



DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD

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DDESB-PE

JUL 18 2019

MEMORANDUM FOR COMMANDING OFFICER, NAVAL ORDNANCE SAFETY AND
SECURITY ACTIVITY (ATTENTION: CODE N54)

SUBJECT: Approval of 7-Bar Structural Strength Designation for Navy Standard Modular
Storage Magazine (MSM) Constructed to Naval Facilities Engineering Command
Drawing Numbers 14063806 through 14063858

- References:
- (a) NOSSA ltr 8020 Ser N41/639 of 16 July 2019, Subject: Request for Expedited Review and Approval of Revised 7-Bar Modular Storage Magazine [Criteria/WEBSAR 4601/WJ-166]
 - (b) Naval Facilities Engineering Command Atlantic Drawing Numbers 14063806 through 14063858, Modular Storage Magazine, dated 2 July 2019
 - (c) Defense Explosives Safety Regulation 6055.09, Edition 1, 13 January 2019
 - (d) Naval Facilities Engineering Command Atlantic Drawing Numbers 14026988 through 14027031, Modular Storage Magazine, dated 31 May 2013
 - (e) "Navy MSM Magazine Summary of Changes (REV 1)," Naval Facilities Engineering Command Atlantic, 3 July 2019
 - (f) DDESB Technical Paper 15, "Approved Protective Construction," Revision 3, May 2010

As requested by reference (a), we have reviewed the reference (b) drawings for compliance with Department of Defense explosives safety criteria found in reference (c). Based on our evaluation, the design contained in reference (b) is approved as a 7-Bar earth-covered magazine (ECM). This new design supersedes the previous reference (d) MSM design.

The new drawings of reference (b) do not deviate substantially from the design of reference (d). Modifications have been made to enhance physical security (i.e. changes to embedded steel in the door trench and vertical enclosure jamb) and to improve constructability of the magazine. There are also minor revisions to the electrical and mechanical systems and updates to the lightning protection system. A detailed list of changes between references (d) and (b) is provided in reference (e).

The design of reference (b) will be added to Table AP1-1 of reference (f) as approved for new construction, and reference (d) will be relocated from Table AP1-1 to Table AP1-2 and considered not approved for new construction.

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By direction for
THIERRY L. CHIAPELLO
Executive Director

Cc:
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