



DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD

4800 MARK CENTER DRIVE, SUITE 16E12
ALEXANDRIA, VIRGINIA 22350-3606

14 OCT 2022

DDESB-PE

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

SUBJECT: Approval of 7-Bar Structural Strength Designation for Navy Standard Type C Earth-Covered Box Magazine Constructed to Naval Facilities Engineering Systems Command Drawing Numbers 14115934 through 14115968

- References:
- (a) NOSSA ltr 8020 Ser N41/1208 of 9 June 2022, Subject: Expedited Request for Approval of Revised Standard Drawings for Navy Type Box C, Navy Type Box D and Navy Modular Storage Magazines [Criteria/Non-WEBSAR/NN-002]
 - (b) Naval Facilities Engineering Systems Command Drawing Numbers 14115934 through 14115968, Type C Box Magazine, dated 14 September 2022
 - (c) Defense Explosives Safety Regulation 6055.09, Edition 1, 13 January 2019
 - (d) Naval Facilities Engineering Command Drawing Numbers 14005091 through 14005122 (with loading platform) and 14004689 through 14004720 (without loading platform), Type C Box Magazine, dated 10 May 2017
 - (e) NAVFAC Atlantic DC-42 Memorandum, 27 September 2022, Subject: Type C Box Magazine Standard Drawings Interim Updates
 - (f) DDESB Technical Paper 15, "Approved Protective Construction," Revision 4, 26 July 2020

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) Type C Box magazine design.

The new drawings of reference (b) include a revised blast door design that incorporates Grade 50 structural steel and hollow structural section (HSS) stiffeners. Otherwise, these design drawings do not deviate substantially from the design of reference (d). A detailed list of changes between references (b) and (d) 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.

Point of contact is Mr. Ryan Bowers at Commercial: (571) 372-6706; DSN: 372-6706;
or E-mail: ryan.w.bowers.civ@army.mil.



THIERRY L. CHIAPELLO
Executive Director

Cc:
NAVFAC EXWC/SH21
NOSSA
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MARCORSYSCOM/AM-EES
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