I. Introduction

Surprisingly, to date, with all the information available on the subject of “defensive shooting” very little has been said about the very important subject of Defensive Accuracy. The main purpose of this document is to expose the reader to the term “Defensive Accuracy” and how it applies to civilian defensive shooting. It is not intended to cover the subject of Defensive Accuracy in all its forms and complete detail.

II. First, Some Definitions.

1. Why The Word “Defensive”?

The reason I put the word “Combat” in parentheses in the title is because that word is most often used and expected when discussing this subject. “Combat Accuracy” is a very common term, no so “Defensive Accuracy”. Though for our discussion the word “combat” is really not as appropriate as the word “defensive”. “Combat” generally refers to situations that involve the military, and may also be extended to law enforcement in SWAT type situations. In combat, firearms are generally used both defensively and offensively. Both the military and law enforcement often go after the bad guys (offensive use).

Not so for civilians. Civilians can not legally pursue bad guys. We can be “defensive” but not “offensive”. Civilian use of firearms is normally for “defensive use only” - not for “combat” or offensive use.

2. What is “Accuracy”?

Quite often on internet forums, in books on shooting, and also in talking with others about shooting the term “accuracy” is used when describing how a shooter and his/her equipment is able to accomplish tight groups. This is not truly “accuracy”, this is actually “consistency”. One can have consistency without accuracy, and one can have accuracy without consistency. They are not the same and they are mutually exclusive.

As a graphic example, in both Figures below the shooter was aiming at the “X”.
(Figure 1) shows a tight group that is not near the “X”. Often this is described as the gun and/or shooter being “accurate”. Actually, this is “consistency, but not “accuracy”. The holes are very close to same place each time - “consistent”, but they missed the “X” by a good distance - not “accurate”. In (Figure 2) the holes are both “consistent” and “accurate”. For our discussion here I will use the terms “accurate” and “accuracy” to mean both accuracy and consistency together as in (Figure 2).
III. How Accurate (and Consistent) Must We Be?

The answer to this depends on what we are trying to accomplish as civilian shooters. What is the optimum goal?

1. Target Shooting: Optimum Goal = *a Perfect Score.*

For accuracy in TARGET SHOOTING we are trying to accomplish a **PERFECT SCORE.** The optimum would be to make a hole right at the cross of the “X” with the first shot, through which every subsequent shot would pass. Although this would be “perfect accuracy”, we really don’t NEED “perfect accuracy”. What we NEED is a “PERFECT SCORE”. To obtain a perfect score all we must do is make every shot break the 10 ring. So, in this case we must be accurate enough to keep each shot breaking the 10 ring. This is not to say that each shot breaking the 10 ring to obtain a PERFECT SCORE is easy; we all know it takes a lot of dedication, training, practice, and even a bit of luck. Often, as the target distance increases so does the size of the rings on the target in order to help compensate for equipment inaccuracies, the effects of weather conditions, and we imperfect humans, while at the same time making a PERFECT SCORE reasonable to accomplish.

2. Hunting: Optimum Goal = *to Kill Game Efficiently.*

3. Most Other Shooting Disciplines: Optimum Goal = *a Perfect Score.*

As for accuracy in OTHER SHOOTING SPORTS such as skeet, trap, IDPA, steel plate, etc.; again we are trying to accomplish a **PERFECT SCORE**, though making a perfect score in each of these requires different amounts of accuracy and/or speed to accomplish.

4. Defensive Shooting: Optimum Goal = *to Stop A Threat To Life And Limb As Quickly As Possible.*

This a much different goal than any of the other civilian firearm disciplines. Being a loser in this discipline does not just mean you get a low score and lose a match and may go home without a prize. Not accomplishing your goal in defensive shooting could mean that you do not get to go home at all, and even if you are lucky enough to come out of a confrontation alive you may very well be wounded and have life-altering injuries. Except for hunting dangerous game, which in many ways is similar to defensive shooting, the major difference between defensive shooting and the other shooting disciplines simply put is:
- Other shooting disciplines -- Your target is benign as you shoot at it.
- Defensive shooting -- **Your target is trying harm you!**
IV. To Stop A Threat To Life And Limb As Quickly As Possible.

When we are attempting “To Stop A Threat To Life And Limb As Quickly As Possible” which is our goal in Defensive Shooting, we are in reality, attempting to stop a human body from having the strength and will to continue an attack.

1. To Quickly Stop An Attack.

I am not going spend a lot of time on the details of the mechanics of the human body and how these mechanics may quickly be brought to a halt. Instead I will just point out the areas of the body that when harmed have the greatest potential to stop the body from continuing an attack.

(Figure 3) on the following page is taken (with permission) from a thread submitted by RyanM on March 15th, 2007 on the internet forum www.thehighroad.org. This is an excellent graphic and explanation which shows the areas of the human body that can most quickly be compromised by various types of firearms and ammunition.

I have added dotted blue circles approximately 4” in diameter to indicate the accuracy required to hit the most vital areas and efficiently stop an attack quickly.

Notice that the most effective area is a vertical path about 4” wide centered on the body running from the eyes down to about arm pit height. This larger path is only confidently achievable with rifles and very high caliber handguns.

The area at the neck indicated by thinner circles is is at once very vulnerable because the trachea and a very vital vascular system in front, as well as the central nervous system (spinal column) in the rear are virtually unprotected. Even a very weak and small caliber bullet in the central nervous system here has a very high potential of instant incapacitation. That’s the good part - the bad part is; this area is extremely difficult to hit because it is so small and usually moving. Due to this difficulty it is not recommended as an effective area to concentrate on except under almost perfect circumstances.

The most vital areas reachable by most handguns is a 4” circle around the eyes and another around the heart. So when whittled down, the two most effective areas are two 4” circles, one around the eyes and the the other around the heart. THESE TWO CIRCLES INDICATE THE AREAS NECESSARY TO HIT IN ORDER TO ACHIEVE DEFENSIVE ACCURACY.

These two (circled) zones are most often referred to as the HEAD zone and the COM (Center Of Mass) zone.

Notice that in order achieve a 4” circle around the POA (Point Of Aim) one must place each shot no more than 2” away from POA. A 4” diameter circle has a 2” radius.

Unlike some other shooting disciplines, the target areas on the human body cannot be made larger if they are further away in order to make your perceived accuracy better. Accuracy must be maintained to be within 2” of POA (Point Of Aim) at ALL distances.

Maintaining defensive accuracy at all distances means one must expand the time to take each shot as the distance increases, and conversely, shorten the time to take each shot as the distance decreases.

Optimally, we must keep a balance between shooting as fast as possible, while at the same time placing the shots within 2” of POA at all distances.
Actually, what Fackler has said is that shot placement trumps everything, given adequate penetration. The generally accepted figures are that 12" to 18" penetration in ballistic test gelatin is adequate, while 13" to 15" is optimal. Under 12" and you may not have enough penetration to nail vitals, even on a perfectly placed shot. Over 18", and the hole size shrinks down to where blood loss may not be as rapid as it could be.

But really, as long as you've got penetration over 12", shot placement is all that matters. Actually, I drew up some charts showing where the best spots to aim are. They also demonstrate the difference between rifle and pistol pretty well. These charts aren't just supposed to show what organs produce results, but also which organs you can expect to actually hit. The kidneys are pretty far back, so you can't count on hitting those with a pistol, but a rifle produces enough temporary cavity to still rupture one on a near miss, for instance.

- Black means near-instant incapacitation,
- Red is 10-20 seconds,
- Orange is 20-30 seconds,
- Yellow is 30-60 seconds,
- White means 60 seconds or more.

Effective shot placement for a high-powered rifle.
Intermediate rifle calibers and larger magnum pistol calibers (.41 magnum through .30-30, roughly).
Standard service pistol calibers.
Mousegun calibers, .380 and down.

Figure 3. Approximate Incapacitation Times with Various Calibers.
V. Attaining and Improving Defensive Accuracy.

We all know that the more knowledge one can attain in any discipline, and the more one practices that discipline, the more adept one can become in that discipline. To become adept in Defensive Accuracy one must gain as much knowledge about the subject as possible and also practice as much as possible.

There is much good (and bad) information to be had on the internet, in books and videos on the subject, and in defensive training schools on the subject. There is so much that can be learned and practiced in defensive shooting it is not possible to cover it all here. As I said in the beginning, “The main purpose of this document is to expose you to the term “Defensive Accuracy” and how it applies to defensive shooting. It is not intended to cover the subject of Defensive Accuracy in all its forms and complete detail.”

All of the following (from here to the end of this document) assumes that your firearm and ammunition combination are consistent. In other words, the “equipment” is capable of shooting tight groups.

1. Defensive Accurate Zones.

(Figure 4) shows the two optimal zones (4” circles) to stay within at all distances in order to attain Defensive Accuracy.

![Figure 4. Optimal Zones for Defensive Accuracy](image)

2. The Balance Between Speed and Accuracy.

We want to place the hits as quickly as possible (speed) while still staying within the zones (accuracy).

This means that we can shoot much faster at a “bad breath” distance and stay within the zones than we can at greater distances. Maintaining the optimum balance of keeping within the zones and still shooting as fast as possible is the goal of Defensive Accuracy.

In (Figure 5) we first see the result of a good balance between speed and accuracy, then an example of shooting too slowly, then shooting too quickly.
3. Correcting Inaccuracy.

In both examples in (Figure 6) a good balance between distance and speed is shown, but the first has poor accuracy, and the second with exactly the same shots has good accuracy.

VI. Possible Causes of Poor Accuracy.

In both examples (poor and good) (Figure 6) all the groups are very good in that the hits are within a good 4” circle size. Though, in the first example (poor) both the head group and the COM group are inaccurate in exactly the same way - they are too low and too far to the right. Again, this illustration is a very good example of the difference between consistency and accuracy. All four groups have good consistency, but the first two groups have poor accuracy. These inaccuracies could be either equipment related or shooter related or a combination of both shooter and equipment.
VI. Possible Causes of Poor Accuracy (Cont.).

1. Equipment

Equipment could still be the cause, or part of the cause of poor accuracy, even though the firearm and ammunition combination is capable of producing consistent groups. The poor accuracy could be caused completely or in part by the **sights on the gun** being **poorly aligned**.

2. The Shooter

The shooter can be also be the cause or part of the cause of inaccurate group placement. The two main causes for the shooter being part of the problem are:

   a. *Poor Sighting*

   The poor accuracy shown in (Figure 6) could be caused by either poor **sight alignment**, or poor **sight picture**, or a bit of **both** as shown in (Figure 7). Any one of the first three examples in (Figure 7) could cause the poor accuracy shown in the first example in (Figure 6).

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**Figure 7. Sighting**
VI. Possible Causes of Poor Accuracy (Cont.).

   b. Poor Trigger Control

Poor trigger control can also be the cause or part of the cause for poor accuracy. The charts in (Figure 8) show some the possible effects of poor trigger control actions for both left-handed and right-handed shooters.

As an example, the low/right groups shown previously in the “Poor Accuracy” example in (Figure 6) could be caused or partially caused by Jerking or Slapping Trigger or Tightening Fingers for the a left-handed shooter, or Tightening Grip While Pulling Trigger for the right-handed shooter.
VII. Some Other Ways to Improve Defensive Accuracy.

These are the only two subjects I will just slightly mention that can be of immediate use for the novice in defensive shooting. This is just a starting point. I will not go into detail on either of these subjects. The intention here is to provide enough information for a novice to as quickly as possible, gain the upper hand in most defensive shooting situations.

1. Practice.

Defensive shooting, because it is uniquely different than most other shooting disciplines, also requires uniquely different practice sessions. These sessions as much as possible, should include drawing and shooting from various positions, both stationary and moving. Positions such as; standing, sitting, kneeling, prone (on stomach, back, and sides). Shooting with both hands, strong-handed only, and weak-handed only. Shooting from cover and concealment at realistic targets which are set at various heights and distances. Also shooting at moving targets. All this while at the same time shooting as fast as possible and keeping each shot within 2” of POA at all distances and from all positions.

2. Laser Sights. See (Figure 9) on the following page.

Laser sights are not for everyone, and they have their pros and cons, but most shooters, especially novices can use them to great advantage both in practice and in most defensive shooting situations. Here’s why they can be a very useful addition to iron sights:
   1. Can be on target faster.
   2. Can be more accurate.
   3. As fast as point-shooting, but much more accurate.
   4. Much more visible and also faster than iron sights in low light and especially in the dark.
   5. Requires viewing only the target and not the gun.
   6. Not necessary see sights or target sharply. Seeing the laser dot superimposed over the general shape of the target in the Defensive Accurate zones is sufficient. This is particularly helpful if you have poor eyesight, wear glasses but don’t have the time too put them on, or if they fall off or get broken during a confrontation. Also, not necessary to acquire the correct focal portion of eyeglasses (this can be especially troublesome with tri-focal lenses).
   7. Can see peripherally much better.
   8. Head doesn't have to be in line or level with the gun.
   9. Arm, hand, and gun don’t have to be in a position that blocks vision around the target area.
10. Can shoot from almost any body position with either hand or both hands very accurately.
11. Helps with trigger control and natural pointing during dry fire and hot fire practice.
12. The iron sights are always there if you want to use them.

VIII. Conclusion.

Acquiring accuracy in defensive shooting is not easy and takes much practice, but attaining accuracy in this shooting discipline is well worth it. It can save your life and/or the life of another. Be “Defensive Accurate” - Be Safe!
Defensive Accuracy = About a 4” dia. circle around intended bullet impact point.

**Laser Parallel with Bore**

With the laser located about 1-1/2” below and *adjusted parallel to the bore line*, the laser dot will be defensive accurate up to and beyond a certain natural point (Point 1).

**Laser Sighted at Short Distance**

With the laser located about 1-1/2” below and *adjusted for a short distance away*, the laser dot will be defensive accurate up to, and somewhat beyond the sight-in point (Point 2).

**Laser Sighted at Longer Distance**

With the laser located about 1-1/2” below and *adjusted for a longer distance away*, the laser dot will be defensive accurate up to a short distance from the muzzle, then become inaccurate until it is a short distance before the sight-in point where it will again become accurate until it is a short distance beyond (Point 3).

*Note: Actual defensive-accurate distances will depend on the “flatness” of each individual bullet trajectory, which in turn will depend on the firearm and cartridge combination used.*