Taser X26P Conversion

Revised By & Date: [redacted] 11-25-14

Course Goal: Provide law enforcement personnel with the knowledge and skills necessary to utilize the X26P Taser.

Course total time: 4 hours

Course Objective: Peace Officers, utilizing knowledge gained from course lectures, PowerPoint and dynamic scenarios and must successfully complete the course with a score of pass.

Instructor Requirements: Department Taser Instructor

Classroom Setup: Lecture, Small Group,

Maximum Student Capacity: 20

Number of Instructors Required: 1

Resources required for this module: (All resources required to deliver this module of instruction)

LCD projector, required electrical receptacles and associated accessories, laptop computer with PowerPoint installed (version 2010 or better), laptop remote, projection screen, chairs that will comfortably seat 20 students. Taser version 19 PowerPoint(second edition) (LASD CTU training files), 1 Taser X26P with holster, per student, 2 Taser cartridges, expended Taser cartridges, Taser targets, padded dummy, kicking shield, matted area.

Course content	Instructor Notes
I Taser A.B.C.D.(45 min) A. Opening 1. Rules and safety of facility{1} 2. Expectations 3. Department policy vs Taser/Court rulings{2} B Legal Aspects 1 4th Amendment {3} (a) Officers action vs. suspect threat (b) Taser in probe mode (c) CEW use on non-violent suspects (d) Repeated use of electrical shocks (e) Drive Stun mode {4} (f) Excessive force issues (g) Documentation 2. Medical and Safety {5} (a) Heart to dart issues	{1} Current product warnings are available at www.TASER.com {2} Discuss the difference between Taser policy, court rulings and our department policy. "Actively resisting" as the courts have described and department policy "assaultive/high risk". Discuss CDM and MPP regarding giving verbal warning prior to deployment. Also "sparking" the Taser to try to gain suspects co-operation. (refer CDM 3-03/020.20 and MPP 5-06/040.95) {3} In the case of Scott v Harris, the court stated that In judging whether an officer's actions were reasonable, we must consider the risk of bodily harm that officer's actions posed to the suspect in light of the suspect's threat to the public that the officer was trying to eliminate." ********** In determining reasonableness of the manner in which a seizure is effected, we must balance the nature and quality of

(b) Amount of shock (extended durations)
(c) Recurrent training mandated

C. Physiologically or Metabolically Compromised Persons
1. Arrest related deaths (ARD)
(a) Subjects at risk
(b) Physiologic or Metabolic change may cause death or serious injury

D. Tactical Considerations
1. Holding the trigger past 5 seconds
(a) This will result in a continuous discharge

E. Targeting {6} E.F.G.H. (15 min)
1. Avoid targeting sensitive areas
2. Examples
(a) Head
(b) Throat
(c) Breast
(d) Chest or area of the heart
(e) Known pre-exiting injury areas

F. Preferred Target Zone Rear (when possible){7}
1. Below neck
(a) large muscles]
(b) avoid head]

G. Preferred Targeting Zone Front {8}
1. Lower torso
(a) More effective
(1) Split the beltline
(2) Larger muscles
(b) Reduces risk of hitting sensitive areas
(c) Increases dart-to-heart safety margin distances
(d) Do not intentionally target the genitals

H. Probe Placement
1. Deploy per department S.O.P.
2. Greater probe spread generally increases effectiveness
(a) Probe spread should be greater than four inches
(c) More effective if probes are above and below the waistline

I. Neuro-Musclar Incapacitation {9} I.J.K.L. (15 min)
1. There are different levels of NMI
2. The greater the probe spread the greater chances of NMI
3. CEW's may not achieve total NMI
4. Be prepared with other force options
5. Drive stun alone will not achieve NMI

the intrusion on the individual's 4th Amendment interests against the importance of the governmental interests alleged to justify the intrusion.
Scott v. Harris, 550 U.S. 372, 383 (2007).

{4} When using the X26 in drive stun mode, the court has said that when reasonable to do so, you must reasonably perceive that the person is actively resisting, you must have a reasonable belief that the subject is capable of complying with your commands, avoid conflicting commands, give a warning, you must give the subject adequate time to comply with your commands before each drive stun application.
As with all use of force incidents, prepare clear and complete reports.

{5} One risk of applying electricity to a human is the direct induction of ventricular fibrillation (VF). In addition to electrically induced direct VF induction, other risks include, but are not limited to: cardiac capture/pacing including at sufficiently high rates to cause VF or for sufficiently long duration to deteriorate to VF, ventricular tachycardia ("VT") and through sufficiently significant physiological or metabolic effects to negatively impact the heart.

{6} Avoid intentionally targeting the CEW on sensitive areas of the body such as the head, throat, chest/breast, or known pre-existing injury areas without legal justification.
The preferred target areas are the lower center mass (below chest) for front shots and below the neck area for back shots.

{7} Because of the larger muscle groups, the preferred target zone on the back begins just below the neck and extends all the way down the legs.

{8} There have been some ineffective hits to the front of the body, particularly with hits to the upper torso with narrow probe spreads. By lowering the point of aim to the lower torso on the front of the body by about four inches, the potential for Neuro Muscular Incapacitation of the core muscles is often increased by splitting the belt line of the body and targeting larger muscle groups. Aiming for the lower torso also reduces the risk of hitting some sensitive body areas.
Non-preferred target zones are NOT prohibited, rather they should be avoided when practical.

{9} Even with both probes making contact in a preferred target zone with a large spread, a subject may be able to voluntarily move his arms and legs. The subject might be able to access

J. How electricity works {10}
1. Volts vs amps

K. Injuries from falls
1. NMI causes subjects to fall {11}
2. Subject may not be able to protect themselves from falls
3. Consider the environment, likelihood of falls
4. Consider intermittent connections/effects

I. Controlling/cuffing under power {12}
1. You can go hands on with the subject during the 5-second Cycle without feeling the effects of the NMI
(a) Electricity generally follows the path of least resistance
(b) Do not place hands on or between probes
(c) Use each 5-second CEW cycle as a "window of opportunity" to establish control/cuff while the subject is affected
(D) Move in, control, and handcuff subject while the CEW is Is cycling during the 5 second window

J. Taser X26P {13} J.K.L.M.N. (25 MIN)
1. Designed for simple operation
2. Safety, trigger and cartridge operate the same as X26

K. Trigger Operation {14}
1. Single trigger pull and release discharges a 5 sec cycle
2. Shift the safety switch down to stop discharge
3. Holding the trigger down past 5 sec the X26P will continue To discharge
4. Once the cartridge is fired you can re-energize the cartridge by pulling the trigger
5. Each trigger pull will initiate another 5 second cycle
(a) Additional trigger pulls during the 5 second cycle will not extend the cycle unless the trigger is held back

L. Central Information Display {15}
1. Display will count up for single trigger pull (e.g. 1,2,3,4,5)
2. Will continue to count up (e.g….7,8,9) if the trigger is held back past the 5 second cycle
3. Power source icon display battery consumption and displays remaining battery life on the CID
4. Battery pack should be changed at less than 20%
5. Battery bars show in 20% increments

M. System Status Monitoring and Reporting {16}
1. No Icons- No problems
2. Major Fault- Non essential subsystems failure (Taser still good to use)
3. Critical Fault- System failure (do not use Taser)

and manipulate a weapon or strike/kick at an approaching officer. When reasonably safe and practicable, officers should attempt to gain physical control of a subject as quickly as possible to restrict their movement and minimize any threats.

{10} Before we review the history and state-of-the-art in ECD's, we need to first lay a foundation of our core technology – which relies on the phenomenon of electricity. Electricity is a flow of energy, or more specifically a flow of electric charge within a conductor. That conductor can be a copper wire, or it can be the human body.

{11} Like many other force options, NMI frequently causes people to fall to the ground or other surface. They may or may not be able to catch or brace themselves and cushion the fall. Several people have suffered significant injuries including death from falling on a hard surface following a CEW exposure. Consider the environment the subject is standing on and the likelihood that a fall will result in injury.
A clothing disconnect may still cause NMI if the subject moves in such a way that the probes get close enough to the skin to complete the circuit. This could result in injury if during the cycle the subject runs, climbs a fence, or moves to a more hazardous environment.

{12} There have been incidents where subjects have been exposed to multiple TASER CEW cycles because the subject would not comply with verbal surrender commands following a TASER CEW deployment. Contact officers were available but did not move in during the cycle while the subject was incapacitated. While there are circumstances under which multiple cycles may be appropriate and reasonable, officers should consider an attempt to move in and control the subject while the TASER CEW is cycling and it is practical and reasonably safe to do so.
Remember, as with any application of force, each CEW (5-second) cycle, deployment, or trigger pull must be legally justified.

{13} You must be a currently certified TASER Instructor or User

{14} Pulling the trigger discharges the cartridge and initiates a 5-second discharge cycle. The cycle may be extended beyond 5 seconds by keeping the trigger depressed. To stop a discharge cycle, for example in the case of an accidental discharge, shift the Safety Switch down to the SAFE position. Holding the trigger continuously beyond the 5-second cycle will continue the electrical discharge until the trigger is released. In this instance, the discharge will cease once the trigger is released.

{15} The Central Information Display or CID is a single color (yellow) display screen and allows the X26P operator to observe system and battery status information, as well as view sighting options.

N. Selector Switch {17}
1. Used to place unit in stealth mode or sighting options
(a) Use only finger, no pencils, paperclips, etc.

O. Performance Power Magazine {18} O.P.Q.R.S.T.(20 min)
1. Contains three 3-volt lithium power cells
2. Store enough power for 550 five second cycles
3. Five different types
(a) PPM-regular
(b) APPM- Automatically stops the cycle after 5 seconds
(c) TPPM- Tactical magazine with extended grip
(d) Taser Cam- HD color video
(e) XPPM- Storage for additional cartridge
4. PPM replacement

P. Current Metering

Q. Spark Test {18}
1. perform at least a daily spark test
(a) To check that the X26P is Sparking
(b) To check battery performance
2. Follow department protocol

R. Pulse Calibration {19}
1. X26P is equipped with a pulse calibration system that measures the output of every single pulse
2. Operator may detect a slight change in the pulse rate during 5 second spark test. This does not affect the X26P's effectiveness

S. Trilogy Logs {20}
1. Event Log: tracks events and is similar to the X26 download
2. Pulse Log: records pulse activity
3. Engineering Log: monitors the performance of key sub-systems

T. Evidence.com {21}

{16} The X26P monitors its system and functional status. It communicates this information to the operator by a small icon in the upper right corner of the CID. If no error icon is displayed, there were no problems detected during the X26P internal diagnostic sequence that occurs every time the Safety Switch is shifted to the up (ARMED) position. If a Major Fault is detected, a triangle icon with an exclamation mark will appear in the CID. A Major Fault is a noticeable subsystem failure like a LASER or flashlight failure. The X26P can still function and can still be used.
If a Critical Fault is detected, an Octagon with an exclamation point icon will appear in the CID. A Critical Fault indicates a system failure. The X26P is not to be used and should be sent back to TASER for analysis and possible repair.

{17} The flashlight and LASER settings are similar to the X26. The sighting options can only be accessed and changed when the safety switch is in the down (SAFE) position.

{18} There are different versions of the Performance Power Magazine (PPM):
* The Automatic-shutdown Performance Power Magazine (APPM) will automatically stop after a 5 second cycle even if the trigger is held down past the cycle. The operator must press the trigger again to re-energize the fired cartridge. The APPM also has an audible tone that sounds at four seconds into the cycle to warn the operator that the cycle is about to end. If you remove the APPM and replace it with a different type of PPM, the X26P will return to its normal configuration.
* The Tactical Performance Power Magazine (TPPM) features an extension with finger grip. The TPPM has no auto-shutdown feature.
* The TASER Cam HD utilizes HD color video and functions similarly to the original TASER Cam. The TASER Cam HD is available with or without the auto-shutdown feature.

{18} When performing a spark test make sure you look and listen for the arc, meaning you see the arcing and you hear the pulse rate.

{19} Unlike the X26, the X26P has a pulse calibration system that measures the output of every single pulse. The system is designed to constantly monitor the high voltage output. As a result, the Operator may detect a slight change in the pulse rate during spark test. This is a normal function of the weapon and will not affect the performance of the X26P, absent any major or critical faults that are displayed on the CID.
This change does not occur all the time and is caused by the designed characteristics of the X26P. Additionally, no adverse information is shown on the data download if this change occurs.
This change does not occur when a cartridge is affixed to the end of the X26P or during a cartridge deployment

U. Written test — U. (30 min) 1. Taser user test part 1 2. Taser user test part 2 3. Taser X26P conversion test V. Stress drills — V. (90 min)	{20} The X26P records much more data than the X26. We call these enhanced data logs the Trilogy Logs. This consists of an Event Log, a Pulse Log and an Engineering Log. Information for the most recent 2000 discharges is recorded. The Event Log records the date and time every time the safety is shifted to the up (ARMED) position on the X26P and when the trigger is pulled. It also logs the duration of each cycle, the internal temperature of the device, the battery strength at the time of discharge, and what time the safety switch was put in the down (SAFE) position. The Pulse Log records the output of each pulse. This can determine that the CEW output was within specifications and can help in determining if and when electricity was delivered to a subject. The Engineering Log is for use by TASER engineers to diagnose if the X26P was operating properly during an event. {21} X26P firing data can be uploaded to EVIDENCE.com via Evidence Sync. EVIDENCE Sync software may be used to download firing data to local computers. EVIDENCE Sync can be downloaded free of charge from www.taser.com *** Note that the terms "Upload" and "Download" are not inter-changeable for the purposes of transferring data to either EVIDENCE.com or a local computer. Upload refers to the data that is being sent to EVIDENCE.com. Download refers to the data that is being sent to a local computer from the via EVIDENCE Sync.

Activity 1: Drawing from holster

Purpose of Activity: Students will be given instructions (in a zero stress environment) on the use proper techniques of drawing and holstering of the X26P. Students will get a chance to draw and holster to begin to develop muscle memory on this technique. After time the instructor will begin to add stress to the drill.

Description: Students will line up across from each other so each has a partner. Students will begin to practice drawing the X26P from the holster. As drill continues instructor will add stress by giving them time restraints on drawing, targeting and activating the X26P.

Resources required: Classroom or mat room able to accommodate the class and enough X26P Tasers, holsters and cartridges for the students.

Key learning points:

- How to properly draw the X26P from the holster.
- How to aim the X26P.
- How to activate the X26P.
- How to give orders and commands when using the X26P.
- How to tactically deploy the X26P and move to a safe area.

Activity 2: Firing the X26P without a cartridge

Purpose of Activity: Students will demonstrate their ability to properly draw, aim and fire the X26P on target.

Description: Students will face a partner and under minimal stress will fire Taser aiming at the proper targeting zones. As the students proficiency grows stress will be added (i.e. partner advancing at student with Taser activated until students draws and activates the weapon.

Resources required: X26P Taser and X26P holster.

Key learning points:

- Manipulation of the X26P.
- Aiming if the X26P.
- Firing of the X26P.

Activity 3: Reload drills

Purpose of Activity: Students will practice firing, returning to safe, reloading and firing the X26P.

Description: Students will be given approximately 10 empty (previously fired and safe) Taser cartridges. The student will have to draw fire the Taser. After firing the X26P the student will have to place the Taser on safe, remove the fired cartridge, reload the Taser activate the Taser and fire again. While doing this drill the instructor will add stress to the student.

Resources required: X26P, 10 Taser cartridges (previously fired and safe), X26P holster.

Key learning points:

- Student will learn to quickly fire and reload the Taser.
- Develop good habit for safely loading and reloading the Taser..
- Learn to reload the Taser under stress.

Activity 4: Three point Drive stun with the X26P.

Purpose of Activity: Students will practice the three point drive stun technique without activating the Taser.

Description: The students will be broken up into groups of three or four (depending on class size). One student will role play the suspect, one student will role play the Deputy with the Taser and the remaining students will be the arrest team. The Taser operate will simulate shooting the Taser at the suspect and the suspect will act as a dart missed or it's a close probe spread. The Taser deputy will follow up with a drive stun (without activating the Taser) and direct the arrest team to control the suspect hands and simulate cuffing under power. Each student will participate in each role.

Resources required: X26P Taser and X26P holster

Key learning points:

- Students will learn to identify need for a three point drive stun.
- Student will learn to remain in contact with suspect during the drive stun all the way to the ground.
- Student will direct arrest team members what to do.
- Student will give the suspect directions
- Student will have to control the situation.

Activity 5 Firing the X26P

Purpose of Activity: Students will demonstrate their ability to properly draw, aim and fire the X26P on target.

Description: Students will be placed in front of a target and under minimal stress will fire Taser into the proper targeting zones.

Resources required: X26P Taser, targets (Taser targets if possible, or actual life size targets). X26P holster and one Taser cartridges.

Key learning points:

- Manipulation of the X26P.
- Aiming if the X26P.
- Firing of the X26P.

Activity 6: Three point Drive stun with the X26P.

Purpose of Activity: Students will practice the three point drive stun technique on a dummy. Additional students will be utilized to hold the dummy while it is being drive stunned.

Description: Students will be given a stress environment and have to hit a pad for approximately 30 seconds. Student will then have to run over to a dummy target that two additional deputies are involved in a fight with (simulated). Student will have to properly find and area on the dummy target and safely perform a three point drive stun, give verbal commands, direct the arrest team and manage the entire scene.

Resources required: X26P Taser, X26P holster, padded dummy target or cardboard conductive target (full body length) , safety glasses (if using a live cartridge), expended cartridge.

Key learning points:

- Students will learn how to control their stress level.
- Student will, after punching bag, have to manipulate the X26P from the holster.
- Student will have to safely identify their targeting zone.
- Student will have to apply a proper three point drive stun.

- Student will have to control the situation.

Activity 7: drawing and firing X26P while on the ground

Purpose of Activity: Students will practice drawing, firing and getting back to their feet while they have simulated being knocked to the ground.

Description: Student will start in a seated position, simulating being knocked to the ground. Students will practice front kick from the ground and rolling from one side to another. After several repetitions, the students will roll onto their gun side, draw their Taser (with no cartridge), fire it and get to their feet. The student will give verbal commands and manage the scene. Stress will be introduced by having a student hold a kicking shield properly and advance on the student who is on the ground. The student will roll to the appropriate side from where the suspect is attacking and deliver a kick to the kicking shield. The instructor will give the command to "get up" and the student will deliver a final kick, draw and fire the Taser at the suspect. The suspect will simulate being hit by the Taser and fall to the ground. The student will get to their feet, being mindful not to turn their back to the suspect, give verbal commands and manage the scene.

Resources required: X26P Taser, X26P holster, matts, and kicking shield.

Key learning points:

- Students will learn how to control their stress level.
- Student will, after kicking the bag, have to manipulate the X26P from the holster.
- Student will have to safely identify their targeting zone.
- Student will have get to their feet
- Student will have to give verbal commands.
- Student will have to manage the scene and control the situation.

References: Taser PowerPoint version 19 with videos and instructor notes
LASD Manual Policy of Procedures-Taser section MPP 5-06/040.95
LASD Custody Division Manual- Taser section CDM 3-03/020.20