Purpose

The Bullet Trap Monday Night Practical Shooting Adventure (MNPSA) program is intended to provide shooters an opportunity to compete in a series of weekly outdoor shooting events. Each event will present shooters with an array of challenging targets which they will engage using holster draw, speed shooting and run-n-gun techniques.

Safety

As always, **SAFETY IS OUR HIGHEST PRIORITY.** We want everyone to enjoy their shooting experience, but it's no fun if someone gets hurt. To this end:

- All BT range rules and safety procedures will be in full force during the competition.
- Gun may be uncased or unholstered ONLY at the firing line or Safety Table.
- Uncased or unholstered guns MUST be pointed in a safe direction at ALL TIMES.
- Shooters must follow all commands of the Range Safety Officer (RSO).
- Finger is off the trigger until ready to shoot.
- Magazines MUST NOT be inserted into the gun until the shooter is on the firing line and the "Make ready" command has been given.

Also, Cold Range protocols will be in effect:

- No loaded firearms may be brought onto the range.
- All Rimfire firearms will be cased unless the shooter is on the firing line.
- All Centerfire firearms will be cased when brought onto the range. The firearm will be uncased and holstered at the Safety Table immediately on arrival. The UNLOADED firearm may be carried holstered throughout the match.
- All firearms will be kept UNLOADED (empty chamber and empty magazine well) until on the firing line and the "Make ready" command is given.
- Firearms MAY NOT BE HANDLED except on the firing line under the direct supervision of the RSO, and at the Safety Table.
- Ammo may be handled anywhere on the range **EXCEPT AT THE SAFETY TABLE.**
- Loaded magazines must be placed in a pouch, pocket or case until the shooter is given the "Make Ready" command at the firing line by the RSO.
- Before leaving the range, the shooter will clear the firearm and recase it at Safety Table.

Eligibility

The MNPSA program is open to all Bullet Trap members.

Shooting Divisions

Shooters are organized into two power factor divisions based on bullet caliber:

Minor: .22 cal Major: .38 Super, .380 cal, 9 mm, .357 Sig .40 cal, .45 ACP, and 10 mm

Equipment

Firearm: Any **semi-auto handgun** (no revolvers) firing the above calibers and having a capacity of at least 6 rounds, may be used in competition.

Sights: In addition to open sights, optical aids or pointing devices such as scopes, red dots, holographs and lasers are also permitted.

Ammunition: Shooters will provide their own ammo. Reloads are permitted, but the shooter is responsible for its reliability and compatibility with the firearm. Steel core or steel jacketed ammo is NOT PERMITTED. Maximum ammo velocity is 1600 feet per second.

Holster: Centerfire shooters will draw and fire from an outside-the-waist-band (OWB), straight hanging holster worn on the shooters strong side at about the 3 o'clock position. The holster must completely cover the trigger guard when the gun is fully inserted. **Rimfire shooters do not need holsters. They will start each run from low ready.**

Magazines: Shooters will need at least 3 magazines to complete the course of fire for each stage. The shooter must bring enough ammo to the line to complete the course of fire. If the shooter runs out of ammo before completing the run, he/she will forfeit the remaining targets. **Recharging magazines at the firing line is not permitted.**

Eye Protection: Eye protection must be worn at all times when on the range.

Ear Protection: Ear protection is required at all times when on the range. The shooter must be able to hear the RSO's commands and the shot timer start signal, so active electronic devices are strongly recommended.

Outdoor Match Considerations

Loading Table: For outdoor matches, a Loading Table is provided where shooters can conveniently prepare magazines between stages.

Clothing: Open-toed shoes, low-cut tops, tank tops and sleeveless shirts are discouraged at the outdoor range as a precaution against painful (and distracting) skin contact with hot brass. Also, there are biting insects that like to feast on bare legs, so long pants are recommended. Finally, there is little shelter available, so an SPF lotion is also recommended.

Eye Protection: The outdoor range is graveled and some targets are steel plates, so flying debris can come from any direction. **Eye protection must also have side shields.**

Weather: A given match will be cancelled if severe weather or temperature over 90 degrees is forecast at match time. The decision to cancel will be made on Monday at noon and all shooters booked for the match will be notified by e-mail.

Schedule

Matches will be held Monday evenings at the Bullet Trap outdoor range in Dalton City from 5:00 PM until roughly 8:00 PM (or depending on how many shooters show up).

Fees

The match fee is \$20 and covers range time, targets, and prizes. It is payable each week when the shooter arrives at the range.

Prizes

When the match is complete, all shooters will be ranked by their match scores from highest to lowest. Three gift cards will be awarded each week using a distribution method called the Lewis Class System. There will be three classes based on the finishing scores. Class I will be the top third of the scores, Class II will be the middle third, and Class III will be the bottom third. The top shooter in each class will be awarded a Bullet Trap gift card: Class I \$20, Class II \$10, and Class III \$5.

Course of Fire (COF)

A typical match will have two stages using a combination of steel and USPSA silhouette targets. The match will be completed in three runs. The first run will be on one stage, the second run will be on the other, and the third run will combine both stages. Most matches will require 40-50 rounds of ammo.

Range Commands

Shooters will be guided through each run by standard commands from the Range Safety Officer. Shooters can take action only when instructed to do so. The maximum time to complete a single run is 30 seconds.

Next Shooter

RSO: "Next Shooter."

Shooter: The shooter comes to the firing line with the firearm cased (Rimfire) or holstered (Centerfire) and steps into the shooter box.

Make Ready

RSO: "Make Ready." **NOTE: The shooter must not touch the trigger at any time during the make ready period.**

Centerfire: Unholster the firearm, insert a magazine, charge the first round, and engage any external safety or de-cocker. The shooter may have 30 seconds to take sight pictures to prepare for the stage. When ready to proceed, holster the firearm and move the hands to the surrender position. **Any external safety or de-cocker MUST be engaged before holstering.**

Rimfire: Uncase the firearm, insert a magazine, charge the first round. External safety devices need not be engaged. The shooter may have 30 seconds to take sight pictures to prepare for the stage. When ready to proceed, assume a low ready position pointing the gun at the sand-filled bucket in front of the shooting table.

Shooter Ready

RSO: "Shooter Ready"

Shooter: Indicate ready to start by nodding of saying "Yes". If the shooter says nothing, the RSO will assume the shooter is ready and proceed to the next command. If the shooter is not ready for some reason, he/she must clearly say "Not ready". The RSO will allow the shooter to remedy whatever caused the not ready condition.

Standby

RSO: "Standby". At this point, the RSO will activate the shot timer.

Shooter: Wait for the beep. At the beep, draw (Centerfire) or raise (Rimfire) the gun and begin engaging the targets per the course of fire.

Unload and Show Clear

RSO: After the run "If you are finished, unload and show clear".

Shooter: Lower the gun, remove the magazine, empty the chamber, lock or hold the slide back and present the gun to the RSO for inspection.

NOTE: If the last round will not extract from the chamber (common in rimfire guns), the RSO will instruct the shooter to fire the last round into the berm without penalty.

Hammer Down and Holster

RSO: "if clear, hammer down and holster"

Centerfire: Point the firearm safely downrange, release the slide and pull the trigger to show that the gun is empty, and holster. Shooter may leave the firing line.

Rimfire: Show clear and case. Trigger need not be pulled and slide release is optional. Shooter may leave the firing line.

Range Clear

RSO: "Range is clear". At this point, the stage is finished and shooters can move forward to repaint and score targets. The shooter may retrieve brass until the next shooter is called to the line.

<u>Stop</u>

RSO: "Stop" or "Cease fire". This command generally indicates that there is an urgent situation that must be addressed immediately.

Shooter: Immediately cease firing, stop moving and await further instructions.

Equipment Malfunctions

There are no alibis in MNPSA. If there is an equipment malfunction, the shooter will attempt to clear it and continue the run. If the malfunction cannot be cleared, the shooter will forfeit any targets not shot.

Penalties and Disqualification

Penalties

A shooter will receive a 10-point penalty for any of the following violations

Creeping: Moving hands towards the firearm, or physically moving to a more advantageous shooting position or posture before the start signal.

Procedural: Failure to execute the COF as specified

Boundary: Stepping over the firing line or any other marked boundary.

Barrier: Making contact with or shooting any stage barrier or prop.

Trigger Finger: Moving (taking more than one step) with finger inside of trigger guard. Finger inside the trigger guard during a magazine change, unloading, loading or during remedial action.

Stage Disqualification (SDQ)

180 Rule: A shooter who violates the 180-degree rule (Pointing a firearm up-range) will be disqualified from and receive a score of zero for the current stage

Match Disqualification (MDQ)

A shooter who violates any of the following at any point during a match will be disqualified from the match and forfeit all scores achieved and fees paid.

Berm Violation: Any shot fired directly over or outside of the berm in any direction.

Dropped Firearm: Dropping a firearm, whether loaded or unloaded, at any time during the match.

Unsafe Gun Handling:

- Handling a firearm unsupervised, or any where away from the Safety Table.
- Leaving the firing line with a loaded firearm, or possession of a loaded firearm anywhere other than on the firing line.
- Sweeping or pointing the muzzle of a firearm loaded or unloaded at any part of any person's body.
- Holstering a loaded handgun without the external safety applied (if present).

Unsafe Ammo Handling: Handling live ammunition or loaded magazines at the Safety Table

Negligent Discharge:

- Any shot fired while loading/unloading/reloading or lowering the hammer.
- Any shot fired during remedial action in the case of a malfunction.
- Any shot fired into the ground within 10 feet of the competitor.
- Any shot fired while not engaging a target.

Appendix A: Hit Factor Scoring

The match results might look puzzling if you are not familiar with Hit Factor scoring. Some scoring methods are focused on shooting accuracy (bullseye) where the shooter with the highest total points is the winner. Other methods reward shooting speed (steel challenge) where the shooter with the fastest total time is the winner.

Our game, Practical Shooting, looks at both aspects by using Hit Factor scoring. It's not the highest score or the fastest time that determines the winner, but the best shooting efficiency. That is, points scored per second of shooting. It all starts with the target.



The standard target has 3 scoring areas A, C, and D. Each area has a point value as follows

Area	Major	Minor
А	5	5
С	4	3
D	2	1

Each target is usually shot twice so the maximum possible score is 10 points and the Stage Value is 10 times the number of targets. When the shooter finishes the stage, the points scored on each targat are tallied and recorded along with any penalty points and the time it took to complete the stage.

For any given stage, the shooter's point score is divided by the time needed to complete the stage, yielding the Hit Factor. You can find this in the Stage Results portion of the score sheets and shown here.

Stage Results - Combined											
Place	Name	No.	Class	Div	PF	Points	Pen	Time	Hit Factor	Stage Pts	Stage %
1	Shooter A			0	Maj	65	0	15.26	4.2595	70.0000	100.00%
2	Shooter B			0	Maj	70	0	18.13	3.8610	63.4511	90.64%

If the match consisted of just one stage, the shooter with the highest Hit Factor (third to last column) would be the winner. But in a multi-stage match, you can't simply add up the hit factors since the maximum points possible, or Stage Value, can vary for each stage. So the hit factor is used to calculate how much of the Stage Value each shooter has earned relative to the best shooter (highest hit factor) in each stage. That's where the "Stage Pts" and "Stage %" columns in the Stage Results come into play.

In this example, the Stage Value is 70 points. Shooter A finishes in 15.26 seconds and scores 65 points for a hit factor of 65/15.26=4.2595, and Shooter B scores all 70 points, but takes 18.13 seconds to finish for a hit factor of 70/18.13=3.8610. Shooter A is the stage winner.

The shooters are awarded a portion of the Stage Value points based on the percentage of the stage winner's Hit Factor they achieve (the "Stage %" column). The stage winner (top hit factor) always gets 100% of the Stage Value. The other shooters get a percentage equal to their hit factor divided by the top hit factor which for Shooter B would be 3.8610/4.2595 or 90.64%. This is used to calculate the Stage Points ("Stage Pts" column) earned by each shooter. So for this stage, Shooter A gets 70 points (100% of the Stage Value) and Shooter B gets 63.4511 points (90.64% of the Stage Value).

Now add a second stage (not shown) with an 80-point Stage Value and use round numbers to simplify the math. Shooter A gets a perfect score of 80 points in 15 seconds for a hit factor of 5.333. Shooter B scores a 76 in 10 seconds for a 7.600 hit factor. This time, Shooter B gets 100% of the Stage Value (80 Stage Pts) while Shooter A gets 5.333/7.600=70.02% of the Stage Value (56.14 Stage Pts).

The Match Score then is the sum of the Stage Points.

Shooter A: 70.00 + 56.14 = 126.14 Shooter B: 63.45 + 80.00 = 143.45

And Shooter B wins the match.

A lot of number crunching to be sure. Fortunately, we have a scoring app that keeps track of everything and does all the math so we can concentrate on having fun.