



**DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD  
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FEB 02 2006

DDESB-KT

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

References: (a) Naval Ordnance Safety and Security Activity ltr 8020 Ser N511/1528 of 28 September 2005, Subject as above

(b) DDESB Memorandum, Subject: Box Magazines Type C & D, 5 November 1985

(c) DDESB Memorandum, Subject: Box Magazines Types E and F, 17 July 1987

(d) DoD 6055.9-STD, DoD Ammunition and Explosives Safety Standards, August 1997

(e) DoD 6055.9-STD, DoD Ammunition and Explosives Safety Standards, 5 October 2004

(f) DDESB Technical Paper 15, Approved Protective Construction, Revision 2, 2 June 2004

Reference (a) requests approval to increase the maximum allowable explosives limits of Navy Box Magazines C, D, E, and F to 500,000 pounds (lbs) net explosives weight (NEW) of Hazard Division (HD) 1.1. Reference (b) originally approved Navy Box Magazines C and D as Standard Magazines with an NEW limit of 350,000 lbs of HD 1.1, and reference (c) originally approved Navy Box Magazines E and F as Standard Magazines with an NEW limit of 350,000 lbs of HD 1.1. All four of these magazines were subsequently approved as 7-bar earth-covered magazines (ECM) in reference (d). The analysis forwarded by reference (a) has been reviewed with respect to the ECM design loads in reference (e). Based on the information furnished, an NEW of 500,000 lbs of HD 1.1 is approved for Navy Box Magazines C, D, E and F, and reference (f) will be updated to reflect these new explosives limits for the following ECM designs:

a. Reinforced Concrete (RC) Box, Type C, NAVFAC Drawings 1404430 through 140444.

- b. RC Box, Type D, NAVFAC Drawings 6448522 through 6448554.
- c. RC Box, Type D, High Security Integrated Locking System (HSILS), NAVFAC Drawings 6448555 through 6448588.
- d. RC Box, Type E, NAVFAC Drawings 1404523 through 1404537.
- e. RC Box, Type F, NAVFAC Drawings 6448589 through 6448621.

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*for Mark S. Hughes, COL, USA*  
WILLIAM E. WRIGHT  
Captain, US Navy  
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