# INCH-POUND

A-A-59103 <u>9 June 97</u> SUPERSEDING MIL-T-83018E 13 November 87

# COMMERCIAL ITEM DESCRIPTION

## TRUCK, TANK A/S32A-24, POTABLE WATER

1. SCOPE. This commercial item description covers the general requirements for a 250-gallon tank truck capable of handling individually 250 gallons of potable water, demineralized water, or water/alcohol mixtures.

## 2. SALIENT CHARACTERISTICS.

2.1 <u>Safety</u>. The truck shall comply with all applicable requirements of the Federal Motor Carrier Safety Regulations (49CFR 393), Federal Motor Vehicles Safety Standards (49CFR 571), and OSHA standards in effect at the time of manufacture. The principle platform walking surfaces shall be of an anti-skid type.

2.2. <u>Design and construction</u>. The vehicle shall be designed to comply with all applicable requirements of SAE APR 1247 and shall have a 10 year minimum life expectancy.

2.3 <u>Maintainability</u>. All assemblies, controls, and installed equipment shall be located so that there is no adverse interference with each other or the operation, and shall be readily accessible for maintenance, operation, removal, and replacement using common hand tools. All operating controls and servicing shall be so designed to allow access by personnel wearing arctic winter clothing.

2.4 <u>Environmental requirements</u>. The vehicle shall be capable of satisfactory storage, start and operation under the following environmental conditions with truck stabilized at:

- a. Temperatures ranging from -40 degrees F to +125 degrees F.
- b. Exposure to relative humidity up to 100 percent.
- c. Exposure to salt fog.
- d. Exposure to sand and dust particles as encountered in desert areas.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use improving this document should be addressed to: WR-ALC/LVR, 225 Ocmulgee Court, Robins AFB GA 31098-1647, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

## AMSC N/A

FSC 2320

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2.5 <u>Air Transportability</u>. The vehicle shall be air transportable in C-130, C-141, C-17 and C-5 aircraft using AFSC Design Handbook DH 1-11 as guidance.. Removal of mechanically attached (non-welded, non-riveted, etc.) components shall be acceptable, if necessary, to meet the required height for air transport. Removal and reinstallation of equipment shall take no longer than 15 minutes for two mechanics using common hand tools. The self-mobility of the vehicle shall not be affected by the removal of these components.

2.5.1 <u>Tiedowns</u>. Tiedowns for the truck and removed or relocated equipment shall be furnished. Removal, tiedown and installation instructions shall be described in the technical manual(s) delivered.

2.5.2 <u>Transportation Data Plate</u>. A transportation data plate shall be provided and contain at least the following information:

- a. Side and rear silhouette views of the vehicle.
- b. Horizontal and vertical location of the center-of-gravity of the vehicle in transport configuration.
- c. Shipping weight.
- d. Loading (cube capacity)
- e. Overall length, width and height.
- f. Tiedown instruction.

2.5.3 <u>Overall Dimensions</u>. The overall width of the truck shall not exceed 96 inches. The overall height of the truck shall not exceed 85 inches in the empty condition. The overall length of the truck shall not exceed 18 feet.

2.6 <u>Engine</u>. The engine shall be a standard commercial diesel capable of providing the performance specified herein when operating on diesel fuel and turbine fuel conforming to MIL-T-83133.

2.7 <u>Transmission</u>. The transmission shall be automatic.

2.8 <u>Lubrication</u>. Lubrication means shall be provided for all moving parts that require periodic lubrication. The types of lubricants shall be selected from and in accordance with SAE J754. Grease lubrication fittings shall conform to SAE J534.

2.9 <u>Fluid level indicator</u>. All fluid level indicators shall be located where they are readily accessible without danger of burns or injury to the operator.

2.10 <u>Battery</u>. The battery shall have adequate capacity to provide not less than 8.0 hours of continuous operation under normal industrial use. The battery mounted half connector shall be the "SB" type.

2.11 <u>Ammeter</u>. An ammeter shall be provided within view of the operator.

2.12 <u>Steering</u>. Power steering shall be furnished.

2.13 Service brakes. Service brakes conforming to ASME/ANSI B56.1 shall be furnished.

2.14 <u>Parking brake</u>. Parking brake shall conform to ASME/ANSI B56.1.

2.15 <u>Tires.</u> Tire loading shall not exceed those specified in the Tire and Rim Association Yearbook.

2.16 <u>Tank.</u> The tank shall be a minimum of 250 gallon liquid capacity, plus at least 10 percent expansion space and accommodate baffles, if required, without reduction of stated minimum liquid capacity. The tank and all of its components which come into contact with water shall be fabricated of 300 series stainless steel. A manhole of no less than 20 inches in diameter shall be provided to allow the entry of personnel within the tank for cleaning and/or inspection.

2.17 <u>Elastomers.</u> Elastomeric materials used in the tank, pumping system and all components which come into contact with water shall be compatible with potable water, de-mineralized water, water/alcohol mixtures and 50/50 mixture of propylene glycol (uninhibited) antifreeze and de-mineralized water.

2.18 <u>Access Plates</u>. Access plates shall be provided to allow for maintenance and inspection of the tank.

2.19 <u>Drain</u>. A drain valve shall be installed to permit complete drainage. The operation of the drain valve shall not require the operator to go beneath the truck.

2.20 <u>Pumping System</u>. The pumping system shall include the tank to pump suction line, pump, tank return line, filter, positive displacement meter, hose reel, a minimum of 25 feet of servicing hose, nozzle, valves, control panel, associated plumbing and minor components. All pumping system components which come into contact with water shall be compatible with potable water. The pumping system shall deliver a minimum of 20 GPM at a maximum of 40 PSI when nozzle is at least 35 feet above pumping compartment floor. The nozzle squeeze control valve shall be capable of throttling the liquid from 0 GPM to 20 GPM without adjustment of the pumping system.

2.20.1 <u>Pumping Compartment</u>. The pumping system shall be housed in a completely enclosed compartment. The pumping controls, servicing hose and nozzle storage box shall be accessible for normal operation.

2.21 <u>Night Servicing Lights</u>. The truck shall be provided with at least two adjustable lights to facilitate servicing in the darkness. The pump compartment shall be illuminated for night operation.

2.22 <u>Controls and instrumentation markings</u>. All controls and instrumentation shall be provided with position markings conforming to ANSI B56.11.3.

2.22.1 <u>Operating Instructions</u>. Brief operating and precautionary instructions shall be permanently affixed near the appropriate controls. The instructions shall be clear, concise and adequate to enable operation of the vehicle without damage to the equipment or injury to personnel and shall refer to the components as identified by nameplates.

2.23 <u>Painting</u>. The truck shall be primed and painted using standard commercial practices and color specified as required.

2.24 <u>Rear Bumper</u>. The rear of the vehicle shall be protected in accordance with Federal Motor Carrier Safety Regulation 393.86. A rear bumper shall be furnished.

2.25 <u>Acoustic Noise Levels</u>. The maximum A-weighted sound level produced by the vehicle during operations shall not exceed 83dba.

2.26 Electromagnetic interference (EMI). The truck shall comply with the EMI requirements of SAE J551.

2.27 Optional Winterization Kits.

2.27.1 <u>Truck Winterization</u>. When specified, a standby type winterization kit designed to operate from an external 110 volt AC power source shall be provided for the truck. The kit shall include at least immersion type heaters for the engine coolant, oil pan and transmission, as well as battery box heater. The winterization kit shall be adequate for operation at -40 degrees F.

2.27.2 <u>Potable Water Tank and Pump Compartment Winterization</u>. When specified, the cargo tank and pump compartment shall incorporate a standby type winterization kit designed to operate from an external 110 volt AC power source. The heater in the cargo tank shall be controlled to limit the maximum water temperature to +60 degrees F. The heater in the pumping compartment shall be controlled to limit the maximum air temperature to +150 degrees F.

2.28 <u>Identification plate</u>. A stainless steel identification plate shall be permanently installed at an easily accessible location. It shall contain the following information:

NOMENCLATURE: MANUFACTURER'S NAME: MANUFACTURER'S ADDRESS: MANUFACTURER'S SERVICE PHONE NUMBER: MANUFACTURER'S MODEL NUMBER: MANUFACTURER'S SERIAL NUMBER: DATE OF MANUFACTURE: CONTRACT NUMBER: NATIONAL STOCK NUMBER: REGISTRATION NUMBER: US PROPERTY

3. REGULATORY REQUIREMENTS.

3.1 The contractor is encouraged to use recovered materials to the maximum extent possible. However, used, rebuilt, or remanufactured components, pieces, and parts shall not be incorporated in the truck.

# 4. QUALITY ASSURANCE PROVISIONS.

4.1 <u>Product Conformance</u>. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

4.2 <u>Market Acceptability</u>. The following market acceptability criteria are necessary to document the quality of the product to be provided under this CID.

4.2.1 <u>Commercial</u>. The vehicle furnished shall be, as of the date of award, the latest model (with minor modifications, as that term is defined in DoD FAR Supplement 252.211-7012, Paragraph K-85 of the solicitation) of an established product previously produced and sold in substantial commercial quantities [exceeding the criteria at FAR 15.804-3(f)(2)(ii)(A)] for at least three years. The vehicle furnished, or earlier models of it, absent minor modifications, shall have routinely been supported with spare/repair parts which were produced or sold in the normal course of business. At the time of delivery, the contractor shall furnish the Administrative Contracting Officer with verification of compliance with these requirements. Offers shall provide, as part of their proposals, the following information on the vehicle (or its earlier models) being offered as a commercial item:

- (1) Total sales to the U.S. Government or to contractors for U.S. Government use during the three years.
- (2) Total sale of the item to the general public during the three years.
- (3) Length of time the item has been sold in the commercial market place.
- (4) Other pertinent information necessary to determine that the item is an established commercial item.

#### 5. PACKAGING.

5.1 Unless otherwise specified in the contract, the truck shall be preserved in accordance with the contractor's commercial practice, and shall be packaged to assure acceptance by common carrier and provide protection against loss and damage while in transit.

#### 6. NOTES.

6.1 The purchaser shall specify the following at time of purchase:

- (a) If a winterization system is required.
- (b) If air conditioning is required.
- (c) Color of the truck

6.2 Source of documents Source of Documents.

6.2.1 ASME/ANSI documents may be obtained from American Society of Mechanical Engineers, 345 East 47th St., New York NY 10017.

6.2.2 SAE documents may be obtained from Society of Automotive Engineers, Inc, 400 Commonwealth Drive, Warrendale PA 15096.

6.2.3 Copies of Military Specifications are available from the Standardization Document Order Desk, 700 Robbins Avenue, Bldg 4D, Philadelphia, Pa 19111-5094.

## MILITARY INTERESTS:

CUSTODIANS: Air Force - 99 CIVIL AGENCY COORDINATING ACTIVITY: GSA-FSS

PREPARING ACTIVITY: Air Force: 84

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	ced document(s) or to amend contractual re 1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
I RECOMMEND A CHANGE:	A-A-59103	97/06/09
<ol> <li>DOCUMENT TITLE TRUCK, TANK A/S32A-24, POTABLI</li> </ol>	ε ωλτερ	
4. NATURE OF CHANGE (Identify paragraph	number and include proposed rewrite, if possible. Attac	ch 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 (Incl. (1) Commercial (2) AUTOVON (If applicable)	ude Area Code) e. DATE SUBMITTED (YYMMDD)
8. PREPARING ACTIVITY		
a. NAME WR-ALC/LVR	b. TELEPHONE (Include (1) Commercial (912) 926-1	(2) AUTOVON
c. ADDRESS (Include Zip Code) 225 OCMULGEE COURT ROBBINS AFB, GA 31098-1647	Defense Quality an 5203 Leesburg Pik	EIVE A REPLY WITHIN 45 DAYS, CONTACT: ad Standardization Office e, Suite 1403, Falls Church, VA 22041-3466 56-2340 AUTOVON 289-2340

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