ARIZONA PEACE OFFICER STANDARDS AND TRAINING BOARD
585 - HOUR BASIC CURRICULUM
MODEL LESSON PLAN

LESSON TITLE: BOMB THREATS AND DISASTER TRAINING 3.7 **NOVEMBER 2015**

SUBJECT:	Bomb Threats and Disaster Training
AZ POST DESIGNATION:	3.7
HOURS:	4
COURSE CONTENT:	This course of instruction will prepare first responders to respond to and recognize a crime scene in which a terrorist action has occurred and the use of an explosive device or a weapon of mass destruction has been used. Examples of both high and low explosives will be provided for hands on training to better demonstrate the various types of commercial and military explosives. Inert Improvised Explosive Devices (IED) will be displayed to demonstrate how the explosives have been used. This course of instruction will make the first responder aware of the many hazards within the community that may be used as a terrorist weapon of mass destruction such as fuel farms, Chlorine storage facilities, rail and over the road vehicles.
PERFORMANCE OBJECTIVES:	Upon completion of this course of instruction, students using notes, handouts and other support materials as references, within the allotted time, will:

3.7.1 Identify the following as procedures to be followed when at the scene of a suspected explosive device:

A. Avoid touching/handling the device.

B. Move people from the scene.

C. Avoid use of the police radio/cell phones.

D. Request specialized assistance (bomb squad, fire department, etc.).

E. Request a supervisor to assist at the scene.

3.7.2 Given photos, slides or actual items or various miscellaneous objects/materials, identify the following:

A. Safety fuse.

B. Detonating cord (Detcord).

C. Blasting cap.

D. Low explosive.

E. High explosive.

3.7.3 Identify the following initial responsibilities of the first responder to the scene of an air crash, bomb threat, major vehicle accident or disaster scene:

A. Provide for emergency medical aid, if needed.

B. Establish security perimeter and command post.

C. Request needed equipment and assistance.

D. Identify and admit authorized personnel.

E. Request assistance of supervisor.

F. Maintain communication with radio for information updates.

G. The student will be able to describe the roles and missions of first responders in the WMD response environment as well as determine appropriate self protective measures that must be employed to minimize further damage and injury to all responders.

1. Military Warfare Agents.

2. Toxic Industrial Chemicals (TIC).

3. Radiological.

4. Personal Protection Equipment.

5. Vehicle Borne Improvised Explosive Device (VBIED).

H. Identify past WMD (Weapons of Mass Destruction) attacks on the United States, current trends and potential threats that are in our communities that include Critical Infrastructure.

I. Identify what the preferred terrorist weapon is.

J. Describe the appropriate response to a suicide/homicide bomber.

DATE FIRST PREPARED: July 2000

PREPARED BY: Sgt. Arlyn Walz

REVIEWED – ***REVISED***: SME Committee DATE: November 2000

REVIEWED – ***REVISED***: SME Committee DATE: December 2001

REVIEWED – REVISED:	SME Committee	DATE: July 2004
REVIEWED – ***REVISED:***	SME Committee	DATE: September 2005
REVIEWED – REVISED:	SME Committee	DATE: April 2008
MAJOR *REVISION:*	Det. John J. Bohi, Phoenix PD and AZPOST SME Committee	DATE: August 2009
REVIEWED – REVISED:	SME Committee	DATE: November 2011
REVIEWED – REVISED:	SME Committee	DATE: November 2012
REVIEWED – ***REVISED:***	Det. John J. Bohi, Phoenix PD and AZPOST SME Committee	DATE: July 2014
REVIEWED – ***REVISED:***	Re-worded P.O.'s by AZPOST staff	DATE: November 2015
REVIEWED – REVISED:		DATE:
REVIEWED – REVISED:		DATE:
AZ POST – APPROVAL:	Richard Watling	DATE: November 2015

INSTRUCTOR REFERENCES: Explosives and homemade bombs, explosives and bomb disposal guide, hazardous devices school manuals, Dupont Blaster's hand-book and military manuals.

1. Hazardous Devices School, Redstone Arsenal, Huntsville, Alabama.
2. Recognition of Explosive and Incendiary Devices published by the National Bomb Data Center, Part 1 and Part 2.
3. Introduction to Explosives, published by the F.B.I.
4. Department of Defense Domestic preparedness Instructor Guide.
5. Department of Justice Domestic Preparedness Instructor Guide and Reference to Terrorism Training Presentation Program.
6. International Association of Fire Chiefs Response to Terrorism Conference Guide book.
7. Various Federal Bureau of Investigation Response to Terrorism Resource manuals.

CLASS LEVEL: Recruit - This course is a Basic first responder level, designed for

	Police, Police Recruits, Fire and EMS personnel.
TRAINING AIDS:	PowerPoint Projector, Explosive Training aids, Exemplars, and departmental policy or operations orders.
INSTRUCTIONAL STRATEGY:	Interactive lecture with PowerPoint Presentation, class discussion and demonstration.
SUCCESS CRITERIA:	70% or higher on a written, multiple-choice examination.
COMPUTER FILE NAME:	3.7 Bomb Threats and Disaster Trng
REVISIONS:	Major re-write August 2009

I. INTRODUCTION

A. Instructor – (self) introduction.

Instructor introduction. Explain what your duties are as a bomb technician responsibilities of the unit.

B. This course is designed to prepare first responders who are responding to incidents involving the use or threatened use of a weapon of mass destruction. The student will have a better understanding of past WMD (Weapons of Mass Destruction) attacks on the United States, current trends and potential threats that are in our communities.

Preview of performance objectives.

C. A weapon of mass destruction is described in section 921, title 18 US Code as being any explosive, incendiary or use of a poison gas, any weapon involving a disease organism, any weapon designed to release radiation or radioactivity at a level dangerous to human life or any destructive device as designed in Section 921 of this Title:

Instructor shares information regarding his/ her department and during their career

1. Bomb
2. Grenade.
3. Rocket having a propellant charge of more than four ounces.
4. Mine.
5. Device similar to any of the devices described in the preceding clauses.

Any type of weapon (other than a shotgun or a shotgun shell) which may be readily converted to expel a projectile with a bore of more than one-half inch in diameter.

II. HISTORICAL REASONS AND JUSTIFICATIONS

P.O.3.7.3H

A. Attacks in the United States.

1. 1972 – Order of the Rising Sun. Used 30-40 Kg. of typhoid bacteria cultures in the water supplies of Chicago and St. Louis. Not successful.

1. Material was successfully introduced into the water but water cleansing process killed bacteria.

1. 1984 – Bhagwan Shree Rajineesh. Cultivate salmonella bacteria to spray on salad bars to make people sick in order to influence an election. 751 became sick, 45 hospitalized, 0 fatalities.

2. 1993 – Al-Qaida, bombed the World Trade Center with a large vehicle bomb and cyanide. 6 killed.

3. Cyanide gas was used to enhance the number of deaths. Cyanide was destroyed in the explosion.

3. 1995 – Minnesota Patriots Council. They conspired to use ricin to assassinate federal agents who served papers on them for tax violation. Arrests were made prior to the attacks.

4. 1995 – Larry Wayne Harris, arrested for mail fraud for obtaining Yesinia Pestis, the bacteria that which causes bubonic plague. Arrested prior to use.

5. 1995 – Timothy McVeigh bombed the Murrah Federal Building in Oklahoma City, Oklahoma using a large vehicle bomb.

6. 1999 – Al-Qaida, Ahmed Ressam was arrested by customs agents for carrying explosive materials in his vehicle. It's believed his target was Seattle's Space Needle during the Millennial Celebrations.

7. The material that customs thought was a drug was actually TATP. He had other materials to make more explosives in the trunk.

7. 2001 – Al-Qaida, attack on the World Trade Center, and Pentagon by flying aircraft into the buildings.

8. 2003 – Brian Douglas Wells, he was a proxy bomber in Erie, Pennsylvania where a collar bomb was placed on his neck and told to rob a bank. The device detonated killing him.

9. It was later discovered that he was involved in the robbery and not a true proxy bomber.

9. 2005 – Joel Hinrich, suicide bombing in Norman, Oklahoma. It is believed Hinrich attempted to gain entry into the Oklahoma Memorial Stadium during a football game. After being denied three times he attempted to blow up a bus at a bus stop. The bus pulled away prior to the detonation.

10. Hinrich used TATP as his main charge. It is not know if the bomb malfunctioned when it blew up or he set it off. TATP was found in his room as well.

III. EXPLOSIVES

A. All explosives are sensitive to heat, shock and friction.

P.O. 3.7.2

B. Explosives are divided into **two classes** (Low and

High).

1. Low explosives burn or “deflagrate” at 3,300 feet per second (fps or slower.

2. High explosives detonated at 3,000 fps or higher.

3. Note: All explosives will burn if flame is applied.

IV. LOW EXPLOSIVES

P.O. 3.7.2D

A. Black Powder

Black Powder based

1. Extremely sensitive to head, shock and friction (regardless of its age).

Black powder based ammunition such as cannon balls still function as designed even after decades of being buried.

2. Most dangerous due to its availability and sensitivity.

3. Retains explosive properties regardless of age.

Always have the bomb squad handle item.

4. When confined, it burns faster.

5. Main ingredient in safety fuse.

6. Black Powder is commonly used in pipe bombs.

B. Smokeless Powder

7. Used in small arms ammunition.

8. Smokeless powder is sensitive to heat, shock and frictions, but is not as sensitive as black powder.

C. Flash Powder

Flash powder can detonate without confinement. All it needs is the weight of itself.

1. Very accessible, used in fireworks.

2. Flash powder is very sensitive to heat, shock and friction, more so than black powder.

Pound for pound is as powerful as dynamite.
P.O.3.7.2

3. Can detonate without confinement.

D. Safety/Time Fuse

P.O.3.7.2A

1. A waxy, fibrous, waterproof, outer core covering a layer of tar, which covers an **inner core of black powder.**

Core will be black or very dark gray color.

2. Burns at approximately 40-45 seconds per foot.

3. Used to initiate a non-electric blasting cap, which

then in turn sets off your high explosives charge.

4. Safety Fuse is color coded

   a. Black – Used in salt mines.

   b. White – Used in coal mines.

   c. Straw – General purpose.

   d. Green – Military.

V. HIGH EXPLOSIVES

P.O. 3.7.2E

A. High explosives are extremely sensitive and can detonate by applying <u>heat</u>, <u>shock</u> or <u>friction</u>.

B. Explosive Detonating Cord (also known as Primacord®, Detacord®, Primaline®, etc.)

P.O.3.7.2B

1. A line of cord containing a high explosive, usually PETN which is used to set off several charges simultaneously.

About 14 minutes from Los Angeles to New York

Usually full name (PETN).

2. The detonating velocity is approximately five miles per second (25,000 to 26,000 fps).

25 grain =25 grains of PETN per foot.

3. Detonating cord can come in various sizes and exterior colors but will have a **<u>white or pink inner core.</u>**

Detcord's core is white or light pink, safety fuse's core is black.

4. The number of grains determines the size. 25 grains means 25 grains per linear foot.

C. Dynamite – 8,000 to 21,000 FPS

Classified as a "<u>civilian explosive.</u>"

1. Composition and size will vary from approximately ½ pounds to 25 pound sticks.

<u>Always</u> have bomb squad handle them.

2. The main ingredient is nitroglycerin.

3. Other types of Dynamite.

   a. Ammonium (extra) -- nitro/ammonium nitrate.

   b. Gelatin – a nitro/nitrocellulose mixture used in wet environment blasting. It can stay under water for several hours.

4. Special problems encountered.

Be aware of your environment. The floor

   a. Due to improper and long-term storage, the

nitroglycerin can leach out forming crystals.

b. These crystals are covered with nitroglycerin and are extremely sensitive to heat, shock and friction.

you are walking on may be explosive. This is from the nitroglycerin leaching out and gravity taking hold.

c. **Never attempt to move crystallized dynamite.**

D. Binary Explosives

V. A binary explosive is a 2-part mixture that is commonly sold in 1/3, ½ and one pound sticks or pouches.

Classified as a "civilian explosive".

2. Nitro-paraffin or nitro-methane are fuels used to sensitize the ammonium nitrate.

Can be a plastic tube or a foil pouch.

3. Neither is an explosive by itself.

4. The product comes in pre-measured packages. You just mix the two and insert a blasting cap.

E. ANFO (Ammonium Nitrate Fuel Oil) 9,000 to 19,000 fps.

1. Used by Timothy McVeigh to bomb the Murrah Federal Building in Oklahoma City, OK.

Timothy McViegh stipulated to 4,000 lbs of ANFO. Receipts found suggest closer to 7,000 lbs.

2. Consists of ammonium nitrate and fuel oil (diesel fuel).

3. ANFO is mostly used for blasting operations to move earth.

4. ANFO requires the use of a booster in order to achieve detonation.

F. TNT (Trinitrotoluene) 22,600 fps

1. The standard by which all explosives are compared.

Classified as a "military ordnance."

2. Very stable and insensitive to head, shock and friction.

All explosives are compared to TNT. Nuclear weapons are said to be equivalent to __ tons of TNT

3. Military use only – has not civilian use.

4. Comes in Flake, Cast or Block form. Can be melted and cast into any shape.

5. It has high brisance characteristic. Used for demolition work.

Always have bomb squad handle item.

G. C-4 (Composition-4) 28,000 fps

1. C-4 is a white in color, high explosive that is RDX based. It has consistency similar to play dough and exhibits strings or spider webs when pulled apart.

Classified as a "<u>military ordnance</u>."

2. Very stable and insensitive to shock. Will burn readily with a yellow white hot flame, completely consuming itself.

The plasticizer used in C-4 is the same plasticizer used in Bazooka bubble gum.

3. Military use – however, there are civilian law enforcement applications.

4. High velocity and brisance give it the ability to shatter target.

<u>Always</u> have bomb squad handle item.

VI. BLASTING CAPS

P.O.3.7.2C

A. Non-electric blasting caps

1. Used in conjunction with safety fuse to initiate high explosives.

2. Non-electric cap attached to end of safety fuse with a cap crimping tool.

3. Small amount of highly sensitive, high explosive located in the last 1/3" of the cap.

4. Cap is initiated when the small flame, (called a spit) from safety fuse, reaches the explosive in the end of the cap.

5. Different colors and sizes (copper, aluminium, brass).

(Copper, brass, & aluminum).

6. **Transport only if the bomb squad is not available.** Ensure the caps are not broken, bent, or damaged in any way.

<u>Always</u> have bomb squad handle item.

a. Do not place in pocket

b. Do not blow into, or place anything into the open end of the cap.

c. The best place to put non-electric caps is in the trunk of your car, preferably wrapped in a blanket so they don't roll around loose.

Blasting caps are directional. Handle the like a gun; don't point them at yourself or others. The energy is directed out from the closed end and 360 degrees around the end.

d. Never transport blasting caps and explosives in the same container.

<u>Do not</u> allow the cap to roll around loose.

B. Electric blasting caps

1. Electric caps are used in conjunction with a power source.

   a. Power travels down leg wires and causes a bridge wire in the cap to heat up which sets off the chemical compound in the cap.

   b. As little as .4 amps can initiate blasting cap. This means that static electricity, RF energy and lightning (electrically charged atmosphere) can initiate an electric blasting cap.

As little as .5 amps can initiate, also can be initiated with static electricity, RF energy and lightning.

2. Electric blasting caps come in different colors and sizes (copper, aluminium). The size helps determine whether the cap is instantaneous or a delay cap.

   a. Copper caps are extremely hazardous and are no longer manufactured (brass caps are still in use). The copper case causes a chemical reaction to the explosives and form a highly sensitive explosive salt called copper azide.

   b. Copper caps or suspect copper caps should not be touched. **Call the bomb squad.**

3. Officers in the State of Arizona should not have to handle explosives due to the fact that bomb squads will respond to state wide situations. So if your department does not have a bomb squad, there is one close by who will respond to your situation.

4. Refer to your department's operations manual, Standard Operating Procedures, etc. to see what your policies are for handling recovered explosives.

5. If you must handle any blasting caps;

   a. Turn off your radio and cell pone. You should advise radio as you arrive on scene. Give them a time frame that you will be off the air.

   b. Ground yourself by placing your bare hand on the ground. If you have a knife, stick it into the ground and then touch the blade with your bare hand.

   c. If you are dealing with electric caps, accordion fold the leg wires. This prevents the leg wires from acting like an antenna and lesson s the ability of RF energy to initiate the cap.

d. Place the caps in a blanket or soft container and then place them inside your trunk.

e. Using a land based telephone or after obtaining some distance from your vehicle, call radio and advise them of what your have and the route you are taking to your impound (for hazardous materials such as an explosive magazine, bunkers, etc.).

There are millions of transmissions around us all the time. What we are concerned about is the pulse of energy coming from your radio or phone. Get some distance, go around a corner or go into another room prior to calling.

f. Keep your radio, cell phone, MDT, etc., off while transporting. If you can, have a second unit follow you in case of an emergency.

g. Never transport blasting caps and explosives in the same vehicle if possible.

VII. IMPROVISED EXPLOSIVES

A. Triacetonetriperoxide. (TATP)

1. A home made explosive that is extremely sensitive to heat, shock and friction. It only requires a heat source for initiation (match, safety fuse, etc.). Its blast properties can be compared to dynamite.

Made from common household materials; hydrogen peroxide, acetone and a strong acid (muriatic, sulfuric, etc.).

2. Easily made at home with hydrogen peroxide, sulphuric acid, and acetone.

3. Deteriorated TATP has a strong odor of vinegar.

4. Resembles crack cocaine

a. Drug reagent kits may cause TATP to detonate.

5. Richard Ried used TATP in his attempt to bomb an American Airlines Flight (shoe bomber case from December 2001).

B. Hexamethylenetriperoxidediamine (HMTD)

1. Similar to TATP, but more sensitive to friction and pressure.

Made from Hexamine tablets, hydrogen peroxide and citric acid.

2. Can be easily be made at home with hexamethylenetetramine, citric acid (any strong acid will do) and hydrogen peroxide.

3. Resembles powder sugar.

C. Chlorate mixtures

1. Potassium chlorate mixed with sugar or

Both require a blasting cap

charcoal.

2. Potassium chlorate and petroleum jelly.

A very sensitive explosive that is made from potassium chloride and red phosphorous. It is mixed in alcohol and placed on aluminium foil. While it's wet the foil is balled up and allowed to dry. Once it is dry, it is very sensitive to friction.

for initiation.

VIII. EXPLOSIVE DEVICE CATEGORIES

A. Manufactured.

1. Commercial high explosives.

2. Commercial low explosives.

Stress the difference between Classes (high, low) and Categories (manufactured and military).

B. Military explosives

C. Improvised.

IX. MILITARY ITEMS

A. Most military ordnance recovered are either stolen from the military or they are brought home as a souvenir.

B. Types of military ordnance most commonly found:

1. Hand Grenades including smoke, fragmentation and tear gas.

a. Most grenades have been made inert by drilling a hole in the bottom. If you can't see the hole. **Do Not Touch** ! Evacuate the area and call the bomb squad.

P.O. 3.7.1

b. If you show up on scene and one is handed to you (it has happened), and there is a spoon attached, tape it down use electrical tape, duct tape, fingerprint tape, etc. Use what you have to secure the spoon. Place the grenade in a secure location and call the bomb squad.

2. Pyrotechnics

a. Ground burst simulators and signal flares.

i. Treat in the same manner as hand grenades. Pyrotechnics can remove body parts if they detonate while you are holding them.

It is very hard to tell if a piece of military ordnance has been altered. If at all possible, ***Do Not Touch.***

3. Other military ordnance encountered.

a. Rockets

b. Bombs (from aircraft).

c. Landmines (claymore, etc.).

4. Military ammunition color codes.

a. Green – High Explosive

b. Black – Anti-Armor

c. Blue – Practice

d. Gray – Chemical

e. Do not rely on color code to indicate safety. Some training items contain up to 25 lbs. of high explosives

i. If the item is no longer in the possession of the military, assume that it has been altered or improvised into an Improvised Explosive Device (IED).

If it is not on a military installation, the color means absolutely nothing. Treat as an IED and call the bomb squad.

ii. On all cases dealing with military ordnance. ***Call the Bomb Squad.***

X. IMPROVISED EXPLOSIVES

A. Pipe Bombs

Due to the sensitivity of the filler it is best to not touch any improvised explosive. Static, pressure, heat, etc., can set them off

1. Most common type of IED encountered by bomb squads.

2. Consists of a pipe or tube and sealed ends using end caps or plugs.

a. Can be galvanized pipe, PVC pipe (anything the perpetrator can find that is hollow).

Call the Bomb Squad

3. Normally filled with a low explosive and a means of initiation (time fuse, hobby fuse, matches, paper, etc.).

B. Chemical reaction devices.

1. Normally a 2 liter bottle is used for the container. Any sized bottle can be used with varying degrees of results.

It is impossible to determine when these go off. Don't take chances.

2. There are dozens of chemical mixtures used inside the bottle such as dry ice and water,

HTH or muriatic acid and foil.

3. Extremely hazardous due to the high PSI (pounds per squad inch) generated and possible chemical burns.

Per ARS, chemical reaction devices are a class 4 felony.

A 2 liter soda bottle is regulated to withstand up to 120 PSI. The bottle cap is designed to break at 110 PSI. Compare these pressures to a police diversionary device (flash bang) that is around 5 PSI.

Dry ice and water mixture is a felony only if it is used during a criminal act

C. Co2 device. (Cricket)

1. This device is constructed of a Co2 cylinder and a low explosive. It is initiated by hobby fuse or a match.

Call the Bomb Squad

2. Treat this device the same as a hand grenade. Muriatic.

D. Improvised Explosive Devices (IED) is only limited to the imagination of the person building the device. They can be very simple like a pipe bomb or be very sophisticated with electronic circuits. If you are in doubt, call the bomb squad.

XI. BOMB THREATS

A. Bomb threats can be vague or very specific. Regardless of the type of threat, all threats must be acted upon.

B. Avoid the use of police radio/cell phones. **P.O.3.7.1C**

C. When you respond to a bomb threat, first contact the Responsible Person (RP). This may be the resident, a shift supervisor, a night watchmen, etc. Ask if they are the one who received the threat, if not request to speak to that person as well.

D. Request specialized assistance (bomb squad, fire department, HAZMAT, etc.). **P.O.3.7.1D**

E. Find out if a search had been done of the premises. If not, have the RP search with you. This is important because they know what belongs in the home/business. Because we are unfamiliar with the premises, everything looks suspicious to us.

Search public area's first working your way to the more secure areas.

F. It is up to the RP if an evacuation is going to be done when there is only a threat. If a suspicious item is found, advise the RP that an evacuation is advisable.

Remember to first search the area where people are being evacuated to.

G. Suspicious item is defined as an item; be it a box, suitcase, or backpack, which no one can account for. The item does not belong in the area and no one can account

for how it got there.	
H. Request a supervisor to assist at the scene.	**P.O.3.7.1E**
I. The suspicious item could contain an anti-disturbance mechanism and if disturbed can go off if moved. ***Do not Touch !***	**P.O.3.7.1A**
J. Evacuated the area. The recommended distance for a small to medium package is 300 feet behind cover. Remember to search the area where people are being evacuated to for possible secondary devices.	**P.O.3.7.3A**
XII. RESPONSE TO AN EXPLOSION AND DISASTERS	
A. First rule is to not become a victim yourself.	
B. While enroute, have the dispatcher make notifications to those specialized units that may need to respond.	Fire department, bomb squad, hazmat, medical, etc.
C. When you arrive, look at the whole scene. What is the environment where the explosion or disaster occurred? (Open area, vehicle, building, etc.).	
D. Assess the situation for hazards that may exist such as down power lines, open gas lines, weakened structures, toxic chemicals, oxygen deficient atmosphere, etc. Provide first aid as possible.	**P.O.3.7.3A**
E. Establish security perimeter and command post.	**P.O.3.7.3B**
F. Assess need for and request necessary equipment assistance.	**P.O.3.7.3C**
G. Identify and admit only necessary equipment and assistance.	**P.O.3.7.3D**
H. Request supervisor if not already on scene and maintain communications with updates.	**P.O.3.7.3E** **P.O.3.7.3F**
I. Be on alert to possible secondary devices.	
J. Be aware of surroundings	
1. Strong likelihood that the suspect is there and watching law enforcement's movements.	
2. They may be waiting to detonate a secondary device via a remote control.	
K. Applicable A.R.S. charges reference incidents.	
1. False reporting (A.R.S. §13-2907(A), Class	

1 misdemeanor.

2. Use of telephone to terrify, intimidate, threaten or harass (A.R.S. §13-2916(A), Class 1 misdemeanor.

3. Misconduct involving weapons (A.R.S. §13-3102 (A)(3), Class 4 felony.

a. This can be somewhat confusing.

b. Notice the definition of prohibited weapon under A.R.S. §13-3101.7, to include "explosive, incendiary or poison gas" bomb, grenade, rocket, mine, etc.

4. Misconduct involving simulated explosive devices (A.R.S. §13-3110(A), Class 1 misdemeanor.

XIII WEAPONS OF MASS DESTRUCTION (WMD)

A. WMD threat **P.O.3.7.3G1**

1. Chemical agents

2. Biological agents

3. Radiological agents

4. Nuclear

5. Explosives / incendiary devices.

These are military items. They are very hard and very hazardous to make. If they are used, then they are most likely stolen from the military, a laboratory or smuggled in from another country.

B. Blister agents.

1. Military Warfare Agents.

2. Corrosives can have similar effects as military warfare blister agents.

C. Choking agents

1. Phosgene (CG)

2. Chlorine (CL2)

3. Anhydrous

4. Ammonia.

a. Commercially available.

b. Heavier than air.

c. Causes severe irritation, pulmonary edema.

D. Blood agents/Cyanides

1. Cyanide

2. Used in the gas chamber, sodium cyanide pellets introduced to sulphuric acid creating hydrogen cyanide gas.

3. Used by Ramzi Yousef in 1993 World Trade Center Bombing.

E. Nerve Agents

1. Organophosphates -- Discovered by scientists creating insecticides.

2. Tabun (GA)

3. Sarin (GB)

4. Soman (GD)

5. VX

6. Victims must be removed from the source and given injection of Atropine and 2 Pam Chloride.

The "G" designates that they were discover in Germany, Tabun (GA) was Hitler's secret weapon that he planned on using if the war didn't go his way.

F. Toxic Industrial Chemicals (TIC)

P.O.3.7.3G2

1. Respiratory Irritants -- Acids, ammonia, aldehydes.

2. Choking – Chlorine, phosgene

3. Flammable gasses – Acetones, alkenes, alkyl halides.

4. Oxidizers – Oxygen, butadiene and peroxides.

5. Organophosphates – Pesticides, insecticides.

6. Sources of TIC's.

a. Chemical manufacturing and storage plants.

b. Food processing facilities.

c. Transportation assets.

d. Storage tanks, facilities.

Use of military chemical munitions is possible but unlikely. There are numerous commercial chemicals that have similar properties and are available everywhere.

e. Airports.	
f. Pumping stations.	
g. Mining.	
G. Incapacitating Agents.	Can be bought anywhere and used in the right scenario can cause mass panic (movie theater, concerts, etc.).
1. CS, CR, CN, OC.	
2. Easily to obtain.	
3. Effects in seconds.	
4. Commercially available.	
H. Biological agents.	
1. Categories.	
a. Bacteria.	
i. Single celled organism, does not need a host to survive.	**P.O.3.7.3G1**
ii. Anthrax is a bacteria.	
b. Viruses.	
i. Much smaller than Bacteria.	
ii. Needs a living host to survive and reproduce making it much more difficult to disseminate.	
iii. Examples would be Ebola, HIV.	
c. Toxins.	
i. Ricin is a neuro-toxin made from the beans of the castor plant.	Caster Bean plants grow all over the United States. Ricin comes from the Caster Bean.
ii. Botulinum toxin is one of the deadliest toxins known to man.	
I. Radiation	
1. The symbol used to identify radiation is the Trefoil.	**P.O.3.7.3G3**
2. Radiation sources are everywhere and used in medical and industrial settings.	
3. Exposure to first responders is possible through terrorist activities or accidental exposures by	

contact with sources involved in accidents or mishandling.

4. Be aware of businesses using radiation sources and type of packaging used to transport radioactive material.

5. Markings

a. Packaging containing radioactive material will be labelled.

b. Vehicles will be placarded on all four sides.

c. Buildings and facilities will have signs indicating radiation hazards.

d. Exception to this rule will be trucks transporting radioactive materials in large casks that are escorted by armed security.

J. Radiological Dissemination Device (RDD). **P.O.3.7.3G3**

1. A “Dirty Bomb” where radiological material is disseminated by an explosion. Can be as simple as placing a pipe bomb on a can of radioactive waste.

Dissemination can be achieved by other means such as simply placing a radioactive source in an area the terrorist wishes to contaminate.

2. Not a nuclear bomb, no fissionable material present.

3. Any type of radioactive material can be used.

4. Unlikely to cause serious health effects from the radiation used.

K. Protection.

1. Time – Spend the least amount of time in an area contaminated by a radioactive source. The less time in an environment, the less exposure.

2. Distance – Remove yourself as far as possible from the source. Distance is a good protective measure. 2 X 4 rule. For example; At one meter your reading is 25 µrem. A two meters your reading could be 4 µrem.

3. Shielding – Place a barrier such as a large dirt mound, concrete walls, or lead between you and the radiation source. Household items such as smoke detectors contain radioactive sources.

Smoke detectors have an Alpha emitter.

L. Types of radiation.

1. Alpha and Beta radiation are particles – Protect your respiratory system as well as using barriers.

2. Gamma and Neutron are high energy electromagnetic radiation wavelengths. **P.O.3.7.3G3**

M. Personal Protection Equipment **P.O.3.7.3G4**

1. Level “A”. As a first responder, most likely you won’t have PPE over level “C”

a. Provides the most protection.

b. Incorporates a fully encapsulating suit and Self Contained Breathing Apparatus (SCBA). Your best defense is knowledge.

c. OSHA requires level “A” when entering an unknown environment.

2. Level “B”.

a. Similar to a level “A” but not encapsulated.

b. SCBA is on the outside of the suit.

3. Level “C”.

a. No splash problems.

b. Gloves and Boots are not attached to the suit. They must be taped in place.

c. Full face respirator or supplied air respirator.

4. Level “D” Level “D’ is your normal street clothes or uniform.

a. This consists of your work uniform.

b. Does not provide much protection.

XIV. CRITICAL INFRASTRUCTURES/POSSIBLE TARGETS OF TERRORISM

A. Eight Critical infrastructures **P.O.3.7.3H**

1. Electrical power These are said to be the

2. Gas and oil storage.

3. Government operation.

4. Transportation.

5. Telecommunications.

6. Agriculture – Food – Water.

7. Emergency Services.

8. Banking and Finance.

most likely targets. We also believe that targets such as shopping mall, and sporting events are very likely targets.

XV. TERRORISM

A. Terrorist groups active in the United States.

1. Left Wing.

a. ALF – ELF – PETA

b. These groups now believe that it is permissible to kill in order to further their cause.

It is believed that some of these organizations have been approached by foreign terrorist because of their anti-government activities and beliefs.

2. Right Wing.

P.O. 3.7.3.H

Neo Nazi – Militia Groups – Freemen – KKK -Posse Comitatus – Christian Identity.

3. Lone Wolf.

Larry Wayne Harris – Ted Kaczynski – Eric Ruldolph.

4. Islamic.

a. Al Qaida – Hamas – Islamic Jihad – Hezbollah – Abu Sayyaf Group – Algerian Armed Islamic Group – Muslim Brotherhood – Just to name a few.

b. The profile of an Islamic terrorist is that there are not profiles. Men and women, young and old are being utilized to carry our their deeds.

5. Who de we have to watch?

All of them.

B. Terrorism.

P.O.3.7.3I

1. Up to 87% of worldwide terrorists related incidents involved the use of explosives.

Explosives are still the number one choice of

a. Bombings.

b. Suicide/Homicide Bombers.

c. Vehicle Born Improvised Explosives Devices (VBIED).

terrorists. They tend to be creatures of habit and stick with what they know.

C. Suicide/Homicide Terrorism. **P.O.3.7.3J**

1. Definition – A terrorist carrying out an attack using an improvised explosive device (IED) who knowingly, willingly kills his/herself when activating the device.

2. The motive is not suicide….. It's HOMICIDE.

3. Most experts believe it's not a matter of if, but a matter of when.

D. Suicide/Homicide Prevention

1. Unless discovered and stopped in the planning stage, this act will be very hard to prevent.

2. Does your agency have a written policy on suicide/homicide terrorism?

3. Things to consider.

This is a topic that most agencies don't like to discuss because the only true way to deal with a determined suicide/homicide bomber is to kill them before they kill us.

a. If the suspect is a determined suicide bomber, deadly force is normally the only response option.

b. Determined bomber will detonate their device if they believe they have been discovered.

c. Some bombers may have a handler who can remotely detonate the device.

d. If possible maintain distance.

i. Experts say 50 feet behind cover.

ii. Close and negotiate tactics should not be attempted.

The Israelis have a method that would not set to well with American Law Enforcement. They identify the bomber and send plain clothed personnel and tackle them and prone them out prior to them being able to press the switch. Of course this can only happen if the bomber is identified prior to reaching their target.

Remember, there may be a handler who has the ability to fire the device.

e. If you believe deadly force is the only option. **P.O.3.7.3J**

i. Attempt a headshot.

ii. Do not shoot the explosives. **DO NOT USE A TASER,**

f. If a bomber is neutralized.	**THIS WILL SET OFF THE EXPLOSIVES.**
i. Do not attempt to render first aid.	
ii. Retreat to a point of observation.	This could be a trick where they are trying to lure you in closer. **YOU ARE THE TARGET!**
iii. Make an immediate area evacuation.	
iv. Establish a perimeter.	
v. Be aware of secondary devices, bombers or vehicle borne bombs.	
vi. EOD should make the initial approach.	
g. If a bomber is giving up.	**P.O.3.7.3J**
i. Seek and maintain cover.	
ii. Evacuate area and attempt to set up a perimeter.	
iii. Separate suspect from their device.	
iv. At this point leave them down range.	
v. Make sure the bomber has no other device or methods of initiating their device.	Time is critical
Have them take their clothes off before attempting to take the suspect into custody.	
vi. Never approach the device.	
E. Vehicle Borne Improvised Explosive Device (VBIED).	
1. Bomb in a car or VBIED, what's the difference?	A VBIED does not have to be a U-Haul® or Ryder® type vehicle. A sedan can hold 500 lbs or more an ANFO.
2. Historically the United States has been the target of VBIED's both at home and overseas.	
3. The threat of a VBIED is real.	
4. Advantages of vehicle born IED's	**P.O.3.7.3G5**
a. Large amount of explosives can be used.	

b. Easily obtained.	
c. Do not look out of place.	
d. Easy method of transporting the device.	
e. Vehicle and fuel can enhance the effects.	
5. Types of vehicles.	
a. Heavy goods vehicles.	
b. Buses.	
c. Vans.	
d. Cars.	
e. Motorcycles/Bicycles.	
f. Vehicle trailers.	
g. Industrial equipment.	
6. Methods of initiation.	
a. Short/Long delay timers.	
b. Burning fuse.	**P.O.3.7.3G5**
c. Remote control.	
a. Cell phones.	
b. Garage openers.	
c. Radio control devices.	
d. Suicide bomber.	
e. Victim.	
f. Proxy bomber.	
F. Response to a possible VBIED	
1. Notify a supervisor and radio communications, advising them of your situation.	**P.O.3.7.3.G5**
2. If <u>not</u> verified; call for specialized assistance (bomb squad, fire department, etc.).	
3. Verified; start evacuation, 500 meters is the recognized distance. Buildings do not provide much	The threat of building collapse and falling debris

protection inside this distance.

4. Remember that the VBIED is most likely on a timer or is set up as a victim actuated device if there is no driver. In most cases overseas; if there is a driver it is a suicide VBIED.

is likely. Blast reflection can go around corners and hit you causing death or serious injury

VI. CONCLUSION

A. Review of performance objectives.

B. Final questions and answers.

C. Instructor closing comment(s).

VII. ***OPTIONAL ACTIVITY*** **– DYNAMIC DEMONSTRATIONS**

MUST BE CLEARED THROUGH PROPER CHANNELS AT THE ACADEMY.

A. The time allotted for this class may allow demonstrations by bomb squad members – some demonstrations which may be considered are:

1. A demonstration of “shock tube” or non-electric initiating system.

2. The detonation of a blasting cap in an empty coffee can.

B. The demonstrations may be used at the discretion of the course instructors.

C. Consider the location of the class when making this decision (sound, fragmentation possibilities, etc.).