

MIL-T-81838(AS)
AMENDMENT - 1
8 March 1976

MILITARY SPECIFICATION

TANK, FUEL, AIRCRAFT, AUXILIARY, EXTERNAL 300 GALLON, TYPE AERO-1D

This amendment forms a part of Military Specification MIL-T-81838(AS), dated 30 November 1971, and has been approved by the Naval Air Systems Command, Department of the Navy.

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Paragraph 2.1, add new specification "MIL-V-81356, Valve, Fuel System Pressurization, and Vent.

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Paragraph 3.1.1.1, add new paragraph "Camouflage Tanks - When specified camouflage tanks shall be painted such that the final exterior color and camouflage paint scheme shall consist of applying Federal Standard 595A-1 COLOR 34079, green, to the top half of the tank and color 36622, grey, to the bottom half. The colors shall be overlapped in an irregular sinuoidal pattern. The area of overlap shall be six (6) inches above and below the horizontal centerline. The background color for decals located on the top half of the camouflage tank shall be in accordance with Federal Standard 595, color 34087."

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Paragraph 3.13.1, add new paragraph "Vent Shut-Off Valve - The vent shut-off valve shall be in accordance with MIT-V-81356 and shall prohibit fuel from being vented while the tank is accelerated in the forward direction."

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Paragraph 4.4.2, Line 26, add to the last sentence "The following exception shall be permitted for lot sizes requiring three samples to be selected. The three samples may be selected utilizing following schedule:

0-40%	tank fabricated in the lot	{1 sample)
41-80%	tank fabricated in the lot	(1 sample)
81-100%	tank fabricated in the lot	(1 sample)

- (1) All tanks in the lot shall be fabricated within a period not to exceed one month.
- (2) None of the tanks in the lot may be shipped until all three samples have satisfactorily passed the lot sample tests.
- (3) The third lot sample must be selected after the final tank in the lot has been fabricated."

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Paragraph 4.6.1.3, Delete entire paragraph and substitute "Finish Hardness - Two (2) test panels each day of paint operation shall be tested in accordance with Federal Standard 141 Method 6212. The finish shall not be marred by the test. The panels shall be fully representative of the production tank material, paint, and paint procedures.

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Paragraph 4.6.1.6, line 3, delete "This examination shall be made after the functional tests."

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Paragraph 4.6.2.3.4, delete "1 psi" and substitute "2 psi".

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Paragraph 4.6.2.4.3.1, delete entire paragraph and substitute "With tank full of fuel and the MD-2 tester connected as in paragraph 4.6.2.7.2.2 read the fuel capacitance C_f of the probe. Compare the value of C_f as obtained with the MD-2 tester to the C_f valve as calculated by the following formula:

Where:

C_e = dry empty capacitance mmf

C_{eff} = effective capacitance mmf (furnished probe manufacturer)

K = dielectric constant of test fluid

Compare the measured value of C_f as obtained with the MD-2 tester to the C_f value calculated by the formula above. C_f obtained which the MD-2 tester shall be within - 1.5% of the calculated C_f ."

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Paragraph 4.6.3, line 7, add after last sentence "All pressure tests at the higher levels (above 15 psig) shall be run with either JP-5 fuel containing a red dye, or water containing a red dye."