PRACTICAL PORTION OF THE REFRESHER/ PART-TIME CLASS

The practical portion should be completed after the online class is complete. The following lesson plans are the minimum requirement for the practical portion. The lead instructor should sign off on each section for each officer and go to webforms in the portal (Refresher/ Part-time Practical) and upload the document below for each participant in their class.

PART-TIME/ REFRESHER PRACTICAL

Officer Name:_____ CLEST-ID #:_____

Lead Instructor:_____ Date of Class:_____

Location or Department of class:_____

Defensive Tactics	Complete: _____ Incomplete:_____
Firearms Qualification	Firearms Score:_____ Date of Qualification:_____
Accident Investigation	Complete: _____ Incomplete:_____
Active Shooter	Complete: _____ Incomplete:_____
Self Aid/Buddy Aid	Complete: _____ Incomplete:_____
OC Spray	PASS:_____ FAIL:_____ WAIVER:_____
	If waiver is used, please upload letter on department letterhead.

I am certifying that this officer has completed all of the above practical portions as defined by the lesson plans attached to this document.

_____ _____

Lead Instructor Signiture Date

Example Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 to 8:50	**Firearms (8 Hours)** Inspection Cleaning Orientation Drills Qualification (1 of 2 Targets)	**Defensive Tactics (8 hours)** Review of: Pressure Points Handcuffing Baton Strikes and Kicks	**Building / Area Search (2 Group Sessions)** (Active Shooter) **(4 Hours)** Firearms Safety-Moving and Shooting Contact/Cover	**Accident Investigation (8 Hours)** Diagramming practical	**First Aid First Responder (Self-Aid/Buddy Aid) (4 Hours)** Tourniquet Wound Packing Chest Seals
9:00 to 9:50					
10:00 to 10:50					
11:00 to 11:50					
Lunch	Lunch	Lunch	Lunch	Lunch	
1:00 to 1:50		Ground Fighting Weapon Retention	**Traffic Stops (2 Group Sessions) (4 Hours)**		
2.00 to 2:50					
3:00 to 3:50		OC Spray - Exposure			
4:00 to 4:50					

Prepared 10/15/2020

Police Refresher/ Part-Time Course

8 hr. Practical Exercise

Instructional Unit Title: Defensive Tactics

Terminal Objective: To familiarize the Officer with the methods of self-defense; to include pressure points, tactical handcuffing, tactical baton, empty hand strikes and kicks, grappling and takedowns, escapes, weapon retention, and OC spray deployment & exposure

Enabling Objectives:

1. The officer will learn and demonstrate the proper application of handcuffs.
2. The Officer will learn and demonstrate the proper use of the collapsible baton.
3. The Officer will learn and demonstrate empty hand control techniques to include; command presence, and grappling.
4. The Officer will identify the proper application of OC as it relates to a field situation involving non-compliant suspects. Each student will participate in a laboratory which will involve both the application and decontamination of OC.

Time Allotted: 8 Hours

Instructional Method: Practical demonstration

Target group: Refresher/ Part-Time Students

References: Police Combative's 2006 Chuck Habermehl

ASP Tactical Handcuffing 2009 Armament Systems & Procedures

ASP Tactical Baton 2009 Armament Systems & Procedures

PPCT Defensive Tactics 1996 PPCT Management Systems

Training Aids: Training Firearm, Collapsible Baton, Handcuffs, Strike pads, Wrestling mat, and Duty Rig

Coordinating Personnel: Recommended 12:1 student to Instructor ratio

Prepared by: Joe Duboise/ Amanda M. Chaney

10/15/20

I. Basic Tactical Handcuffing Application 1 Hour

1. Expected effects of Tactical Handcuffing

    a. Decentralization of subject.

    b. Quick application of handcuffs.

    c. Ability to respond to resistance.

2. Principles of Application.

    a. Balance displacement.

    b. Distraction.

    c. Pain Compliance (when resistance is encountered).

3. Considerations of Tactical Handcuffing.

    Tactical handcuffing is designed so an officer can quickly handcuff a subject by using the same technique whether the subject is standing, kneeling, or in the prone position. It should be the officer's primary concern to get the first handcuff on quickly, utilizing the double-push principle. Additional control can be obtained by rotating the cuffed hand to the outside. This will also minimize the subject's ability to rotate into the control and allow the officer easy access to the second hand.

4. Technique Considerations.

    a. Control subject first.

    b. Handcuffs are held firmly with fingers around the chain links separating the handcuffs.

    c. Double bars are loaded toward the palm with the single bars poised to go on the subject's wrist.

    d. Decentralize the subject prior to approach.

        1. Standing:

            aa. Legs spread shoulder width apart.

            bb. Toes pointed out.

cc. Upper torso is bent slightly forward.

dd. Arms back, palms facing up.

ee. Subject facing away from officer's approach.

2. Kneeling:

aa. Subject directed to both knees.

bb. Ankles crossed.

cc. Knees spread after crossing ankles.

dd. Upper torso is bent slightly forward.

ee. Arms back, palms facing up.

ff. Subject facing away from officer's approach.

3. Prone:

aa. Subjected directed to a prone position.

bb. Arms straight out, palms facing up.

cc. Legs spread, toes out, heels down.

dd. Subject facing away from officer's approach.

e. Maintain the reactionary gap.

f. Utilize the double push method of applying the handcuffs. Simultaneously pull the hand into the cuff while pushing the cuff onto the wrist.

g. Flip the handcuffed wrist to the outside while maintaining control of the cuff chain.

h. The unrestrained hand is then controlled by turning the thumb up and applying the second handcuff by using either a top down or bottom up motion while applying the single bar side of the cuff to the wrist.

i. Double lock the handcuffs.

5. Speed and accuracy drills
    - Place basic in a circle, allow two students to apply handcuff in a circular motion, completing the circle. Students will use batons for drill.
    - Place squads at the outside 25 yard line, run to the end on the yard line apply cuff properly on other squad members, if applied properly the student stays in the handcuff position and the other member runs to tag off the next basic.
    - Have the students in two rows, one row facing the opposite direction in the handcuff position. The instructor will advise the "arrestee" students to apply the cuff properly, once the "arrestees" approach the cuffed student, the instructor turns the lights out, once everyone stated they are done the instructors check for tightness and double lock techniques.

Verbalization

A. Verbalize when performing defensive tactics drills so that verbalization occurs during the real thing.
    a) EX. "Stop resisting and you won`t get hurt!"

B. Good "Command Presence" can aid in keeping you out of trouble.
    a) Command Presence is your ability to take control of a scene.

Don`t let your command presence turn into over confidence. You must be able to perceive the threat, feel the threat and feel the danger to prepare for it!

II. Collapsible Impact Weapons- Batons 1hr

A. Designed as a Defensive Impact weapon.

B. Two modes of operation are open and closed.

C. The primary striking surface in open mode is the last 3 inches of the shaft or tip.

D. Closed mode striking surface is the cap.

E. WARNING
    a) DO NOT target strikes to the head, neck, spine, sternum, or groin!!!
    b) Strikes to these areas may produce injuries which are eventually fatal, while not effectively terminating assailant resistance.

Baton Strikes

A. Closed mode strikes used in close contact after all other procedures have failed.
   1) Weapon Strike.
      i. Baton held in full hand grip.
      ii. Primary striking surface is the cap.
      iii. Strike targets the center mass of the body.
   2) Reaction Strike
      i. Strike is directed at a 45 degree angle toward the center mass of the subject's body.
   3) Straight Strike
      i. Baton is grasped firmly in a vertical position.
      ii. Primary striking surface is the fist.
      iii. The strike is directed at the center mass on of the body.

B. Open Mode Strikes.
   1) Weapon Strikes
      i. Most powerful and most often used.
      ii. Strike with the last three inches.
      iii. Strike to the center mass of the subject's weapon delivery system.
      iv. <u>Continue striking only so long as resistance continues.</u>

   2) Rapid Response Strike.
      i. Can be employed during a sudden assault when there is little time or warning.
      ii. Swinging the baton with a 45-degree arc with a full extension of the arm allows the baton to open while in route to its target.

   3) Reaction Strike.
      i. Less powerful than a weapon strike.
      ii. Execute rapidly as a means of returning the baton to the weapon side.
      iii. Striking hand is palm down.
      iv. Target the area between the shoulder and waist of the subject.

   4) Straight Strike.
      i. Short range technique used to create distance.
      ii. Used when the aggressive assailant closed the gap despite warnings or other strikes.

   5) Open mode combinations.

i. Baton strikes can be used in any order, repeated or combined with other strikes as the encounter requires.
ii. Strikes should stop as soon as control is restored.

III. Ground fighting & weapon retention 1 hr

1. Orientation
   a. Safety
      1. Instructor will advise students of all safety rules.
   b. Tap-out
      1. Instructor will advise students how to verbally and physically "tap out" if training becomes unsafe or to intense.
   c. Stretch
      1. Instructor will lead students in 10 minutes, or until the Instructors satisfaction, of light calisthenics to warm the muscles for training.

2. Takedowns- Instructors will demonstrate each maneuver for the students before pairing them up. After students are paired up, the instructors will lead the student step by step through the maneuver. Once the instructors have observed the students and corrected any problems, the students will complete the maneuver at speed on the command of the instructor. When the students switch partners, the instructor will complete the instruction part again as needed.

   a. Bulldog
      1. Use your left arm/hand in a reverse hooked position, forearm straight up, and arm bent. Hook behind subjects` neck. Snap subject down using your body weight. Keep your arm bent and close to the subjects` body to stay strong. Snap subject over to at least a 90 degree angle. Grab subjects` belt with your off hand and drive him (bulldog him) down to the ground.

   b. Arm-bar
      1. Under hook the subjects` right arm with your left. From this position place your left hand on the subject` right shoulder. Place your right hand on top of your left hand. Step back from subject with your right leg and push down on subjects`

shoulder while you raise your left elbow up. Keep the subjects` arm in the armbar and drive him to the ground.

c. T-bar

1. With your left arm, underhook the subjects` right arm. Catapult the subjects` arm up as you duck underneath his arm and move behind him. Now you should have him in a rear bearhug. Slide to the subjects` left side and take your right arm and slam it in between the subjects` legs. With your left hand, reach in front of the subjects` legs and grab your right wrist. Pull up and drive forward.

3. Breakdowns- Instructors will demonstrate each maneuver for the students before pairing them up. After students are paired up, the instructors will lead the student step by step through the maneuver. Once the instructors have observed the students and corrected any problems, the students will complete the maneuver at speed on the command of the instructor. When the students switch partners, the instructor will complete the instruction part again as needed.

a. Outside Arm

1. When the subject is on all fours you are crouched adjacent to the subjects` left hip. With your left arm, reach under the subjects` chest and grab his right arm at the elbow with your thumb on top. Your right arm is around his waist to stabilize him in position. Pull the subjects` arm in ward across his own chest, while driving your body into him. Drive in the direction of the pulled arm and slide right up to the mount position.

b. Outside Leg

1. From the same start position as the outside arm, kneel down, and with both hands, grab the subjects` outside leg at the knee. (Your left arm reaches in front of his leg and your right arm reaches behind his leg.) Interlace your fingers and pull the subjects` knees together and drive with your body toward the trapped knee. Slide up to the mount position.

c. T-bar

1. From the same start position as outside arm and outside leg, take your right arm and slam it between the subjects` legs from behind (crotch area) making sure your right forearm is bent to

strike the groin. With your left hand reach around the front of the subjects` legs and grip your right wrist palm down. With a rocking chair motion of your right arm, lift and drive the subject forwards. You should end up on the subjects` back.

4. Mount- Instructors will demonstrate each maneuver for the students before pairing them up. After students are paired up, the instructors will lead the student step by step through the maneuver. Once the instructors have observed the students and corrected any problems, the students will complete the maneuver at speed on the command of the instructor. When the students switch partners, the instructor will complete the instruction part again as needed

   a. Side Mount
      1. Is where the subject is on his back, and you are lying with your chest on his chest with your body at a 90 degree angle out from the subject. Your arms are locked around his head, and your feet are spread apart to give you a solid base.

   b. Full Mount
      1. Is straddling a person across the chest with your knees on the ground.

   c. Blocking the Mount
      1. Prevent the mount by raising your inside leg (leg closest to the offender) to a 45 degree angle and keep contact with your leg against the subject

   d. Bucking the Mount
      1. If the offender has mounted you, every time the subject tries to punch, you should buck at the waist; this will force the subject to reestablish his base each time you buck, thus preventing him from doing damage to you by punching etc.

5. The Guard- Instructors will demonstrate each maneuver for the students before pairing them up. After students are paired up, the instructors will lead the student step by step through the maneuver. Once the instructors have observed the students and corrected any problems, the students will complete the maneuver at speed on the command of the instructor. When

the students switch partners, the instructor will complete the instruction part again as needed

a. Guard
    1. The guard position is when you are on your back with the subject scissor between your legs.

b. Passing Full Guard
    1. Try to escape the subjects` guard by planting a knee at the base of the subjects` tailbone, using the tips of your elbows to dig into the inside of the subjects` legs to break the grip of the crossed ankles. Once the grip is broken, scoop his legs and catapult them over your head. Protect your neck so he doesn't choke you with his legs

6. Arm Bars- Instructors will demonstrate each maneuver for the students before pairing them up. After students are paired up, the instructors will lead the student step by step through the maneuver. Once the instructors have observed the students and corrected any problems, the students will complete the maneuver at speed on the command of the instructor. When the students switch partners, the instructor will complete the instruction part again as needed

c. Figure 4
    1. From the mount position, trap the subjects` right arm at a 90 degree angle with your right arm. With your left hand palm down, slide under the subjects` forearm and grab your other wrist with your fingers on top. While keeping the back of his hand in contact with the ground, raise your left arm.

d. Straight
    1. From the mount, grab an arm with both hands. Stand up, step to opposite side of the arm that you grabbed. Both feet should be on opposite side of the offenders` body, with the subjects` arm extended between your legs. Now sit down on the opposite side you're standing on while keeping the subjects shoulder extended between your legs. Lay back and push your hips up against the subjects` elbow, while lying back, pull his arm down to your chest. Keep the subjects` arms extended with palm facing up when in the final position.

7. Weapon Retention:

If your weapon is in the holster and a subject who is facing you grabs your weapon:

A) Place your strong hand on your pistol, which is then on top of his hand, with your palm down and fingers facing forward.
B) Push your gun back into the holster
C) Support hand is placed on top of the strong hand at a 90-degree angle, palm down and fingers pointing away from the side
D) Push your gun back into the holster
E) Squeeze the subject`s hand
F) Lower your center of gravity
G) Step into the subject
H) Spin violently AGAINST the subject's wrist
A) Spin quickly and violently in a small circle to break the subject's hand from the weapon or break the subject's wrist. If your weapon is in the holster and a subject who is behind you grabs your weapon:
   - Immediately trap the weapon and the subject`s hands as before
   - Lower your center of gravity
   - Step back towards the attacker
   - Spin violently in a small circle, going against the subject`s wrist
   - Break the grip or the wrist.

IV. <u>Identify and demonstrate the proper application of OC. 2 hr</u>

1. The maximum effective range for most OC devices is approximately 15 feet. The distance of the suspect and wind conditions are factors that the officer has to take into consideration prior to spraying. As stated previously, OC should never be used when a lesser force option is applicable. In deadly force situations where an officer cannot get to their firearm, OC may be used. When the use of OC is justified, the following spraying guidelines should be followed:

   a. Attempt to maintain a safe distance of 4 to 6 feet from the suspect when spraying. This will: (1) give the officer time to react to the suspects movement; (2) allow optimal dispersal of the OC carrier stream; (3) allow evaporation of excess alcohol in the carrier formula; (4) help prevent high pressure liquid injuries to the suspects eyes; and (5) give the OC time to take effect. (OC effects will not fully occur until the carrier evaporates.)

b. Point the OC device directly at the suspects face and eyes and depress the actuator for approximately 1 second. The officer must be careful **not** to "**over spray**" the suspect. If over spraying occurs the desired effects may be delayed and there will also be an excessive amount of OC in the air. Another drawback to over spraying is that the active OC in the air can be dangerous to the officer because of the possibility of "blow back" spray. The old saying, "If a little is good then a lot is better" doesn't apply with OC.

c. The officer who sprays OC should, if at all possible, shout "OC" or "SPRAY" before spraying. This will warn other officers in the area. They should also raise their free hands in front of their face to lessen the possibility of contamination.

d. After an officer sprays a suspect with OC they should move to a position of advantage and evaluate the effects and tactical situation. Tactical movement to maintain a position of advantage is an important factor in the deployment of OC.

2. Exposure Exercise
(*Mandatory w/o Waiver***)**

All students, that have been medically cleared, will be exposed to OC spray. The instructors will oversee the exposure and decontamination process and ensure that all students participate in both the exposure and decontamination stages of the training.

Exposure training of the students serves 6 purposes:

a. OC assaults on officers by criminals are <u>increasingly frequent occurrences</u> in the real world of the streets. In at least two incidents officers, who were victims of OC attacks, felt compelled to use deadly force against their attackers. The Grand Juries who acquitted the officers based their decisions primarily on the fact that the officers had been exposed to OC in their training and knew from personal experience the incapacitating effect of OC. This was a major factor in the "Totality of Circumstances" standard for the use of deadly force. An incapacitated officer cannot protect the public or himself.

b. Officers who have been *exposed* have a *better understanding of the effects* and limitations of OC. Officers will know that OC can have a wide range of effects on suspects depending on the individual and circumstances of its use. With proper training the officer will not have unrealistic expectations that OC will "instantly" work on "all" subjects. Personal knowledge of

OC's effects will allow the officer to take actions that will decrease the danger of harm to himself, suspects, and the public.

c. Officer credibility in court testimony is enhanced when confronted with suspects claims of excessive force or pain and suffering resulting from OC use. The trained officer can speak from personal experience not only that OC can incapacitate, but also that OC is survivable with minimal or no lasting effects, especially when compared to the use of other force options such as impact tools or deadly force.

d. An officer who has undergone OC exposure will be more judicious in their use of OC. Understanding the effects of OC from personal experience will help prevent the misuse of OC on suspects when a lower level of force could reasonably and safely be applied.

e. Officers who have been sprayed and decontaminated will be more effective at applying decontamination procedures to themselves and others in the field. Officers who have been exposed will more aware of potential problems in exposed subjects than officers who have not undergone the experience.

f. Officers will learn that it is possible to survive, overcome, and win a confrontation involving OC exposure. This is the single most important reason for OC exposure in training. Simple exposure is not sufficient to accomplish this objective, the student must be exposed and required to accomplish specific tasks related to officer survival and suspect control.

The class will be broken down into groups of two. The student being exposed will assume a FI stance. The instructor will assume the role of a obtain compliance from the instructor. The instructor will, at a time of his choosing, spray the student with OC to simulate an OC assault. Immediately after the student has been sprayed with OC, their partner will take over the role of attacker and approach the exposed student with a kick bag in a simulated physical attack. The exposed student will take appropriate action with their available force options (verbal commands and/or practice baton, practice firearm, empty hand techniques, OC, etc.) until instructed to cease action by the instructor. (Scenario should not exceed 30 seconds duration.)

At the conclusion of the scenario the student playing the role of the attacker will assist the exposed student through the entire decontamination process. The students will then reverse roles.

The decontamination process will familiarize the students with the effects of OC and help them to quickly recognize and individual that is experiencing an adverse reaction to OC.

Prior to student exposure the instructor should have the following training items in place:

1. Instructor (1 primary instructor and 2 safety instructors per class)

    a. 4 - 6 water hoses or the functional equivalent (potable water source)

    b. 4 - 6 large fans or the functional equivalent

    c. 4 live OC units per 24 students

    d. 1 pair of protective goggles per instructor

    e. 1 pair of protective eye goggles per student in the attacker role.

    f. Communication equipment (to contact emergency medical assistance if necessary)

    g. Conduct a test to determine the wind direction by spraying inert OC into the air. This will ensure that the live OC does not expose bystanders or flow into the decontamination area.

    THIS PRACTICAL MAY BE MODIFIED TO ACCOMMODATE CLASS SIZE AND AVAILABLE FACILITIES.

V. Conclusion

A. It is important to remember that to be effective in the use of defensive tactics you should continue to train to develop automated responses to attacks.

Firearm Qualification

Practical Exercise

8 hours

Law Enforcement Refresher/ Part-Time Course

Revised: October 2020

Instructional Unit Title: Firearm's Orientation / Qualification

Training Aids:

Firing Range

Coordination / Personnel:

Firearm's Instructor(s)

Terminal Objective:

This practical is designed to apply the refresher/ part-time student's ability to safely handle and operate their issued handgun, as well as, complete a proficient marksmanship qualification.

Enabling Objectives:

1. Demonstrate safe manipulation and operation of the handgun through firearms orientation drills.
2. Qualify by scoring no less than 80% on the ALETA Handgun Speed and Accuracy Course.

Firearms Orientation / Qualification

Introduction

A. The ability of the Officer to demonstrate proficient operations and accuracy with the handgun.

Body

Orientation Drills (Weapons should be cleared of ammunition)

1. Holster Manipulation and Drawing to Target
   a. Officers will stand in interview stance facing a safe direction.
   b. On command, have officers draw from holster to target. Officers should demonstrate strict trigger finger discipline and muzzle placement.
   c. On command, have officers draw to target with two hand grip, strong hand only grip and weak hand grip.
   d. Officers should perform a safe and effective ready position with their handgun.

2. Dry Fire
   a. Have officers draw weapon to target and establish proper sight alignment and sight picture.
   b. On command, Officers should dry fire their weapon, demonstrating smooth trigger discipline.

3. Magazine Exchanges
   a. All magazines should be cleared of ammunition
   b. Officers will insert an empty magazine into the weapon
   c. On command, officers should demonstrate a proper tactical magazine exchange, while maintaining strict muzzle and finger discipline.
   d. On command, officers should demonstrate a proper combat reload, while maintaining strict muzzle and trigger finger discipline.

4. Weapon Malfunction Clearance
   a. Have officers demonstrate applicable phases of clearing firing malfunctions with their weapons.

B. Range Safety Rules

1. **Assigned Firearm's Instructors should explain the appropriate safety rules and regulations designated for their range facility, before qualification can begin.**

C. Qualification

1. Officers will be given two (2) attempts to score no less than 80% (400 or better on a 500 point scale) on one target.

2. Required Course of Fire:

ARKANSAS MODEL HANDGUN COURSE

(Meets all minimum requirements. Fifty round course of fire; B-27 Standard Silhouette)

<u>3 Yards</u>

1. Starting with an empty chamber and a loaded magazine inserted into the weapon, from the holster, draw and fire on empty chamber, execute an immediate action drill, followed by **2 rounds**, both hands, in 9 seconds.

2. From the ready, **2 rounds**, both hands, in 4 seconds.

3. From the ready, **2 rounds**, both hands, in 4 seconds and holster.

4. From the holster, **2 rounds**, strong hand only, in 5 seconds.

5. From the ready, **2 rounds**, strong hand only, in 4 seconds.

6. From the ready, **2 rounds**, strong hand only, in 4 seconds, then a tactical exchange of magazines and holster.

7. From the holster, **2 rounds**, weak hand only, in 5 seconds.

8. From the ready, **2 rounds**, weak hand only, in 4 seconds.

9. From the ready, **2 rounds**, weak hand only, in 4 seconds and holster.

<u>7 Yards</u> (5+1 in gun)

1. From the holster, **3 rounds** in 7 seconds.

2. From the ready, **3 rounds**, combat reload, **3 more rounds**, 16 seconds.

3. From the ready, **5 rounds** in 10 seconds and holster.

<u>15 Yards</u> (Set-Up Magazines – 7+1 rnds in weapon/ 10 rnds in a reload)

1. From the holster, **4 rounds** in 9 seconds.

2. From the ready, **4 rounds** in 8 seconds combat reload and holster.

3. From the holster, **3 rounds** in 7 seconds.

4. From the ready, **2 rounds** in 4 seconds and holster.

5. From the holster, **3 rounds** in 7 seconds.

6. From the ready, **2 rounds** in 4 seconds.

III. Conclusion

A. Every law enforcement officer in the state should be properly trained in the function and use of their assigned duty weapon, and demonstrate their skill by completing the qualification course of fire successfully.

ACCIDENT INVESTIGATION
(Diagramming Practical)

8 Hours

Joe Duboise/ Amanda M. Chaney
Revised: October 15, 2020

Law Enforcement Refresher /Part-Time

References:

Rivers, R.W., Traffic Accident Investigators' Handbook, Charles C. Thomas, Publisher, Springfield, IL, 1980.

Arkansas Law Enforcement Training Academy accident investigation student book. Revised August 2018.

Training Aids:

Handouts
Chalk
100ft Measuring Tape or Wheel

Coordination/Personnel:

Agency Training Staff

Prepared By:

Joe Duboise/ Amanda M. Chaney

Course Name:

Accident Investigation Practical Diagramming

Terminal Objective:

This lesson plans purpose is to prepare the student to be able to properly diagram a traffic accident using field sketches and taking measurements. This lesson will provide the student with the knowledge necessary to perform these tasks.

Enabling Objectives:

At the conclusion of this course, the student will:

1. Be able to demonstrate how to prepare a field sketch
2. Be able to demonstrate and explain the coordinate method and baseline.
3. Be able to demonstrate and explain the triangulation method
4. Be able to record measurements directly on the field sketch
5. Be able to prepare a scale diagram of the crash scene
6. Be able to use e-Crash program

I. INTRODUCTION

a. One of the most important aspects of the entire traffic crash investigation process is the taking and recording of accurate and adequate measurements during the at-scene

investigation. Good measurements serve to assist in determining where, how and why a crash occurred and what happened (the results).

b. They refresh an investigators memory of the investigation; enable the investigator to testify, perhaps at a much later time, with accuracy and confidence regarding the location of objects and events at a crash scene.
c. Assist Accident Reconstructionist to prepare a scale diagram or map of the crash and determining the truthfulness of statements given by drivers and witnesses.
d. And provide a better understanding of the relationships of things in photographs

II. BODY

A. WHAT TO MEASURE

Upon arriving at a crash scene, the investigator must decide what to measure and how to best complete the measurements. The positions of vehicles and other objects that are not likely to be moved immediately from their final positions can be measured after attending to immediate concerns like caring for the injured, ensuring safety at the scene, and taking measurements of short-lived evidence.

1. There are basically five kinds of crash results that the investigator should look for.
   a. Locations of vehicles
   b. Locations of dead or injured persons
   c. Tire marks, including skid marks, yaw marks, scrub marks, ruts and furrows.
   d. Damages to the roadway surface and roadside objects
   e. Debris, such as patches of glass, liquids and dirt, personal belongings, broken and detached vehicle parts and load spillage.

2. The investigator must decide what measurements he should take to meet the objectives of the investigation.

3. Some measurements should be taken at all crash scenes. They can be made quickly and easily, and it is better to have measurements that are not needed later than to need measurements that are not available and can no longer be obtained.

4. For court purposes, measurements should also be taken to show the relationships among items of evidence.

5. The seriousness of an accident will usually dictate the extent to which measurements should be taken, not drivers.

B. SCALE DIAGRAMS

1. Provided you have proper and sufficient measurements, it is quite east to reconstruct the scene on a scale diagram. The investigator must choose the scale they wish to use. They may choose one inch or any part thereof to

represent one foot or any number of feet. For example: 1 inch = 10 feet or 1 inch = 20 feet. We recommend 1 inch = 10 feet (1:120) due to the larger scale being completed faster and more accurately, and in much more detail than the smaller scale 1 inch = 20 feet (1:240).

2. A sharp pointed pencil or pen must be used to prepare a scale diagram. A mark from a broad-pointed pencil or pen could represent several inches in width, depending upon the scale used.
3. The traffic template (blue blitz) is designed to be used with a 0.5mm pencil lead. A larger mm will fit into the traffic template, but as mentioned above it could represent several inches on the diagram.
4. Other items you will/may need are a compass, protractor, traffic template (blue blitz), and ruler.

C. EVIDENCE

Evidence on scene may be divided into one of two categories, depending upon its probable length of existence where it is located.

Short-lived evidence

1. Short-lived evidence is evidence that should be photographed and measured as soon as possible, and includes the following:
   a. Tire prints made in snow, mud or other soft material
   b. Tire tread deposits such as burned-off tire particles, dust and dirt that adhere to pavement.
   c. Skid mark shadows and impending skid marks
   d. light debris that has fallen from a vehicle and can be blown away or swept away by passing vehicles.
   e. Positions of persons who have been injured or killed and who will be moved or removed.
   f. Positions of vehicles on the roadway, particularly those which are blocking or impeding the traffic flow.
   g. Tire prints made on a dry surface by a wet tire.
   h. Blood and blood stains
   i. Damage to objects that are likely to be repaired quickly, such as traffic signal or power/telephone pole.

Long-lived evidence

1. Long-term evidence is evidence that will last for several days, a month or longer. Example including chips, gouges, grooves and other damage or marks to or on the roadway or roadside objects.
2. Some evidence normally considered long-term evidence may become short-lived evidence, depending upon the degree of impression or damage caused and also upon the weather conditions, and the amount and kind of traffic at the time.
3. When circumstances are such that photographs and measurements cannot be taken before an item of evidence is moved or removed, its position may be marked before an item of evidence is moved or removed. It can

be marked with spray paint, crayon, chalk, or tape for later measurement and recording. Whenever possible, however, photographs should be taken before moving the item of evidence.

D. FIELD SKETCHES/NOTES

1. **A preliminary field sketch** is a sketch made as soon as possible after the investigator arrives at the accident but before a regular field sketch can be prepared. The purpose of a preliminary field sketch is to record the positions and measurements of things that will soon be moved, lost, destroyed, changed.
2. **A field sketch is a diagram** of an accident scene, made in a summary way, which records certain features of the accident, roadway configurations and measurements. A field sketch is also part of the investigator's field notes in which he records observations and measurements he has taken at the scene. This is completed after the preliminary field sketch.
3. Field sketches must also clearly show the distances and relationships between items at a crash scene. These items include bodies, debris, marks on the roadway, objects on or beside the roadway, roadway markings, ditches, obstructions and any other type of physical evidence that has or might have bearing on the crash.
4. An important requirement of a field sketch is to provide the investigator with adequate data to complete an accurate scale diagram. To meet this requirement, the sketch must include the dimensions of items of evidence as well as the distance measurements that fix the locations of the items of evidence and relevant scene features. This information may be placed in a legend instead of directly in the sketch.
5. Field sketches/notes in their completed state should contain all features, roadway configurations, and measurements of the crash scene as witnessed by the at-scene investigator.
6. Contents of a field sketch should include, but not limited to the following:
   a. An arrow pointing north.
   b. Precise points which measurements are made.
   c. Highways, including rights-of-way, ditches, shoulders, roadways, driveways, sidewalks, crosswalks, center lines, lane lines, banks, railway tracks, railings, and bridges.
   d. Names of roadways, lanes, paths, and other traffic ways
   e. Baseline (reference line) for which measurements are made
   f. An outline of roadways and roadway markings.
   g. Reference points (RP's).
   h. Distance and direction to the nearest, well known landmark when the accident is not at an intersection.
   i. Highway measurements.
   j. Names of roadways, lanes, paths, and other traffic ways.
   k. Vehicles, bodies, and other evidence using relative sizes, configurations and locations or positions

l. Traffic control devices (signal lights and signs)
m. Roadway defects and damage, such as potholes and construction work
n. Drain outlets, culverts, headwalls, etc.
o. Fences, hedges, trees, poles, billboards, buildings, and all possible view obstructions. These types of things should be crosshatched.
p. An arrow pointing in the direction of travel
q. Parked vehicles
r. Debris especially if it is related to point of impact
s. Weather, road and light conditions
t. Date and approximate time of the accident and the date and time measurements were taken, and the field sketch was made
u. Name of assistant in taking measurements
v. Signature of person who makes the field sketch and possible assistant

E. REFERENCE POINTS

A reference point (RP) is a point from which measurements are made to establish or fix points on items of evidence. Reference points may by tangible (permanent) or intangible (either temporary or constructed).

1. Tangible reference points include such permanent items as posts, buildings, bridges, signs, trees, fire hydrants, roadway damages and other permanent objects or conditions.

2. Intangible reference points include such temporary points as crayon or spray paint marks placed on the roadway, constructed or temporarily marked curb extension lines, or other temporary identification marked, placed or indicated on a surface. An intangible reference point should always be related to or in some way identified with a tangible reference point.

I. POINT

A spot on an item of evidence to which a measurement is taken from either a tangible or intangible reference point is known as a point (P). The difference between a reference point (RP) and point (P) must be well established in the mind of the investigator.

II. ESTABLISHING REFERENCE POINTS

Two or more tangible reference points, or one tangible reference point and one or more intangible reference points, may be used for the base of the triangles when the investigator uses the triangulation method of measuring. When there is a tangible reference point nearby, such as a fire hydrant, but it is not in a suitable location to be used as the base corner for

a triangle, intangible reference points may be fixed by connecting them to the triangle reference point.

III. BASELINE

One of the very first steps in measuring a crash scene is to decide on the baseline (reference line) that will be used. Preferably, the baseline should be straight, although this is not absolutely necessary. For example, a roadway edge around a slight curve can be used as a baseline. Preferred baselines include such items as a curb, guard rail, fence, roadway edge, center line or marked center line.

IV. REFERENCE POINTS ON BASELINE

Once a baseline has been established the investigator must decide on how many points he will establish along the baseline or connect in some way to the baseline in order to fix the positions of the various items of evidence to which measurements must be taken. These points must include at least one tangible point.

V. POINTS ON EVIDENCE

a. After the baseline and the reference points have been decided upon, the investigator should then decide where to establish points on the items of evidence in order to fix the positions of the evidence in relation to the points on the baseline.
b. A single point is usually sufficient on small items such as: a small body part, wheels, fenders, tires, short grooves, chips or gouges in the roadway that are less than two feet in length, small puddles, posts, etc.
c. Use at least two points on larger items such as: vehicles, tire marks (skid marks should be measured in length) debris, sections of curbs, guardrails, roadway edges, roadway damages, lane markings and other items in excess of two feet long, and bodies. Usually two points can locate a body properly. A point at the forehead and one at the navel/belt-buckle area will locate the body and orient it properly.

VI. NUMBER OF POINTS

When deciding upon the number of points to use on an item of evidence, always remember that by using only one point, the item can revolve around that point when an attempt is made to reposition it on the roadway or on a scale diagram. Each reference point must be identified and described either on the face of the sketch or in a table included in or attached to the sketch.

F. METHODS OF TAKING AND RECORDING MEASUREMENTS

1. There are various ways to take crash scene measurements. Very short distances may be measured with a pocket measuring tape, ruler or yard stick. Longer distances may require a 300 foot measuring tape. Longer

distances such as a ¼ mile may be measured adequately by using a vehicle odometer.

a. For safety reasons use the inside edge of a curve or side of the roadway as a baseline whenever possible.
b. Take measurements to the nearest inch
c. For anything besides short distances, get an assistant
d. The person who records the measurements should hold the measurements end of the tape and should, in all cases, read the measurements from the device being used. Switching positions with the assistant so that both persons always read the measurements is recommended for court purposes.
e. Use a pocket tape measure to measure distances less than 12 feet
f. A rolling wheel of 12 inches or larger diameter is useful for measuring long distances.
g. The heel-to-toe method can be used for short distances. When using this method determine the length of shoes worn and multiply this length by the number of heel-to-toe steps required over the distance measured. Use only as a last resort.
h. The pacing method should not be used unless the distance to be measured is in excess of 20 feet. When using this method, first determine what the person's average natural pace length is and then multiply that length by the number of paces required over this distance measured.
i. Greater distances, those that are in excess of ¼ mile may be suitably measured using a vehicle odometer. The odometer readout may later be converted to feet if necessary.
j. Electronic measuring devices using a laser and infrared technology allow for precise measurements of distances and increased officer safety during measurements of a crash scene.

G. METHODS OF RECORDING MEASUREMENTS

1. When recording measurements, don't use the apostrophe (') and quotation marks (") to indicate feet and inches because these symbols can be mistaken for the numbers 1 and 11.
    a. Record feet and inches as illustrated in the following examples:
    Record thirteen feet and three inches as $13^{\underline{3}}$
    Record eleven feet as $11^{\underline{0}}$
    Record ten inches as 0^{10}
2. In the case of a minor motor vehicle accident when only a few measurements are required, they can quite easily be recorded on the face of the sketch. However, when there are a great number of measurements, they should be recorded in a table as part of the sketch or be recorded as a table on a separate sheet of paper attached to the sketch. Also, when there are several reference points and items of evidence that need to be

described, it is often easier to identify them with a number and / or letter on both the sketch and in the table and then give there descriptions in a legend accompanying the table. (see table example below)

3. A field sketch and a scale diagram should always be prepared in a manner that is easily understood and that is comfortable to the investigator.
4. Note: measured street widths can be recorded in their entirety on the sketch. In the case of lanes separated by painted lines, you may record these measurements by taking a continuous measurement that starts at one edge of the street and goes directly across at a 90 degree angle, making measurement notes as you reach important points such as painted lines and far road edge.

H. COORDINATE MEASURING METHOD

Coordinates are distances measured at right angles from the baseline to a point on an item of evidence. When the edge of the roadway is straight or it has only a very slight curve, the edge may be used as the baseline. For the purposes of location and future reference, the baseline must be related by measurement to a reference point. The RP should be a point on the baseline or roadway either at or related to a permanent, recognizable landmark or object. The RP is the zero point from which to measure the distance to other points along the baseline. If a permanent object does not lie directly on the baseline, an intangible point that is close to and easily related by measurement to such an object may be labeled RP and used as the zero point.

1. Use of a measurement table can be developed to record measurements using letters and numbers that appear on a sketch or diagram. **Example below**:

See diagram for table at end of this lesson plan

FROM	DIST. E-W	TO/FROM	DIST. N-S	TO	COMMENTS
RP	W22	P1	N10	A1	Begin LF skid mark (car)
RP	W16	P2	N9	B1	Begin LR skid mark (car)
RP	W14	P3	N6	C1	Begin RR skid mark (car)
RP	E6	P4	N9	B2	End LR skid mark (car)
RP	E11	P5	N6	C2	End RR skid mark (car)
RP	E17	P6	N14	A2	End LF skid mark (car)
RP	E24	P7	N6	D1	RR Wheel, car at final rest
RP	E31	P8	N10	D2	RF wheel, car at final rest
RP	E35	P9	N29	E	Blood spot
RP	E42	P10	N13	F1	Front wheel, MC at final rest

RP	E46	P11	N11	F2	Rear wheel, MC at final rest
RP	E52	P12	N17	G1	Head of MC rider body at final rest
RP	E54	P13	N16	G2	Torso of MC rider body at final rest

A table can be developed to record measurements using letters and numbers that appear on a sketch diagram. Additional explanatory detail in respect to evidence can be shown in a legend.

See example diagrams

See curb used as a baseline diagram at end of this lesson plan. The reference point (RP) is located on the baseline directly opposite a permanent object, a fire hydrant. The RP is the zero point from which all measurements to other points on the baseline are made.

See edge of roadway with a slight curved diagram at the end of this lesson plan. The edge of a roadway with a slight curve may be used as a baseline from which to measure coordinates, and the coordinates can be measured at right angles directly from the roadway edge. If the curve is other than slight, however, an alternate baseline must be established.

See establishing a baseline on a curve diagram at end of this lesson plan. This can be done, but we must remember that all coordinate measurements are taken at right angles from the baseline, NOT from the roadway edge.

See establishing a baseline when roadway is irregular or uneven diagram at end of this lesson plan. When the roadway is irregular or uneven, use an imaginary line or mark a line to serve as an average edge. This edge can then be used as a baseline.

See imaginary or marked curb line diagram at end of this lesson plan. Imaginary or marked curb line extensions can also be used as a baseline. At right, intersecting curb line extensions establish an RP.

I. TRIANGULATION MEASURING METHOD

1. Triangulation is a method of locating a point or spot on an item of evidence or within an area by measurements taken from two or more reference points (tangible or intangible). The locations and types of reference points used are to be identified for future use.
2. There are three basic steps in measuring by triangulation:
   a. Locate one or two tangible (permanent) reference points or one tangible and one intangible reference point on or near the roadway edge, constructed baseline, or feature that is being used as a baseline. (In triangulation all reference points are labeled RP)

b. Measure from each reference point to one point on the object or item of evidence being measured to.
c. Measure in a direct line between the reference points to form a triangle.
See the triangulation method diagrams at the end of this document

3. When using the triangulation method, you should observe certain rules.
   a. Always attempt to select reference points that are a sufficient distance apart to give a reasonably wide triangle base. Do not use long thin triangles.
   b. Fix small objects by measuring to their centers. This procedure is usually satisfactory for small patches of blood or other liquids and small areas of evidence that are not more than 2 feet in width.
   c. Except for small items of evidence, fix all items with at least two triangles
   d. Use one triangle for each point on an item of evidence to which a measurement is made.
   e. Whenever possible, use the same baseline from which to form triangles when fixing points on the same side of an item of evidence.
   f. Yaw or other curved tire marks should be fixed by triangles at intervals of 10 to 20 feet, depending on the length and radius of the curve.
   g. Irregular angles and marks should be fixed with sufficient numbers of triangles to enable the investigator or some other person to reposition the evidence at its precise location both at the scene and on a scale diagram.

4. Triangulation may be better method of measuring than the coordinate method in areas where it is difficult to locate or establish a good, reasonably straight baseline. Examples of such areas are where a roadway:
   a. Does not have an adequate curb line
   b. Has an uneven edge as sometimes found on dirt, snow, or gravel surfaces
   c. Has a sharp curve
   d. Forms a part of and is within a complicated intersection
   e. Has places to which it is difficult to make measurements from the roadway edge.

5. Sometimes it is advisable to use both triangulation and coordinates to fix items of evidence at the scene of a crash. For example, while coordinates may fix the location of a skid mark readily enough, it may be easier to fix the location of a small item of evidence such as a motorcycle helmet by triangulation.

J. E-CRASH PROGRAM

E-Crash program is an electronic traffic crash reporting and transmission procedure system.

1. Introduction to e-Crash
2. Identifying needed Information
3. Location
    a. with Mapclick
    b. without Mapclick
4. Driver Information
    a. ID Information
    b. Medical Info
    c. Drug/ Alcohol Info
    d. Statements
5. Vehicle Information
    a. ID Information
    b. Insurance
    c. Tow/ Storage Information
6. Property Information
7. Witnesses
8. Citations
9. Sequence of Events
10. Diagramming

III. CONCLUSION

In summary, you should remember that a good accident investigator should:

1. Be able to prepare a field sketch
2. Be able to record measurements directly on a field sketch
3. Be able to demonstrate and explain the coordinate method and baseline
4. Be able to demonstrate and explain the triangulation method
5. Be able to prepare a scale diagram of the crash scene
6. Be able to use e-Crash

BUILDING/AREA SEARCHES
(Active Shooter) PRACTICAL

(Refresher/ Part Time Officer)

4 HOURS

Prerequisite (3 hour online class on Active Shooter)

Prepared by Joe Duboise/ Amanda M. Chaney

10/15/2020

References:

Patrol Response to Active Shooter Training Manual, University of Arkansas Criminal Justice Institute

University of Arkansas Criminal justice Institute**,** Reality Based Training. www.cji.edu October 2011

ALERRT level 1 University of Texas @ San Marcos

Training Aids: Simunition training weapons, protective apparel, building with hallways and adjoining rooms such as a school or dormitory. Role players.

*Simunition training kits can be obtained from ADEM with adequate notification by contacting Shelly Teague (501) 683-6700

Coordination/Personnel:

Agency Training Staff

Prepared By:

Joe Duboise/ Amanda M. Chaney

Instructional Unit Title:

Building and Area Searches: Responding to Active Shooter Incidents

Terminal Objective:

The student will recognize the course goal, and enabling objectives, course schedule, and course performance requirements.

Enabling Objectives:

* State the goal and summarize the objectives for the course
* Describe the course schedule and administrative requirements
* Describe how participant performance will be evaluated
* Take a pre-test to assess their knowledge of course material
* Discuss the historical basis for first responder training specific to hostage/barricade and active shooter situations
* Define active shooter
* Identify the priority of life scale
* Discuss the importance of knowing and understanding the law, agency policy, and relevant case law pertaining to the use of force.

Terminal Objective: Students will recognize the difference between an active shooter and a barricaded gunman and identify the concepts and principles of appropriate actions in situations that may include an active shooter, barricade/hostage situations, or terrorist attacks.

Enabling Objectives:

* Describe the difference between active shooter and barricade/hostage situations and be able to discuss the appropriate response

* List the 6 Cs relating to the patrol response to barricade/hostage situations
* Identify and list the six Concepts and Principles used for working in ad hoc teams
* Discuss the importance of law enforcement officers never being off duty
* Discuss the Avoid/Deny/Defend (ADD) strategy as it relates to citizens finding themselves as possible victims in active shooter situations

Field Training Practical – Active shooter (4 Hour)

1. Student Introduction- Identify students name, agency, education, and years of service.

2. The student will report to the training site at the scheduled time equipped with their duty belt. **NO WEAPONS**

3. Upon the student entering the training area the agency representative will ensure that the student is relieved of any firearm, pepper spray and/or taser in his possession and will have the student sign in on the training roster.

Students will be informed of the rules of simulated firearms training:

- A whistle blown by an instructor will stop all action.
- Any student may call out "abort" to stop action if an unsafe condition is observed.
- Protective equipment must be worn at all times during the simunition training.
- Only simunition guns and the plastic training guns will be used in this practical exercise.
- No live ammunition shall be on any student's person during this practical exercise.

RULES FOR SIMUNITION USE

1. Only firearms specifically adapted for Simunition use and approved by the instructor in charge may be in the training environment. The training location is that physical area so designated by the instructor in charge.

2. An instructor will issue all Simunition. No other Simunition will be allowed in the training area.

3. Students and participants in the practical exercise shall be carefully checked for live ammunition, weapons or any articles that might cause harm. All items located will be secured prior to the beginning of each block of instruction.

4. Protective equipment issued by the training staff must be worn at all times while in the training environment, whether or not the student is actively involved in the training scenario.

5. The sound of a whistle shall immediately stop all action.

6. Any instructor, student, or observer is empowered to immediately call a halt to the scenario if they observe any situation they consider unsafe.

7. Simunition weapons SHALL not be fired intentionally at the head or unprotected area of a person that participating in role play.

8. Simunition weapons SHALL not be fired at another person that is closer than ten (10) feet from the weapon.

9. Participants may not engage in unsafe actions or horseplay.

10. Students participating in roles of Law Enforcement Officers may not fire upon any person role playing as a suspect who is unarmed or attempting to surrender.

11. Any vehicles in the training environment SHALL be carefully searched prior to the commencement of training. Any live rounds of ammunition or weapons will be secured in the trunk of the vehicle.

12. Instructors SHALL not fire upon a student unless they are acting as a role player in the scenario and are wearing protective equipment as specified in rule number four.

13. Students that are observing and not acting as a role player in a scenario shall not be armed with a Simunition weapon or fire upon another student for any reason.

14. No student is to be fired upon with Simunition by any person as a result of their failure to perform as instructed in any scenario. Students should be corrected by instruction including explanation and demonstration of the correct standards and critique of their performance.

Each phase should take about 50 minutes with a 10-minute break in between phases. After completion of each of the two scenarios the Instructor shall evaluate what was observed relating to phase 1 thru 6 and ask for feedback from the students.

<u>At the end of each phase of instruction all participants will be checked for injury and asked if medical attention is required.</u>

PHASE ONE: Weapons Manipulation

Instructors will demonstrate proper weapons handling techniques:

1. Treat all weapons as if they are always loaded.
2. Trigger Finger Indexed.
3. Laser Rule and Arc of Fire.
4. Combat ready (low and high).
5. "SUL" safety circle.
6. Students will demonstrate high and low ready as well as SUL.

PHASE TWO: Threshold Evaluation

Instructors will demonstrate a proper threshold evaluation and then have the students practice the technique.

1. Three places to have a gun fight:
    a. from the hallway
    b. In the threshold. (bad)
    c. Inside the room
2. What to look for during the evaluation?
3. If contact with suspect what to do?
    a. Commands or engage?

Instructor then demonstrates what to do by placing different bad guys inside the room armed and unarmed in different positions and shows the proper commands for disarming and taking suspect into custody utilizing contact and cover principal or by engaging the suspect in a gun battle.

PHASE THREE: Team Movements 1-4 officers

Instructor(s) will:

1. Place students in different formations from 2-4 officers and demonstrate deliberate movement and direct to threat emphasizing responsibilities among the formation such as rear guard.
2. Demonstrate and have students practice a solo entry.

PHASE FOUR: Set up for Room Entry and Entry

Instructor(s) will:

1. Demonstrate setting up outside the room in the hallway to make entry into a room with an open door and then a closed door.
2. Talking about letting the room breath for a few seconds after opening or breaching the door.

3. Demonstrate different position and areas of responsibility for the entry members.
4. Demonstrate Israeli Lean when coming back into the hallway if no one was left to guard the hallway.
5. Talk about and demonstrate the button hook and the crisscross entry.
6. Talk about hard corners and collapsing fields of fire, over penetration into room.
7. SPEED, Surprise, VIOLENCE of ACTION.
8. Talk about knowns and unknowns based on threshold evaluation.
9. Differentiate between a center and corner fed room.
10. Have students practice making room entries.

PHASE FIVE: SIM

Instructor will talk about after room entry is made and the active shooter is neutralized providing SECURITY, IMMEDIATE ACTION PLAN, MEDICAL

1. This is when the instructor can remind them of the priority of life scale
2. Innocent Citizens, Officers and then Suspect are treated in that order.

PHASE SIX: APPROACH

Instructor will talk about:

1. bounding over watch, cover, and concealment on the approach to entry into the building.
2. Instructor will talk about breaching different types of doors, windows, and breaching tools.
3. If a stairwell is available, demonstrate clearing a stairwell.
4. Students will then practice bounding over watch to the building and clearing the stairwell if available.

PHASE SEVEN: ACTIVE SHOOTER SCENARIO

- Utilizing 2 role players as bad guys and 3 role players as victims a team of officers ranging from 2 to 4 students will be dispatched to a report of a subject entering a school waving a handgun around.
- As officers enter the hallway, the bad guy who is positioned at the far end of the hallway, will be yelling threats and then fires a blank gun simulating killing one of the three victims.
- That victim falls in the hallway.
- The other two victims raise their hands and begin yelling “don’t shoot” and running down the hallway toward the responding officers.
- This is now a directed threat and the officers should move down the hallway with speed and aggression to eliminate the active shooter.
- As the officers are moving down the hallway the second bad guy, who until this point was concealed in a room, will step out into the hallway once the team has past his location.
- The purpose of this is to see if the rear guard is focusing on the rear instead of in front.

- The bad guy should wait one second and then fire a simunition round at the rear guard and continue firing one round each second until the rear guard shoots him.
- During this time the original bad guy could still be a threat if he has not been shot.
- The team must continue down the hallway to eliminate the threat.
- Once both bad guys have been neutralized, the instructor is then looking to see if they continue trying to search all rooms or if they understand the concept of clearing one room and begins SIM.
- During both scenarios if an officer is hit with a simunition round he will continue to fight on.
- If a bad guy is hit, he will cease action.

PHASE EIGHT: HOSTAGE BARRICADE SUSPECT

- Utilizing at least 3 role players inside a room officers are dispatched to shots having been fired in a school.
- Upon arrival, officers observe no casualties but hear loud voices coming from a room.
- The three role players are a bad guy and 2 hostages.
- There is no active killing going on at this time.
- This is a hostage situation where the responding officers should employ the 5 c's
    1. Contain
    2. Control
    3. Communicate.
    4. Call SWAT
    5. Create a plan.
- If the officers complete the 5 c's then the hostages are released and the bad guy surrenders.
- More times than not the officers tend to make entry into the room. If the officers decide to make entry, then the bad guy should engage.

“Self-Aid Buddy Aid” Practical’s

4 Hours

Joe Duboise/ Amanda M. Chaney

References:

TCCC Guidelines for Medical Personnel.
TECC Guidelines for First Responders

Training Aids:

CAT Tourniquet
Pulse oximeter
Mannequins for demonstrating chest seals
Training chest seals
Training hemostatic gauze
Pressure bandage
Training IFAKS

Coordination/Personnel:

CLEST Agents

Prepared By:

Joe Duboise/ Amanda M. Chaney

Course Name:

Self-Aid Buddy Aid Practical

Terminal Objective:

This block of instruction is to teach officers how to perform a patient assessment, control life threatening hemorrhages, treat sucking chest wounds, and treat for hypothermia through practical application.

Enabling Objectives:

1. Following this block of instruction, the student will be able to demonstrate a B.A.T.H. Assessment.
2. Following this block of instruction, the student will be able to treat extremity bleeding through the application of a tourniquet.
3. Following this block of instruction, the student will be able to treat sucking chest wounds through the application of a chest seal.

Time Allotted:

4 Hours

Instructional Method:

Practical

Target Group:

Basic
Advanced

I. INTRODUCTION

Law Enforcement officers are often the first contact with incidents involving violent offenders. While EMS has to stage and wait for the scene of any incident to be deemed "safe", law enforcement already has boots on the ground and can save lives before EMS is willing to come into the scene.

For this reason, it's necessary for officers to be trained in basic life saving techniques. The below six practical stations will provide a good understanding of utilizing the different techniques and steps taken in TECC.

II. TACTICAL EMERGENCY CASUALTY CARE

A. The goals of TECC are to treat the casualties, prevent further casualties, and complete the mission.
B. There are three phases of care:
   a. The direct threat care phase
   b. The indirect threat care phase
   c. Evan care phase

III. DIRECT THREAT CARE PHASE (HOT ZONE)

A. In this phase there is still an active threat
B. Neutralize the threats
C. Get off the "X"
D. Communicate
E. The only two lifesaving interventions that can be used during this phase:
   a. Tourniquets
   b. Recovery Position.

IV. INDIRECT THREAT CARE PHASE (WARM ZONE)

A. In this phase the suspect has been isolated, distracted, or neutralized
B. Establish security and an immediate action plan
C. Disarm unconscious subjects
D. Medical treatment of injured and wounded
   1. Assess life threatening injuries
E. Establish casualty collection point
F. Constant reassessment
G. Establish a safety cordon
H. Evacuate the injured/wounded
I. Return with logistical support

V. EVACUATION CARE (COLD ZONE)

A. This phase focuses on EMS duties

VI. #1 - B.A.T.H. ASSESSMENT – INDIRECT THREAT CARE ZONE (WARM ZONE)

Task: Perform a rapid casualty assessment

Equipment Needed: Training IFAK and student to play injured person

1. Assess Scene Safety

    A. Assess scene safety for hostel threat including gun fire, burning, electrocution, or anything that can cause further harm.

2. Assess the casualty for responsiveness
    A. If safe, assess the casualty for responsiveness by asking in a loud, but calm voice "are you okay" and note any signs of confusion.
    B. If unresponsive, gently shake or tap them to see if the casualty is awake.
    C. DISARM if unconscious or has an altered mental status.

3. Retrieve the IFAK
    A. Use their (injured person) first aid kit or tourniquet first.

    B. If scene is not safe to enter, and the casualty is able, direct them to move to a safe location and, if needed perform self-application of tourniquet.

    C. If they can't move, don't have a first aid kit, etc., eliminate or reduce the threat and perform sweep for obvious extremity bleeding, apply tourniquets as needed and move casualty to safe/covered position.

4. Initiate B.A.T.H. Assessment

    B. Bleeding

        a. If the source of the massive bleeding is obviously visible from an amputation or other major wound, immediately control the bleeding by applying a tourniquet (s) or packing wound (s) if the injury is in a location where a tourniquet cannot be used (groin, armpit or neck).

        b. Now perform a blood sweep using both hands in a claw shape. Start by feeling the legs, neck, and arms. Then check the chest, abdomen, back, and finally the head. Check yours gloves every few seconds to look for blood. If you encounter any massive bleeding, immediately apply tourniquets or pack wounds if in an area you can't use a tourniquet. Continue blood sweep until all done. Locate in 30 seconds and control in 60 seconds.

    A. Airway

        a. Look for signs of respiratory distress. (look, listen, feel) Appearance – panicked/anxious, pale/blue in color. Breathing effort – working hard to breathe. Incomplete sentences – 1-3 breaths/word. Do you hear noises – gurgling, raspy or coughing? What's **YOUR** normal?

        b. Semi-conscious /unconscious casualties – perform chin lift/jaw thrust Conscious casualties – assist casualty in assuming position of comfort. Monitor and place in recovery position if casualty becomes unconscious

T. Tension Pneumothorax

a. May occur from penetrating chest wounds into chest, back, abdomen, shoulder or neck (GSW) or blunt trauma to chest/back – mva, baseball bat, etc. Tension Pneumothorax occurs as air fills the affected side of the chest and begins to exert pressure on the heart and opposite lung. Look for respiratory distress (shortness of breath), sucking or hissing sound when the casualty inhales, froth or bubbles around the injury, coughing or spitting up blood, rapid/shallow respirations (unconscious pt), jugular vein distention, and tracheal deviation.

b. Treat with chest seal/occlusive dressing. Place as the casualty exhales. You may have to "burp" the chest seal to release the buildup of air.

H. Hypothermia

a. Try to maintain body heat. If a significant loss of blood occurs hypothermia can occur. Treat with passive warming (remove wet clothing, cover casualty with blankets or heat reflective blankets) and active warming (Hypothermia Prevention & Management Kit (HPMK), heat packs, etc).

5. Assess and renders aid for other injuries.

A. Check for signs or symptoms of head injuries

<u>Guidelines and Key Points for B.A.T.H. Assessment</u>

1. Assess for tension pneumothorax and treat as necessary.

- Suspect a tension pneumothorax and treat when a casualty has significant torso trauma or primary blast injury and one or more of the following:
  - Severe or progressive respiratory distress
  - Severe or progressive tachypnea
  - Absent or markedly decreased breath sounds on one side of the chest
  - Hemoglobin oxygen saturation < 90% on pulse oximetry
  - Shock
  - Traumatic cardiac arrest without obviously fatal wounds

  <u>Note:</u>

  * If not treated promptly, tension pneumothorax may progress from respiratory distress to shock and traumatic cardiac arrest.

- Initial treatment of suspected tension pneumothorax:
  - If the casualty has a chest seal in place, burp or remove the chest seal.
  - Establish pulse oximetry monitoring.
  - Place the casualty in the supine or recovery position unless he or she is conscious and needs to sit up to help keep the airway clear as a result of maxillofacial trauma.
  - Decompress the chest on the side of the injury with a 14-gauge or a 10-gauge, 3.25-inch needle/catheter unit.
  - If a casualty has significant torso trauma or primary blast injury and is in traumatic cardiac arrest (no pulse, no respirations, no response to painful stimuli,

no other signs of life), decompress both sides of the chest before discontinuing treatment.

2. All open and/or sucking chest wounds should be treated by immediately applying a vented chest seal to cover the defect. If a vented chest seal is not available, use a non-vented chest seal. Monitor the casualty for the potential development of a subsequent tension pneumothorax. If the casualty develops increasing hypoxia, respiratory distress, or hypotension and a tension pneumothorax is suspected, treat by burping or removing the dressing or by needle decompression.

VII. **#2 - Airway Maneuvers and Recovery Position**

Task: Open airway using the head-tilt/chin-lift and jaw thrust maneuvers

Equipment Needed: Student will play injured person

1. Kneel at the level of the casualty's shoulders and roll the casualty onto their back. Position yourself on the injured side of the casualty.
2. Open the mouth and look for anything blocking the airway. Look for obstructions, broken teeth, burns, swelling or other debris such as vomit. Remove visible objects immediately.

   Open the airway

   (a) **Use the head-tilt/chin-left maneuver, if no suspicion of a neck or spine injury**
      1. Place one hand on casualty's forehead and apply firm backward pressure with the palm of your hand. Tilt the head back gently.
      2. Place fingertips of your other hand under the tip of the bony part of the casualty's lower jaw (thumb on top) and bring chin forward.
      3. Lift the chin upward. The mouth should not be closed as this could interfere with breathing if the nasal passages are blocked or damaged.

   (b) **Use the jaw-thrust maneuver, if you suspect a neck or spine injury**
      1. Position yourself on your knees at the head of the casualty and rest your elbows on the ground.
      2. Place your forearms along the casualty's head to stabilize. Maintain positive control ensuring not to rotate or move the neck or head.
      3. Place the fingers under the curvature of the jaw line ensuring fingers are below the ears and place the thumbs onto the chin.
      4. Use the index fingers to pull the lower jaw up while using the thumbs to push the casualty's chin forward.

3. Reassess for breathing. Look for rise in the chest during breaths, listen for air moving in and out & feel for breath on your cheek.
4. Look/feel for any wounds by running hands across the chest, abdomen and back using a sweeping motion. **NOTE:** to examine the back, kneel beside the casualty, reach across

their body and grab them at the waist and shoulder and roll them on to your knees and move/remove clothes and body armor to expose their back.

5. Position the casualty. Place the casualty that is awake in a sitting or the recovery position. Place the unconscious casualty in the recovery position. **NOTE:** to place the casualty in the recovery position, extend the arm that will be on the bottom as your roll the casualty towards you above the casualty's head and bend the other (top) arm so the back of their hand is against their cheek on the opposite side. Roll the casualty as a single unit onto their side. Ensure the chin is raised forward. Bend the upper leg and place the knee on the ground. Slightly bend the lower leg. In a casualty with a suspected spinal injury, do not place in the recovery position. Leave as you found them.

   The recovery position is used to maintain an open airway for semi and unconscious casualties. It helps to keep the tongue forward and also allows fluids to drain from the nose and mouth.

<u>Airway</u>

1. Conscious casualty with no airway problem identified:
   a. No airway intervention required
2. Unconscious casualty without airway obstruction:
   a. Place casualty in the recovery position
   b. Chin lift or jaw thrust maneuver OR
   c. Nasopharyngeal airway OR
3. Casualty with airway obstruction or impending airway obstruction:
   a. Allow a conscious casualty to assume any position that best protects the airway, to include sitting up.
   b. Use a chin lift or jaw thrust maneuver
   c. Use suction if available and appropriate
   d. Nasopharyngeal airway OR
   e. Place an unconscious casualty in the recovery position.
4. Always remember that the casualty's airway status may change over time and requires frequent reassessment.

* For casualties with trauma to the face and mouth, or facial burns with suspected inhalation injury, nasopharyngeal airways and extra glottic airways may not suffice and a surgical cricothyroidotomy may be required.

VIII. <u>#3 – Sucking Chest Wound – Chest Seal/Occlusive Dressing</u>

Task: Apply chest seal/occlusive dressing

Equipment Needed: Training chest seal, and mannequin to place chest seals on

1. During your assessment you observe respiratory distress. The patient appears to be anxious and tachypnea (breathing rapidly). Their pulse is elevated.
2. Examination of the chest wall reveals the wound, which may make audible sucking sounds during inspiration, with bubbling during exhale.
3. Place a vented chest seal over the open chest wound.

4. If no vented seal is available, place a plastic or foil square over the wound and tape on three sides.
5. If none of these are available, an unvented chest seal or a material such a petroleum gauze that prevents ingress and egress of air may be used; however, this may develop a tension pneumothorax.
6. If patient develops tachycardia, tachypnea, or other indications of respiratory distress, remove the dressing for a few seconds and assist ventilations as necessary or "burping" the chest seal. This helps with tension pneumothorax development.
7. If respiratory distress continues, assume the development of tension pneumothorax, and perform a needle decompression. They will usually complain of chest pain and difficulty breathing.
8. If possible, allow the casualty to seek a position of comfort, such as sitting upright. If the casualty wants to lie down, lay the casualty with the injured side down to reduce the respiratory effort from the collapsed lung.

IX. **#4 – Wound Packing – Hemostatic Gauze/dressing**

Task: Apply hemostatic dressings, pack wounds, and apply pressure

Equipment Needed: Training IFAKs with hemostatic dressing/gauze, pressure bandage and mannequin for injured person

1. Identify the wound and expose the injury by opening or cutting away the casualty's clothing
2. Locate the source of the most active bleeding and apply direct pressure
3. (a) remove the hemostatic dressing from its sterile package
   (b) pack it tightly into the wound directly over the site of the most active bleeding. (1 for 1).
4. After packing, continue to apply firm, manual pressure until the bleeding stops. Hold continuously direct pressure for a minimum of 3 minutes.
5. Reassess the wound to ensure that bleeding has stopped and apply more dressings if necessary.
6. Apply a sterile pressure bandage over the hemostatic dressing to secure it in place.

Pressure bandage

1. Identify and remove the bandage from the first aid kit
2. Place the pad directly on the hemostatic dressing or open wound, as you continue to maintain pressure. **NOTE:** if the wound has already been packed, continue to apply direct pressure using your thumb or any digit over the site.
3. Wrap the elastic bandage around the wounded extremity, while continuing to apply direct pressure.

4. If using a dressing with a pressure bar, insert the elastic bandage completely in the pressure bar.
5. Reverse wrap the elastic bandage back over the top of the pressure bar
6. Wrap the elastic bandage tightly over the top of the pressure bar forces the bar down into the pad.
7. Secure the hooking end of the closing bar into the elastic bandage. If you are using a bandage with a Velcro end, pull up a piece of the wrap and secure it on the top and bottom with the teeth tabs. If available tape the bandage as well.
8. Assess the circulation below the pressure bandage, and readjust to loosen if necessary, and re-secure. **NOTE:** if the skin below the pressure bandage becomes cool to the touch, bluish, or numb, of if the pulse below the pressure bandage is no longer present, the pressure bandage may be too tight.

X. **#5 – Pressure Points (effective direct pressure)**

Task: To perform direct pressure utilizing two pressure points – brachial and femoral

Equipment Needed: Students will use direct pressure on themselves so they can learn how it feels and better understand the process.

Brachial

1. The brachial artery can be occluded with knee pressure or finger pressure using a "C-clamp" grip.
2. Place the patient on their back if not already there
3. Rotate the casualty's palm up to expose the inner surface of the bicep
4. To use your fingers place them at the base of the inner bicep where the muscle meets the bone, up high near the armpit. Using your thumb on the opposite side of the bicep apply pressure in a "C-clamp" fashion. A good landmark for the brachial artery is just below the junction of the pectoralis (chest) muscle and the bicep.
5. To utilize knee pressure being with the knee on the bicep up high near the armpit then slide the knee downward until you see the bleeding stop (the artery runs along the bone where the bicep muscle and bone meet).

Femoral

1. The femoral artery is most commonly occluded using knee pressure however, depending on the size of the patient verses the size of the officer, adequate pressure may be achievable with the palm.
2. Place patient on their back if not already there.
3. To expose the femoral artery rotate the foot outwards so you can access the inner surface of the thigh (to further aide in exposing the inner

surface of the thigh bend the knee at about a 45 degree angle while turning the foot outward).

4. Femoral artery pressure should be applied halfway down the width of the inner thigh where the thigh muscle meets the bone and close to the junction of the leg and pelvis.
5. Begin by placing the knee on the thigh muscle and move it down towards the bone until bleeding stops
6. To apply knee pressure face the victim and straddle the victim's extremity, use your inside knee to apply pressure (for injuries to the victim's right extremities use your right knee, for injuries to the victim's left extremities use your left knee.)

XI. #6 – Tourniquet Application

Task: Apply a CAT tourniquet to a fellow student, and practice one handed self-application. Students will also practice putting two tourniquets on back to back.

Equipment Needed: CAT Training Tourniquets and student to play injured person

1. **SLIDE** the injured arm or leg through the loop of the self-adhering band. This can be done one handed when applying to self or two when applying to a casualty.
   NOTE: if using two-hands, wrap the self-adhering band around the extremity and pull the free end through the slit of the routing buckle, and fasten back on it-self. If applying to a leg wound, it may be helpful to wrap the self-adhering band around the leg then route through the routing buckle to form a loop, instead of trying to slide a pre-looped band over the foot and up the leg.
2. **POSITION** the self-adhering band above the wound site – GO HIGH OR DIE!!!! If applying to self-pull to the inside. If applying to casualty pull to outside.
3. **PULL** the free end of the self-adhering band around the extremity as tightly as possible (critical step) and securely fasten the band back on itself.
   NOTE: all slack must be removed from the self-adhering band before tightening the windlass rod. The bands should be tight enough so that the tips of three fingers can't slide between the band and the extremity. Do not adhere the band past the windlass clip.
4. **TWIST** the windlass rod to tighten the band until the bleeding has stopped. Check for a pulse in the arm/leg to which a tourniquet has been applied farther out on the limb than the tourniquet. If arterial blood flow has stopped, the pulse should not be felt.
   NOTE: stop the bleeding within 1 minute from the time you start applying the tourniquet. LOCK the windlass rode inside the windlass clip to secure it and keep the band from untwisting.
5. **RE-CHECK** to make sure that the bleeding has not started again, and the pulse is still absent.

NOTE: if the bleeding is not controlled or the pulse is still present, remove the windlass rod from the clip, tighten the windlass rod further until the bleeding and/or pulse is absent, and re-position the windlass rod back inside the clip.

6. **ROUTE** the self-adhering band between the clip and around the rod
7. **SECURE** the windlass rod and self-adhering band under the windlass safety strap.

   NOTE: pull the band backwards through the windlass clip and then back around the windlass rod if possible. Fold the windlass safety strap over the top of the clip and adhere to the Velcro on the windlass clip. It is important to secure the windlass rod with the safety strap before moving the casualty. The tourniquet application process should be completed within 3 minutes (from start to finish).

Radial Pulse

1. Locate the radial pulse on the thumb side of the front of the wrist
2. Palpate the radial pulse with the index and middle finger over the artery
3. You can find the pulse behind the knee, on the ankle or foot for a leg.
4. Count the pulse for 30 seconds and multiply by 2 to get the pulse rate

Life-threatening bleeding can be identified by several characteristics

- There is pulsatile or steady bleeding from the wound.
- Blood is pooling on the ground.
- The overlying clothes are soaked with blood.
- Bandages or makeshift bandages used to cover the wound are ineffective and steadily becoming soaked with blood.
- There is a traumatic amputation of an arm or leg.
- There was prior bleeding, and the patient is now in shock (unconscious, confused, pale).

Applying the Tourniquet

- Tighten the tourniquet until bleeding is controlled. If the first tourniquet fails to control the bleeding, apply a second tourniquet just above the first. Don't put a tourniquet directly over the knee or elbow. Don't put a tourniquet directly over a holster or a cargo pocket that contains bulky items.

Common Mistakes when Applying Tourniquets

- Not using one when you should or waiting too long to put it on.
- Not pulling all the slack out before tightening.
- Using a tourniquet for minimal bleeding.
- Putting it on too proximally if the bleeding site is clearly visible.
- Not taking it off when indicated during TFC.
- Taking it off when the casualty is in shock or has only a short transport time to the hospital.

- Not making it tight enough – the tourniquet should both stop the bleeding AND eliminate the distal pulse.
- Not using a second tourniquet if needed.
- Periodically loosening the tourniquet to allow blood flow to the injured extremity.

****** If you can only do ONE thing for the casualty – stop them from bleeding to death.**

****** Where a tourniquet can be applied, it is the first choice for control of life-threatening hemorrhage in Care Under Fire**