

INCH-POUND

MIL-PRF-32046

1 July 2003

## PERFORMANCE SPECIFICATION

### RATION HEATING UNIT, FIELD FEEDING

This specification is approved for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE.

1.1 Scope. This specification covers a ration unit used for heating unitized group rations.

#### 2. APPLICABLE DOCUMENTS.

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

#### 2.2 Government document.

Beneficial comments (recommendations, additions, deletions) and any data which may be of use in improving this document should be addressed to: U. S. Army Soldier and Biological Chemical Command, Natick Soldier Center, Natick, MA 01760-5018 by using the Standardization Document Improvement Proposal DD Form (DD 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 7310

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2.2.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and the supplement thereto, cited in solicitation (see 6.2).

### STANDARDS

#### FEDERAL

#### UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

Title 30, Part 18, Section 18.64, Part 7, and Subpart K, Section 7.407- Flame –Resistant Cables

#### DEPARTMENT OF DEFENSE

MIL-STD-810 – Environmental Engineering Considerations and Laboratory Tests

2.2.2. Government drawings. The following drawing forms part of this document to the extent specified herein:

U. S. Army Soldier and Biological Chemical Command

5-13-6867–Tray Ration Heater Rack Weldment

5-13-6871–Ration Heating Unit, Field Feeding

(Copies of drawings are available from the U. S. Army Soldier and Biological Chemical Command, Natick, MA 01760-5014)

2.3 Non-Government publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

#### NSF INTERNATIONAL

Standard No. 4 – Commercial Cooking, Rethermalization and Powered Hot Food Holding  
and Transport Equipment

Standard No. 51–Plastic Materials and Components Used in Food Equipment

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(Application for copies should be addressed to NSF International, P. O. Box 130140, Ann Arbor, MI 48113-0140).

### UNDERWRITERS LABORATORIES, INC. (UL)

Standard 62 – Flexible Cord and Fixture Wire  
Standard 296 – Oil Burners

(Application for copies should be addressed to Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062).

### AMERICAN WELDING SOCIETY, INC.

AWS Standard D1.6 - STRUCTURAL WELDING CODE - STAINLESS STEEL

(Application for copies should be addressed to American Welding Society, Inc., 550 N.W. LeJeune Road, Miami, FL 33126).

2.4 Order of precedence. In event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

## 3. REQUIREMENTS.

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Operating requirements. The ration-heating unit shall meet the operating requirements specified in 3.2.1 through 3.2.12.

3.2.1 Heating rations. The ration-heating unit shall have the capacity to heat up to eighteen heat and serve rations or twelve heat and serve rations and five No. 10 food cans to a serving temperature of 160°F + 10°F, -0°F in the boil mode in one hour or less.

3.2.2 Temperature settings. The ration-heating unit shall have two temperature settings, a boil mode that allows the unit to heat the tank of water to a boil, and an auto setting that allows the unit to heat the tank of water to 190°F ± 10°F in one hour or less.

3.2.3 Burner system. The burner shall have a capacity to heat the rations specified in 3.2.1. The burner shall be securely attached to one end of the tank and shall be capable of being removed for maintenance or replacement. The burner shall meet Underwriters Laboratories (UL) Standard No. 296.

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3.2.4 Burner fuel. The burner shall be self-priming and operate on DF1, DF2, artichoke, and JP8 diesel fuels.

3.2.5 Electrical control box. The electrical control box shall be waterproof and shall contain a pull-on/push-off illuminated switch, an auto and boil mode switch, and a power receptacle.

3.2.6 Voltage and current. The ration-heating unit shall operate on 120 VAC, 50/60Hz, with a maximum current draw of 6 amps.

3.2.7 Safety. The ration-heating unit shall be safe to operate.

3.2.8 Low water level. A sensor shall be used to ensure that the burner will not start without sufficient water in the tank, and that the heater unit shall shut down the burner if the water level in the tank is less than 4 inches from the bottom of the tank.

3.2.9 Electrical overload protection. Necessary overload protection shall be incorporated to protect against component damage, electrical shorts, and personnel burns. The overload protection shall be readily accessible for resetting, removal, or replacement.

3.2.10 Tilt switch. The ration-heating unit shall have a switch that will shut off the burner if the unit is tilted more than 30 degrees from horizontal in any direction.

3.2.11 External temperature. The temperature on the controls, handles, latches, and top shall not exceed 120°F when the unit is operating, except at the steam vent outlet.

3.2.12 Noise. The ration heating unit shall not produce noise in excess of 78 dba when operating.

3.3 **Support or ownership requirements**. The ration-heating unit shall meet the requirements specified in 3.3.1 through 3.3.12.

3.3.1 Weight. The dry weight of the empty ration-heating unit shall not exceed 300 pounds.

3.3.2 Materials. The heating tank, tank lid, electrical control box, and removable ration racks shall be made from corrosion resistant material. The contractor shall select all of the other materials, but the materials shall be capable of meeting all of the operational and environmental requirements specified herein. Materials used shall meet food contact surface requirements for inside the tank and lid, NSF International Standard No. 51, See Chapter 4, section VI, TB MED 530. Other outside surfaces of the Ration Heating Unit, shall be easily cleanable.

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3.3.3 Heating unit tank. The heating unit tank shall be supplied with rounded inside corners, a bottom drain valve, a standard garden hose adapter, and shall have minimum inside dimensions of 35-3/4 inches in length, 16-5/8 inches in width, 14 inches in height required to interface with the ration racks(see Drawing No. 5-13-6867). The tank shall be constructed to NSF International Standard No. 4. The tank shall not exceed the overall outside dimensions as specified in Drawing No. 5-13-6871.

3.3.4 Heater unit lid. The heater unit lid shall have a handle for opening and closing, a locking mechanism for holding the lid open, a replaceable gasket made of FDA approved materials, and two snap action locking clamps on the front of the tank and connected to the lid to form a liquid-tight seal. The lid shall be provided with a means of venting steam and preventing pressure build-up during operation so as to allow the operator to safely open the lid without being burned by escaping steam.

3.3.5 Hour meter. The ration-heating unit shall be equipped with a non-resetting visible hour meter that accurately monitors the number of hours in tenths when the burner is operating.

3.3.6 Electrical wiring. Electrical wiring shall conform to the requirements of UL Standard No. 62, and shall be arranged, supported, and marked to allow identification with the wiring diagram.

3.3.7 Maintainability/repairability. Routine maintenance and repairability of the heating unit shall require only standard hand tools, and have ease of accessibility.

3.3.8. Identification plate. An identification plate shall be corrosion resistant material and permanently attached to the outside of the unit. The plate shall include the manufacturer's name, contract number, date of manufacture, and the Commercial and Government Entity (CAGE) number.

3.3.9 Caution label. A caution label containing the words "CAUTION- MAY BE HOT" shall be securely attached to a readily visible location on the burner end of the unit.

3.3.10 Instruction plate. An instruction plate shall be made of corrosion resistant material and permanently attached to the outside of the unit. The plate shall include complete instructions for starting and operating the ration-heating unit.

3.3.11 Menu guidelines. A menu guidelines shall be corrosion resistant material permanently attached to the outside heating unit lid. It shall contain heating times for Unitized Group Rations (Heat and Serve) menu items in both the boil and the auto modes (see Drawing No. 5-13-6871).

3.3.12 Welding. All welding shall be performed in accordance with the requirements of AWS Standard No. D1.6.

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3.4 **Environmental requirements.** The ration-heating unit shall meet the requirements specified in 3.4.1 through 3.4.5.

3.4.1 **Operating temperatures.** The ration-heating unit shall be operable and functional at ambient temperatures of -25°F to + 120°F.

3.4.2 **Altitude.** The ration-heating unit shall be operable at altitudes up to 8,000 feet above sea level with only air mixture adjustment.

3.4.3 **Rain.** The ration-heating unit shall be operable after being exposed to rain.

3.4.4 **Corrosion.** The ration-heating unit shall show no visual corrosion, deterioration, clogging or binding of moving parts, or change in tolerance limits on any internal or external parts when exposed to a corrosive environment.

3.4.5 **Vibration.** The ration-heating unit shall remain operable after being subjected to vibration.

3.5 **Interface and interoperability requirements.** The ration-heating unit shall meet the requirements specified in 3.5.1 through 3.5.5.

3.5.1 **Vehicle and fuel supply interface.** The ration heating unit shall be designed to interface with the High-Mobility, Multi-purpose Wheeled Vehicle(HMMWV). The unit shall run off a five gallon fuel can (NSN 7240-01-337-5269), and fuel feed hose adapter (NSN 7240-21-911-8834), and be secured to the cargo bed in a manner that will permit removal without tools.

3.5.2 **Fuel line.** A fuel line hose with drip resistant quick disconnects shall be attached from the fuel can to the burner, and be properly vented so that the fuel pump in the burner will be properly supply fuel from the fuel can. The supply side line shall have a 100 mesh brass body in-line fuel filter containing a monel screen, minimum 10 gallons per minute capacity, that can be easily removed for cleaning. The length shall be as specified in Drawing No. 5-13-6871.

3.5.3 **Skids, and skid rings.** The bottom of the ration-heating unit shall have skids along both sides of the unit with curved ends, and rings at each lower corner of the skid to accommodate tie down straps for securing the unit during transit. The skids shall interface with the grooves on the bed of the HMMWV.

3.5.4 **Ration racks.** The removable ration racks to be furnished with each ration-heating unit, shall be in accordance with Drawing No. 5-13-6867, and as specified in 6.2 .

3.5.5 **Power cord.** The unit shall be equipped with a water resistant 16 gauge, 3-wire, 15 foot power cord capable of supplying sufficient power to operate the unit, and shall conform to UL Standard No. 62; and flame resistance requirements of MSHA, Title 30, Part 18, Section 18.64, Part 7, and Subpart K, Section 7.407.

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## 4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are as follows:

- a) First article inspection (see 4.2).
- b) Conformance inspection (see 4.3).

4.2 First article inspection. When a first article inspection is required (see 3.1 and 6.2), it shall be inspected for the verification procedures listed in table I.

4.3 Conformance inspection. Conformance inspection shall consist of all the verification procedures listed in table I except that the requirements listed for paragraphs 4.4.2.3, 4.4.2.5, 4.4.2.8, 4.4.3.1 through 4.4.3.4, 4.4.3.7, 4.4.4.1 through 4.4.4.5, 4.4.5.1 and 4.4.5.2 shall not be required. Sampling shall be as specified in the contract or purchase order (see 6.2).

4.4 Verification methods. Verification methods may include visual examination, measurement, testing, simulation, modeling, engineering evaluation, component properties analysis, certification, and similarity to previously-approved or previously-qualified designs.

4.4.1 Verification alternatives. The contractor may propose alternative test methods, techniques, or equipment including the application of statistical process control, tool control, or cost-effective sampling procedures to verify performance (see 6.4).

TABLE I – Verification Methods

<u>Requirement</u>	<u>Requirement paragraph</u>	<u>Verification paragraph</u>
<b>OPERATING REQUIREMENTS</b>	3.2	4.4.2
Heating rations	3.2.1	4.4.2.1
Temperature settings	3.2.2	4.4.2.2
Burner system	3.2.3	4.4.2.3
Burner fuel	3.2.4	4.4.2.4
Electrical control box	3.2.5	4.4.2.5

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TABLE I – Verification Methods (Cont'd)

<u>Requirement</u>	<u>Requirement paragraph</u>	<u>Verification paragraph</u>
Voltage and current	3.2.6	4.4.2.6
Safety	3.2.7	4.4.2.7
Low water level	3.2.8	4.4.2.8
Electrical overload protection	3.2.9	4.4.2.9
Tilt switch	3.2.10	4.4.2.10
External temperature	3.2.11	4.4.2.11
Noise	3.2.12	4.4.2.12
<b>SUPPORT OR OWNERSHIP REQUIREMENTS</b>	3.3	4.4.3
Weight	3.3.1	4.4.3.1
Material	3.3.2	4.4.3.2
Heating Unit Tank	3.3.3	4.4.3.3
Heater unit lid	3.3.4	4.4.3.4
Hour meter	3.3.5	4.4.3.5
Electrical wiring	3.3.6	4.4.3.6
Maintainability/repairability	3.3.7	4.4.3.7
Identification plate	3.3.8	4.4.3.8
Caution label	3.3.9	4.4.3.9
Instruction plate	3.3.10	4.4.3.10



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TABLE I – Verification Methods (Cont'd)

<u>Requirement</u>	<u>Requirement paragraph</u>	<u>Verification paragraph</u>
Menu guidelines	3.3.11	4.4.3.11
Welding	3.3.12	4.4.3.12
<b>ENVIRONMENTAL REQUIREMENTS</b>	3.4	4.4.4
Operating temperatures	3.4.1	4.4.4.1
Altitude	3.4.2	4.4.4.2
Rain	3.4.3	4.4.4.3
Corrosion	3.4.4	4.4.4.4
Vibration	3.4.5	4.4.4.5
<b>INTERFACE AND INTEROPERABILITY REQUIREMENTS</b>	3.5	4.4.5
Vehicle and fuel supply interface	3.5.1	4.4.5.1
Fuel line	3.5.2	4.4.5.2
Skids, and skid rings	3.5.3	4.4.5.3
Ration racks	3.5.4	4.4.5.4
Power cord	3.5.5	4.4.5.5

4.4.2 **Operating requirements verification.** All verifications shall be performed in accordance with paragraph 4.4.2.1 through 4.4.2.12.

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4.4.2.1 Heating rations verification. The ration-heating unit shall be loaded with up to eighteen heat and serve rations or twelve heat and serve rations and five No. 10 cans at an ambient air temperature of  $70^{\circ}\text{F} \pm 5^{\circ}\text{F}$ . Water at  $60^{\circ}\text{F} \pm 5^{\circ}\text{F}$  shall be added up to approximately 3 to 4 inches from the top of the heat and serve rations. The burner shall be set to the boil mode. Verify that the rations reach an internal serving temperature of  $160^{\circ}\text{F} + 10^{\circ}\text{F}$ ,  $-0^{\circ}\text{F}$  in one hour or less.

4.4.2.2 Temperature settings verification. The ration-heating unit shall be filled with twelve rations, five No. 10 cans, and approximately 15 gallons of water at  $60^{\circ}\text{F} \pm 5^{\circ}\text{F}$ . Set the unit to the auto mode. Verify that the tank of water reaches  $190^{\circ}\text{F} \pm 10^{\circ}\text{F}$  in (1 hour or less). Cool unit down and remove water. Refill unit with  $60^{\circ}\text{F} \pm 5^{\circ}\text{F}$  water and verify the above in the boil mode.

4.4.2.3 Burner system verification. Verify that the burner is securely attached to one end of tank, but is capable of being removed and replaced without damage. Certify that the burner meets the requirement of UL Standard No. 296.

4.4.2.4 Burner fuel verification. Verify that the burner is self-priming and operates properly on diesel and JP8 fuels for one hour.

4.4.2.5 Electrical control box verification. Certify that the electrical control box is waterproof. Visually inspect the box for a pull-on/push-off switch, an auto and boil mode switch, and a power receptacle.

4.4.2.6 Voltage and current verification. The ration-heating unit shall be filled with 15 gallons of  $60^{\circ}\text{F} \pm 5^{\circ}\text{F}$  water and rations as specified in 4.4.2.1, connect to a 120 VAC, 50/60 Hz power source. Verify that the maximum current draw does not exceed 6 amps when started and operating.

4.4.2.7 Safety verification. Visually inspect the ration-heating unit and verify that it is free of burrs, nicks, sharp edges and any other conditions that may be hazardous to personnel. Verify that the unit is designed to meet the applicable requirements of NSF International Standard No. 4.

4.4.2.8 Low water level verification. Add 3 inches of water in the tank and attempt to start the burner. If the burner starts, it shall constitute a failure.

4.4.2.9 Electrical overload protection verification. Verify that the ration-heating unit is equipped with circuit breakers and that it is readily accessible for resetting, removal, or replacement.

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4.4.2.10 Tilt switch verification. The ration-heating unit shall be filled with 15 gallons of water. The unit shall be tilted side to side and front to back to 30 degrees from the vertical. If the burner does not turn off, this shall constitute a failure.

4.4.2.11 External temperature verification. Measure the temperature on the outside of the unit after operating at boiling for 1/2 hour. Four readings shall be made on the top, all handles, controls, and latches. Any reading exceeding 120°F shall constitute a failure.

4.4.2.12 Noise verification. While operating the ration-heating unit, measure sound levels at a 3 foot distance around the outside of the unit on all four sides and at the top. Any reading in excess of 78 dba shall constitute a failure, except at steam vent.

4.4.3 **Support or ownership requirements verification**. All verifications shall be performed in accordance with paragraph 4.4.3.1 through 4.4.3.12.

4.4.3.1 Weight verification. Verify that the dry weight of the empty ration-heating unit does not exceed 300 pounds.

4.4.3.2 Corrosion resistant material certification. Certify that the tank, tank lid, electrical control box, and removable ration racks are made from corrosion resistant material.

4.4.3.3 Tank design verification. Verify that the minimum inside dimensions of the tank are not less than 35-3/4 inches in length, 16-5/8 inches in width, and 14 inches in height, and that the unit contains rounded inside corners, a bottom drain valve, and a standard garden hose adapter. Verify the tank does not exceed the overall outside dimensions as specified in Drawing No. 5-13-6871. Conformance with design, materials and construction to NSF International Standards shall be by letter from independent testing laboratory acceptable to the Surgeon General, See TB MED 530 Chapter 4, section VI.

4.4.3.4 Ration-heating unit lid verification. Verify that the ration-heating unit lid contains a handle for opening, a locking mechanism for holding the lid open, a gasket, and two snap action locking clamps on the front of the tank connected to the lid to form a liquid-tight seal. Verify that the lid includes a means of venting the steam.

4.4.3.5 Hour meter verification. Verify that the ration-heating unit contains a visible non-resetting hour meter that logs the number of hours in tenths when the burner is operating.

4.4.3.6 Electrical wiring verification. Verify that all wiring is arranged, supported, and properly marked to allow identification with the wiring diagram.

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4.4.3.7 Maintainability/repairability verification. Demonstrate and verify that all components are accessible for ease of installation, adjustment, maintenance, and servicing and replacement without the removal of any other component and that only standard hand tools are necessary.

4.4.3.8 Identification marking and label verification. Verify that all identification information is included and that the corrosion resistant plate is permanently attached to the control box of the ration-heating unit.

4.4.3.9 Warning label verification. Verify that the warning label contains the required warning and is securely attached to a visible location at the burner closure box.

4.4.3.10 Instruction plate verification. Verify that all instructions are complete and accurate, and that the corrosion resistant plate is permanently attached, and readily visible to the operator.

4.4.3.11 Menu guidelines plate verification. Verify that heating times in both the boil and auto mode for the UGR-H&S menu items are complete and accurate, and that the corrosion resistant plate is permanently attached to the outside of the ration-heating unit lid visible to operator.

4.4.3.12 Welding verification. Verify that all welding is sound, smooth, and free from pits, flashes, fractures, burn through, or fissures. Verify that all scale, or flux are removed.

4.4.4 Environmental requirements verification. All verifications shall be performed in accordance with paragraphs 4.4.4.1 through 4.4.4.5.

4.4.4.1 Operating temperatures verification. The test procedure in 4.4.2.1 shall be followed except that the ambient air temperature shall be – 25°F and + 120°F. Operate for a minimum of one hour without failure.

4.4.4.2 Altitude verification. The ration-heating unit shall be subjected to an atmospheric pressure simulating an altitude of 8,000 feet above sea level. The unit shall start and operate without incident for one hour.

4.4.4.3 Rain verification. The ration-heating unit shall be tested in accordance with Method 506.4, Procedure I of MIL-STD-810 using a rainfall rate of 4 inches per hour and ambient water temperature. The unit shall be tested with the face of the control panel tilted 45° from the vertical. The test unit shall start and operate for 15 minutes without incident, after the rain test as specified in 4.4.2.1.

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4.4.4.4 Corrosion resistance verification. The ration-heating unit shall be tested for resistance to the effects of a salt fog atmosphere in accordance with Method 509.4 of MIL-STD-810, with the unit subjected to 24-hour period of salt fog exposure and 24-hour period drying conditions for two wet and two dry cycles. After completion of testing, visually inspect the unit to verify that there are no signs of corrosion, and will operate for 15 minutes without incident as specified in 4.4.2.1.

4.4.4.5 Vibration verification. The ration-heating unit shall be tested for vibration in accordance with Method 514.5, Procedure III of MIL-STD-810. The test procedures specified in 2.2.1, method b, shall be followed. After completion of testing, verify that the rations reach an internal serving temperature of 160°F +10°F, -0°F, in one hour or less as specified in 4.4.2.1.

4.4.5 **Interface and interoperability**. All verifications shall be performed in accordance with paragraphs 4.4.5.1 through 4.4.5.5.

4.4.5.1 Vehicle and fuel supply interface verification. Verify that the ration-heating unit properly interfaces with the five gallon fuel can and that the fuel adapter line hose is properly attached and vented from the fuel can to the burner.

4.4.5.2 Fuel line verification. Verify the supply and return fuel lines interface with the ration-heating unit, and the fuel adapter line hose. Verify the fuel lines are the proper lengths as specified in Drawing No. 5-13-6871.

4.4.5.3 Skids, and skid rings verification. Verify that the bottom of the ration-heating unit contains skids curved at each end along both sides, and a skid ring at each lower corner. Verify that the skids are not more than two inches wide, and measure 18 inches, center-to-center, between skids.

4.4.5.4 Ration racks verification. Verify that each ration-heating unit contains the number of racks as specified in the contract, and that the racks are in accordance with Drawing No.5-13-6867.

4.4.5.5 Power cord verification. Verify the power cord interfaces with the ration-heating unit, and is the proper power rating.

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## 5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or purchase order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

## 6. NOTES.

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory).

6.1 Intended use. The ration-heating unit is intended for use by field troops to heat rations and No. 10 cans to serving temperatures. The unit can be operated from the back of the HMMWV through the use of a power inverter as specified in Drawing 5-13-6871, which converts vehicular 24 VDC to 120 VAC, 60 Hz, or when used off the vehicle, can be plugged into any 120 VAC, 60 Hz source.

6.2 Acquisition requirements. Acquisition documents shall specify the following:

- a. Title, number, and date of this specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2.2 and 2.3).
- c. When a first article is required (see 3.1, 4.1.1, and 6.3).
- d. The number and type of ration racks to be furnished with each ration-heating unit (see 3.5.4, and 4.4.5.4).
- e. When a technical manual is required (see 6.5).
- f. Sampling plan for conformance inspection (see 4.3).
- g. Packaging requirements (see 5.1).
- h. Length of exhaust hose required (see Drawing No. 5-13-6871).
- i. Length of fuel line required (see Drawing No. 5-13-6871).

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6.3 First article. When requiring a first article inspection, contracting documents should provide specific guidance to offerors. This guidance should cover whether the first article is a first article sample, a first production item, or the number of test items. These documents should also include specific instructions regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Pre-solicitation documents should provide Government waiver rights for samples for first article inspection to bidders offering a previously-acquired or tested product. Bidders offering such products who wish to rely on such production testing must furnish evidence with the bid that prior Government approval is appropriate for the pending contract.

6.4 Verification alternatives. Contracting documents should provide guidance to offerors regarding the submission of alternatives to specified verification methods (see 4.4.1).

6.5 Technical manuals. The requirement for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, specifications and standards that have been cleared and listed in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMS DL) must be listed on a separate Contract Data Requirements List (DD Form 1423), which is included as an exhibit to the contract. The technical manuals must be acquired under a separate contract line item in the contract.

6.6 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided the material meets or exceeds all specified requirements and promotes economically advantageous life cycle cost.

6.7 Subject term (key word) listing.

Cans, No. 10  
Diesel fuel  
HMMWV  
Tray packs

Custodians:  
Army – GL  
Navy – MC  
Air Force – 99

Review activities:  
Army – MD1, QM1  
Air Force – 84  
DLA – IS

Preparing activity:

Army – GL

(Project 7310 – 0941)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

## INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

**I RECOMMEND A CHANGE:**

**1. DOCUMENT NUMBER**  
MIL-PRF-32046

**2. DOCUMENT DATE (YYYYMMDD)**  
20030701

**3. DOCUMENT TITLE**  
RATION HEATING UNIT, FIELD FEEDING

**4. NATURE OF CHANGE** (*Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.*)

**5. REASON FOR RECOMMENDATION**

## 6. SUBMITTER

a. NAME (*Last, First, Middle Initial*)

b. ORGANIZATION

c. ADDRESS (*Include ZIP Code*)

d. TELEPHONE (*Include Area Code*)  
(1) Commercial  
(2) DSN  
(*If applicable*)

**7. DATE SUBMITTED**  
(YYYYMMDD)

## 8. PREPARING ACTIVITY

a. NAME  
Mr. Anthony Cellucci

b. TELEPHONE (*Include Area Code*)  
(1) Commercial 508-233-4335 (2) DSN 256-4335

c. ADDRESS (*Include ZIP Code*)  
U.S. Army Natick Soldier Center  
Systems & Equipment Engineering Team  
Natick, MA 01760

**IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:**  
Defense Standardization Program Office (DLSC-LM)  
8725 John J. Kingman Road, Suite 2533  
Fort Belvoir, Virginia 22060-6221  
Telephone (703) 767-6888 DSN 427-6888