INCH-POUND |

MIL-L-81745B(AS) AMENDMENT 2 30 April 1990 SUPERSEDING AMENDMENT 1 9 January 1986

MILITARY SPECIFICATION

LAUNCHER CONTAINER, "A" SIZE SONOBUOY LAU-126/A

This amendment forms a part of MIL-L-81745B, dated 26 September 1985, and is approved for use by the Naval Air Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Top right, document identifier: Delete "MIL-L-81745B" and substitute "MIL-L-81745B(AS)" and add "(AS)" to document identifier top center of all remaining pages.

* Top right, above document identifier: Add the words "INCH-POUND" and place in a rectangular box.

PAGE 2

* 2.1.2, under DOCUMENTS, Naval Weapons Support Center, Crane, IN: Delete

"STF-TP-101, Vol III Manual of Sonobuoy Test Procedures, "A" Size Store Packaging Test Procedures"

* 2.1.2, under DOCUMENTS, Naval Avionics Center, Indianapolis, IN: Add

"NAC TP 622, Vol V Sonobuoy Test Operations Manual, Sonobuoy Receiving Warehouse, Operations And Responsibilities"

* 2.1.2, under DRAWINGS, Naval Avionics Center, Indianapolis, IN: Delete

"NAVAIR 1458AS120 SLC Internal Interface"

* 2.1.2, under DRAWINGS: Delete

"Naval Air Development Center, Warminster, PA
TE21077 Envelope Control Drawing for "A" Size
Store Launcher Systems"

* 2.1.2, under DRAWINGS, Naval Avionics Center, Indianapolis, IN: Add

"NAVAIR 3065AS100 Envelope Control Drawing for "A" Size Store Launcher Systems"

AMSC N/A
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PAGE 6

* 3.4.1.3, line 3: Delete "+ 160° F" and substitute "+ 160° F"

PAGE 7

- * Add as new paragraph 3.4.2.4:
- "3.4.2.4 Corner drop, accelerated handling. (Note: This paragraph applies only when the store weighs 30 pounds (13.6 Kg) or less.) With sonobuoy or equivalent dummy store installed and stabilized at a temperature of $75^{\circ}F^{+}$ $10^{\circ}F$ (23.9°C $^{+}$ 5.5°C), the SLC shall be dropped from a height of 22 inches (55.9 cm) with the muzzle end down and at a $15^{\circ}+5^{\circ}$ angle to the vertical onto a flat concrete surface. The SLC shall be accelerated by gravity and shall contact the concrete surface on its end at the angle indicated. During the test the SLC shall be allowed to bounce to a halt, but tipover onto the breech end is not required. After the drop the SLC shall remain completely intact including the muzzle cap and its parts. The retention mechanism may be deformed by the drop, but longitudinal displacement of the muzzle cap from the muzzle end shall be less than 0.13 inch (0.33 cm). The SLC and its component parts shall not break or crack, but stress whitening of the muzzle and muzzle cap is allowed. Note: This is an SLC test only, and store function or test thereof is not required following the test."
 - 3.4.3.4: Delete all 4 lines. Redundant to 3.4.3.4 on page 8.

PAGE 8

- * 3.4.3.4, line 4: Delete "JAU-1/B" and substitute "JAU-22/B"
- * 3.5.1, line 5: Delete "JAU-1/B initiator, a"
- * 3.5.1, line 7: Delete "STF-TP-101" and substitute "NAC TP 622"

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First paragraph (unnumbered), line 1: Delete "seconds duration are permitted" and substitute "3.5.1.2 <u>Launching</u>. The muzzle cap release mechanism shall yield during launch to the force transmitted through the store. The reactive load on the aircraft launch tube structure shall be not greater than 2,000 pounds (8,896 N). Transient loads not greater than 3,500 pounds (15,568 N) and 4 milliseconds duration are permitted."

- * 3.6.1, line 7 and line 12: Delete "TE21077" and substitute "3065AS100"
- * 3.6.1, line 8: Delete "1458AS120" and substitute "3065AS100"

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- * 3.6.4, line 4: Delete "1458AS120" and substitute "3065AS100"
- * 3.6.5, line 2: Delete "JAU-1/B or"
- * 3.6.5, 3.6.5.1, 3.6.5.2, 3.6.5.4, 3.6.5.5, and 3.6.6: Delete "TE21077" and substitute "3065AS100"

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- * 3.6.7, line 12: Delete "1458AS120" and substitute "3065AS100"
- * 3.6.8: Delete and substitute:
- "3.6.8 Muzzle cap release mechanism. A mechanism shall be provided for retention of the store in the bore of the SLC prior to launching and release of the store at launching. The design of the mechanism shall prevent Foreign Object Damage (FOD)-producing debris by jettison of the mechanism with the muzzle cap at launch or retention of the mechanism within the muzzle. If the mechanism is retained with the SLC, no part of the mechanism shall extend beyond the muzzle after launch. The mechanism shall be readily removable and replaceable, without the use of special tools for the purpose of removing or replacing the store. The SLC and release mechanism shall withstand the application of a force not less than 600 pounds (2,669 N), applied outwardly from the direction of the store through the muzzle cap, prior to the full release of the muzzle cap (see 4.5.2.1.8). During launch the portion of the mechanism which retains the muzzle cap may deform permanently, but no material failure (shearing or cracking) of any portion of the mechanism or the SLC shall occur. Also, during accelerated handling of the SLC, the mechanism may deform but shall not fail in any manner which would allow the store to be released (see 3.4.2.4)."

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* 3.6.11, line 6: Delete "1458AS120" and substitute "3065AS100"

PAGE 16

Add as new paragraph 4.1.1:

"4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspections 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 assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material."

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* 4.4.1, line 3: Delete "TE21077 and Drawing 1458AS120" and substitute "3065AS100"

PAGE 18

- * 4.5.2, line 4: Add ", except for the indicated destructive tests" at the end of the second sentence.
- 4.5.2.1.1: Delete title "Obturator diameter." and substitute "Obturator sealing diameters.". Delete first sentence, and substitute "Verify that both the obturator diameter and the internal breech diameter are in accordance with the approved PCI."

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* 4.5.2.1.1, second sentence: Delete "Average" and substitute "Acceptable"

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- * 4.5.2.1.5, line 1: Delete "that"
- 4.5.2.1.7, first sentence: Delete "accomplishing" and substitute "assembling"
- * 4.5.2.1.7: Add "The parts under test shall not be used in production." at the end of the paragraph.
- * 4.5.2.1.8: Delete and substitute:
- "4.5.2.1.8 <u>Muzzle cap release mechanism strength test</u>. Verify the strength of the muzzle cap release mechanism by either (1) assembling the mechanism to a fixture that simulates an SLC muzzle and muzzle cap and then applying the required force, or (2) applying the force directly using a production SLC and muzzle cap. The peak force required to release and fully separate the actual or simulated muzzle cap from the muzzle shall be not less than 600 pounds (2,669 N) as specified in 3.6.8. The force shall be applied at a fixed rate of .1 to 1 inch (2.5 to 25 mm) per minute. MIL-STD-105 Single Sampling Plan, inspection level S-1 and AQL of 2.5 shall apply. The parts under test shall not be used in production."
- * 4.5.2.1.9: Delete and substitute:
- "4.5.2.1.9 Obturator strength test. Verify the strength of the obturator by assembling the obturator to a fixture that simulates the minimum surface area case of sonobuoy to obturator interface on the sonobuoy side of the obturator and that will permit a 5 pound $^+$ 1 ounce (2.27 $^+$.03 kg) steel ball (approximately 3.25 inch (82.6 mm) diameter) to be dropped from a height of 36 $^+$.25 inches (91.4 $^+$.6 cm), through a tube, onto the center of the CAD side of the obturator. The ball shall strike within a 0.28 inch (7.1 mm) diameter circle whose center coincides with the center of the obturator. The obturator shall not crack, and stress patterns shall not be present beyond a 1.5 inch (38.1 mm) diameter circle whose center coincides with the center of the obturator. The obturator under test shall not be used in production. MIL-STD-105 Single Sampling Plan, inspection level S-1, and AQL of 2.5 shall apply."

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- 6.2.2, line 5: Delete "DAR"
- 6.2.2, line 6: Delete "7-104.9 (n) (2)" and substitute "DOD FAR Supplement, Part 27, Sub-Part 27.410-6"

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