



**DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD  
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DDESB-PD

**MAR 13 2013**

**MEMORANDUM FOR COMMANDING OFFICER, NAVAL ORDNANCE SAFETY AND  
SECURITY ACTIVITY**

**SUBJECT: Approval of 7-Bar Structural Strength Designation for Navy Standard Type D Earth-Covered Box Magazine constructed to Naval Facilities Engineering Command Drawing Numbers: 14021368-14021404 (Without Platform) and 14021406-14021444 (With Platform)**

- References:**
- (a) Memorandum from Commanding Officer, Naval Ordnance Safety and Security Activity, Subject: Request For Approval of Revised Navy Standard Type D Earth-Covered Box Magazine as a 7-Bar Earth-Covered Magazine [CRITERIA/WEBSAR 2789/WE-003] , dated 05 Oct 12
  - (b) NAVFAC Drawing Numbers 14021368-14021404 Type D Box Magazine without Loading Platform, dated 17 Sep 12
  - (c) NAVFAC Drawing Numbers 14021406-14021444 Type D Box Magazine with Loading Platform, dated 26 Sep 12
  - (d) DoD 6055.09-M, DoD Ammunition and Explosives Safety Standards, date varies by volume
  - (e) NAVFAC Drawing Numbers 6448522-6448554, dated 27 May 97
  - (f) Memorandum from Department of Defense Explosives Safety Board to Chief of Naval Operations (OP-04), Subject: Box Magazines Type C & D, dated 05 Nov 85
  - (g) DDESB Memorandum for Commanding Officer, Naval Ordnance Safety and Security Activity (Attention: Code N71), Subject: Analysis of Navy Box Magazines C, D, E, and F for Potential Increase in Maximum-Rated Net Explosives Weight Capacity, dated 02 Feb 06
  - (h) DDESB TP 15, Approved Protective Construction, Revision 3, May 2010

As requested by reference (a), we have reviewed the reference (b) and (c) drawings for compliance with Department of Defense explosives safety criteria found in reference (d). Based

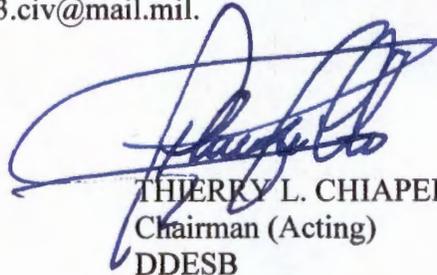
on our evaluation, the designs contained in references (b) and (c) are approved as 7-Bar earth-covered magazines (ECM). These new designs supersede the designs of reference (e) that were originally approved by reference (f) with an allowable Hazard Division (HD) 1.1 explosives limit of 350,000 lbs net explosive weight (NEW). Reference (g) increased the allowable Hazard Division (HD) 1.1 explosives limit to 500,000 lbs NEW.

This revision corrects minor drafting issues, updates the lightning protection and grounding systems and creates separate sets of standard drawings with and without loading platforms.

The allowable Hazard Division (HD) 1.1 explosive limit for the reference (b) and (c) design is 500,000 pounds net explosive weight (NEW).

The design of reference (b) will be added to Table AP 1-1 of reference (h), as approved for new construction.

The point of contact for this action is Mr. William Robertson, (571) 372-6776, DSN 372-6776, E-mail address: [wiliam.l.robertson3.civ@mail.mil](mailto:wiliam.l.robertson3.civ@mail.mil).



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