity commander and warehouse/facility management when observed. Reported problems should be monitored until corrected. **Actively involve facility employees in the pest management program to observe conditions during daily activities which may contribute to a pest infestation.**

C. Effective inspection techniques are critical for the efficient operation of an IPM program. Conducting a proper inspection requires several items, such as a flashlight, pocket knife for opening boxes, clipboard, paper, pen, vials and tape for resealing boxes. In addition, the inspector may want to carry chalk for marking infested pallets, a magnifying hand lens to aid in initial insect identification, and a mirror on an extendable handle for inspecting difficult to reach locations. Also, a portable black light is useful in determining rodent contamination, as rodent urine fluoresces under ultraviolet light (Note: many substances will fluoresce when exposed to a black light. Experience is necessary to distinguish rodent urine from other materials).

D. During receipt inspections, the inspector should note the condition of boxes and pallets and look for actual infestations in the food product itself. Over-aged items and products in severely deteriorated or damaged containers should be viewed with suspicion. Where possible, such items shall be returned to the shipper. Do not place infested products in the food warehouse. The conveyance vehicle/vessel should also be inspected for evidence of insect or rodent infestation; such evidence may be grounds for rejection of the products. Shipments of MREs showing evidence of infestation shall be reported to DSCP immediately for pest management guidance.

E. During the initial preprogram inspection, as well as during follow-up inspections, the inspector should note general sanitation levels, structural discrepancies, and signs of rodent or insect infestations. Inspection results shall be communicated to the activity commander and warehouse management, as well as any other involved agency such as Public Works or Maintenance. Effective communication is necessary so that deficiencies may be corrected promptly to ensure an effective program.

F. Insect and other arthropod (mite) identifications must be supported by confirmation from a pest management consultant, the supporting medical laboratory, the Navy Environmental Health Center, a Navy Disease Vector Ecology and Control Center, Navy Environmental and Preventive Medicine Unit; an Air Force MAJCOM Pest Management Consultant or the regional or main office of the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM).

G. The following guidelines are helpful to inspectors in identifying insect and rodent infestations:

1. Rodents

a. Look for droppings, urine stains, rub marks, gnawing, and shredded nesting materials on, in, and under palletized goods. Rodents may infest the interior of palletized goods, especially if held for long periods in the warehouse before issue.

b. Do not confine inspections to pallets of edible foods; rodents will nest with equal facility in pallets of canned goods or paper products.

c. In heavy infestations, the odor of rodents provides a valuable clue to their location.

2. Insects

a. Note the number and type of dead insects on floors, ledges, and window sills, as well as any live insects crawling on or flying around commodities.

b. If New Jersey style or other light traps are used, their contents must be checked weekly for the number and species of insects. A pest management consultant should provide a positive identification.

c. Pheromone traps are recommended and may be used at the discretion of the responsible pest management consultant. Technical Guide No. 27, Stored Product Pest Monitoring Methods, (Reference (h)), provides guidance on their use.

d. Check infestible food products by removing a layer or two of packages off the top of a pallet and examine for insects on package surfaces or in cracks and folds between packages. Insects infesting food products will usually be found on the underside of plastic bags, in and along folds and seams of bagged commodities, in the bottom of cartons and sacks, or underneath carton or box flaps. The existence of "frass" or silk in or on a product or chewed entry or exit holes are clues to an infestation, even if actual insects are not immediately seen.

**e. Check rodent bait stations periodically. Rodenticides are combined with a grain base and often become infested by stored product insects.**

#### **IV. Structural Design/Pest Exclusion.**

A. Proper structural design and other techniques can prevent or minimize arthropod, rodent and bird entry into warehouses and storerooms, thereby, minimizing additional resources needed to remove them.

##### 1. Outside Grounds.

a. Eliminate heavy vegetation and debris near the storage facility, particularly near doors and windows. These areas serve as harborage for insects and rodents increasing the risk of facility access by these pests.

b. Empty refuse receptacles and pick up trash daily. Ensure receptacles have lids and are covered when not in use. Ensure areas around dumpsters are maintained debris free. Additionally, refuse receptacles should be washed frequently to prevent the collection of debris.

c. Locate and organize surplus pallets well away from the warehouse building, as they will provide harborage for rodents and insects.

d. Install yellow or sodium vapor exterior lighting to reduce insect attraction. Direct light, when possible, away from the facility.

##### 2. Buildings.

a. Identify and repair holes/cracks in or under walls. Seal all cracks around door jams or at the wall-ground junction with concrete or other suitable material.

b. Maintain tight closure of doors - the gap along bottom and sides should not exceed ¼ inch. Keep doors closed when not in use. If railroad tracks run into the warehouse, a block or plate should be attached to the door to fill the gap next to the track itself.

c. Seal grooves and channels where utility lines enter the building.

d. Cover operable windows and air ducts with 16-mesh screening. Ensure screening is in good repair without holes or tears.

e. Cover exhaust fans with operable louvers and/or 16-mesh screening.

f. Appropriately screen or cover floor drains and heating/cooling vents with ¼ inch mesh to prevent rodent access. Seal nonfunctioning floor drains. Flush or clean drains on a regular basis.

g. Properly seal expansion joints and other joints or cracks to eliminate pest entry or harborage.

h. Proper use of air curtains at entry points.

### 3. Warehouse Interior.

a. If there is an area open below the loading dock, keep it open, accessible and clean. Keep the dock itself free of debris, excess pallets, and packing materials, which can provide pest harborage.

b. To aid surveillance and cleaning efforts, maintain a minimum of 46 cm (18") perimeter clearance between walls and shelves or pallets.

c. Store packing material in repack areas off the floor; store tools and parts in mechanical and recharging areas similarly.

d. Ensure damaged goods are isolated from all other consumables and returned or properly disposed in a timely manner.

e. Provide lockers for employee storage of personal items and lunches. An area must be designated for eating and drinking, separate from storage operations.

## **V. Sanitation/Housekeeping.**

A. Proper sanitation and housekeeping efforts will substantially reduce pest food sources and harborage, as well as facilitate effective chemical and non-chemical control measures. Good sanitation practices include:

1. Promptly cleaning spilled stored commodities. Avoid, when possible, storing commodities on wooden shelving or wooden pallets. Wood is absorbent and extremely difficult to clean thoroughly. Avoid storing commodities directly on the floor. All storage racks/shelving must be periodically inspected and cleaned.

2. Repair or remove and dispose of broken food containers and packages, especially in salvage and recoupment areas. Thoroughly cleaning metal or plastic refuse containers located in the recoupment area as frequently as necessary with hot water or steam. Use disposable liners in refuse containers to minimize cleaning frequency.

3. Use snug-fitting covers or lids for refuse containers. Additionally, when emptying refuse containers daily, ensure the containers are thoroughly clean.

4. **Deep cleaning is absolutely necessary to remove food resources which may be exploited by pests.** Sweep floors regularly, paying special attention to debris removal, which accumulates around posts, shelf legs, and pillars. Use an industrial vacuum sweeper to thoroughly clean warehouses and storerooms containing subsistence assets. Empty stock locations should be swept prior to new stock placement. **This applies for trailers, containers, government-owned vans and rail cars to be loaded with MREs.**

5. If rodent droppings are found, notify pest control immediately. Prior to removal, thoroughly review the area (including commodities, packaging, pallets, and floors) for contamination by urine or other filth and assist in identifying the source of the infestation. Note: Special precautions may be necessary in certain regions. Refer to MILSTD 904B (Reference (i)).

6. Maintain pallets in good repair, keeping clean and free of debris.

7. Ensure all rail cars and truck vans are clean and without holes prior to loading and upon receipt.

8. Restrict food consumption and smoking to designated areas. Remove empty food tins, open containers of food scraps, and in other out-of-the-way places. These items are powerful pest attractants.

9. Keep all rest rooms and "break" or lunch areas clean.

## VI. Stock Handling Practices.

A. Certain stock handling practices have been effective at reducing the potential food supply and harborage for pests:

1. Inspect incoming products to ensure they are pest free upon receipt. Dispose of any infested products. See Section I of DLAR 4155.37 (Reference (f)).

2. Store MRE rations separate from commissary and fleet/troop issue food items to the maximum extent feasible, except when stored under refrigeration.

3. Avoid combining different commodities on the same pallet.

4. Consolidate items on pallets as compactly as possible to eliminate rodent hiding places.

5. Rotate stock properly. Proper stock rotation is critical; the older a product, the more likely it is to be infested. **Base rotation on the date of pack of the item, rather**

**than the date the item was received in the warehouse or storeroom, unless food inspection personnel indicate otherwise.** Management must be aware of the turnover time on various items in order to reduce the likelihood of overstocking, and consequent over-aging of products.

6. In locations where MRE rations are collocated with commissary or troop issue items, conduct a thorough inspection of the most highly infestible commodities (e.g. dry pet food) to determine whether or not an infestation exists. Conduct the same inspection on all other infestible commodities shortly thereafter. The following items are at risk for infestation:

Dry pet food	Flour Mixes*
Bakery Mixes*	Nuts
Dry fruit	Pasta
Cookies	Grits
Cereals	Dry beans
Rice	Cornmeal
Candy	Spices

\*(Note: Canned flour and bakery mixes are subject to packaging infestation because of product dust/residue on the cans and in the cases.)

7. Food items, other than MREs, found to be infested with insects should be isolated as quickly as possible and fumigated or discarded (See AFPMB TIM-11, (Reference (g)), and fumigant manufacturer’s labeling). If this cannot be done within 24 hours, cover the infested commodity with plastic and seal the plastic to the floor with tape. It will serve as a temporary means of minimizing contamination of other products. If all of the above are impossible, place the infested commodity in refrigerated storage. The fumigation of MRE rations is not recommended and will only be done if no other options area available, and only after consultation with a Defense Supply Center Philadelphia (DSCP) entomologist (Directorate of Subsistence, Operational Rations, Commercial 215-737-5648/7533, DSN 444-5648/7533 or main desk, commercial 215-737-2952, DSN 444-2952). Reworking the MRE cases, placing the rations under refrigeration or freezing are preferred options. If rations are frozen, they must be thawed prior to handling to avoid damage to the packaging and compromising food safety.

8. Encourage careful forklift operations. Most spillage and commodity damage is caused by carelessness. Special care must be taken with soft packaged items, such as flour, sugar, and rice.

**VII. Pest Exclusion Methods**

A. These methods are designed to exclude pests from storage environments and prevent their establishment:

1. Properly installed plastic or wire screening attached or suspended beneath warehouse overhangs can be an effective means of excluding birds from access to roosting or nesting sites.
2. Screening (16-mesh) in good repair properly installed over windows on outside walls is an effective way to prevent bird entry.
3. Large doorways leading to outside accesses should be tight-fitting and have no gaps larger than ¼ inch on any edge when the door is closed. If these doorways are left open for extended periods, they should be fitted with full length plastic strips or properly installed air curtains (air current blowing down and out of the facility) to discourage and prevent pest entry.
4. Electronic, magnetic, and sonic devices are neither effective nor authorized for rodent or bird control (Reference (j)).

## **VII. Non-chemical Control Methods**

A. These methods are designed to control pest infestations by catching, killing, or excluding the pest without the use of pesticides. Warehouse design must be considered from the standpoint of control and exclusion.

1. Repeating traps and snap traps are used for rodent control around the inside perimeter of the warehouse. They are set at regular intervals (distance will vary depending on the potential for rodent activity and the type of rodent normally encountered), or within stacks in high susceptibility areas such as those used for pet food, rice, and flour storage. Traps should be checked at least weekly, or daily if activity is observed. It is possible to have either a warehouse worker or food inspector check traps during the interval between routine pest control visits. They should notify pest control of any activity found.
2. Glue boards may be used for rodent control and should be placed in the same manner as traps on the natural rodent runs. They can also be used for monitoring for some insects. Note: Glue boards are often ineffective when used in very hot or dusty environments.
3. Eliminate unnecessary water sources readily available to rodents, including leaking pipes and excessive condensation. This will also improve the effectiveness of liquid rodenticides.
4. Repellent glues may be used to keep birds off roosting points, if they cannot be entirely excluded. In some situations, slip sheets (cardboard sheets used between the pallet base and load) or plastic may be placed on top of pallets to protect products from contamination.

5. Insect pheromone traps, New Jersey style light traps, and insect electrocutors, while not effective control measures do provide surveillance of insect populations. Pheromone traps may also be used outside of a storage facility, away from the building, to monitor outside pest insect populations and intercept pest insects before they can enter the facility.

## IX. Chemical Control Methods

A. Chemical pesticides are used to prevent or control insect, rodent, and bird infestations. Least hazardous yet effective pesticides are used as a last resort in accordance with Integrated Pest Management.

1. Ensure that all pesticide applicators are trained, certified, or appropriately licensed to apply pesticides.

2. When necessary, use ULV fogging machines with an approved insecticide as a warehouse space treatment during non-duty hours. ULV can control flying and crawling stages of many insects, but will not affect eggs or insects inside food containers. It is not a substitute for fumigation. Specific recommendations shall be obtained from the responsible pest management consultant and shall be based upon surveillance results.

3. Apply crack and crevice residual pesticides, insect growth regulators (IGR) or baits (approved for food processing establishments) per label instructions in dry storage warehouses or similar facilities. **The frequency of application should be adjusted, reduced or increased, based on surveillance results; however, it shall not exceed label recommendations.**

4. Dry rodenticide bait may be used in storage environments in tamper-resistant and secured bait stations. Rodent bait stations should be placed along the outside warehouse perimeter, as well as at points of evident need based on surveys and a map made recording location (Note: **Rodents feeding on bait will die, possibly in inaccessible areas resulting in odor and filth flies**). Mechanical traps (windup, snap and bait stations with snap traps) may be used along interior walls (e.g. fire walls) as an alternative to bait stations. Place rodent control devices only in locations (map locations to prevent misplacing) that are accessible for inspection and servicing, and are protected from operations which may cause damage. Stations should be checked at least monthly for rodent activity. Old bait material must be completely replaced with new at regular intervals, since many insect pests can feed on the bait without ill effect. Bait stations should be used outside all storage facilities. For products stored in wet caves, bait stations should also be placed at intervals of 50 feet (15 meters) or closer. Bait stations placed outside must be tamperproof and secured. Baits must be protected from mechanical damage and be readily accessible to the rodent population. If rodent activity is noted indoors, both liquid bait stations and mechanical traps should be used to supplement dry rodenticide baits and the frequency of monitoring increased.

5. Rodent bait stations can be used outside the storage facility, and are especially effective for rapid reduction of high rodent populations.

6. Routine fumigation of MRE rations is prohibited. MRE fumigation will be performed only as noted in paragraph 5G.

7. To eliminate active infestations and prevent the spread of insects to MREs or other commodities, isolate and return or destroy infested product, deep clean storage areas and apply residual pesticides and/or IGRs if required. If necessary, fumigate any non-MRE product in which there is evidence (direct or indirect) of insect infestation. Fumigation should be accomplished in place, if possible, and as promptly as possible. When identified, report infestation to Senior Installation Medical Authority. If infestation affects mission or facilities, also notify Garrison Commander or Station Commanding Officer.

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## **PART 2. SHIPBOARD PROGRAMS**

### **I. Introduction.**

A. The Meal, Ready-to-Eat (MRE) is a combat ration packaged in a 10 mil polyethylene bag which is strong and lightweight, but can be penetrated by rodents and certain insects. Under the confined conditions found aboard ship, MREs may be at risk for infestation or damage by those pests. Because of the critical importance of the MRE for use during contingency operations, it is essential that ship commanders ensure these rations are protected through an effective shipboard pest management program.

#### **B. Ships Carrying MREs.**

1. MRE rations are stocked aboard Navy ships when specifically authorized by a fleet commander and the Navy Food Service System Office. For example, an LSD may requisition MREs to feed the ship's landing party during training or field exercises. In that situation, the rations will be found in the food service storerooms and will be the responsibility of the supply department. Additionally, the Marines and the U.S. Army store pre-positioned MRE stocks aboard contract vessels and USNS vessels (Military Sealift Command).

2. Navy replenishment and USNS vessels may carry MREs, some of which will be transported in refrigerated spaces. Certain types of amphibious assault ships have been designed to carry large quantities of MREs under a program called Landing Forces Operational Reserve Materials, or LFORM. The very nature of the program renders the MRE vulnerable to invasion by insects and rodents.

### **II Landing Force Operational Reserve Materiel (LFORM)**

A. Concept of LFORM. LFORM are part of Marine Corps Pre-positioned War Reserves Materiel stocks and are maintained aboard selected amphibious warfare ships to provide support for embarked troops in contingencies. Embarked Marines aboard for training operations will not draw stocks from LFORM. The combat cargo officer is responsible for LFORM stocks, not the supply officer.

B. Ship Types Carrying LFORM MREs. MRE rations for a Marine Expeditionary Unit (MEU) will be pre-positioned and stored in secure spaces aboard each LPH, LHA, LPD and LKA. Designated ships each receive and hold five to seven thousand cases with 12 rations per case. Note: For most pre-positioned situations the MREs are stored in certified containers (sealed containers, no openings/vents). As long as the MREs are pest free when the containers are loaded, and the containers are tight, there should be no pest problems. Additionally, once staged aboard the pre-position ships the MREs are not readily accessible.

C. Palletizing MREs in LFORM. MREs are palletized and banded on standard 40" x 48" wooden pallets. There are 48 cases/pallet.

D. Rotation of MREs in LFORM. MREs have a 3 year shelf life under normal conditions. Current policy is to rotate MREs every deployment. Rotation will return MREs to supply channels for reissuing and consumption.

### **III. U.S. Marine Corps and U.S. Army Pre-positioned Stocks.**

A. Newly assembled MRE rations are used for pre-positioned stocks. MREs are stored in containers aboard either contracted, chartered or USNS vessels maintained by the Military Sealift Command. Once placed aboard ship, the rations are not readily accessible and generally will not be inspected until the stocks are rotated off the ships. Some ships have containers equipped for remote monitoring of container conditions. The rations are stored for 30 months (U.S. Marine Corps) and 24 months (U.S. Army). When rotated, the rations are replaced with new rations to maintain the serviceability of the stocks. **It is critical that these containers receive a proper inspection prior to loading.** Container integrity and cleanliness are key components of this program.

### **IV. Stacking Requirements.**

A. Stacking. MREs shall be stacked no more than four (4) pallets high in a warehouse to prevent crushing the cases at the base of the stack. Continual vibration while underway will hasten the settling or crushing effects on the lower cases of MREs pallets. On those ships having overhead clearance allowing stacking of MREs, it is recommended that stacks be no more than three (two preferred) pallets high. While other LFORM gear may be placed under the MREs, no items shall be placed over the MRE rations. MREs shall not be stacked over or immediately adjacent to petroleum products (oils, greases, fuels, solvents, cleaning agents, explosives or ammunition).

B. Inspections. Marine Corps Service Support Group LFORM loading plans should allow accessibility to MRE rations for stored product pest inspections by medical department personnel. In this situation, accessibility means sufficient space for an individual to closely inspect a minimum of one side and the top of the MREs as stacked on a pallet.

C. Time and Temperature Guidelines. MREs stored in LFORM blocks can be expected to experience temperature ranges that allow them to last for at least one year. Studies by the U.S. Army, Natick Laboratory indicate the following time and temperature storage guidelines for MREs: seven years at 60°F, five years at 70°F, four years at 80°F, thirty months at 90°F, and five months at 110°F (See Reference (d)). Daily temperature logs should be kept on LFORM stowage areas where ordnance is held. Similarly, any spaces with MREs must also be monitored for temperature. The combat cargo officer should consider placing MREs in the coolest sections of the LFORM stowage spaces when designing the load plan.

## V. Pest Management Guidelines.

A. Initial Inspection and Treatment of LFORM MRE Stowage Spaces. The combat cargo officer must coordinate the initial inspection of storage space with the preventive medicine technician or Medical Department representative (MDR) prior to loading LFORM MRE rations. A meticulously thorough survey for any insect or rodent must be made at that time. Even if no insects or rodents are found, flawless sanitation and housekeeping practices will substantially reduce pests in food sources and harborage, as well as facilitate chemical and non-chemical measures for any pest that may be introduced later. A high degree of sanitation is essential in all store rooms to prevent or limit infestations. Information concerning shipboard pest management may be obtained from Reference (k).

1. Thoroughly deep clean (surface sanitation is not sufficient) the entire stowage space where MREs are to be placed. Any nearby spaces which hold or have recently held foodstuffs or animal products (boots, blankets, brushes, wool uniforms, etc.) must receive similar attention. Remove debris from the ship after each cleaning.

2. **Once the storage area is cleaned, residual insecticide sprays may be applied; however, this treatment is not warranted unless pest activity was noted during clean up.** Consider using insect growth regulators (IGRs) as a crack and crevice treatment to reduce the risk of pest population expansion. The preventive medicine authority certified to apply pesticides or station pest control personnel will apply approved compounds. Specific pesticide recommendation, rate, and type of application must be obtained from the respective area medical entomologist.

3. If subsistence supplies are procured at overseas ports, ensure they receive a proper receipt inspection (pier-side inspection) to prevent the introduction of stored product pests into ship storage areas.

B. Inspection of LFORM MREs Prior to Loading. Paragraph 4200 of Reference (c) states that stores received from military installations require only a quantity inspection. It further states that quality inspections are made by the supply activity upon acceptance of the material from the original supplier and will not be duplicated aboard ship. However, quality inspections are encouraged before the stores are transferred to onboard storage areas. It is during this inspection that the Medical Department Representative should check closely for signs of insects and rodents. Receipt of stores from government installations other than military are to be inspected for both quantity and quality. Due to the absolutely critical importance of the LFORM MRE in future contingency operations, only stocks in good condition and free of defects should be accepted.

C. Loading of LFORM MREs. Loading can begin once the combat cargo officer has determined the quality and quantity of LFORM MREs, and that stowage spaces are properly prepared. Care must be taken to avoid damaging the rations during

loading operations. Damaged cases with exposed foodstuffs must be removed from the pallet and repackaged. Prompt cleanup of spillage is essential. Supervisors must encourage caution and consciousness among forklift and elevator operations to avoid damage to these rations.

D. Routine Inspection Program for MREs Stored Aboard Ship.

1. Inspection of Ship's Company MREs. In those storerooms where MRE rations are co-located with ship's company food stuffs, the Medical Department should conduct a thorough monthly inspection of several of the most highly infested commodities (flour, mixes, cornmeal, grits, pasta, cookies, cereals, spices, beans, nuts, and candy). Handle infestations detected as a result of those inspections per Reference (c).

2. LFORM MRE Inspection Program Requirements. Due to the absolutely critical nature of these rations, conduct intense surveillance of the LFORM MREs. Any insect life form found in these stowage spaces must initially be considered as a threat to the MRE. The combat cargo officer should coordinate with the medical officer to have designated Medical Department representatives conduct weekly inspections for stored product pests. The LFORM load plan must allow for reasonable access; otherwise, adequate inspections cannot be performed.

3. Surveillance Equipment. To conduct an adequate and thorough inspection, the inspector will need to carry several items, such as a flashlight, clipboard, paper, pen, alcohol vials for preserving insect specimens, magnifying hand lens to aid in initial pest identification, and optionally, a portable black light to identify rodent urine (Note: many substances will fluoresce when exposed to a black light. Experience is necessary to distinguish rodent urine from other materials).

4. The inspector should note the condition of pallets and cases, as well as look for actual infestations in the products stored adjacent to MREs. Damaged cases should be viewed with suspicion. Note: Open package inspection of MRE meals for insect infestation is not necessary nor is it recommended unless the pouch bag has been damaged or a special inspection has been requested.

5. Rodent Inspection.

a. The MRE is vulnerable to rodent attack, especially in the LFORM configuration. Mice, for example, may be brought aboard in plywood boxes containing other materials in LFORM (burlap bags, ordnance, barbed wire, etc.).

b. Inattention to detail on the part of the inspector looking for rodents could have serious consequences. The inspector should look for droppings, urine stains, rub marks, gnawing, and shredded nesting materials on, in, and under palletized goods. Rats and mice may also infest the interior of palletized goods.

c. The inspector should not confine the search for rodents to the MRE rations. The pests will nest in non-food pallets as well.

6. Insect Inspection.

a. The inspector should note number and type of dead insects on the deck, as well as any live insects on or around pallets and packages. Location and lot numbers of infested rations should be recorded.

b. Check MREs by removing cases from the top of the pallet and looking closely for insects on package surfaces or in cracks or folds between packages. Insects may be found on the underside of plastic bags, in the bottom of cases, or between the box and the sides of the MRE case. The existence of "frass" or silk in or on the product or chewed entry or exit holes are clues to an infestation, even if actual insects are not immediately seen. Breaking open pallets of all MREs stowed aboard ship is not recommended.

c. Positive insect identification may be obtained from the nearest area medical entomologist or PMC listed in Reference (h).

E. Procedures When LFORM MREs are Infested by Insects.

1. Notify the combat cargo officer and medical officer.
2. Determine the extent of infestation and record lot numbers of MRE containers.
3. Remove all infested/damaged cases from the LFORM stowage space immediately, in order to minimize the possibility of infestation of "clean" supplies. Refrigerate cases, if possible, or dispose of them following current directives. When cases are damaged during loading, the cases shall be replaced with undamaged cases from stock.
4. Contact the nearest Navy medical entomologist or PMC by phone or message for guidance and to transmit information on the lot numbers, condition and quantity of infested MRE rations. See Reference (h) for location of the nearest area entomologist.
5. No fumigation procedure for MREs or other food stores aboard ship is currently approved. MREs and other food stores found to be infested can be covered with plastic and the plastic sealed to the floor with tape to isolate the product. If possible the products should be placed in refrigerated storage. This will serve as a temporary means of

minimizing cross contamination to other products. Local medical or veterinary representatives must then determine through ration breakdown which components can be salvaged.

F. Procedures When MREs are Infested by Rodents.

1. Light gangways well at night. Set traps and dispose of rodent carcasses following guidance provided in Reference (i). Check all traps during weekly inspections. When in port, rat guards must be utilized on all ship-to-shore lines on any vessel carrying MREs.

2. Rodent bait blocks made of grain bait are not recommended for use aboard ship for two reasons: (1) the grain bait may be infested with insects during the manufacturing process and serve as foci for infesting the ship's stored products, and (2) any rodent poisoned by a bait block may die in an inaccessible area and cause unpleasant odors.

3. Glue boards may be useful for rodent control, especially in inaccessible areas. As with traps, locate the glue boards in natural rodent runs. Glue boards are not recommended for use in excessively hot and dusty areas.

4. Remove damaged cases from storage. Pallets with damaged cases should receive 100% inspection of the cases to ensure there are no rodent nests present. Adjacent pallets should also be examined. A blacklight is useful for identifying rodent contaminated cases. Remove MRE pouches from contaminated cases and destroy the boxes as appropriate. The pouches should be examined for damage or contamination.

5. MRE pouches that exhibit gnawing by rodents should be destroyed. Pouches with urine contamination can either be sanitized with a chlorine solution (Reference (i)) or destroyed as per Navy medical entomologist or local medical authority.

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## References

- (a) COMNAVSURFPACINST 4080.1/FMFPAC ORDER 4080.2 (NOTAL)
- (b) COMNAVSURFLANTINST 4080.1B/FMFLANT ORDER 4000.10B (NOTAL)
- (c) NAVSUP PUB 485, Afloat Supply Procedures. Revision 2, 15 Nov 89, with changes through 31 Jan 96.
- (d) [DPSC Handbook 4155.2, Subsistence, Inspection of Meal, Ready-to-Eat \(MRE\) Rations, Appendix A.](#)
- (e) [DLAI 4145.31, Integrated Stored Products Pest Management, 9 May 1997.](#)
- (f) [DLAR 4155.37/TB 702-18, Appendix S, Materiel Quality Control Storage Standards, 24 Feb 93.](#)
- (g) [AFPMB Technical Guide No. 11, Hydrogen Phosphide Fumigation of Subsistence with Aluminum Phosphide.](#)
- (h) [AFPMB Technical Guide No. 27, Stored Product Pest Monitoring Methods.](#)
- (i) [MILSTD 904B, Department of Defense Standard Practice: Guidelines for Detection, Evaluation, and Prevention of Pest Infestation of Subsistence.](#)
- (j) [DoD Instruction 4150.7, DoD Pest Management Program, April 22, 1996.](#)
- (k) [US Navy Shipboard Pest Control Manual](#)

## **APPENDIX A**

### **ENTOMOLOGICAL LABORATORY IDENTIFICATION SERVICES AND ADDITIONAL POINTS OF CONTACT**

Specimens can be sent to any of following laboratories for identification. It is recommended that the facilities be contacted prior to shipment for any special instructions.

#### **LABORATORIES SERVICING CONUS INSTALLATIONS**

##### **CHPPM-North**

Chief, Entomological Sciences Division  
USACHPPM-North, ATTN: MCHB-AN-ES  
4411 Llewellyn Avenue  
Fort Meade MD 20755-5225  
DSN: 923-5281/6502, FAX DSN: 923-7132  
Comm: (301) 677-5281/6502, FAX Comm: (301) 677-7132

##### **CHPPM-South**

Chief, Entomological Sciences Division  
USACHPPM-South, ATTN: MCHB-AS-ES  
1312 Cobb Street SW  
Fort McPherson, GA 30330-1075  
DSN: 572-2564/78, FAX DSN: 572-2126  
Comm: (404) 752-2564/78, FAX Comm: (404) 752-2126

##### **CHPPM-West**

Chief, Entomological Sciences Division  
USACHPPM-West, ATTN: MCHB-AW-ES  
Box 339500 – MS 115  
Fort Lewis, WA 98433-9500  
DSN: 347-0073/0084, FAX DSN: 347-0163  
Comm: (253) 966-0073/0084, FAX Comm: (253) 966-0163

##### **CHPPM-Main**

USACHPPM-Entomological Sciences Program  
5158 Blackhawk Road  
Aberdeen Proving Ground, MD 21010-5422  
DSN: 584-3613, FAX DSN: 584-2037  
Comm: (410) 436-3613, FAX Comm: (410) 436-2037

Navy DVECC, Jacksonville

Navy Disease Vector Ecology and Control Center  
P.O. Box 43  
Naval Air Station/Bldg 937  
Jacksonville, FL 32212-0043  
DSN: 942-2424/25, FAX DSN: 942-4324  
Comm: (904) 542-2424, FAX Comm: (904) 542-4324

Navy EPMU-2

Navy Environmental and Preventive Medicine Unit No. 2  
ATTN: Medical Entomology Department  
Naval Station  
1887 Powhatan Street  
Norfolk, VA 23511-6288  
DSN: 564-7671, FAX DSN: 564-1191  
Comm: (757) 444-7671, FAX Comm: (757) 444-1191

Navy EPMU-5

Navy Environmental and Preventive Medicine Unit No. 5  
ATTN: Medical Entomology Department  
Naval Station  
3055 Albacore Alley, Box 368143  
San Diego, CA 92136-5199  
DSN: 526-7070/7077, FAX DSN: 526-7071  
Comm: (619) 556-7070/7077, FAX Comm: (619) 556-7071

Naval Facilities Engineering Command, Southern Division

Applied Biologist  
SOUTHNAVFACENGCOM (Code16A)  
2155 Eagle Drive, P. O. Box 190010  
North Charleston, SC 29419-9010  
DSN: 583-7020, FAX DSN: 583-7024  
Comm: (803) 820-7020, FAX Comm: (803) 820-7024

Naval Facilities Engineering Command, Northern Division

Applied Biologist  
NORTHNAVFACENFCOM (Code 1831)  
10 Industrial Highway - Mail Stop 82  
Lester, PA 19113-2090  
DSN: 443-5067, FAX DSN: 443-0555  
Comm: (610) 595-5067, FAX Comm: (610) 595-0555

Naval Facilities Engineering Command, Southwest Division

Applied Biologist  
1220 Pacific Highway  
San Diego, CA 92132-5190  
DSN: 522-1234, Comm: (619) 532-1234,

Air Force School of Aerospace Medicine

Medical Entomology Function  
IERA/RSRH  
2513 Kennedy Circle  
Brooks AFB, TX 78235-5123  
DSN: 240-6135, FAX DSN: 240-6841  
Comm: (210) 536-6135, FAX Comm: (210) 536-6841

**LABORATORIES SERVICING OCONUS INSTALLATIONS**

**EGYPT**

NAMRU-3

Chief, Entomological Sciences Division  
NAMRU-3  
PSC 452, Box 131  
FPO AE 09835-0007  
Comm: 011-202-284-1381; FAX Comm: 011-20-284-1382

**GERMANY**

CHPPM

Chief, Entomology Sciences Division  
CMR 402, Box 864  
APO AE 09180  
DSN: 486-6675/, FAX DSN 486-7198  
Comm: 011-49-6371-86-6675, FAX Comm: (011)-49-6371-86-7198

**HAWAII**

Navy EPMU-6

Navy Environmental and Preventive Medicine Unit No. 6  
ATTN: Medical Entomology Department  
P.O. Box 112, Building 1535  
Pearl Harbor, HI 96860-5040  
DSN: 471-9505, FAX DSN 471-9361  
Comm: (808) 471-9505, FAX Comm: (808) 474-9361

Naval Facilities Engineering Command, Pacific Division

Applied Biologist

PACNAVFACENFCOM (Code 1813)

Pearl Harbor, HI 96860-7300

DSN: 430-5961, FAX DSN: 430-5419

Comm: (808) 474-5961, FAX Comm: (808) 474-5419

Preventive Medicine Service

ATTN: MCHK-PV, Entomologist

Tripler Army Medical Center

Honolulu, HI 96859-5000

DSN: (315) 433-9944, FAX DSN: (315) 433-9914

Comm: (808) 433-9944, FAX Comm: (808) 433-9914

**ITALY**

Navy EPMU-7

Navy Environmental and Preventive Medicine Unit No. 7

ATTN: Medical Entomology Department

PSC 824, Box 2760

FPO AE 09623-2760

DSN: 624-4401/3782, FAX DSN: 624-4100

Comm: 011-39-95-56-4101/3782, FAX Comm: 011-39-95-56-4100

**JAPAN**

CHPPM-PAC

Chief, Entomological Sciences Division

USACHPPM-PAC-Sagami

Unit 45008

APO AP 96338-5008

DSN: 268-4835, FAX DSN: 268-4367,

Comm: 011-81-3117-68-4835, FAX Comm: 011-81-3117-68-4367

**KOREA**

Preventive Medicine Detachment

Medical Entomologist

5th Medical Detachment

Unit 15247

APO AP 96205-0020

DSN: 725-4927, FAX DSN: 725-4920

Comm: 011-822-7915-4927, FAX Comm: 011-822-7915-4920

## **OKINAWA**

### Air Force Institute for Operational Health

Detachment 3, Unit 5213 - Building 850,

Kadena Air Base, Okinawa Japan

APO AP 96368-5213

DSN: (315) 634-2639/2603, FAX DSN: (315) 634-2611

Comm: 011-81-611-734-2639, Comm. FAX: 011-81-611-734-2611

### Naval Hospital

U.S. Naval Hospital

Consolidated Preventive Medicine Unit

PSC 482

FPO AP 96362-1600

DSN: 643-7808, FAX DSN: 643-7812

Comm: 011-81-611-743-7808, FAX Comm: 011-81-611-743-7812

## **ADDITIONAL POINTS OF CONTACT**

### Defense Logistics Agency

Defense Supply Center Philadelphia

ATTN: DSCP-HROS (Entomologist), Bldg. 6

700 Robbins Ave.

Philadelphia, PA 19111-5092

DSN: 444-3876, FAX DSN: 444-4115

Comm: (215) 737-3876, FAX: (215) 737-4115

### Armed Forces Pest Management Board

Defense Pest Management Information Analysis Center

Forest Glen Section/WRAMC

6900 Georgia Avenue, N.W.

Washington, DC 20307-5001

DSN: 295-7476, FAX DSN: 295-7482

Comm: (301) 295-7476, FAX: (301) 295-7482

## **APPENDIX B**

### **US ARMY VETERINARY COMMAND POINTS OF CONTACT**

#### **North Atlantic Regional Veterinary Command Units**

##### **North Atlantic Regional Veterinary Command**

Walter Reed Army Medical Center, Building 1 Room A130

Washington, D.C. 20307-5001

Phone: (202)-782-2299

DSN: 662-2299

##### **Allegheny District Veterinary Command**

116 Forbes Avenue Suite 4

Carlisle, Pennsylvania 17013-5066

Phone: (717) 245-4149/3180

DSN: 242-4149/3180

##### **Carlisle Barracks Branch Veterinary Services**

627 Wright Avenue Suite 2

Carlisle, Pennsylvania 17013-5078

Phone: (717) 245-3430/4122

DSN: 242-3430/4122

##### **Fort Drum Branch Veterinary Services**

11050 Mount Belvedere Boulevard

Fort Drum, New York 13602-5004

Phone: (315) 772-4265/4276

DSN: 341-4265/4276

##### **Fort Knox Branch Veterinary Services**

U.S. Army Medical Department Activity Building 1489

Fort Knox, Kentucky 40121-5520

Phone: (502) 624-2736/7622

DSN: 464-2736/7622

##### **Great Lakes Branch Veterinary Services**

3001 B 6th Street, Building 200H, 8 East

Great Lakes, Illinois 60088-5000

Phone: (847) 688-3252

DSN: 792-3252

Wright-Patterson Branch Veterinary Services

Wright-Patterson Air Force Base, Ohio

Phone: (513) 257-0569/0571

DSN: 787-0569/0571

Mid-Atlantic District Veterinary Command

Building 2792 Harrison Loop

Fort Eustis, Virginia 23604-5558

Phone: (757) 878-3207

DSN: 927-3207

Camp Lejeune Branch Veterinary Services

Tarawa Terrace

Camp Lejeune, North Carolina 28543-5002

Phone: (910) 451- 5757

DSN: 751-5757

Cherry Point Branch Veterinary Services

PSC Box 8085

Cherry Point Marine Corps Air Station, North Carolina 28533-0085

Phone: (252) 466-2037

DSN: 582-2037

Fort Bragg Branch Veterinary Services

Building 2-1148 Macomb Street

Fort Bragg, North Carolina 28307-5000

Phone: (910) 396-3103

DSN: 236-3103

Fort Lee Branch Veterinary Services

700 24th Street

Fort Lee, Virginia 23801-1716

Phone: (804) 734-2449

DSN: 687-2449

Norfolk Branch Veterinary Services

1933 Cold Storage Road, Building CEP-156

Norfolk, Virginia 23511

Phone: (757) 444-3136

DSN: 564-3136

Peninsula Branch Veterinary Services

Building 580 Jefferson Street  
Fort Eustis, Virginia 23604  
Phone: (757) 887-7272  
DSN: 953-7272

National Capital District Veterinary Command

10002 Caples Road, Building 630  
Fort Belvoir, Virginia 22060-5400  
Phone: (703) 805-1043  
DSN: 655-1043

Aberdeen Proving Ground Branch Veterinary Services

Building 2479  
Aberdeen Proving Ground, Maryland 21005  
Phone: (410) 278-4604/4804  
DSN: 298-4604/4804

Andrews Air Force Base Branch Veterinary Services

1781 Arnold Avenue  
Andrews Air Force Base, Maryland 20762-6323  
Phone: (240) 857-5464  
DSN: 857-5464

Dover Air Force Base Branch Veterinary Services

U.S. Air Force Hospital Dover (SGV)  
Dover Air Force Base, Delaware 19902-5300  
Phone: (302) 677-5254/5252  
DSN: 445-5254/5252

Forest Glen Branch Veterinary Services

Walter Reed Army Medical Center, Building 156  
6900 Georgia Avenue NW  
Washington, D.C. 20307-0004  
Phone: (301) 295-7581  
DSN: 295-7581

Fort Belvoir Branch Veterinary Services

10015 Theote Road, Suite 101  
Fort Belvoir, Virginia 22060-5441  
Phone: (703) 805-3350  
DSN: 655-3350

Fort Meade Branch Veterinary Services

2480 Llewellyn Avenue  
Fort Meade, Maryland 20755-5800  
Phone: (301) 677-1316  
DSN: 923-1316

Fort Myer Branch Veterinary Services

Building 238  
Fort Myer, Virginia 22211  
Phone: (703) 696-3606  
DSN: 426-3606

Northeast District Veterinary Command

Building 876 Cocayne Avenue  
Fort Monmouth, New Jersey 07703-5617  
Phone: (732) 532-1680  
DSN: 992-1680

Brunswick Naval Air Station Branch Veterinary Services

33 Canam Drive  
Topsham, Maine 04086  
Phone: (207) 921-2277  
DSN: 476-2277

Fort Monmouth Branch Veterinary Services

Building 810 Murphy Drive  
Fort Monmouth, New Jersey 07703-5000  
Phone: (732) 532-1829  
DSN: 992-1829

McGuire/Dix Branch Veterinary Services

Building 5250 New Jersey Avenue  
Fort Dix, New Jersey 08640-6640  
Phone: (609) 562-2433  
DSN: 944-2433

New London Branch Veterinary Services

Building 411, Box 65, Naval Submarine Base  
Groton, Connecticut 06349  
Phone: (860) 694-3328/2980  
DSN: 694-3328/2980

West Point Branch Veterinary Services

Building 630

West Point, New York 10996-1197

Phone: (914) 938-3010

DSN: 688-3010

**Western Regional Veterinary Command Units**

Western Regional Veterinary Command

Madigan Army Medical Center

Building 9783 McKinley Avenue

Tacoma, Washington 98431-1110

Phone: (253) 968-5528

DSN: 782-5528

Alaska District Veterinary Command

1060 Gaffney Road #7470

Fort Wainwright, Alaska 99703-7470

Phone: (907) 353-5484

DSN: 317-353-5484

Fort Richardson Branch Veterinary Services

600 Richardson Drive #7470

Fort Richardson, Alaska 99505-7470

Phone: (907) 353-2872

DSN: 317-384-2872

Fort Wainwright Branch Veterinary Services

1060 Gaffney Road #7470

Fort Wainwright, Alaska 99703-7470

Phone: (907) 353-2977

DSN: 317-353-2977

Northern California District Veterinary Command

700 East Roth Road, Box 36

French Camp, California 95231-9747

Phone: (209) 982-2417

DSN: 462-2417

Beale Branch Veterinary Services

17751 23rd Street, Building 25504

Beale AFB, California 95903-5000

Phone: (530) 634-2105

DSN: 368-2105

Lemoore Branch Veterinary Services

Building 780 Franklin Avenue

Lemoore NAS, California 93246  
Phone: (559) 998-2757  
DSN: 949-2757

Travis Branch Veterinary Services  
David Grant Medical Center/SGV, Building 543  
411 Lane Street  
Travis AFB, California 94535-5300  
Phone: (707) 424-2608  
DSN: 837-2608

Tracy Branch Veterinary Services  
700 East Roth Road, Box 36  
French Camp, California 95231-9735  
Phone: (209) 982-2416  
DSN: 462-2416

Pacific Northwest District Veterinary Command  
Madigan Army Medical Center  
Building 9783 McKinley Avenue  
Tacoma, Washington 98431-1110  
Phone: (253) 968-5529  
DSN: 782-5529

Fort Lewis Branch Veterinary Services  
Madigan Army Medical Center  
Tacoma, Washington 98431-1110  
Phone: (253) 967-4705  
DSN: 357-4705

Rainier Branch Veterinary Services  
Building 769  
McChord AFB, Washington 98438  
Phone: (253) 982-9063  
DSN: 382-9063

Olympic Branch Veterinary Services  
Subase Bangor  
Silverdale, Washington 98315  
Phone: (360) 396-4447  
DSN: 744-4447

Cascade Branch Veterinary Services  
Smokey Point Commissary, Building 900

13900 45th Avenue NE  
Marysville, Washington 98271  
Phone: (360) 257-5534  
DSN: 820-5534

Southern California District Veterinary Command

937 N Harbor Drive  
San Diego, California 92130-0069  
Phone: (858) 556-0544  
DSN: 526-0554

San Diego Branch Veterinary Services

937 N Harbor Drive  
San Diego, California 92130-0069  
Phone: (858) 556-6253  
DSN: 526-6253

West Coast Branch Veterinary Services

Marine Corps Base, Building 22103  
PO Box 555230  
Camp Pendleton, California 92055  
Phone: (760) 725-4304  
DSN: 365-4304

Mojave Branch Veterinary Services

Building 453  
PO Box 105078  
Fort Irwin, California 92310-5078  
Phone: (760) 380-5185  
DSN: 470-5185

**Southeast Regional Veterinary Command Units**

Southeast Regional Veterinary Command  
505 North Range Road  
Fort Gordon, Georgia 30905-5650  
Phone: (706) 787-7841  
DSN: 773-7841 FAX: 787-7491

Gulf Coast District Veterinary Command

Building 9400, Dust Off Road  
Fort Rucker, Alabama 36362-5333  
Phone: (334) 255-1144  
DSN: 558-1144

Fort Benning Branch Veterinary Services

P.O. Box 56100, Bldg 265  
10th Mountain Division Road  
Fort Benning, Georgia 31905-6100  
Phone: (706) 545-5660  
DSN: 835-5660

Albany FI Section

DeCA Commissary  
814 Radford Blvd, Suite 20327  
Albany, GA 31704-0327  
Phone: (229) 639-5867  
DSN: 567-5867

Redstone Arsenal Branch Veterinary Services

Bldg, 3543, Shillelagh Road  
Redstone Arsenal, AL 35898  
Phone: (256) 876-5847  
DSN: 746-5847

Robins Air Force Base Section

78th Medical Group/SPTG  
Veterinary Section  
655 7th Street, Bldg 703  
Robins AFB, GA 31098-5300  
Phone: (912) 327-8448  
DSN: 497-8448

Pensacola Branch Veterinary Services

52 Turner Street  
Bldg 626A  
NAS Pensacola, FL 32508  
Phone: (850) 452-8201  
DSN: 922-8201

Whiting Field FL Section

Veterinary Section/Commissary Bldg  
NAS Whiting Field  
Milton, FL 32570  
Phone: (850) 623-7131  
DSN: 868-7131

Keesler AFB Section

Veterinary Service ATTN: MCVS-PK  
Bldg 0408, 3rd Street  
Keesler AFB, MS 39534  
Phone: (228) 377-2086  
DSN: 597-2086

Eglin Section

Veterinary Treatment Facility  
201 Cherokee Ave, Bldg 888  
Eglin AFB, FL 32542  
Phone: (850) 882-4333  
DSN: 872-4333

Tyndall Section

Tyndall Veterinary Treatment Facility  
1309 Suwanee Road, Bldg 1309  
Tyndall AFB, FL 32403-5721  
Phone: (850) 283-2434  
DSN: 523-2434

Fort Rucker Branch Veterinary Services

Building 7204  
Fort Rucker, Alabama 36362-5333  
Phone: (334) 255-3713  
DSN: 558-3713

Maxwell Section VTF

151 S. Arnold Street  
Maxwell AFB, AL 36112  
Phone: (334) 953-7357  
DSN: 493-7357

Meridian FI Section

431 Allen Road  
Meridian, MS 39309-5609  
Phone: (601) 679-3325 Ext 35  
DSN: 637-3325 Ext 35

Moody AFB Section

Moody Veterinary Treatment Facility  
Bldg 971 Georgia Road  
Moody AFB, GA 31699-5000  
Phone:

South Atlantic District Veterinary Command

459 West Bultman Avenue Suite 100  
Fort Stewart, Georgia 31314-4915  
Phone: (912) 767-5010  
DSN: 870-5010

Fort Stewart Branch Veterinary Services

461 W. Bultman Ave  
Fort Stewart, Georgia 31314-4915  
Phone: (912) 767-3107  
DSN: 870-3107

Hunter AAF Section

Hunter AAF Veterinary Section  
1030 Perimeter Road, Bldg 1030  
Hunter Army Airfield, GA 31309-5023  
Phone: (912) 353-5602  
DSN: 729-5602

Parris Island Section

Bldg 517A  
517 Alaska Blvd  
Parris Island, SC 29905-9560  
Phone: (843) 228-3373  
DSN: 335-3373

Jacksonville Branch Veterinary Services

PO Box 110  
Naval Air Station Jacksonville, Florida 32212-0110  
Phone: (904) 542-2878  
DSN: 942-2878

Mayport Section

Mayport NS Veterinary Services  
Bldg 460  
NS Mayport, FL 32228-0243  
Phone: (904) 270-7004  
DSN: 960-7004

King's Bay Section

King's Bay Commissary  
ATTN: Veterinary Inspector  
1037 USS Daniel Boone  
King's Bay Naval Base, GA 31547  
Phone: (912) 573-3323

DSN: 573-3323

Guantanamo Bay Section

Veterinary Services  
PSC 2005, Box 52  
FPO AE 09593-0052  
Phone: 011-53-99-2212  
DSN: 660-2212

Patrick AFB Branch Veterinary Services

1407 Edward H. White II Street  
Bldg 408  
Patrick AFB, FL 32925-3214  
Phone: (321) 494-8020  
DSN: 854-8020

MacDill Air Force Base Services

PO Box 6057  
MacDill Air Force Base, Florida 33608-0057  
Phone: (813) 828-3560  
DSN: 968-3560

Key West Section

Bldg 4911  
ATTN: Veterinary Inspector  
811 Sigsby Road  
NAS Key West, FL 33040  
Phone: (305) 293-4403  
DSN: 483-4403

Fort Buchanan Section

Fort Buchanan Veterinary Services  
Bldg 676  
Fort Buchanan, PR 00934-5760  
Phone: (787) 707-3062  
DSN: 740-3062

Tennessee Valley District Veterinary Command

650 Joel Drive  
Fort Campbell, Kentucky 42223-5349  
Phone: (270) 798-4117  
DSN: 635-4117

Fort Campbell Branch Veterinary Services

650 Joel Drive  
Fort Campbell, Kentucky 42223-5349  
Phone: (270) 798-5789  
DSN: 635-5789

Evansville MRE

Ameriquial Packaging  
ATTN: Army Vet Inspectors  
225 West Morgan Ave  
Evansville, IN 47710  
Phone: (812) 452-4309 ext 251

Millington Branch Veterinary Services

5722 Integrity Drive  
Millington, TN 38054-5004  
Phone: (901) 874-5421  
DSN: 882-5421

Little Rock AFB Section

Veterinary Services  
314 Med Gr SGV  
3701 Arnold Drive  
Little Rock AFB, AR 72099  
Phone: (501) 987-7250

Fort Jackson Branch Veterinary Services

USAMEDDAC, Box 202  
4500 Stuart Street  
Fort Jackson, SC 29207-5720  
Phone: (803) 751-5132  
DSN: 734-5132

Charleston Section

Veterinary Treatment Facility  
107 Scarton Lane, Bldg 648  
Charleston, SC 29404  
Phone: (843) 963-4269

Mullins MRE Section

SOPAKCO  
119 South Cypress Street  
Mullins, SC 29574  
Phone: (834) 464-7851 ext 103/112

Atlanta Branch Veterinary Services

Veterinary Treatment Facility  
1670 Hardee Ave, SW  
Fort McPherson, GA 30330-1058  
Phone: (404) 464-2651

Fort Gordon Section Veterinary Services  
ATTN: MCVS-SER-G  
500 North Range Road  
Fort Gordon, Georgia 30905-5650  
Phone: (706) 787-7375  
DSN: 773-7375

## **Pacific Regional Veterinary Command Units**

Pacific Regional Veterinary Command  
Building 102 Room 107  
1 Jarrett White Road  
Tripler Army Medical Center, Hawaii 96859-5000  
Phone: (808) 433-6623

Central Pacific District Veterinary Command  
Building 435 Pierce Road, Fort Shafter  
Honolulu, Hawaii 96858  
Phone: (808) 433-2273

Fort Shafter Branch Veterinary Services  
Honolulu, Hawaii  
Phone: (808) 433-1972

Kaneohe MCBH Branch Veterinary Services  
Hawaii  
(808) 257-1717

Hickam Air Force Base Branch Veterinary Services  
Hawaii  
Phone: (808) 449-6587

Schofield Barracks Branch Veterinary Services  
Hawaii  
Phone: (808) 433-8540

Japan District Veterinary Command  
APO AP 96343-5005  
Phone: (011) 813-11763-3317

DSN: 263-3317

Camp Zama Branch Veterinary Services

Japan

Phone: (011) 813-11763-5913

DSN: 263-5913

Iwakuni Marine Corps Air Station Branch Veterinary Services

Japan

Phone: (011) 813-11753-4622

DSN: 253-4622

Misawa Air Force Base Branch Veterinary Services

Japan

Phone: (011) 813-11766-3917

DSN: 226-3917

Okinawa Branch Veterinary Services

C/O 18th Medical Group SGV

APO AP 96368-5000

Phone: (011) 816-11734-6032

DSN: 634-6032

Yokosuka Naval Base Branch Veterinary Services

Japan

Phone: (011) 813-11743-8862

DSN: 243-8862

Yokota Air Force Base Branch Veterinary Services

Japan

Phone: (011) 813-11725-4363

DSN: 225-4363

Western Pacific District Veterinary Command

PSC 455 Box 197

FPO AP 96540-1197

Phone: (671) 339-3040

Anderson Air Force Base Branch Veterinary Services

Guam

Phone: (671) 366-2447/3314

Naval Branch Veterinary Services

Guam

Phone: (671) 366-2447/3314

New Zealand Branch Veterinary Services

PSC 467 Box 108  
FPO AP 96531-2000  
Phone: (011) 643-358-1408

Singapore Branch Veterinary Services

U.S. NRC Singapore  
PSC 470 Box 2100  
FPO AP 96534-2100  
Phone: (011) 65-750-2516

**Great Plains Regional Veterinary Command Units**

Great Plains Regional Veterinary Command

2410 Stanley Road  
Fort Sam Houston, Texas 78234-6230  
Phone: (210) 295-2465  
DSN: 421-2465

North Plains District Veterinary Command

833 McClellan Avenue  
Fort Leavenworth, Kansas 66027-2327  
Phone: (913) 684-6506  
DSN: 552-6506

Fort Leavenworth Branch Veterinary Services

831 McClellan Avenue  
Fort Leavenworth, Kansas 6027-2327  
Phone: (913) 684-6519  
DSN: 552-6519

Fort Leonard Wood Branch Veterinary Services

310 Freedom Drive  
Fort Leonard Wood, Missouri 65473-8922  
Phone: (573) 596-0523  
DSN: 581-0523

Fort Riley Branch Veterinary Services

600 Caisson Hill Road  
Fort Riley, Kansas 66442-5037  
Phone: (785) 239-2732  
DSN: 856-2732

Rocky Mountain District Veterinary Command

1661 O'Connell Boulevard, Building 1012  
Fort Carson, Colorado 80913-5108  
Phone: (719) 526-1216  
DSN: 691-1216

Denver Branch Veterinary Services  
Building 228, US Army Garrison Fitzsimons  
12101E Colfax Avenue  
Aurora, Colorado 80045-5000  
Phone: (303) 365-3137

Fort Bliss Branch Veterinary Services  
William Beaumont Army Medical Center Box 70010  
5005 North Piedras  
El Paso, Texas 79920-5001  
Phone: (915) 568-0265  
DSN: 978-0265

Fort Carson Branch Veterinary Services  
1661 O'Connell Boulevard, Building 1012  
Fort Carson, Colorado 80913-5108  
Phone: (719) 524-4115  
DSN: 883-4115

Fort Huachuca Branch Veterinary Services  
U.S. Army Medical Department Activity  
Fort Huachuca, Arizona 85613-7040  
Phone: (520) 533-3204  
DSN: 821-3204

Hill Air Force Base Branch Veterinary Services  
7457 8th Street, Building 401  
Hill Air Force Base, Utah 84056-5012  
Phone: (801) 777-2969  
DSN: 777-2969

South Plains District Veterinary Command  
80th and Engineer Street, Building 4905  
Fort Hood, Texas 76544-4752  
Phone: (254) 287-7606  
DSN: 737-7606

Fort Hood Branch Veterinary Services

Building 4905 80th and Spur Drive  
Fort Hood, Texas 76544-5063  
Phone: (254) 288-3052  
DSN: 738-3052

Louisiana Branch Veterinary Services

1585 3rd Street  
Fort Polk, Louisiana 71459-5110  
Phone: (318) 531-2132  
DSN: 863-2132

Oklahoma Branch Veterinary Services

Building 721 Macomb Road  
Fort Sill, Oklahoma 73503-6300  
Phone: (580) 442-3602  
DSN: 639-3602

South Texas District Veterinary Command

2332 Harney Road  
Fort Sam Houston, Texas 78234-1303  
Phone: (210) 295-4034  
DSN: 421-4034

Corpus Christi Branch Veterinary Services

10651 E Street  
Corpus Christi Naval Air Station, Texas 78419-5131  
Phone: (316) 961-3952  
DSN: 861-3952

Fort Sam Houston Branch Veterinary Services

2332 Harney Road  
Fort Sam Houston, Texas 78234-1303  
Phone: (210) 295-4019  
DSN: 421-4019