



**DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD  
2461 EISENHOWER AVENUE  
ALEXANDRIA, VIRGINIA 22331-0600**

DDESB-PD

JAN 04 2011

MEMORANDUM FOR COMMANDING OFFICER, NAVAL ORDNANCE SAFETY AND SECURITY ACTIVITY, ATTENTION: N511

SUBJECT: DDESB Approval of NAVY Box Type C Missile Magazine Standard Drawings 14004689 -14004720 (Without Loading Platform) and 14005091-14005122 (With Loading Platform)

- References:
- (a) DDESB-PD Memo of 4 January 2011, SUBJ: DDESB Approval of NAVY Box Type C Missile Magazine Standard Drawings 14004689 -14004720 (Without Loading Platform) and 14005091-14005122 (With Loading Platform)
  - (b) NOSSA ltr 8020 Ser N511/3015 of 19 October 2010, Subject: Approval Request for Modification of NAVY Box Type-C Missile Magazine Standard Drawings [CC-004]
  - (c) NAVFACENGCOM Drawings 14004689 -14004720, Type C Box Magazine, Without Loading Dock, dated 15 December 2010
  - (d) NAVFACENGCOM Drawings 14005091-14005122, Type C Box Magazine, With Loading Dock, dated 15 December 2010
  - (e) DODM 6055.09-M, DoD Ammunition and Explosives Safety Standards, 29 February 2008, Administratively Reissued 4 August 2010
  - (f) NAVFACENGCOM Drawings 1404430-1404440, Standard Drawing Box Magazine Type C, dated 20 September 1985
  - (g) DDESB Memorandum of 2 February 2006, SUBJ: Analysis of Navy Box Magazines C, D, E, and F for Potential Increase in Maximum-Rated Net Explosives Weight Capacity
  - (h) DDESB TP 15, "Approved Protective Construction"

This memorandum replaces reference (a), which was inadvertently sent out and should be destroyed.

As requested by reference (b), we have reviewed the references (c) and (d) drawings for compliance with Department of Defense explosives safety criteria found in reference (e). Reference (b) describes the modifications that have been incorporated into those drawings.

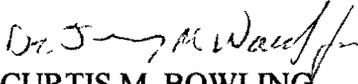
Based on our evaluation, references (c) and (d) are approved as 7-Bar earth-covered magazines (ECM). These new designs supersede the previous reference (f) Type C Box Magazine design.

The allowable Hazard Division (HD) 1.1 explosive limit for each of the references (c) and (d) designs is 500,000 pounds net explosives weight (NEW), as approved by reference (g).

Paragraph 2 of reference (b) identifies that a significant modification to the original reference (f) design was the elimination of "explosion-proof" requirements from the references (c) and (d) designs. Consequently, if the potential exists for stored AE to generate an explosive/combustible atmosphere (i.e., flammable vapors, liquids or gases, or combustible dusts, fibers, or flyings) within a magazine's internal space, then, as given in the General Notes on Sheet E-001 of the references (c) and (d) drawing sets, extensive redesign will be required to meet National Fire Protection Association (NFPA) 70, as well as DoD electrical safety requirements of reference (e). Such redesigns shall be submitted to the Department of Defense Explosives Safety Board (DDESB) for review and approval prior to construction.

References (c) and (d) drawing numbers will be added to Table AP 1-1 of reference (h), as approved for new construction. In addition, reference (f) drawing numbers will be relocated from Table AP 1-1 to Table AP 1-2 of reference (h), as not being approved for new construction. However, any explosives safety site plans that use the reference (f) design and, as of the date of this memorandum, are currently within the review/approval process will continue to be processed by the DDESB.

The point of contact for this action is Mr. Eric Deschambault, (703) 325-3558, DSN 221-3558, E-mail address: [eric.deschambault@ddesb.osd.mil](mailto:eric.deschambault@ddesb.osd.mil).

  
CURTIS M. BOWLING  
Chairman  
DDESB

cc:  
USATCES  
AFSC/SEW  
NOSSA/N511  
MARCORSYSCOM/AM-EES  
NAVFAC Atlantic (Mr. Owen Hewitt)  
NAVFAC ESC (Mr. Javier Malvar)