Appendix C - Unexploded Ordnance (UXO) Safety Presentation
June 30, 2011 Minutes
Community Interest Group
Ricochet Area Munitions Response Site in State Game Lands 211



#### SITE HISTORY AND CURRENT ACTIVITY

Fort Indiantown Gap was first established by the state in 1931 as the primary training site for the Pennsylvania National Guard. It is also home of the Pennsylvania Department of Military & Veterans Affairs, which oversees both the Army and Air National Guard and the state's programs for serving the needs of Pennsylvania's 1 million veterans.

Since 1940, most of the land has been leased to the federal government for military training purposes. During World War II, seven Army divisions trained at the Gap enroute to overseas service. Its mission further expanded in recent years to include all active and reserve components, as well as selected civilian customers.

In October 1998, following BRAC Commission recommendations, the U.S. Army garrison at the Gap closed and responsibility for day-to-day management of the installation was transferred to the Pennsylvania National Guard.

Working in close concert with regulatory agencies, conservation groups and scientific consultants, Fort Indiantown Gap maintains a strong commitment to protect and preserve the environment. For example: 158 acres of training land have been set aside as research habitat for a rare species of butterfly called the Regal Fritillary.

### TODAY'S TOPICS

- What is MEC
- Ordnance Identification
- Ordnance Safety
- Explosive Technicians and Qualifications
- Explosive Accidents



### **Munitions and Explosives** of Concern (MEC)

MEC: This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks and is identified as:

Discarded
Military
Munitions
(DMM), as
defined in 10
U.S.C. 2710
(e)((2);

Munitions
Constituents
(MC) (e.g. TNT,
RDX) present in
high enough
concentrations
to pose an
explosives
hazard.

Unexploded Ordnance (UXO) as defined in 10 U.S.C. 2710(e)(9);



#### What is UXO?

#### Military munitions that have been:

- > primed, fuzed, armed, or otherwise prepared for action, and have been
- > fired, dropped, launched, projected, or placed in such a manner as to
- > constitute a hazard to operations, installation, personnel, or material and
- > remain unexploded either by malfunction, design, or any other cause
- can be extremely sensitive and detonate when disturbed



# Possible Ordnance Items that could be found at Fort Indiantown Gap



#### **Smoke Grenades**



#### Slap Flares



### 60mm Mortar



Illumination





**High Explosive** 

White Phosphorus



### 81mm Mortar



High Explosive







## 75mm Projectiles



Common Fillers:

1 to 2 lbs of agent

Empty
Inert Substance
High Explosive (HE)
White Phosphorus (WP)
Smoke –FS/FM





## 75mm Projectiles as found





### 4.2 inch Mortar



White Phosphorous

High Explosive





BUILDING STRONG®

## 105mm Projectile



High Explosive



## 155mm Projectile





8 Inch Projectile





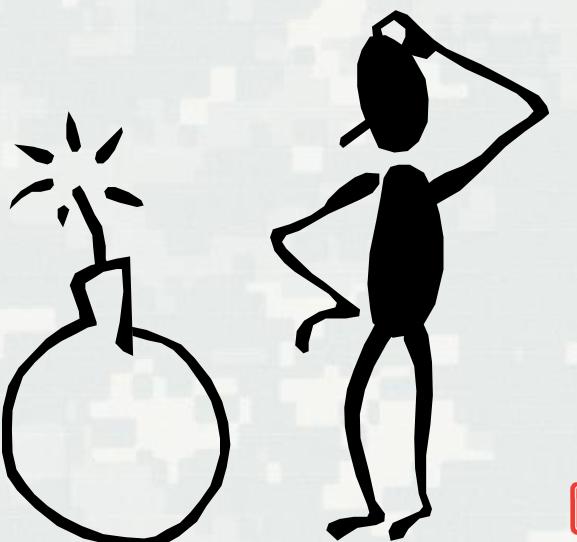
## Fence Post or Pipe or Rocket??



It's a Rocket !!!!



## NOW WHAT?





## When it comes to Military Munitions ALWAYS remember the

3 R's

•RECOGNIZE

•RETREAT

•REPORT



#### UXO SAFETY GUIDLINES



Golf Balls

Once you <u>RECOGNIZE</u> a possible UXO hazard, do not continue to move any closer.



**Submunitions** 



Smoke Grenade



Old Rusty Steel Can

UXOs can have familiar shapes; for example metal pipes, soda cans and even golf balls.



#### **UXO SAFETY GUIDLINES**

#### RETREAT,

For most sites, mark the item no closer then 25 feet around and move 300 feet from a UXO hazard and tell others to stay away!



#### DANGER UXO





#### **UXO SAFETY GUIDLINES**

Do not operate **CELL PHONES** or radios near UXO.

Make all cell phone/radio transmissions from outside your 300' safety zone.







## People to REPORT the suspect item to:

**911** 

- FITG Range Operations:
  - **►** (717) 861-2152/2153
- FITG Police:
  - **►** (717) 861-2727



## Information to have on hand when you REPORT the UXO

**REPORTING ORGINIZATION:** Your name and who you work for.

**CONTACT METHOD:** Your cell/telephone phone number.

**LOCATION:** The location of the suspect UXO and your location (if different).

<u>DESCRIPTION MUNITION:</u> Give a general description of the item you have. Don't worry if you don't know the exact size or type of UXO.

**RESOURCES THREATENED:** Report any equipment, facilities, or other assets that are threatened.



### Remember the 3 R's

**RECOGNIZE** - you have possible UXO item.

**RETREAT** - to a safe distance.

REPORT - the UXO to your local authorities.



## Explosive Technicians and Qualifications

- Police/Sheriff/Fire Dept
  - ► Improvised Devices and some Military Ordnance; FBI Hazardous Devise School 6-8 weeks of training
- Military Explosive Ordnance Disposal
  - ► Military Ordnance and some Improvised Devices; Military EOD School
    - 10-11 Months of training



## Explosive Technicians and Qualifications

- Civilian UXO Contractors
  - ► Military Ordnance Only;
    - Civilian UXO Tech I School
       5+ Weeks of training
    - Military EOD Training
  - ► Qualifications MUST follow DDESB TP-18 requirements
- USACE Explosive Safety Specialist
  - ▶ Military Ordnance Only
  - ▶ Military EOD Trained Only



## **Explosive Accidents**



## Chemical in WWI-era shell injures 3 AF EOD from Dover AFB Delaware

A suspected blister agent in a World War I- era shell found near Bridgeville injured three members of a military explosives disposal team at Dover Air Force Base this week, prompting an investigation by the Army's chemical weapon center in Maryland. Since early February, bomb disposal teams from the state police and Dover Air Force Base have removed nearly 100 war relics from yards and driveways near Bridgeville, Delmar, Laurel, Gumboro and Rehoboth Beach. The three active-duty service members reported undisclosed symptoms a day after they encountered a "black, tar-like substance" while attempting to open the corroded munition Tuesday with a small explosive charge, according to a base statement. One of the three remained hospitalized in stable condition late Friday at Temple University Hospital in Philadelphia. "World War I was when they were using and experimenting with various chemical agents," said George Mercer, spokesman for the Army's Aberdeen Proving Ground in Maryland. "My understanding is that the people from the Air Force who were doing this either had burns or blisters." Delaware State Police had asked the base to dispose of the round after a trooper spotted it at about 7 a.m. Monday protruding from a clamshell driveway.

## Shell explodes, Civil War relic collector injured

July 29, 2006 Lawrence Christopher of Dalton, GA, a 64-year-old Civil War relic collector, was severely injured while deactivating a 140- to 150-year old Civil War "Parrott shell". He is known as the Grandfather of Relics, and is well respected among diggers and collectors.

At this time Lawrence is in Erlanger Medical Center in Chattanooga, TN. He is in a coma, has lost an eye and fingers, among other injuries.



#### Kids take UXOs Home

In 2000, an incident occurred that involved military munitions removed from an operational range. Although, like most operational ranges, this range had signs warning the public not to enter the area and of hazards potentially present, some youths entered and removed munitions. The munitions removed from the range were taken home and passed between the boys and their friends for several days. After changing hands many times, one of the munitions was dropped and exploded. As a result, a 16 year-old boy was killed and another was left in critical condition. Witnesses reported that, at one time, there were up to 20 children handling the UXO that eventually exploded. The boys were attempting to move the UXO, when it fell and hit a truck bumper and exploded. This UXO exploded even though it had been handled and moved around many homes. The explosion not only killed one boy, and injured another; it also damaged a house and two automobiles. After investigation, three local youths were arrested for trespassing into a restricted area and taking government property--the UXO.

## Sam White Civil War Relics Collector

Day two away from home was taking its toll on James Glazier yesterday as he and his wife waited for police to clear the property where neighbor Sam White died in an explosion Monday. "A couple of these items at the tail end have caused some concerns and some questions," Chesterfield police Capt. Steve Neal said. "They need to be examined by the experts."

"Until we know for sure that [it's safe], we can't let people back up in there," he added.

Glazier said he knew White well and never felt any concern about his Civil War relics business or the munitions kept next door. "I had no fears with that at all," Glazier said. "It's just one of those things. The potential [for something to go wrong] is there, and in this case, [White] thought he knew what he was doing; he's been doing it for years."

Glazier and other neighbors said they believe White was working on a "beach-ball" size shell -possibly disarming it -- when it exploded about 1:20 p.m. Monday outside his garage. The blast severed both his legs and an arm and he died within minutes, they said. A 15-pound chunk of the cast iron shell flew into the air and smashed through the front porch roof of an occupied house about a quarter-mile away.

"He's had numerous shells and cannonballs over there," Glazier said. "He would go scuba diving" and pull stuff out of the James [River] and out of the Appomattox [River]. And people would bring! him stuff and sell it to him, or he'd fix it. He had a tremendous business going,"



### Nine Year Old Boy

In 2000, a nine year-old boy playing near a former artillery range found a munition (a UXO) and decided to keep it as a souvenir. More than a year and half later while the boy was playing with it in his garage, the munition exploded. As a result, the boy lost his left hand and forearm. Failure to recognize the explosive hazard posed by munitions irreversibly changed this boy's life.



## The 3 R's and Former Camp Elliott, California

- NEEDLES, CA For years, school kids in Needles have been taught the 3 R's,": Reading 'Riting 'Rithmetic, but this past week they learned some new ones: Recognize Retreat Report.
- It's all part of an educational campaign coordinated by the U.S. Army Corps of Engineers to inform the community about dangers in the nearby desert.
- The former military Camp Ibis is about 20 miles northwest of Needles, off U.S. Highway 95. It was one of 10 major camps in the California and Arizona deserts set up by Gen. George S. Patton in 1942 to train troops and test equipment, ammunition and weapons. Armored tank divisions trained there from 1942-44. As was often the case, they left behind some unexploded munitions.
- The Department of Defense designated the Army Corps of Engineers to clean up thousands of sites used by the military after two 8-year-old boys were killed in their San Diego neighborhood in 1983.
- Their cul-de-sac stood on the former Camp Elliott. The boys found a 37-millimeter shell, which exploded while they played with it.



If you have more questions concerning UXO's, Contact the USACE Baltimore Ordnance and Explosive Safety Office:

