INCH POUND

MIL-C-53109
29 November 1990

MILITARY SPECIFICATION

CAN, FUEL, MILITARY: PLASTIC, 5-GALLON CAPACITY

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

1. SCOPE

1.1 Scope. This document covers a 5-gallon capacity, rectangular, plastic military fuel can, with three carrying handles.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 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 supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

NN-P-71	-	Pallets, Material Handling, Wood, Stringer Construction, 2-Way, and 4-Way (Partial).
PPP-F-320	-	Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade) and Cut Shapes.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: USA Belvoir Research, Development and Engineering Center, ATTN: STRBE-TSE, Fort Belvoir, VA 22060-5606, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 7240

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MILITARY

MIL-S-1285	-	Spout, Can, Flexible.
MIL-G-3056	-	Gasoline, Automotive, Combat.

STANDARDS

FEDERAL

FED-STD-595	-	Colors.

MILITARY

MIL-STD-105	-	Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129	-	Marking for Shipment and Storage.
MIL-STD-147	-	Palletized Unit Loads.

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

ME

TA13228E3325	-	Can, Fuel, Military: Plastic, 5-Gallon Capacity.

(Copies of drawings required by contractors in connection with specific acquisition functions should be obtained from the USA Belvoir Research, Development, and Engineering Center, ATTN: STRBE-FSH, Fort Belvoir, VA 22060-5606.)

UNITED NATIONS (UN)

Recommendations on the Transport of Dangerous Goods
ST/SG/AC.10/1

(Application for copies should be addressed to the United Nations Sales Section, 866 United Nations Plaza, New York, NY 10017).

2.2 Non-Government publications. The following documents form a part of this document 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).

AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)

ASTM F 852 - Portable Gasoline Containers for Consumer use.
ASTM D 3953 - Strapping, Flat Steel and Seals.
ASTM D 4675 - Selection and Use of Flat Strapping Materials.
ASTM D 4919 - Testing of Hazardous Materials Packagings.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

Technical Instructions for the Safe Transport of
Dangerous Goods by Air - #9284

(Application for copies should be addressed to the American Label Mark Co., Label Master Division, 5724 N. Pulaski Road, Chicago, IL 60646.)

INTERNATIONAL MARITIME ORGANIZATION (IMO)

International Maritime Dangerous Goods Codes

(Application for copies should be addressed to the American Label Mark Co., Label Master Division, 5724 N. Pulaski Road, Chicago, IL 60646.)

(Non-Government standards and other publications are normally available from these organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated detail specifications, specification sheets, or MS standards), 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 Description. The 5-gallon plastic fuel can, hereinafter referred to as "fuel can," shall be in accordance with TA13228E3325, and as specified herein.

3.2 Drawings. The drawings forming a part of this specification are end product drawings. No deviation from the prescribed dimensions or tolerances is permissible without prior approval of the contracting officer. Any data (e.g., shop drawings, layouts, flowsheets, processing procedures, etc.) prepared by the contractor or obtained from a vendor to support fabrication and manufacture of the production item shall be made available upon request, for inspection by the contracting officer or the designated representative.

3.3 First article. Unless otherwise specified (see 6.2), samples shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

3.3.1 Hazardous materials packaging requirements. The fuel can shall meet all requirements, as applicable, for packagings of the UN Recommendations on the Transport of Dangerous Goods, as implemented by the IMO and the ICAO regulations and requirements (see 4.3.2). Each fuel can shall be marked in accordance with the IMO and ICAO regulations and as specified on the drawings to indicate that the fuel can corresponds to a successfully tested design type and that it complies with the requirements for packagings of the United Nations Recommendations on the Transport of Dangerous Goods.

3.4 Material. Material shall be as specified herein and on the applicable drawings. The body, cap and retaining strap materials shall contain an ultraviolet degradation inhibitor and shall show no signs of deterioration or degradation after testing as specified in 4.6.1.8. A certificate of compliance shall be made available, stating that the materials with the light stabilizer used on the complete body, cap and retaining strap meet the test requirements of 4.6.1.8. Clean, unburned, plastic material in the form of imperfect parts, sprues, runners, or other scrap of the same composition as the virgin materials, and produced in the molding or finishing operation, may be reground and mixed with the virgin material.

3.5 Design and construction. The design and construction of the fuel can shall be as shown on the drawings in 2.1 and as specified herein. Except as specified herein and on the drawings, the fuel can shall conform to ASTM F 852. The fuel can stability shall be so it will not upset when placed facing in any direction on a plane inclined at 12 degrees with the horizontal. Silicone-type mold release agents shall not be used with polyethylene. Mold release agents which are not active stress-cracking agents for polyethylene shall be used. A certificate of compliance shall be made available, stating that the mold release agents comply with the requirements (see 4.5). The male and female threads shall be fully formed and free from thread misalignment at the parting line. The body and handles shall be fabricated as specified herein and on the drawings, and shall consist of a bottom, four sides, and a top with three handles and a body neck, and shall be formed by a process to give the fuel can a one piece construction. The body wall thickness shall be as specified on the drawings and shall not crack or break when tested as specified in 4.6.1.4 through 4.6.1.7. The interior surface of the can shall be smooth. The interior rounded surface area where the body and the neck join shall have a uniform texture having no rough areas, surface abnormalities, surface deformations, or surface irregularities. The finished fuel can shall not leak when tested as specified in 4.6.1.2, 4.6.1.4, 4.6.1.5, 4.6.1.6 and 4.6.1.7. The fuel can shall be compatible with a standard military spout assembly conforming to MIL-S-1285 and shall not leak when tested as specified in 4.6.1.3.

3.6 Capacity. The nominal capacity of the fuel can shall be five gallons. There shall be no overflow of fuel from the spout when five gallons of fuel are poured or pumped into the fuel can when it is standing in its normal upright position on a flat horizontal surface. Total capacity shall be not less than five percent greater than the nominal capacity.

3.7 Color. The through color of the material for the body, cap, cap flange, and cap retaining strap shall approximate color No. 30279 (sand, lusterless) or color No. 33105 (Forest Drab) of FED-STD-595, as specified in the contract or purchase order (see 6.2).

3.8 Finish. The exterior surfaces of the fuel can, cap and strap assemblies shall have a smooth and lusterless finish throughout. All surfaces shall be free of dirt, dust, and foreign matter inclusion. The finish shall be produced from a die that has cavity surfaces finished in vapor blast, water hone, or similar satin finish, but not by the application of any protective coating, lacquers, or other materials.

3.9 Marking. The fuel can shall be marked as specified on the drawings.

3.10 Workmanship. The fuel can shall be clean and free from flash, bubbles, cuts, tears, holes, burns, breaks, cracks, pinholes, pits, warpage, blisters, and scratches. The fuel can shall show no sign of discoloration, surface deterioration, roughness, orange peel, or grease.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification, where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operation, is an acceptable practice to ascertain conformance to requirements; however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

4.1.2 Component and material inspection. The contractor is responsible for ensuring that components and materials used are manufactured, examined, and tested in accordance with referenced specifications and standards, as applicable.

4.1.3 Dimensional requirements. The contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points necessary in the manufacturing process, to ensure compliance with all dimensional requirements.

4.2 Classification of inspections. The inspections specified herein are classified as follows:

a. First article inspection (see 4.3).
b. Quality conformance inspection (see 4.4).
c. Inspection comparison (see 4.9).
d. Monthly production inspection (see 4.10).
e. Inspection of packaging (see 4.11).

4.3 First article inspection.

4.3.1 First article examination. The first article fuel cans shall be examined as specified in table I, as applicable. Presence of one or more defects shall be cause for rejection.

4.3.2 First article tests. The first article fuel cans shall be tested as specified in 4.6.1.2 through 4.6.1.8. To ensure compliance to United Nations standards for packagings for transportation of hazardous materials (see 3.3.1), additional fuel cans shall be selected in accordance with and tested as specified in 4.7. Failure of any test specified in 4.6.1.2 through 4.6.1.8 and in 4.7 shall be cause for rejection.

4.4 Quality conformance inspection.

4.4.1 Sampling. Sampling for examination shall be in accordance with MIL-STD-105, general inspection level I. Sample size shall be determined by using MIL-STD-105, table I and table IIa.

4.4.2 Examination. Samples shall be selected as specified in 4.4.1 and examined for the defects specified in table I. Presence of one or more defects shall be cause for rejection of the lot.

4.4.3 Tests. Samples shall be selected as specified in 4.4.1 and tested as specified in 4.8.

4.4.4 Component and material inspection. In accordance with 4.1.2, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this document or applicable purchase document.

TABLE I. Classification of visual defects.

Examine	Defect	Classification	Requirement paragraph
		Major	
Finish	Color not as specified.	101	3.7
	Exterior surface of body, cap, or strap not smooth and not lusterless throughout (except any die parting lines).	102	3.8
	All surfaces not free of dirt, dust, and foreign matter inclusion.	103	3.8
Construction and workmanship (applicable to all assemblies and components)	Construction not as specified.	104	3.5
	Components missing.	105	3.1
	Any flash, bubbles, cuts, tears, holes, burns, breaks, cracks, pinholes, pits, warpage, or scratches.	106	3.10
	Any discoloration, surface deterioration, roughness, orange peel, or grease.	107	3.10
Body	Body, handles, and body neck not one piece construction.	108	3.5
	Body wall thickness not as specified.	109	3.5
	Interior surface where body and neck join not smooth.	110	3.5
	Interior surface of the body not smooth.	111	3.5
	Capacity of can not as specified.	112	3.6
Threads	Threads not fully formed or misaligned at parting line.	113	3.5
Marking	Missing, incomplete, not legible, not specified type or size, or not in proper location.	114	3.9

4.5 Certification examination. Certification of compliance, certified test reports, approval labels or listing marks for codes and standards, as applicable, that are submitted as proof of compliance with the document requirements, shall be examined and validated for mold release agents and light stabilizers (see 3.4 and 3.5).

4.6.1 Tests.

4.6.1.1 Conditioning. Prior to being tested, the test fuel cans shall be conditioned at least six hours at a temperature between the range of 70 °F and 85 °F. When required for the test, the screw cap shall be secured to the body of the can with a torque of 125 in-lb.

4.6.1.2 Body and closure leakage (high temperature). One test fuel can shall be filled to its nominal capacity with gasoline, type I of MIL-G-3056, at 70 °F or less and its cap secured. The filled fuel can shall then be conditioned at a temperature of 140 °F for two hours, causing a pressure condition inside the fuel can, resulting from vaporization of the fuel. During the first hour, the fuel can shall be inverted, closure down, and then closure up for the second hour. The fuel can shall be closely observed during the two-hour test period. Any leakage from the fuel can body or closure shall constitute failure.

4.6.1.2.1 Body and closure leakage (low temperature). One test fuel can shall be prepared for test as specified in 4.6.1.2, except that the filled can shall be conditioned at a temperature of -25 °F, ±5 °F, for a period of 24 hours. During the first 12 hours, the fuel can shall be inverted, closure down, and then closure up for the remaining 12 hours. The fuel can shall be closely observed during the 24-hour test period. Any leakage from the fuel can body or closure shall constitute failure.

4.6.1.3 Spout assembly. Compatibility between the fuel can and a military spout assembly conforming to MIL-S-1285 shall be determined. One test fuel can shall be filled to its nominal capacity with gasoline and the spout assembly inserted and secured. All gasoline shall be poured from the container through the spout assembly to another container and observed for leakage. Any evidence of leakage at the point of connection of spout assembly to container shall constitute failure.

4.6.1.4 Handle Strength. One test fuel can shall be filled to its nominal capacity with water and the closure secured. One end of a .375-inch manila rope shall be secured to a rigid point of suspension. The other end of the rope shall be attached to the balance point of one of the can's handles, leaving a minimum of 18 inches slack. The fuel can shall be suspended from this rope for one minute. It shall then be raised 24 inches from the suspended position and allowed to fall freely. Each of the three handles shall be individually tested three times, for a total of nine drops. Following the final drops, the can shall be inverted for five minutes. Any damage of or leakage from the handles or inability to serve their intended purpose shall constitute failure of this test.

4.6.1.5 Drop strength. One test fuel can shall be filled to its nominal capacity with water at 73 °F ±5 °F and the closure secured. It shall then be dropped, free fall, onto a level, solid, rigid surface, such as reinforced concrete. Drops shall be made in the following sequence: one drop on the bottom; one drop on a bottom corner; one drop on a side; and two drops on the closure; for a total of five drops. The distance of each fall shall be 8 feet. Following the drops on the closure, the can shall be inverted for 5 minutes and the closure and can observed for leakage. Any evidence of leakage, cracking, breaking or disassembly shall constitute failure of this test.

4.6.1.5.1 Drop strength (low temperature). One test fuel can shall undergo further drop testing. It shall be filled to its nominal capacity with glycol at 73 °F ±5 °F and its closure secured. After being subjected to an environment of -40 degrees for a period of 6 hours, the series of drops specified in 4.6.1.5 shall be repeated. This series of drops shall be completed within 5 minutes of removal of the container from the -40 °F environment. For these latter tests, the distance of fall shall be 4 feet. Following the drops on the closure, the fuel can shall be inverted for 5 minutes. Any evidence of leakage, cracking, breaking, or disassembly shall constitute failure of this test.

4.6.1.6 Hydrostatic pressure. One test fuel can shall be filled to its nominal capacity with water at 75 °F ±5 °F and the closure secured. The can shall be pressurized through an adapter installed in a hole drilled through a flat, heavy section of the can wall, or the closure, and not on a pinch-off or parting line. The internal pressure shall be increased uniformly to 30 psi over a period of 60 seconds and maintained for 1 hour. Rupture of the can or leakage from the can body shall constitute failure. Any leakage from the closure shall also constitute failure.

4.6.1.6.1 Hydrostatic pressure. Subject the same can that passed 4.6.1.6 to a hydrostatic pressure of 60 psi and release. Examine the can for structural failure. Any evidence of leakage, rupture or cracking shall constitute failure of this test.

4.6.1.6.2 Hydrostatic pressure. Subject another test fuel can to an internal air pressure of 15 psi. Place the pressurized container under water for 5 minutes. Any evidence of leakage, rupture or cracking shall constitute failure of this test.

4.6.1.7 Penetration resistance. An 8-ounce hardened steel plumb bob with a point having an inclined angle of 36 degrees and a point radius of 0.025-inch maximum shall be dropped squarely onto any flat area of one empty test can. The distance of the fall, measured from the tip of the plumb bob to the top surface of the can, shall be 24 inches. The test shall be repeated on the top, sides, and bottom of the can. Following these penetration tests, the can shall be checked under water with an internal air pressure of 5 psig. Any evidence of leakage of air from the cans shall be considered as failure of this test.

4.6.1.8 Light stabilizer for materials used in the body and complete cap. Plastic samples (compression molded plaques) of the body, cap and retaining strap materials shall be exposed to a 6,000 watt Xenon or Carbon Arc Weatherometer for 720 hours. There shall be four one-half hour moisture cycles a day. At the completion of the tests, inspect each sample 7X magnification. Failure is any cracking, deterioration or degradation.

4.7 Performance oriented packaging tests. Hazardous materials package testing shall be conducted in accordance with the requirements of the UN Recommendations on the Transport of Dangerous Goods, as implemented by the IMO and ICAO regulations (see 4.3.2). Fuel cans shall be selected and tested as specified in ASTM D 4919. The contractor may use and report any of the first article tests specified herein which are equal to or exceed the ASTM D 4919 requirements, where duplication of performance testing exists between this specification and ASTM D 4919, in lieu of performing all the applicable tests specified in ASTM D 4919. Conditions of failure shall be as specified in ASTM D 4919. If the contractor does not have certification-granting authority to conduct and certify the performance oriented packaging testing, he shall ensure that all testing is conducted by an independent, third party test laboratory authorized by either the U.S. Department of Transportation or another competent authority to conduct and certify the packaging testing.

4.8 Non-destructive hydrostatic test. Subject the test fuel cans to an internal air pressure of 10 psi through an adapter inserted into the threaded spout. Place the pressurized container under water and allow 2 minutes, minimum, for the water to stabilize and clarify prior to performing the inspection. At the end of the stabilization period, wipe all surfaces clear of clinging bubbles and perform the inspection. Any air bubbles leaking from the can shall constitute failure of this test.

4.9 Inspection comparison. The Government may select fuel cans at any time during the contract period and subject these fuel cans to any of the inspections specified in 4.3. The inspection will be performed by the Government, at a site selected by the Government, on fuel cans selected at random from those which have been accepted by the Government and will not include any previously inspected first article fuel cans.

4.9.1 Inspection failure. Failure of inspection comparison fuel cans to meet any requirement specified herein during and as a result of the examination and tests specified in 4.4 shall be cause for rejection of the inspection comparison fuel cans and shall be cause for refusal by the Government to continue acceptance of production fuel cans until evidence has been provided by the contractor that corrective action has been taken to eliminate the deficiencies. Correction of such deficiencies shall be accomplished by the contractor at no cost to the Government on fuel cans previously accepted and produced under the contract. Any deficiencies found as a result of the inspection comparison will be considered prima facie evidence that all fuel cans accepted prior to the completion of the inspection comparison are similarly deficient, unless evidence to the contrary is furnished by the contractor and such evidence is acceptable to the contracting officer.

4.10 Monthly production inspection. In addition to the quality conformance inspection, six fuel cans shall be selected and tested, two per test, in accordance with 4.6.1.4, 4.6.1.5, and 4.6.1.6 on a monthly basis. Failure of one or more tests shall be cause for rejection of any future lots presented for acceptance until failure analysis and corrective action have been taken by the contractor.

4.11 Inspection of packaging.

4.11.1 Examination of first article pack. The first article pack shall be examined for the defects specified in 4.11.2.3. Presence of one or more defects shall be cause for rejection.

4.11.2 Quality conformance inspection of packaging.

4.11.2.1 Unit of product. For the purpose of inspection, a complete pack prepared for shipment shall be considered a unit of product.

4.11.2.2. Sampling. Sampling for examination shall be in accordance with MIL-STD-105.

4.11.2.3. Examination. Samples selected in accordance with 4.11.2.2 shall be examined for the following defects:

113.	Preservation not as specified (see 5.2).
114.	Number of fuel cans per bundle is more or less than required (see 5.3.1).
115.	Pallet length, width, or height exceeds specified maximum requirement (see 5.3.1.1).
116.	Pallet pattern not as specified (see 5.3.1.1).
117.	Load not bonded with required straps specified (see 5.3.1.1).
118.	Strapping not as specified (see 5.3.1.1).
119.	Marking omitted, incorrect, illegible, or improper size or location (see 5.4).

5. PACKAGING

5.1 First article pack. The contractor shall furnish a first article pack within the time frame specified (see 6.2) to prove, prior to starting production packaging, that the applied packing, palletization, and marking comply with the packaging requirement of this specification. Examination shall be as specified in section 4 and shall be subject to surveillance and approval by the Government (see 6.5).

5.2 Preservation (see 6.6). Each can shall be completely drained and dried, and the cap replaced.

5.3 Packing. Packing shall be level A or level C, as specified (see 6.2).

5.3.1 Level A. Seven fuel cans shall be strapped in a bundle as shown on figure 1, then palletized in accordance with 5.3.1.1.

5.3.1.1 Palletization. Six bundles (42 cans) packed as specified in 5.3.1 shall be positioned three bundles to a course and two courses high on a pallet conforming to NN-P-71, type IV. The method of palletization shall be in accordance with MIL-STD-147, load type VIII, without the horizontal separator. A fiberboard cap fabricated from material conforming to PPP-F-320, V2s shall be provided. Securing shall be by bonding methods C and D of MIL-STD-147, using strapping conforming to ASTM D 3953, type 1 or 2, grade 1 or 2 and ASTM D 4675, size 0.50 inch X 0.020 inch.

5.3.2 Level C. Seven fuel cans shall be packed as specified for level A, except the strapping may be zinc coated and the fiberboard shall be class domestic.

5.4 Marking. In addition to any special marking required by the contract or purchase order (see 6.2), palletized unit loads shall be marked in accordance with MIL-STD-129.

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 fuel can is intended for use in transporting liquid fuels by commercial common carriers, military motor vehicles, aircraft, and vessel transportation, and for storage of and dispensing of liquid fuels.

6.2 Ordering data. Acquisition documents should specify the following:

a. Title 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 2.1.1 and 2.2).
c. When a first article is not required (see 3.3).
d. Time frame for submission and number of first articles required when other than specified (see 3.3).
e. When the Government will conduct any or all of the first article examination and tests (except for the performance oriented packaging tests which should be conducted by the contractor), the contracting officer should specify which examinations and tests will be conducted by the Government and which examinations and tests shall be conducted by the contractor (see 3.3).
f. Color of fuel can (see 3.7).
g. Time frame for submission of performance oriented packaging test report (see 4.7).
h. Level of packing required (see 5.3).
i. Time frame for submission of the first article pack (see 5.1).
j. Any special marking (see 5.4).

6.2.1 Consideration of data requirements. The following data requirements must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this specification is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423. Deliverable data required by this specification is not intended to replace first article test reports normally required by procuring agencies; rather, it is a supplement thereto and is required to ensure contractor conformance with United Nations standards for packagings for transportation of hazardous materials.

Reference Paragraph	DID Number	DID Title
a. 3.3.1	DI-T-1909	Test and Demonstration Report

The above DIDs were those cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

6.2.2 Performance oriented packaging tests. The contracting officer should require the contractor to support performance test requirements by certificates and reports of testing to the date and data results obtained from the performance oriented testing. Results of these tests shall be documented in a test report in accordance with DID DI-T-1909 and submitted with the certificates to the procuring agency for review and acceptance (see 6.2.1).

6.3 First article. When a first article inspection is required, the items should be a preproduction model. The first article should consist of nine fuel cans for the examination and tests specified herein and additional fuel cans selected and tested in accordance with the performance oriented packaging tests specified in ASTM D 4919. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, tests, approval of the first article test results, and disposition of the first article. Invitation for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

6.4 Subject term (Key Word) listing.

Container, polyethylene.
Tank, liquid.

6.5 First article pack. Any changes or deviations of production packs from the approved first article pack will be subject to the approval of the contracting officer. Approval of the first article pack will not relieve the contractor of his obligation to pack, palletize, and mark the fuel cans in accordance with this specification.

6.6 Levels of preservation. Levels of preservation have not been included, as the preservation specified is the minimum acceptable for any level of protection. For purposes of marking, preservation shall be designated as level A.

6.7 Part or Identifying Number (PIN). The PINs to be used for fuel cans acquired to this specification are created as follows:

M	53109	X	
Prefix to indicate military specification	Specification number	Color number - - (see 3.7)	1 = Desert Sand 2 = Forest Drab

Custodians:
Army - ME
Air Force - 99

Review activities:
Army - GL, SM
Air Force - 84
DLA - DGSC

User activities:
Navy - MC, CG

Preparing activity:
Army - ME
Project 7240-0252

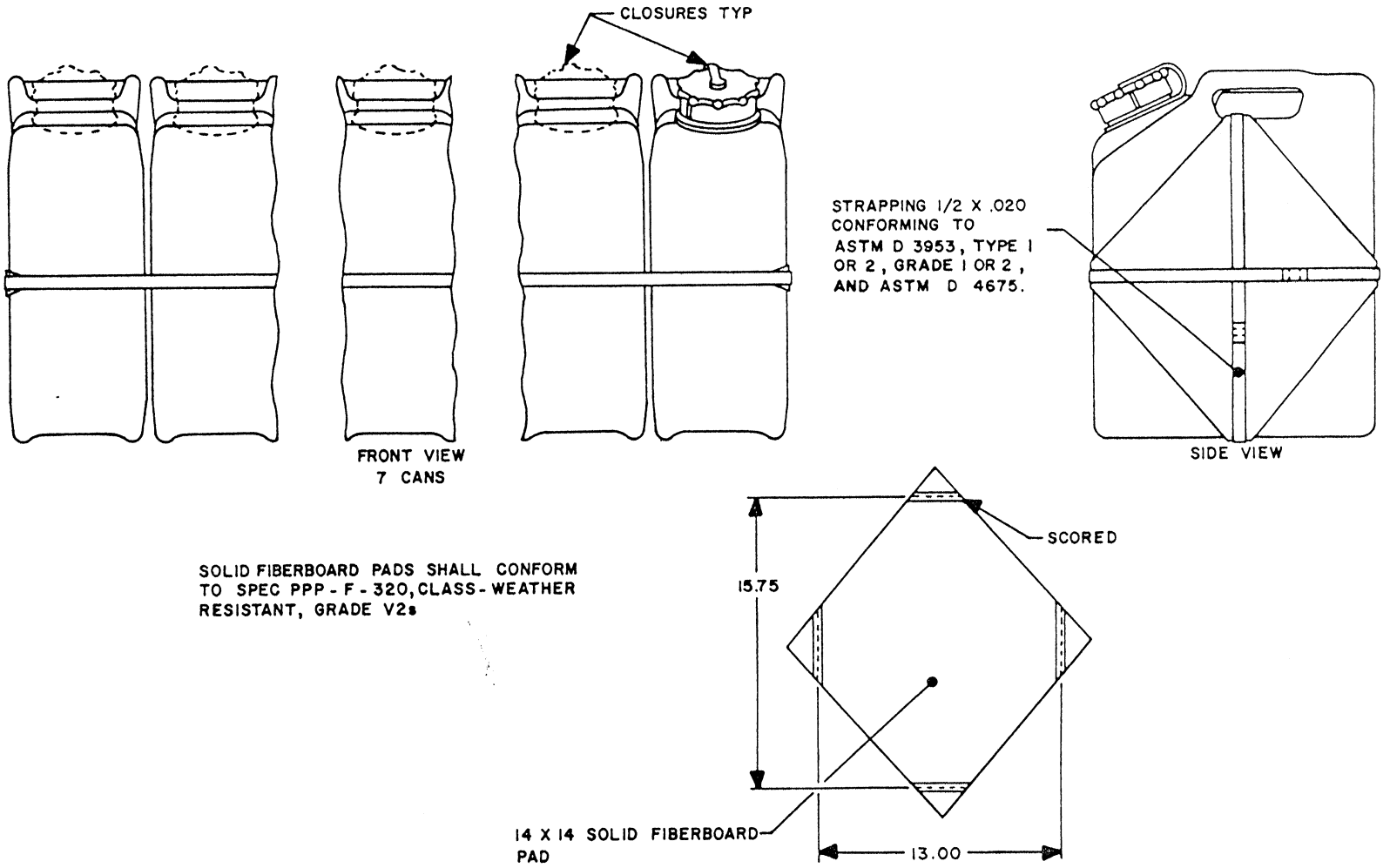

FIGURE 1. Packing for level A.

X-4940A

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.
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	2. DOCUMENT DATE (YYMMDD)
	MIL-C-53109	90/11/29

3. DOCUMENT TITLE
Can, Fuel, Military: Plastic, 5-Gallon Capacity

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) AUTOVON (If applicable)	7. DATE SUBMITTED (YYMMDD)

8. PREPARING ACTIVITY

a. NAME	b. TELEPHONE (Include Area Code) (1) Commercial	(2) AUTOVON
	(703) 664-5717	354-5717
c. ADDRESS (Include Zip Code) US Army Belvoir RDE Center ATTN: STRBE-TSE Ft. Belvoir, VA 22060-5606	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	