

Explosives Safety Bulletin

March 2010

<https://www3.dac.army.mil/es>

Army Safety Careerist Survey Feedback

[Back to Index of Bulletins](#)

By: Risk Management Division
DSN 956-8756

During January and February 2010, we sent out survey questionnaires to approximately 1200 Army safety careerists, 600 Quality Assurance Specialists (Ammunition Surveillance), and 200 Ammunition Warrants worldwide. This survey is part of the General Officer Steering Committee (GOSC) – Army Safety Coordinating Panel (ASCP) initiative to assess the current explosives safety technical competence of Army safety careerists and develop strategies for future enhancement of the Army career program.

We received more than 1,300 survey responses. This is an amazing 67% survey response rate, which is outstanding according to most survey statistics. We are just beginning to analyze the data and will provide you detailed results in an upcoming Explosives Safety Bulletin. The final report on the analysis is due by 31 August 2010. Some of the initial key findings are:

- Competency in explosives safety is rated as low for 7 in 10 Army safety careerists.
- Most Army safety careerists receive less than 4 hours of training on explosives safety annually.
- More than half of Army safety careerists report that the existing level of training on explosives safety is inadequate to perform their job functions.

This is valuable first hand data that we need to assess the current status and identify areas for future improvement. We thank you for taking the time to respond to this important survey, which will be used to strategically plan the future of explosives safety in the Army Safety Program.

If you are working in a position involving ammunition and explosives and did not receive a survey and would like to complete one, send a request to mcal.dac.sjmac-es@conus.army.mil and we will send you one.

IN THIS ISSUE

**Army Safety Careerist
Survey Feedback**
page 1

**Important Information for Users of
the Fast-Obscurant Grenade (FOG)**
page 2

**Tactical Explosives
Safety Workshop**
page 3

**A Solution to Earth Covered
Magazine Deterioration**
page 4

**Fort Campbell Annual Earth
Covered Magazine (ECM)
Inspection Process**
pages 5 and 6

**Use of the 20 Percent
Safety Factor During Munitions
Response Actions**
page 6

**Ammunition Storage in Barracks
(Is It Authorized?)**
page 7

ASP Within an ASP
page 8

**Lessons Learned
“Not Serviceable” Does Not Mean
“Not Hazardous”**
page 9

**Lessons Learned
Don't Assume That Weapons
Are Clear!**
page 10

Accident Shorts
page 11

FAQs
page 12

ATTENTION**Important Information for Users of the Fast-Obscurant Grenade (FOG)**

The Fast-Obscurant Grenade (FOG) is a specialized smoke grenade that may function in as little as 0.3 seconds after the pin is pulled and its safety lever is released. This short-delay feature is designed to allow the FOG to be thrown for immediate effect in a tactical situation, without the interval associated with waiting for a grenade fuze with a longer delay time to burn down. The FOG produces an immediate burst of obscuring smoke. The minimum 0.3 second delay of the FOG fuze allows the item to clear the user's hand upon release before the grenade bursts.

The basic FOG (version 1.0) looks similar in appearance to the M8 and M83 burning-type smoke grenades, but is distinguishable by its fiberboard body, its flat top with four screw heads visible, and its identifying nomenclature (Fast Obscurant Grenade). The improved version of the FOG (version 1.2) can be identified by the presence of a confidence clip on the fuze. (Version 1.0 does not have this clip on the fuze.) It is imperative that the soldier correctly identify the type of grenade before use.

Misidentifying or treating the FOG as a standard smoke grenade can have serious safety consequences. The Army has had two serious accidents recently causing permanent partial disability to soldiers. The first involved a soldier who was simulating an improvised explosive device during training mistakenly used a FOG for this purpose, rather than a standard smoke grenade with a longer delay. The soldier pulled the pin on the grenade and released the



safety lever, but continued to hold the grenade. After one second, the FOG functioned in the soldier's hand, resulting in the loss of two fingers, as well as burns and minor shrapnel wounds. The second accident involved a Soldier training with the FOG grenade, which functioned in soldier's right hand before soldier was able to release it. Soldier sustained a fracture injury to the palm, and amputation of index, middle, and ring fingers.

Because of these two accidents, OEF has issued a FRAGO directing:

- All FOG grenades will be turned in to the supporting ASP
- All units will inspect on-hand munitions to determine if FOG grenades are present
- FOG grenades will be secured from other smoke grenades and turned in to ASP
- Units that have an operational need for the FOG will conduct and document training on the deployment and differences between FOG and regular smoke grenades prior to reissuance of FOGs.

Because of the potential hazards associated with this item, users must wear ballistic eye protection, as well as ear plugs and gloves. The fuze assembled to the FOG is a modified "flash bang" fuze that can cause serious burns.

All potential users of the FOG **MUST** be trained and knowledgeable on the item's identifying characteristics, employment tactics, techniques and procedures (TTP's), and safety precautions.

Additional information can be found on our Explosives Safety Toolbox at <https://www.us.army.mil/suite/page/218481> under *Safety Alerts then FOG – M106 Grenades*



Tactical Explosives Safety Workshop

By: Risk Management Division
DSN 956-8030

[Return to cover page](#)

The United States Army Technical Center for Explosives Safety (USATCES) continues to support deploying military and civilian safety communities by providing the Tactical Explosives Safety Workshop. The workshop is set up to enlighten both military and civilian safety specialists of many of the explosives safety situations they will encounter during their deployment.

Starting out with basic ammunition and quantity distance instruction, safety specialists build on that knowledge to become more aware of issues and situations they will confront when dealing with ammunition and explosives safety issues. These issues are discussed with real time answers and first hand information since most of the instructors have deployed in support of the explosives safety mission for OIF and OEF and are aware of current initiatives and changes occurring in theater.

The course covers explosives safety associated with ammunition holding areas (AHA), forward arming and refuel point (FARP) operations, combat aircraft parking areas (CAPA) and forward operating bases (FOB) in theater. The use of Composite Risk Management and the Certificate of Risk Acceptance (CoRA) are powerful tools to assist the commander in determining how much risk he is willing to expose his Soldiers to and a section of the course is devoted to that process. Management of these risks and recommendations on how to minimize Soldier exposure to unnecessary risks should be foremost in the minds of everyone.

Requests for the Tactical Explosives Safety Workshop should be sent to USATCES at mcal.dac.sjmac-es@conus.army.mil.



U.S. Army Technical Center for Explosives Safety

TACTICAL EXPLOSIVES SAFETY



	
DOHA	FOB MAREZ
	
FOB FALCON	



WHAT IS YOUR EXPLOSIVES SAFETY POSTURE?

Revision 3, 24 November 2009

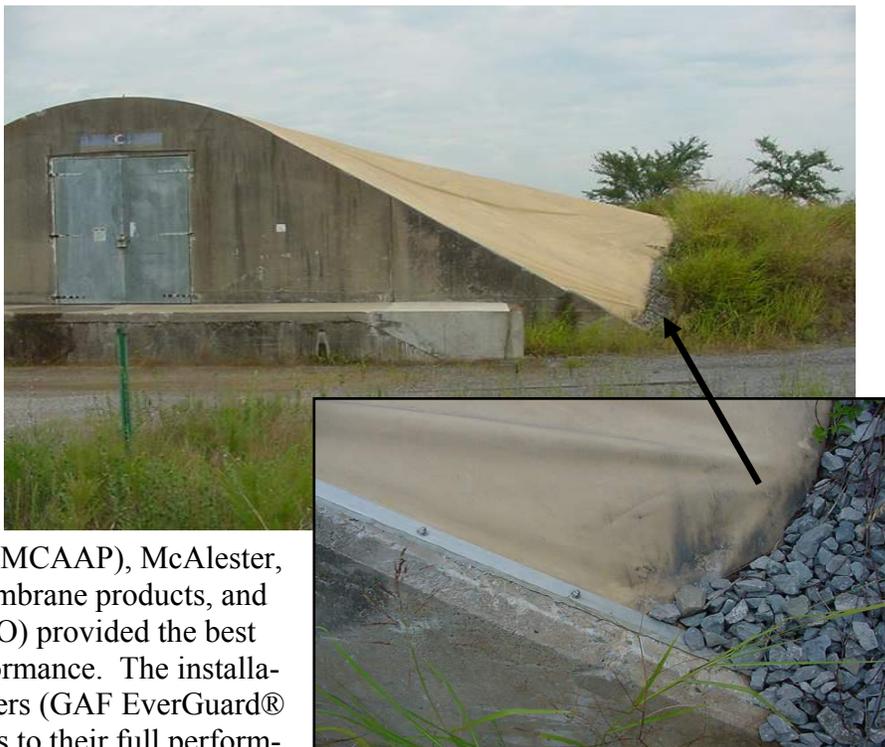
U.S. Army Technical Center for Explosives Safety
DSN 956-8737 or commercial (918) 420-8737
mcal.dac.sjmac-es@conus.army.mil

A Solution To Earth Covered Magazine Deterioration

By: Risk Management Division
DSN 956-8382

[Return to cover page](#)

The durability and protective effectiveness of earth-covered magazines (ECMs) are adversely affected by the use of expansive soils in the earth cover. Such soils swell or contract depending on the amount of moisture present in them, compromising the cover's integrity. The need for magazine maintenance that results from this process can be minimized by the installation of a single-ply water-proofing membrane over the earth cover.



McAlester Army Ammunition Plant (MCAAP), McAlester, Oklahoma, tested several single-ply membrane products, and found that thermoplastic polyolefin (TPO) provided the best combination of characteristics and performance. The installation of one particular brand of TPO covers (GAF EverGuard® TSR-60) at MCAAP returned magazines to their full performance by stopping interior water leakage; stabilizing earth-cover moisture content through the removal of structural stress loads resulting from the expansion and contraction of clay soils; eradicating vegetation on the tops of magazines, with a consequent elimination of mowing requirements; providing excellent fire resistance; and preventing losses of earth cover as a result of heavy rains.

The application of 2,234 TPO covers (at a cost of \$27M) has produced an avoidance in magazine repair costs of \$156M for the installation over the past 20 years.

The EXPLOSIVES SAFETY BULLETIN (ESB) targets the ammunition/explosives community. Contents are not necessarily the views of or endorsed by the Department of the Army, the Department of Defense, or any other US Government agency. The editorial content of the ESB is the responsibility of the US Army Technical Center for Explosives Safety (USATCES), McAlester, OK. Contributions are welcome. Contact information: E-mail address: mcaldacbulletin@conus.army.mil. Postal address: Explosives Safety Bulletin, ATTN: JMAC-ESM, 1 C Tree Road, Bldg 35, McAlester, OK, 74501-9053. Phone: (918) 420-8771, DSN 956-8771. Datafax: (918) 420-8503, DSN 956-8503.

Mr. Ken Williams
Associate Director, USATCES

Mr. Barry Willmington
Chief, Explosives Safety
Knowledge, MEC & Chemical Div

Mrs. Darlys Hutten
Bulletin Coordinator



Fort Campbell Annual Earth Covered Magazine (ECM) Inspection Process

[Return to cover page](#)

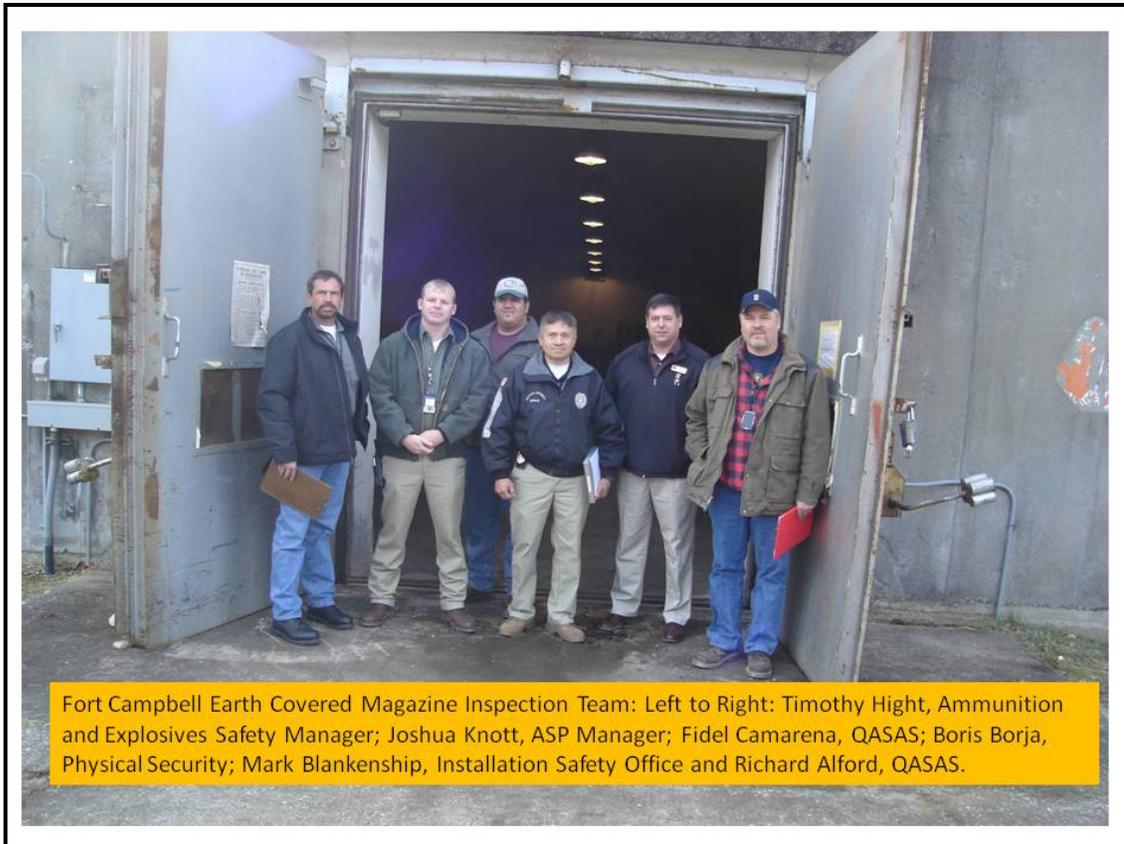
Submitted By: Mark Blankenship, Fort Campbell Installation Safety Office and Timothy Hight, Ammunition and Explosives Safety Manager.

Fort Campbell has 60 operational ECMs, of which 37 are under the direct control of the Ammunition Supply Point (ASP), 10 are under the control of the 101st Airborne Division (AASLT) Ammunition Officer or DAO, and 13 are in the direct control of units assigned to, or tenants of Fort Campbell, (i.e. 5th SFG, 160th SOAR and the 101st Airborne Division (AASLT) Brigade Combat Teams).

First and foremost, explosives safety is a team effort within USAG Fort Campbell, the Installation Safety Office, Directorate of Logistics, Directorate of Public Works, Directorate of Emergency Services, DynCorp Contractors and assigned units representa-

tives comprise a cohesive team that play a vital role in the quality Explosives Safety Program on this Installation.

Each quarter the ASP is closed to conduct a 100% inventory. Once during the year while the ASP is closed for inventory, members from the Fort Campbell Installation Safety Office, QASAS, Physical Security, ASP Manager, military units and on occasion a representative from the Department of Public Works (DPW) form an inspection team and physically enter and inspect each ECM as per the requirements of each represented office.



Fort Campbell Earth Covered Magazine Inspection Team: Left to Right: Timothy Hight, Ammunition and Explosives Safety Manager; Joshua Knott, ASP Manager; Fidel Camarena, QASAS; Boris Borja, Physical Security; Mark Blankenship, Installation Safety Office and Richard Alford, QASAS.

Continued on page 6

Fort Campbell *continued from page 5*

[Return to cover page](#)

Once the inspections are completed, the inspectors provide the safety office a copy of their report and once compiled, the safety office sends the report to required agencies on the installation and coordinates re-inspection dates. Units or organizations that operate these ECMs are responsible for ensuring service or work orders are submitted to DPW so necessary maintenance and repairs can be completed. The ASP Manager is the central point of contact for maintaining the master log of work orders for the ASP.

The inspection process continues with the review and validation of the Standard Operating Procedures (SOPs) and Job Hazard Analysis (JHA) that pertain to daily operations within the ASP and ensuring that all employees are familiar with their duties and responsibilities.

Formal inspections are completed on an annual basis; however, spot check or "drive by" inspections

are conducted whenever one of the ECMs is open. This ensures that ammunition storage and accountability procedures are being maintained at all times.

During our recent HQDA G-4/DAC Logistics Review and Assistance Visit, Mr. Jim Young, DA G-4, complimented Fort Campbell on our annual facility inspection process and the importance of gaining the cooperation and coordination of these organizations and personnel working together as an Explosives Safety Team.

This collective inspection process has developed a cohesive relationship between all personnel (military and civilian) that have a role in explosives safety on the Installation. The inspection process ensures that the aging ECMs at Fort Campbell are maintained and that explosives safety awareness is in the forefront of everyone's mind, reducing the number of injuries and avoiding mishaps that could occur in the ammunition storage process.

Use of the 20 Percent Safety Factor During Munitions Response Actions

**By: Explosives Safety Knowledge, MEC,
and Chemical Division DSN 956-8741**

If you are involved in Munitions Response Actions (commonly known as UXO cleanup), please read on.

As you know, the minimum separation distance (MSD) from UXO cleanup actions is usually based upon the calculated fragmentation distance. At any given UXO cleanup site, the fragmentation distance is calculated for the munition with the greatest fragmentation distance (MGFD) at that site. Experts use DDESB Technical Paper (TP) 16 to calculate the fragmentation distance for the MGFD. Per TP 16, the fragmentation distance is a function of the net explosives weight (NEW) of the MGFD (among other things). TP 16 (equation 2-1) requires that the net explosives weight (NEW) be increased by a safety factor of 20 percent before the fragment range is calculated. For example, if the MGFD has an NEW of 10 lbs, the experts would calculate its fragment distance as if its NEW were 12 pounds (20 percent more).

Recently, some folks in the munitions response business have been using the 20 percent safety factor for other things. But they shouldn't be doing so.

Do not use the 20 percent safety factor when using the following:

- (1) Technical Paper (TP) 16 Fragmentation Data Review Form.
- (2) Buried Explosion Module (BEM).
- (3) Generic Equations Calculator (GEQ).
- (4) Tables C9T.2 and C9T.36 of DOD 6055.09 STD.
- (5) Calculating blast protection distances using K factors (e.g., K18, K40, K328).

Ammunition Storage in Barracks (Is It Authorized?)

[Return to cover page](#)

By: Explosives Safety Knowledge, MEC,
and Chemical Division DSN 956-8867

BLUF: “NO”. Neither the Department of Defense (DOD 6055.9-STD) nor the Department of the Army (DA Pamphlet 385-64) explosives safety documents condone, support, or accept the risk of storing ammunitions and explosives inside sleeping quarters or facilities housing personnel.

The DOD database, Explosives Safety Mishap Analysis Module (ESMAM) has numerous entries documenting injuries or fatalities, whether accidental or intentional, involving munitions within barracks, quarters, or cantonment/bivouac areas. Victims of these scenarios include both those personnel directly involved and in some cases, innocent bystanders.

The only approved method of operating in violation of the DOD and DA explosives safety standards is to follow the requirements of DA Pamphlet 385-30, Mishap Risk Management. As stipulated in the pamphlet, DA Form 7632 (Certificate of Risk Acceptance), is required for violations of explosives safety standards. The approval authority matrix will indicate the command level that must assume the risk for such a catastrophic situation. Documentation, not verbal agreements are required. [Click here for the DA Pam 385-30.](#)

An Arms Room is as close as designated munitions may be located in facilities referred to as barracks. The DA Memorandum, 18 Aug 2004, Subject: Operational, Training, and Ceremonial Ammunition in Arms Rooms, provides authority for the designated munitions as it applies to specific situations and quantities. However, nowhere does this authority allow the presence of ammunition and explosives in a closet, under a bunk, or in a footlocker. [Click here for the DA Memorandum.](#)

Unfortunately, rogue operators appear to rely upon the old adage, “it’s better to ask forgiveness than permission” or “we are training for combat”, when they are discovered as violators by professionals charged with enforcing explosives safety (e.g. Safety, QASAS). It is not uncommon to find situations where operators are blatantly putting personnel, both related and unrelated, in harm’s way (especially as visitors to training areas). No matter what their argument for operating inappropriately is, the explosives safety enforcer is authorized to be vehemently opposed, since not only common sense, but regulatory guidance points directly at operating safely.

Check out our Explosives Safety Toolbox page on AKO. The Toolbox has all kinds of helpful information such as videos, guides, and charts. Check it out by clicking on the **TOOLBOX icon.**



By: Risk Management Division
DSN 956-8806

ASP Within An ASP

[Return to cover page](#)

Many of our ammunition depots, plants, posts, camps and stations were built before, during and shortly after WWII. Over the years our need for manufacturing, maintenance, demilitarization, storage, inspection, testing, and training has increased; while at the same time, these installations have been surrounded by metropolitan areas and privately owned land. Consequently, new construction or changes in the use of old facilities must be done on existing sites. Because greater quantity distance (QD) cannot be provided, the only alternative is to limit the amount of ammunition that can be stored. However, the loss of ammunition storage capability has been compounded by people not understanding the importance of preparing an Explosive Safety Site Plan (ESSP). An ESSP would have identified and avoided the following:

One installation created an Ammunition Supply Point (ASP) within an "ASP". They allowed a secondary contractor to use one of their magazines and a loading dock for a separate explosives operation from the ASP proper. The result was these two locations now had to be provided Intraline Distance (ILD) protection rather than Intermagazine Distance (IMD). To further complicate matters, they allowed a third contractor to do the same thing at the other end of the ASP. The net result; storage capacity of the ASP went from approximately 2.9 million pounds Net Explosive Weight (NEW) down to 31 thousand pounds of NEW.

Another example involved a depot given a mission that required a new non-ammo building. The new building was constructed next to the ammo area and the mission was successful until it was brought to light that an ESSP had not been submitted and approved. Inhabited building distance (IBD) had to be applied to the non-ammo related building. IBD requires the greatest distance/protection from a potential explosive site (PES). The result, Earth Covered Magazines (ECMs) around the new building, previously authorized to store 500,000 lbs NEW of Hazard Division (HD) 1.1, were no longer authorized to store any HD 1.1. Other HDs were affected as well. An ESSP would have identified the poor choice in location.

In another instance, a landfill was built between two magazine blocks and a commercial waste collector was contracted to remove the waste. This is a non-ammo related operation and again, requires IBD. Many magazines were affected and their NEWs reduced significantly. Albeit, the landfill was needed, but the personnel involved in the decision where to locate it did not understand the consequences of the "ammo area" location.

One contractor was allowed to put a temporary road through an ammunition storage area. Unfortunately, the road became a permanent public traffic route (PTR), affecting the entire ammunition storage area and causing a considerable reduction in their ammunition storage capability. PTR distance is 60 percent of IBD.

More often than not, people are unaware of the ESSP process. This process can identify and prevent the costly mistakes above. Commanders must assure ESSPs are initiated for new construction (including non-ammo sites that fall within a QD arc), modifications or changes in use of facilities or ammo operations that introduce or increase risk. An ESSP is not an option. DA Pam 385-65 provides guidance and direction in site plan preparation and explains when they are required. ESSPs bring about the necessary examination of explosives safety and the ammunition community should be vigilant in identifying new construction or changes in mission that may affect a safety clear zone. If in doubt about whether an ESSP is required, contact your Safety Office, Quality Assurance Specialist Ammunition Surveillance (QASAS) or USATCES.

The Safety Office, QASAS, Contracting, Installation Master Planning, Facility Engineering, Ammunition Operations, Logistics, Fire, Health, Security, Environmental should all be aware of and involved in this process. Assistance from USATCES is always available and our expertise will help in all parts of preparing an ESSP.

Remember, the Army's ammunition storage capability is part of supporting the war fighter, it must be preserved.

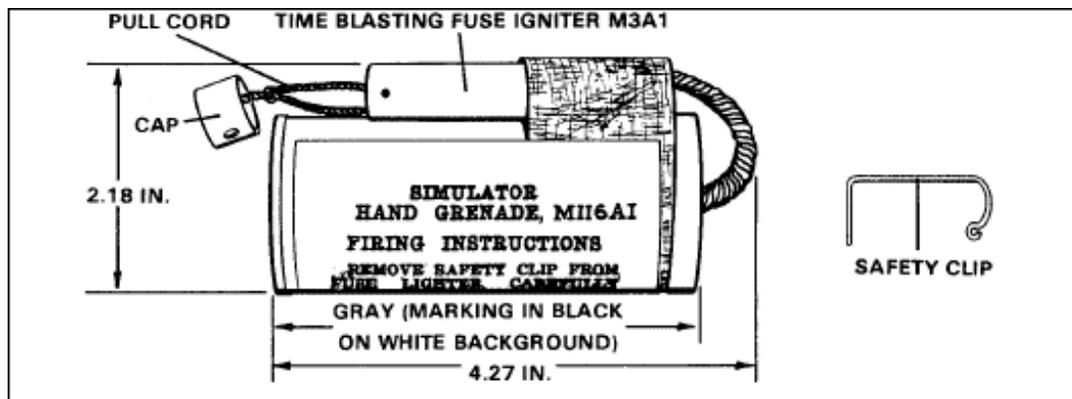
Accident Lessons Learned

By: Risk Management Division
DSN 956-8869

[Return to cover page](#)

“Not Serviceable” Does Not Mean “Not Hazardous”

A Soldier found a hand grenade simulator mixed in with recovered residue and dunnage that was being transported to an administrative supply building for further processing. The simulator was crushed, but its pull string was still present. Because of the simulator’s crushed condition, the Soldier apparently believed that it no longer posed an explosive hazard. The Soldier then removed the pull string from the simulator for accountability purposes, whereupon the simulator functioned with little or no delay time, causing loss of part of the Soldier’s right hand, as well as lacerations and burns to the Soldier’s face and side. A second Soldier who was nearby sustained a ruptured ear drum, and eleven other Soldiers experienced ringing in their ears.



Until any explosive item has been verified as fully expended, or has undergone a demilitarization process that has certified it as explosive-free, a potential hazard is always present. Personnel coming in contact with ammunition items that still pose an explosive risk (even if they are apparently unserviceable for their intended use) must treat them with the same caution and respect given to undamaged, unexpended materiel. In fact, the need for hazard awareness and safe handling practices applies even more to visibly damaged items, since their condition may have compromised built-in safety features (such as delay times), and made them even more dangerous than they would normally be.

Working with explosive items (whether serviceable or unserviceable) requires constant situational awareness, consideration of all potential hazards, and continual observance of applicable safety precautions and practices.

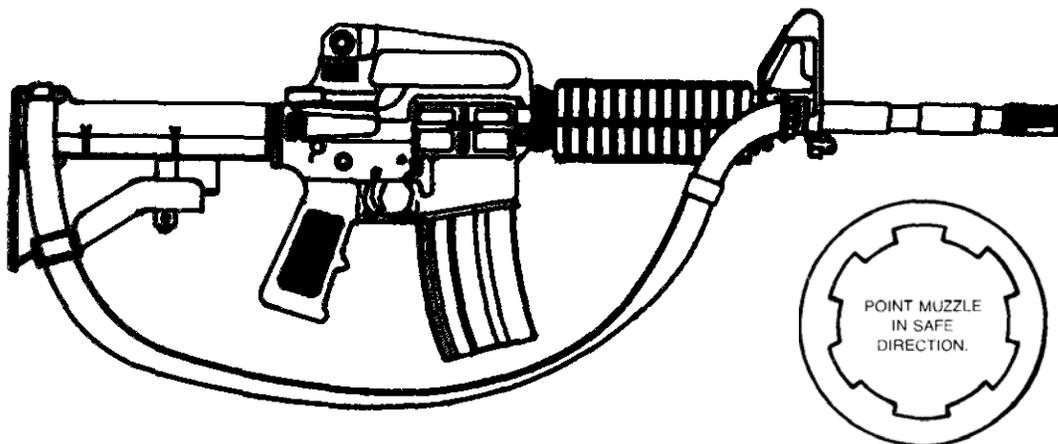
Accident Lessons Learned

By: Risk Management Division
DSN 956-8869

[Return to cover page](#)

Don't Assume That Weapons Are Clear!

A Soldier was firing an M4 5.56mm Carbine for the first time. When the Soldier pulled the trigger, the weapon exploded, resulting in lacerations to the Soldier's upper lip and gum. Examination of the weapon revealed that residue from previously-expended training rounds was still present in the barrel.



Two fundamental user errors contributed to this mishap. The first was non-inspection of the weapon before firing, and the second was the Soldier's failure to clean the weapon bore before assuming a position on the firing line. These actions are basic principles of safe weapon use, and are routine components of both weapon technical manuals (such as TM 9-1005-319-10), and range standing operating procedures.

The weapons provided to Soldiers are effective for their intended purpose when properly maintained and employed. It is the responsibility of each user to assure that all required steps involved in the care and safe handling and firing of those weapons are both learned and observed.

For any Explosives Safety Bulletin inquiries (questions, comments, subscribe, unsubscribe), click [here](#).

For past bulletins, go to the [Explosives Safety Bulletin Index](#)

Accident Shorts

[Return to cover page](#)

We have been pointing out problems involving failure to properly check and set head space and timing for the M2 .50 cal machine gun for several years. The problem is not going away as illustrated by the following:

Date/Time: 17 August 2009 / 1300 (local time)

Soldier was test-firing a M2 .50 Caliber Machine Gun, soldier experienced a jam. After applying several corrective actions without effect, soldier removed the glove from his right hand, opened the feed cover, and reached into the weapon chamber, at which point the round functioned, resulting in a laceration to the soldier's palm, and extensive tissue damage to his fingers (especially his middle finger), although all four fingers were reported as visible and attached.

Date/Time: 8 October 2009 / 1030 (local time)

Soldier was test-firing his M2 .50 Caliber Machine Gun, when the weapon system malfunctioned, and a round detonated inside the chamber, injuring the Soldier's right thigh, just above the knee cap, with fragments, and damaging the weapon.

Date/Time: 11 October 2009 / 2130 (local time)

Soldier was test-firing his crew-served weapon at test fire pit one. During the test fire, the second-three round burst fired resulting in a malfunction. One round exploded with residue coming out the bottom of the gun. The explosion damaged the gun. In addition, Soldier received powder burns and shrapnel wounds to both legs.

Date/Time: 11 October 2009 / 1500 (local time)

Soldier was test-firing his M2 .50 Caliber Machine Gun at the firing range, when the weapon exploded. Soldier received injuries to upper thigh area.

Date/Time: 14 October 2009 / 1200 (local time)

Soldier was test-firing his M2 .50 Caliber Machine Gun before leaving on a convoy, when there was an explosion. A cartridge case fragment penetrated the Soldier's leg.

Date/Time: 29 October 2009 / 1900 (local time)

Soldier fired 600 to 800 rounds of .50-caliber ammunition without incident. Then changed the barrel and setting of headspace and timing, an explosion occurred as a round was fired. The gunner was hit with shrapnel in the thigh and groin area.

Date/Time: 2 November 2009 / 0900 (local time)

Soldier was firing his M2 .50 Caliber Machine Gun when a round failed to seat all the way in the chamber. The round exploded, sending small fragments of brass into the Soldier's right thigh.

Date/Time: 18 December 2009 / 0900 (local time)

Soldier stated that he was test-firing his M2 .50 Caliber Machine Gun, and during the test fire, a round exploded causing damage to the gun, and injuring the Soldier causing powder burn to the face.

Date/Time: 29 December 2009 / 0630 (local time)

Soldier was test-firing his M2 .50 Caliber Machine Gun at the firing range, when the first round fired blew up. Soldier received injuries to left leg.

Frequently Asked Questions

[Return to cover Page](#)

Q I have been telling Units that they can store 1.4 training ammunition in the Arms Rooms assuming we meet all the requirements of the DA Policy Memorandum covering that storage. We've been including .50 cal in that allowance and now looking at the letter I realize that it states that only 1.4S can be stored (except ceremonial ammunition which has a 1 box maximum). I know MP (Military Police) locations are sometimes required to maintain limited quantities of smoke grenades and they are 1.4G, so that doesn't balance with what the memo says either. While we're on the subject; how about 40MM practice rounds which are 1.4C? This is coming to a head because our Fort has just recently lost the use of the AHA (Ammunition Holding Area) located at the ASP (Ammunition Supply Point), so Units are scrambling to figure out how they can draw their ammunition without having to guard it. Thanks for any help you can provide.

A The first Arms Room policy memo from DA Safety (dated 13 Dec 99), allowed arms-room storage of limited quantities of compatible HD 1.4 training ammo for a maximum of 7 days. That memo was superseded by another memo from DA Safety on 18 Aug 04. This second Arms Room memo (which is still current) allows the storage of HD 1.4S training ammo in an arms room for a period not to exceed 30 days. This policy prohibits .50 cal rounds, 40MM practice ammunition, and smoke grenades (even if they are compatible) from being stored in arms rooms. The available alternatives would be either re-doing the arms-room license, or convincing the command to sign a CoRA (Certificate of Risk Acceptance, which is the new term for a waiver) in accordance with the provisions of DA Pam 385-30, in order to allow that expanded storage.

Q Is an LPS (lightning protection system) required for a temporary storage location? The milvans are being taken to an area and the ammo will be used within a 30 - 90 day time period. Is grounding also required for these milvans at the temporary storage site? If there is an LPS system on site do the containers still need to be grounded? I have never heard of this and someone is stating that it is a requirement.

A LPS is required for temporary storage IAW Chapter 12 of DA Pam 385-64, and paragraph C7.1 of DOD 6055.09-STD. Regarding the requirement for grounding, that depends on how the area you mention is being used. If MILVAN/ISO containers at the "spotting" area remain on a mobile chassis, then the containers would not require grounding, per paragraph 6-13 of DA Pam 385-64. By contrast, if the containers are spotted on the ground without being capable of immediate movement, and ammunition is being brought to and/or removed from the containers, then the containers would be considered facilities that would require individual grounding. The 2008 edition of NFPA 780 (Standard for the Installation of Lightning Protection Systems) shows in Figure 7.3.3.9 (A) how a structure/facility under an overhead wire LPS can be connected to the LP grounding system.

There are allowable exceptions to this policy. If the responsible Commander is willing to accept the possible loss of the containers and their contents in the event of a lightning strike, and is also willing to evacuate site personnel to inhabited building distance (IBD) when the approach of lightning is detected, then neither grounding nor an LPS would be required.