

Pit Boss Responsibilities at .50 BMG Matches

By Paul Rittmann, Tri-Cities Shooting Association

The pit boss keeps things running smoothly down in the target pits. The briefcase has the paperwork. Extra supplies are in the storage container. The following list summarizes the duty:

- (1) Verifies that each target has at least one person able to do the work
- (2) Reminds/instructs pit crew members on how to mark the targets during firing
- (3) Verifies that the people at each target are equipped with markers and pasters
- (4) At the start, before firing begins, walks from target to target with the line officer to make sure the shooter's name and class match the target sheet that is in the pits
- (5) During firing communicates appropriate feedback to the line officer
- (6) After firing is completed walks from target to target to measure groups and verify the scores
- (7) Makes up the match results summary for all the shooters on that relay.

Preliminary Walkdown

The line officer and the pit boss walk down the shooting line/target line at the same time. Using the radio the line officer announces who is shooting on each target and what class is being shot. The classes are Heavy, Light, Unlimited, and Hunter. The pit boss verifies this information on the score sheet (as well as a few other details, like target & relay number, date & time, and who is manning the target). The completed score sheet is left with the target puller. A sample score sheet is attached.

It also good to check the target for holes needing to be patched. This is especially true at the start of a match. Sometimes patches fall off while the target is being moved from the storage container.

During the Shooting Periods

The shooting period is divided into a sighter period and record period. All timing takes place on the shooting line. The line officer will radio down when to raise and lower the targets. Note that the halfway position for the targets has little use at these events. The best way to show the line that a target is ready for whatever is next is to raise it all the way up.

During the shooting periods look for bullet impacts in the impact mound directly behind the target. The dust will jump to indicate where the bullet hit. After a little practice you can judge fairly well where the bullet hit on the target by where it hit on the dirt. This is handy if the shooter is off the paper altogether. The target puller tells the pit boss whether the bullet is off to the left or right (or high or low). The pit boss then relays this information to the line so the shooter can get back on paper. Note that this feedback is only allowed during the sighter period. During the record period there is no coaching.

Rattlesnake Mountain Shooting Facility (north of Benton City, Washington)

There are 3 kinds of markers, 3-inch orange, 1.5-inch orange, and 1.5-inch green. (If the shooter has trouble distinguishing colors, black and white markers will be used instead.) The 3-inch orange marker always indicates the most recent shot. The 1.5-inch markers are only used during the record period.

Sighter Period: When a bullet hits (or is close to) the target do the following:

- (1) pull the target down,
- (2) take out the 3-inch marker and patch the hole,
- (3) find the new hole,
- (4) put the 3-inch marker into the new hole,
- (5) raise the target.

If the bullet was off the paper and there is no hole, then raise the target without the orange marker. Tell the pit boss which side so the shooter can get back on paper.

The first sighter period is 10 minutes. The next two sighter periods are 3 minutes each. At the end of a sighter period the line officer will instruct the pit crew to pull and patch all targets. The pit crew pulls down the targets, takes out the 3-inch orange markers, patches the holes, and raises the targets. When the line officer sees all targets back up the record group will be shot. It is important to be quick. Some shooters want to begin the record period as soon as possible after the sighter period.

Record Period: Put away the patches. No holes are patched until all the scoring for this group is completed.

Shooters are given 10 minutes to fire a 5-shot record group. The 3-inch orange marker shows the most recent shot. The 1.5-inch orange markers show the previous shots. So the procedure is the following:

On the first shot, pull the target, insert the 3-inch marker and raise the target.

On the next 4 shots, pull the target, remove the 3-inch marker and replace it with a 1.5-inch marker, put the 3-inch marker in the new hole and raise the target. If the shot was off the paper then raise the target without the 3-inch marker. No feedback to the line regarding the direction off the paper is permitted.

Again, speed is important. A shooter may be waiting for the wind to settle down. When it does the shooter will fire quickly. Keep the target down for as short a time as possible. It helps to have more than one person at each target so that the new hole can be located while the markers are exchanged on the previous hole. Practice really helps.

The 1.5-inch green marker is used if the shooter hits any of the orange markers in the target. The target puller should tell the pit boss so this information can be relayed to the line. For example, if the shooter on target 5 hits one of the orange markers, the target puller would yell out, "Green on 5!" The 1.5-inch green marker is put into the new hole rather than the 3-inch orange.

At the end of the record period the line officer will instruct the shooters to cease fire. The line officer will then instruct the pits to score the targets. The targets are lowered and the scoring begins.

After the Record Group Firing has Ended

The target puller has the score sheet for that target. An example is attached. The target puller completes the first half of the job, namely, the numeric score for the target.

The first step is to note the number of shots off the paper. Write this number just under the record group number on the "off target" line. Then mark the approximate locations of the bullet holes on the sketch of the target. (Some pullers go to the trouble of noting the order in which the bullets hit. This is optional, but some shooters really appreciate it. The 1.5-inch spotters have numbers to facilitate this.)

Next, take out the colored markers and score the target. Holes on (or touching) a line are always scored at the higher value. For example, if a hole just touches the white line around the 10-ring it is scored as a 10, even though most of the hole is in the 9 area. Any hole outside the outer scoring ring, but still on the paper is scored as a 4. Shots off the paper are scored as zero. Any hole inside (or touching) the X-ring is scored as a 10. On the score sheet there is a line to record the score for each hole. Write them down, then total the score for the 5 shots and write it on the "score" line. Also note the number of holes in (or touching) the X-ring. The number of X's is used to separate tie scores.

The second half of the score is the group size. This measurement is done by the pit boss using the official tape measure. The recommended procedure is this:

- (1) find the two holes that are farthest apart
- (2) pull out a few more inches of tape than needed to cover the holes
- (3) insert the tab at the end of the tape measure into one hole and lay the tape over the other hole. Be careful not to enlarge the first hole by pulling on the tape too firmly. If the holes are really far apart, ask the target puller to hold the end of the tape while you read distance at the other end.
- (4) Measure from the near edge of the first hole to the far edge of the second hole. This is the official group size. It is normally carried out to the nearest 1/16 inch. If the group appears to be a world record (see attached list), it must be measured to the nearest 1/1000 inch by 3 range officers. A calipers is used instead of the tape measure. If the group looks like a new world record, take down the target and get out a new one for later groups.
- (5) Write the group size measurement on the "group" line.

If there are shots off target, then add 36 inches for every shot off the target. FCSA rules require that more than 2 shots off target be scored as a "DNF". However, computers don't add text and numbers, so keep adding 36 inches for every shot off target. As an example, a shooter might have two shots 34 7/16 inches apart and 3 off target. On the "group" line show the measured group and the added inches

Scoring Special Cases

Bullets that skip into the target are scored like any other round. Bullets that skip usually leave an oblong hole in the shape of the bullet seen from the side. Since the long holes differ from the normal circles, the scoring is a little different for group size. If the long hole defines the group, measure group from the near edge of the long hole to the far edge of the other hole. (Measuring the other way makes the group size bigger.)

Cross-fires are scored as follows: The target with 4 holes has 1 miss. The target with 6 holes is scored using the 5 best holes. It may be that the 5 best for score differ from the 5 used for group size. In that case the shooter decides which way the target will be scored (best score or best group).

FCSA World Records as of December 2006

Light Gun	Heavy Gun	Unlimited Gun	Hunter -- Prone
Single Target Group			
Sheri Rasmussen 2.6250" - 8/20/2006	Skip Talbot 2.60" - 10/1999	Paula Dierks 3.064" - 7/4/1999	Lee Rasmussen * 4.313" - 3/5/2006
Six Target Aggregate			
Lee Rasmussen 6.7454" - 8/2005	Lee Rasmussen 6.5625" - 7/2005	Lee Rasmussen * 6.500" - 6/4/2006	Lee Rasmussen 8.947" - 7/9/2006
Single Target Score			
Lynn McMurdo 50-5x - 7/2002	Mark Avakian 50-4x - 7/4/2001	Brian McCann 50-5x - 10/15/2005	Skip Talbot 50-3x - 7/3/2004
Six Target Aggregate			
Darren Wardle 294-15x - 8/2005	Scott Nye 297-11x - 7/2002	Lee Rasmussen * 294-12x - 10/8/2006	Lee Rasmussen 293-10x - 7/9/2006

* record was set at Rattlesnake Mountain Shooting Facility

Light Class – rifle weighs less than 32.5 lb

Heavy Class – rifle weighs more than 32.5 lb

Unlimited Class – rifle weighs more than 50 lb

Hunter Class (prone) – rifle has an attached bipod and weighs less than 50 lb total

TARGET NUMBER _____

DATE _____

RELAY TIME _____

RELAY NUMBER _____

SCORER _____

TARGET PULLER _____

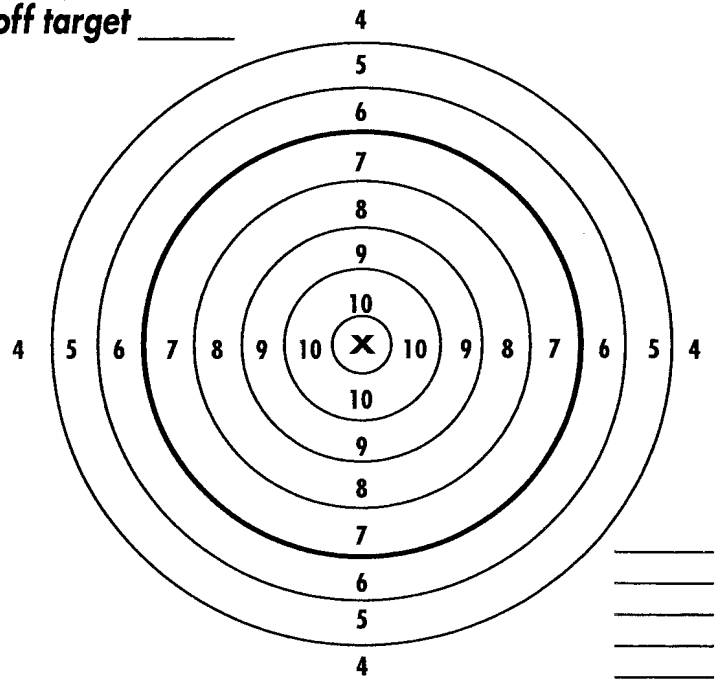
SECOND PULLER _____

CLASS _____

SHOOTER _____

1 target

off target _____



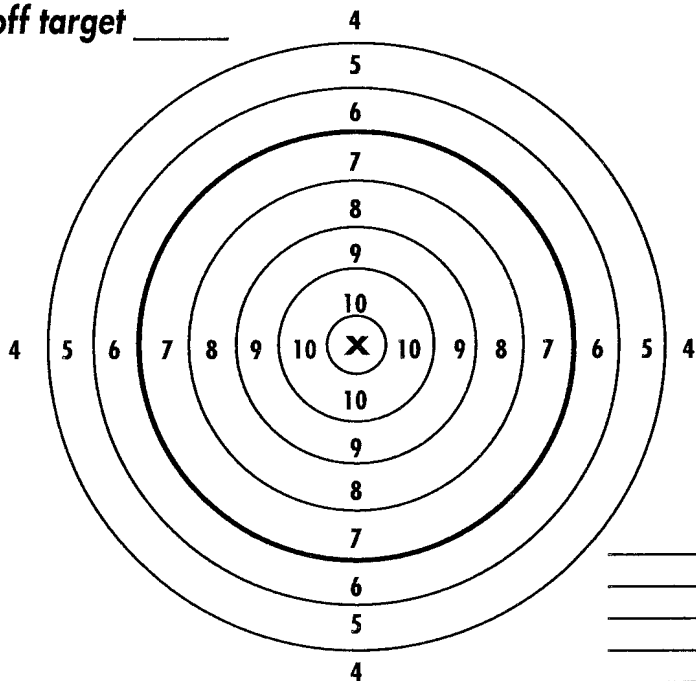
score _____

xring _____

group _____

2 target

off target _____



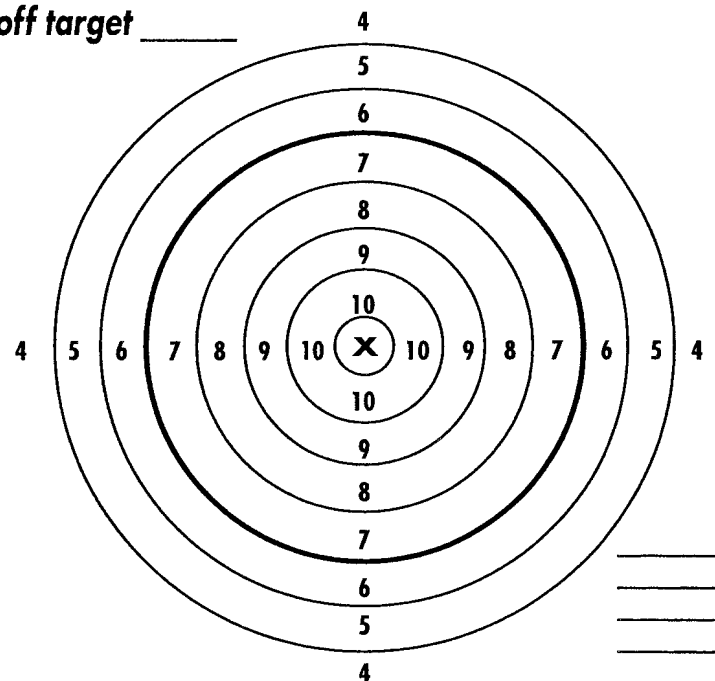
score _____

xring _____

group _____

3 target

off target _____



score _____

xring _____

group _____