



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

20 APR 2000

DDESB-KO

MEMORANDUM FOR DIRECTOR, US ARMY DEFENSE AMMUNITION CENTER  
(ATTENTION: SIOAC-ES)

SUBJECT: Proposed Modification to Drawing 33-15-74, Standard Earth-Covered Magazine-  
Second Submission

References: (a) SIOAC-EST, 2<sup>nd</sup> Endorsement, 10 Apr 2000, Subject as above

(b) EAGD-AM-SS, Memorandum, 24 Mar 2000, Subject as above

(c) DDESB, Memorandum, 6 March 2000, Subject as above

The subject, explosives safety submission (Reference (b)), requests approval of a modified version of the earth-covered magazine defined by drawing number 33-15-74. The submission has been reviewed with respect to explosives safety criteria.

Based on the information furnished, all proposed modifications are approved. The subject safety submission (Second Submission) does reflect the modifications, which produce a type of "faraday cage" by bonding the rebar and metallic parts in adjacent structural elements as per DOD 6055.9 STD.

Point of contact is Dr. Josephine Covino, DDESB-KT1, Phone: 1-703-325-8526,  
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DANIEL T. TOMPKINS  
Colonel, USAF  
Chairman

received  
EP 4-24-00



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08 MAR 2000

MEMORANDUM FOR DIRECTOR US ARMY DEFENSE AMMUNITION CENTER  
(ATTENTION: SIOAC-ES)

SUBJECT: Proposed Modification to Drawing 33-15-74, Standard Earth-Covered Magazine

Reference: Memorandum, dated 23 February 2000, Department of the Army, EAGD-AM-SS  
(385), Subject as above

The subject, explosives safety submission, requests approval of a modified version of the earth-covered magazine defined by drawing number 33-15-74. The submission has been reviewed with respect to explosives safety criteria.

Based on the information furnished, all proposed modifications are approved except those that are related to lightning protection. The design drawings accompanying this submission must be updated to comply with present lightning protection requirements as explained below. When they are revised, resubmit the design drawings for final review and approval.

Drawing 33-15-74 was modified for lightning protection on 01 June 1989 to comply with DoD 6055.9-STD, Section C7.3.1.3.2. The subject safety submission does not reflect the modifications, which produce a type of "faraday cage" by bonding the rebar and metallic parts in adjacent structural elements.

Air terminals are no longer required once the "faraday cage" effect is achieved. However, if air terminals are installed they must be inspected and maintained. Since claims about ionization and enhanced air terminal lengths in the PREVECTRON lightning protection system are not approved by DDESB, use of the PREVECTRON system should be reconsidered. If air terminals are installed, they should comply with the requirements of NFPA 780.

Point of contact is Dr. Chester E. Canada, DDESB-KT1, Phone: 703-325-1369, Fax: 703-325-6227 and E-mail: Chester.Canada@hqda.army.mil.

DANIEL T. TOMPKINS  
Colonel, USAF  
Chairman

Korean version  
of 33-15-74  
2000