50 BMG RIFLE MATCH RULES

for the 1000 yd Rifle Range at the Tri City Shooting Association's Rattlesnake Mountain Shooting Facility

These rules establish uniform standards for 50 caliber rifle competitions at Rattlesnake Mountain. Competitions that are sanctioned by the Fifty Caliber Shooter's Association (FCSA) will also follow the FCSA rules. At any sanctioned FCSA match the FCSA rules will take precedence over these rules in any area of difference.

Recommendations for changes to these rules should be forwarded to Paul Rittmann at PaulRittmann@gmail.com. Rattlesnake rules were first used May 17 & 18, 2014.

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1. INTRODUCTION

- 1.1 <u>Spirit of the Game</u> Competing in "The Spirit of the Game" means you fully participate in what the competition asks. You do not look for ways to create an advantage out of what is or is not stated in these rules. Many would say "The Spirit of the Game" is nothing more than good sportsmanship.
- 1.2 <u>Membership</u> There is no membership requirement to participate in these matches. It is recommended that participants consider membership in the Tri Cities Shooting Association, the National Rifle Association, and the Fifty Caliber Shooter's Association.
- 1.3 <u>Special Awards</u> If there are enough competitors of a specific group (i.e., Women, Juniors, Seniors, Service, etc.), special awards may be presented for this group. Details concerning competitor categories and regular awards and any special awards must be clearly outlined in the match program.
- 1.3.1 Senior A Senior is anyone 65 yr or older the first day of the match.
- 1.3.2 Junior A Junior is anyone under the age of 18 yr the first day of the match.

2. EQUIPMENT

2.1 Ammunition

- (a) any 50 caliber (or 12.7 mm) ammunition that when fired produces a projectile that is supersonic at a distance of 1000 yd.
- (b) Poor quality ammunition displaying characteristics such as corrosion, damaged brass, improperly seated primers or damaged projectiles is prohibited.
- (c) The composition and speed of the projectile must not create a hazardous condition for people in the target pits, or produce excessive wear on the impact mound. Ammunition with incendiary, tracer, and/or explosive characteristics is prohibited.

2.2 Rifles

2.2.1 General

- (a) Rifles must be incapable of automatic fire.
- (b) Any rifles with significant potential to injure the shooter or bystanders based on documented accidents are prohibited.
- (c) All rifles on the firing line must be supported in such a way that they are pointed at the bullet impact area even when unattended.
- (d) At certain times during the event, the competitor must provide a clear indication the rifle is unloaded and cannot be fired. These are when carrying a rifle to or from the firing line or inspection, and when firing a record group is completed, or the Line Officer calls for a safe line. The preferred indication is using an empty chamber flag. Other methods are removing the bolt or at least raising the bolt handle.

2.2.2 Inspections

- (a) Each rifle together with the supports and the ammunition to be used during the event must be inspected for safety and compliance with match rules at rifle check in. Rifles competing in classes with weight limits must be weighed.
- (b) At the beginning of each relay the Line Officer shall inspect the equipment being used by each competitor on the firing line to ensure compliance with these rules.
- 2.2.3 Unlimited Class Rifle fires the ammunition required in Section 2.1.

2.2.4 Hunter Class Rifle

- (a) Hunter class is a modification of NRA high power prone shooting. It is not a form of bench rest and should not be construed as such. In Hunter class the rifle generally won't return to the point of aim of the previous shot.
- (b) Total weight (includes any bipod or monopod) is less than 50.00 pounds (22.6796 kilograms).
- (c) All Hunter class rifles are fired from the ground. A sheet of sturdy pliable material placed on the ground under the muzzle brake is required to avoid relocating gravel and/or raising clouds of dust. Most types of carpet are satisfactory. Recommended size is at least 4 ft by 4 ft.
- (d) Front and rear supports cannot be the machine rests used in Light and Heavy classes. Bipods, monopods, and bags are typical in Hunter class.
- (e) The supports must be consistent with the general objective of Section 2.2.4(a). A sheet of plywood or other hard material may be placed under any support. A shallow

trench may be dug for bipod feet. The bottom of the trench must not be deeper than 2 inches below the local grade level. The trench must not be lined with anything other than the material used to protect the gravel on the firing line in Section 2.2.4 (c).

- (f) Sand bags and/or other materials may be used to reduce felt recoil. However, don't overdo it. Equipment that effectively eliminates felt recoil is prohibited in Hunter class.
- (g) The firearm must be free to be lifted straight up from the firing position.
- 2.2.5 Light and Heavy Class Rifles
- (a) Light and Heavy Classes must be fired from a bench.
- (b) The only difference between Light and Heavy class is the total weight of the rifle including any attachments that would be used during the competition. Heavy class rifles must be less than 50.00 pounds (22.6796 kilograms) while Light class rifles must be less than 32.50 pounds (14.7418 kilograms).
- (c) The front and rear supports must be rifle rests meeting the requirements of Section 2.3.4.
- (d) Any Hunter class rifle may also be entered as a Light or Heavy class rifle provided it meets the weight requirement for that class. When entered in either Light or Heavy class the Hunter class equipment modifications must be approved by the Match Director. Examples of acceptable changes are the following:
 - firing the rifle from either the ground or a bench
 - using a rifle rest (section 2.3.4) for the rear rest

2.3 Rifle Supports

2.3.1 Bipods

- (a) Bipods must be able to fold forward or backward and be removable from the rifle.
- (b) The bipod can only provide two points of contact to the ground or bench and must be mounted to the rifle forward of the trigger guard.
- (c) Any spikes on the bottom of the bipod feet can penetrate the ground to a depth no more than 1.5 inches. Bipods that are of spike design must have a marking on the spike portion of the bipod is to ensure that the spike does not enter the ground to a depth exceeding 1.5 inches.
- (d) Bipods containing rollers or track/rail devices are prohibited.
- (e) The bipod must be attached to the rifle when determining overall weight of the rifle.

2.3.2 Monopods

- (a) A monopod is any device attached to the rifle at any point to the rear of the trigger guard and used for the purpose of raising or lowering point of aim.
- (b) The monopod must not have a spike. Monopods containing rollers or track/rail devices are prohibited.
- (c) The monopod must be attached to the rifle when determining overall weight of the rifle.

2.3.3 Sand bag

- (a) A sand bag is a bag filled with sand or similar material. It is made of soft pliable material. The "sand" does not need to be beach sand. It just needs to resemble beach sand in texture and grain size.
- (b) Sand bags must not be mechanically adjustable.
- (c) Sand bags must not be attached to the rifle.

2.3.4 Rifle Rest

- (a) Rifle support that is mechanically adjustable for height and/or lateral position.
- (b) Portion of rifle rest that touches the rifle must be made of a soft pliable material backed with "sand". There must be at least 0.5 inches of "sand" between the soft pliable material in contact with the rifle and the structural portion of the rest.
- (c) Rifle rests cannot be attached to the rifle or the shooting bench. The front and rear rests must be separate, i.e., not attached to each other. The rifle must be able to be lifted vertically from the rests.
- (d) Rifle rests shall not absorb the recoil of the rifle. Their purpose is to guide the rifle during recoil. The shooter absorbs the recoil.

2.4 Additional Equipment

- 2.4.1 Eye and ear protection required for everyone on the firing line when it is hot.
- 2.4.2 Canopy or umbrella devices to shelter shooter & equipment from weather are permitted so long as the devices can endure the local wind conditions. In addition, installing and using the devices must not damage the shooting line.

2.4.3 Electronic devices

- (a) Electronic devices are allowed both in the pits and on the line. Examples include amplified ear muffs, wind meters, communication devices, thermal measurement devices, and chronographs.
- (b) Use of particular electronic devices may be disallowed if such use interferes with normal progression of the match.
- 2.4.4 White hats or bright orange vests must be worn by any current member of the FCSA Board of Directors, or any current committee chair of the FCSA. The hat or vest will be supplied by the match director, at the match director's discretion.

2.5 Range Equipment

2.5.1 Firing Line - The graveled area near the benches. At Rattlesnake, the benches are about 12 feet behind the front of the firing line. At Rattlesnake, the targets are about 1003 yards from the benches.

2.5.2 Benches

- (a) Concrete benches at the 1000 yd line are placed every 20 ft.
- (b) Personally owned shooting benches are only allowed in Unlimited class.
- (c) Benches are numbered either 1-3-5-7-9-11-13-15-19 or 2-4-6-8-10-12-14-16-18-20 depending on placement of the number bricks on the front edge of the graveled area.
- 2.5.3 Communication Radio communication will be maintained between the target pit and firing line whenever personnel are in the pits. To avoid losing the beginning of a

message to radio warm-up time, press the talk button and allow at least a second before speaking.

2.5.4 PA System – recommended on the firing line especially when there are many shooters.

2.5.5 Wind Flags

- (a) Wind flags every 200 yd on both sides of the range will be raised during competition.
- (b) Wind flags are 12 feet long and tapered the full length. They are 48 inches at the pole and 18 inches at the tip. They are red above and yellow below.
- (b) Competitors may station their own wind monitoring equipment on the range subject to review by the match director. Personally owned wind monitoring equipment must not disturb areas not graveled nor interfere with other competitors' view of the targets or range flags during competition.

2.5.6 Precision Scale

- (a) The scale must be calibrated using at least two standard weights -- one near 32.5 lb and the other near 50 lb. For example, 15 kg (33.0693 lb) and 20 kg (44.0925 lb).
- (b) Scale accuracy must be better than ± 0.0625 lb (1 oz). Scale accuracy is judged by the deviation of the calibration weight reading from the expected reading. A scale with accuracy of ± 0.02 lb means heavy class is less than 50.02 lb on the scale.

2.5.7 Targets

- (a) The NRA target identified as "MR" and bearing the Official Competition target seal will be used. Targets are a square 72 inch by 72 inch with a 24 inch diameter black in the center. Ring dimensions are a 6-inch X ring, 12-inch 10 ring, 18-inch 9 ring, 24-inch 8 ring, 36-inch 7 ring, 48-inch 6 ring, and 60-inch 5 ring. The value marking numbers used in NRA competitions should be covered to avoid confusion.
- (b) A white square 3 inches by 3 inches will be placed at the center of the target covering the "X".

2.5.8 Tape Measure

- (a) The tape measure used for group size must be marked in sixteenths of an inch and be at least 8 ½ feet in length.
- (b) The tab that goes into the hole must be no narrower than 0.15" and no wider than 0.3". Narrower tabs may damage the edge of the hole, making the group smaller. Wider tabs don't start at the edge of the hole, so the measured groups are slightly larger.
- (c) The tape must lie flat against the paper rather than have the typical curl.
- (d) The same tape measure must be used on all targets fired in a given day.

2.5.9 Spotters and Pasters

- (a) The primary spotters used are 3" and 1 $\frac{1}{2}$ " orange disks with with a centered hole about 0.44" in diameter to accommodate the hard plastic tubes of about the same diameter. Additional spotters are 1 $\frac{1}{2}$ " diameter green disks. The plastic tubes generally are 2 $\frac{1}{2}$ " to 3 $\frac{1}{4}$ " in length.
- (b) The black and white spotters are black on one side and white on the other. They come in two diameters, 3" and $1\frac{1}{2}$ " diameters, just like the orange disks.
- (b) Pasters are used to cover bullet holes and need to be at least 3/4 " in diameter.

3. COURSE OF FIRE

- 3.1 Competitors are arranged in 4 groups called relays.
- (a) The first two relays are stationed on the line while the 3rd and 4th relays are stationed in the target pit. Firing begins with the first relay.
- (b) After the 2nd relay completes firing the 1st and 2nd relays trade places with the 3rd and 4th relays. This is called a "pit change".
- (c) On the second day of the match the order is reversed so that relays firing before the pit change the first day will fire after the pit change the second day. Second day firing orders shall be either 4-3-2-1 or 3-4-1-2.
- 3.2 The firing of a relay shall consist of three periods of "record group" fire. Each period of record group fire shall be preceded with a period of "sighter fire".
- (a) The first sighter period is 10 minutes and the other sighter periods are three minutes in length. All three record group periods are 10 minutes long.
- (b) During the sighter period any number of shots may be fired. During the record group period only five shots are allowed.
- 3.3 During the <u>sighter period</u>, each round fired at the target will be marked for the competitor using a three inch diameter, bright red spotter disk. (Black & white spotter disks shall be used for those competitors who request them.) The disk shall be moved each time a round is fired at the target and the previous hole in the target shall be patched. The only marker on the target shall be the competitor's most recently fired round. Any rounds off target are indicated by pulling down the target, patching any hole, and raising the target with no spotter. In addition, the pit crew should inform the Line Officer which side the round was off target. This information will then be passed to the shooter.
- 3.4 At the completion of a sighter period, the targets will be lowered and patched. As immediately as is practical after the sighter period has ended, the record group period will begin.
- (a) The line is hot during the transition from sighter to record group. Shooters may get out the record rounds at any time rather than wait for the Line Officer's instruction to display 5 rounds. Also, a round may be chambered during the sighter period and not fired until the record period begins.
- (b) Rifles designed to load from magazines may use them during both sighter and record fire. There is no requirement for single loading of rounds.
- 3.5 During the <u>record group period</u>, each round fired is marked with a spotter disk. The first bullet is marked with a three inch (3") bright red spotter disk. When the second round is fired, the 3" spotter disk is moved to the hole where the most recently fired round struck the target. A one and one half inch (1.5") diameter disk is then placed into the hole made by the first bullet fired. The larger 3" spotter disk continues to be moved to the hole where the most recent bullet struck the target. The smaller spotter disks are placed into the holes in the target as they are vacated by the larger disk. All the spotter disks shall remain in the target until the target is scored by the Pit Officer. Any rounds off target are indicated by pulling down the target, removing the 3" spotter, replacing it with a smaller spotter, and then raising the target without a 3" spotter.
- 3.6 If a sighter or record shot is off target and it is uncertain which target the shot belongs too, then the targets will remain visible until there is communication from the

line, or a shot is fired into the target and needs to be marked. During record period the target pullers will take note of any unclaimed shots off target so they can be assigned to a target when the targets are scored.

- 3.7 In those cases where a round strikes the three inch spotter disk, a bright green one and one half inch spotter disk shall be inserted into the new hole and the target raised. The pit crew should inform the Line Officer that the target in question just scored a green spotter. The Line Officer shall then relay that information to the competitor who scored a green spotter.
- 3.8 During both the sighter period and the record group period, the Line Officer shall announce the time remaining before expiration of the time limit. Typical announcement times are at 5 minutes, 2 minutes, 1 minute, and 30 seconds. Competitors may inquire of the Line Officer as to the time remaining before expiration of the time limit.
- 3.9 When competitors finish a record group they must close their ammunition containers and double check that their chamber is empty. The rifle must have a visible indication that the rifle cannot be fired, for example, by using an empty chamber indicator, removing the bolt, inserting a cleaning rod, or raising the bolt handle.
- 3.10 After competitors finish their five shot record group or the ten minute "record group" period has expired, the targets shall be lowered for scoring. The Line Officer will verify that each rifle is unloaded before declaring the line is safe.
- 3.11 At the completion of the relay, the Line Officer shall announce a fifteen minute time period to prepare for the next relay. Competitors will use this period to change the rifles on their shooting benches and prepare for the next relay. If it is time for the pit change, the target pit will then be "unsealed" for personnel to return to the firing line area.

4. COMPETITION REGULATIONS

- 4.1 <u>Position of Rifle Butt</u> In all equipment classes except unlimited, the butt of the rifle must be held against the front of the shoulder on the outside of the shooting coat or shirt and must not touch the ground or shooting bench.
- 4.2 <u>Competitor's Position</u> Competitors will take their positions on or near their assigned benches. For competitors on the ground, the muzzle of the rifle must not protrude more than three feet beyond the line formed by the downrange edges of the benches.

4.3 Assisting Competitors

- (a) Examples of assistance include the following:
 - setting up and taking down the rifle
 - obtaining a good zero
 - instruction about match rules and equipment operation
 - guidance on how to deal with wind conditions
 - advice on which side of the target a missed shot was placed
 - -+-+- items below are allowed during the record period -+-+-
 - correcting equipment malfunctions such as broken extractors, case head separation, and squib loads

- dealing with a hangfire/misfire
- helping secure or reposition equipment rearranged by the wind
- contacting the Line Officer about target service problems
- · ensuring the rifle chamber is empty after completing the record group
- (b) During sighter periods, all types of assistance are permitted by anyone.
- (c) When firing the record group less assistance is allowed. Competitors must apply what they've learned. Competitors may receive assistance to deal with problems such as those listed in the last bullets in Section 4.3(a). The purpose of the assistance is to keep the shooter in the competition. Note that equipment malfunctions typically lead to an alibi. If the rifle can be returned to service in a short time, the competitor has the option to finish the group rather than shoot an alibi.
- (d) Competitors who have some physical limitation that requires assistance to operate the rifle will be allowed to compete subject to approval by the Match Director. Assistance during record fire must not give the competitor an unfair advantage, or distract competitors on adjacent firing points. An example of unfair assistance is pointing out a wind change during record period.

4.4 Supervising Competitors

- (a) All competitors will be supervised. One duty of the Line Officer is to supervise competitors. Each competitor may receive additional supervision from spectators or other persons on the firing line.
- (b) All supervision must be within the requirements of Section 4.3.
- 4.5 <u>Hangfires/Misfires</u> the round fails to fire when the trigger is pulled.
- (a) In most cases a second strike on the primer will fire the round. Each competitor must be familiar with how to reset the trigger on their rifle. Each competitor should also have an idea what to expect if the round goes off at any point during the resetting procedure.
- (b) Any competitor who experiences a hangfire or misfired round must immediately notify the Line Officer. The area immediately to the rear of the competitor's bench shall be cleared of all persons before the rifle bolt is opened. The competitor shall wait at least thirty seconds before opening the bolt of the rifle.
- (c) A competitor who experiences a series of misfires/hangfires shall be evaluated by the Line Officer to determine if the rifle or ammunition being used is safe for the competition. The Line Officer shall notify the Match Director of his findings and the Match Director shall decide if the competitor can safely be allowed to continue the competition.
- 4.6 <u>Match Not Completed</u> When a match is not completed by all competitors in accordance with the tournament schedule, the match may be rescheduled or cancelled. Any record group which has been completed by all competitors will not be refired. Awards will be based only on record groups completed by all competitors.

4.7 Refiring a Record Group (Alibi)

4.7.1 General Considerations

(a) Any alibi granted to a competitor shall not interrupt the conduct of the match or create disadvantages for the other competitors. Normally, alibi record groups are fired after the third record group is scored.

(b) Each alibi will begin with a three minute sighter period followed by a 10 minute record group period. The sighter period may be waived or shortened by the competitor.

4.7.2 Competitor Equipment Failure

- (a) Any competitor who is delayed from completing a relay due to a mechanical malfunction of a piece of necessary equipment may request an alibi.
- (b) Each competitor is allowed one such alibi per relay per day that he is registered to compete in.
- (c) If the equipment failure occurs during the first (10 minute) sighter period, and the rifle is not ready until the second sighter period, the duration of the second sighter period may be increased from 3 minutes to 10 minutes at the discretion of the Match Director. This gives time to ensure proper functioning of the rifle prior to firing the record group.

4.7.3 Range Equipment Failure

- (a) Any competitor who is delayed from completing a relay due to range equipment failure, such as may result from a gust of wind acting on the target, will be given the opportunity to refire the record group.
- (b) There is no limit on the number of range failure alibis that may be granted to a competitor. Weather conditions leading to numerous equipment failures may delay or end the match according to Section 4.6.

4.7.4 Withdrawn Target

- (a) If a target is withdrawn just as a competitor fires, the competitor concerned may complain to the Line Officer. If satisfied that incorrect target operation occurred, the Line Officer will direct the shot concerned be pasted and disregarded. The competitor will fire another shot, and is allowed additional time to compensate for time lost.
- (b) If a target is withdrawn before the end of the allotted time the competitor concerned may complain to the Line Officer who will direct the target be raised. The competitor will be allowed additional time to compensate for time lost.
- 4.8 <u>Slow Target Operation</u> If a competitor feels that the operation of his target is excessively slow, the competitor should call the situation to the attention of the Line Officer. The Line Officer will observe the operation of the target and, if the complaint is justified, communicate the need for faster service on the target of concern. Note that the time required from the firing of a shot until the target is again ready should not exceed twenty seconds.

4.9 Cross-Fires (What to do with Extra Shots on a Target)

4.9.1 Extra Shots Accounted For

- (a) During record fire, the extra shot(s) may be observed by either the competitor or the target puller. For example, the competitor might see the target being withdrawn and coming back with the 3" spotter in a new place even though no shots were fired. Or, the target puller may observe more than 5 shots on the target.
- (b) The Line Officer should be notified of the extra shots. The Line Officer will note the total number of fired and unfired rounds and work with the pit crew to determine which shots should be ignored when scoring. The ignored shots would be those from a different bench or the extra beyond the required five.
- (c) The Line Officer may instruct the pit crew to withdraw the target with misplaced shots to flush out who is firing at the wrong target. If it can be determined who cross-fired,

they should be informed of the error to avoid further cross-fires. Each shot fired at the wrong target during the record period will be scored as a miss.

- (d) If there are more than 2 cross-fired shots on their target the competitor may request an alibi. Otherwise, the competitor will finish shooting the group. The competitor is allowed extra time to compensate for time lost.
- (e) The pit crew will continue to score that target without patching any holes. When the target is scored, the cross-fired shot(s) will be ignored. One way to note the shots to be ignored is to reverse the spotter disks so the white side is facing out.

4.9.2 Extra Shots Not Accounted For

- (a) In this situation the extra shots may be cross-fires or the competitor may have fired too many rounds. Some of these shots may even be off target, but the pit crew takes note of all off target shots as described in Section 3.6.
- (b) If all the other targets have exactly 5 shots, then too many shots were fired. The Line Officer should look for evidence that too many shots were fired, for example, by counting empty cases. The target shall be scored using the first 5 shots.
- (c) If the extra shots on one target can be explained by insufficient shots on another target, then it will be scored as a cross-fire. Use the best 5 shots for group and the best 5 shots for score (not necessarily the same ones).
- (d) If there are more than 2 cross-fired shots on a target, the competitor should receive an alibi unless there is clear evidence as to which shots are misplaced. For example, a competitor who normally shoots small groups in the black has a few holes well outside the black or off target. In this case it is reasonable to assume the 5 in the black are his and skip the reshoot.

4.10 Competitor Squadding

- (a) Competitor squadding will take into account particular needs of competitors to the extent possible. For example, at Rattlesnake, the lowest number bench is easiest to access and is favored for competitors with physical limitations or very heavy equipment.
- (b) Whenever possible, all equipment classes will be squadded for the same relay. In this way each class will be fired under the same wind conditions.
- (c) Squadding sheets will be distributed to each competitor showing which relay and target they are assigned to. The squadding sheets will show squadding for both days of the competition to avoid confusion as to how things change on the second day of competition.

5. RANGE COMMANDS, CONTROL & OPERATIONS

5.1 <u>Discipline</u> - The safety of competitors, range personnel and spectators requires continuous attention by all to the careful handling of firearms and caution in moving about the range. Self-discipline is necessary on the part of all. Where such self-discipline is lacking, it is the duty of the range personnel to enforce discipline and the duty of the competitors to assist in such enforcement.

5.2 Emergency Cease Fire

(a) In the event of any emergency requiring a cease fire, a Line Officer or any competitor or any other person may give the command, "CEASE FIRE!" This emergency command also requires lowering the targets. All competitors must cease firing immediately when

the emergency command, "CEASE FIRE" is given and await further instruction. After the emergency is dealt with, firing will resume according to Section 4.7.3 for those competitors who need to complete the record group. If the delay is short, the competitors may waive the alibi and resume the course of fire.

- (b) Emergencies requiring offsite assistance, such as an ambulance, will normally end shooting for the day. Persons calling 911 need to state the following:
 - the injured person is at the shooting range north of Benton City (cell phone locators currently show a different place)
 - rifles/ammunition are being put away so there is no hazard to emergency responders
 - responders will be met at the entrance to the range by someone who will direct them to the injured person
- 5.3 <u>Not Ready</u> It is the duty of competitors to notify the Line Officer if not ready to fire at the time the Line Officer asks "**IS THE LINE READY?**" Should the Line Officer cause firing to proceed, the competitor concerned will be given additional time to compensate for time lost. Failure of a competitor to notify the Line Officer that he is not ready forfeits this right.

5.4 Firing Line Commands

- (a) Most line commands should be given both to the firing line and to the pit crew by keying the radio when speaking to the line.
- (b) At the beginning of a relay the Line Officer commands "RELAY (number) TAKE YOUR POSITION ON THE FIRING LINE," and "THERE WILL BE A FIFTEEN MINUTE SETUP PERIOD." During the setup period the Line Officer should walk the line to verify with the pit crew that the pit target sheet has the shooter's name and class of competition correctly filled out. Any necessary changes may only be made before firing begins on the first day of the match.
- (c) After the setup period ends the command "SHOOTERS TO THE LINE -- RELAY (number) TARGET (number)" is given, followed by "IS THE FIRING LINE READY?"
 - If the firing line is not ready then "THE FIRING LINE IS NOT READY" and when the firing line is ready, "RESUMING COMMANDS, THE FIRING LINE IS READY."
 - If the firing line is ready then "THE FIRING LINE IS READY."

"YOU WILL HAVE 10 (or 3) MINUTES FOR UNLIMITED SIGHTERS. THE LINE IS HOT – COMMENCE FIRE, COMMENCE FIRE!" The Line Officer then starts the timer.

- (d) The Line Officer will announce the time remaining before expiration of the time limit. Typical announcement times are at 5 minutes, 2 minutes, 1 minute, and 30 seconds.
- (e) At the conclusion of the sighter period comes the transition into the record period. The commands given are "SIGHTER PERIOD HAS ENDED CEASE FIRE!" There may be a short delay while any last second shots are marked and displayed.

To the pit crew: "PULL AND PATCH ALL TARGETS."

To the firing line: "DISPLAY FIVE ROUNDS. YOU WILL HAVE 10 MINUTES FOR THE FIVE SHOT RECORD GROUP. THE LINE IS HOT – COMMENCE FIRE, COMMENCE FIRE." The Line Officer then starts the timer.

- (f) The Line Officer will announce the time remaining before expiration of the time limit. Also, the Line Officer will verify that when competitors finish they close nearby ammo containers and leave no round in the chamber of their rifle according to Section 3.9.
- (g) If all firing seems to be finished before 10 minutes has elapsed, then the relay of competitors may be questioned, "IS ALL FIRING COMPLETED ON THE RIGHT? IS ALL FIRING COMPLETED ON THE LEFT?" Upon receipt of a "NO, NOT COMPLETED!" the reply is "CONTINUE FIRING", otherwise "ALL FIRING IS COMPLETED." Otherwise, at the conclusion of the ten minutes, "RECORD PERIOD HAS ENDED, CEASE FIRE."

To the pit crew: "SCORE THE TARGETS"

The line officer will verify that each rifle is unloaded before announcing to both the pit crew and the line, "THE LINE IS SAFE!"

- (h) When scoring is completed the line commands resume with 5.4(c) unless the relay is finished. The commands for the next relay begin at 5.4(b).
- (i) When the second relay finishes there will be more activity as people prepare for the pit change. When the pit crew indicates they are ready to unseal and return to the line, the Line Officer again verifies that all rifles are unloaded and cannot be fired. The pit change commences with the command, "THE LINE IS SAFE, PROCEED WITH THE PIT CHANGE."

5.5 Messages About Targets

- (a) Messages between the firing line and pit will be limited to official matters while competitors are firing. This is not a complete list, but illustrates line-to-pit communication. The competitor or the person supervising the competitor initiates the line-to-pit communication by alerting the Line Officer of the problem.
- (b) "MARK TARGET (number)" means to pull down the target as though a shot had just been fired. If no new bullet hole can be found then the target is marked as a miss, i.e., it is raised without the three inch spotter. This message is used when a shot has been fired but the target is not pulled within a reasonable length of time. Note that during record period if the shooter incorrectly calls for the target to be marked, the miss that results also counts as a round fired during the record period.
- (c) "PLACE A SPOTTER IN TARGET (number)" means to pull down the target and place a spotter in the last shot hole. This message is used when the three inch spotter was not inserted before raising the target, or it fell out.
- (d) "REVERSE THE SPOTTER IN TARGET (number)" This message is used when black and white spotters are being used and the spotter was inserted with the wrong side showing.
- (e) "TARGET (number) WITHDRAWN" means the target has been pulled down even though it should be up. It may indicate a cross-fire, or a target malfunction.
- (f) "CROSS-FIRE ON TARGET (number)" means the target was pulled down and returned with the spotter in a different place, indicating someone else is shooting at the target.
- (g) "PROBLEM ON BENCH (number)" means the competitor has run into an equipment malfunction or some other issue.

6. SCORING

6.1 <u>Record Group</u> - A record group consists of five shots per target. Each record group is measured for extreme spread and total numerical score. Suitable forms to record the results are shown in the attachments.

6.2 Group Size

- (a) The measurement is between the two bullet holes that are the most distant from each other. The group size is the distance from the innermost edge of one hole to the outermost edge of the other hole along a straight line between their centers. This distance is measured to the nearest one sixteenth of an inch using the tape measure specified in Section 2.5.8.
- (b) The overall match result is the average of six record groups three on the first day and three on the second day.
- (c) A competitor who misses the target shall be penalized by adding thirty-six inches to the group size measurement for each recorded miss, up to a maximum of seventy-two inches.
- (d) Ties in average group shall be won by the highest score.

6.3 Numeric Score

- (a) Numerical score is found by adding the target value of each round fired based on which scoring ring the hole is located. The maximum target score is 50.
- (b) X's are scored ten points and all others are scored based on the numerical value of the scoring ring where the round is located. Holes that are outside the 5-ring but still on the 72" by 72" target are worth 4 points. Rounds off target are given a score of zero.
- (c) Rounds which break the outermost edge of a scoring ring are given the higher value of the two scoring rings involved.
- (d) Shot holes that are elongated (keyholed or tipped shots) are scored the same as circular shot holes.
- (e) The overall match result is the total score from six record groups three on the first day and three on the second day. The maximum possible match score is 300.
- (f) Ties in total score shall be won by the largest number of X's. If the X counts are equal, then the tie shall be won by the smallest average group.

6.4 Combo Group

(a) The combo group is a single number that combines group size and numerical score. It has units of inches, just like a group. It is calculated by finding the average number of points lost per record group fired and adding this to the average group size. A formula is shown below.

Combo Group = Average Group + [50 - (Total Score / 6)]

(b) Ties in combo group shall be won by the largest number of X's. If the X counts are equal then the tie shall be won by the smallest average group size.

6.5 Scoring Cross-Fires and Extra Shots

This subject is covered in Section 4.9.

6.6 Two Gun Combo

(a) The Two Gun Combo is calculated using the average of the two best combo groups. A formula is shown below.

Two Gun Combo = (Best Combo + Second Best Combo) / 2

(b) Ties are broken by the total X count of the two best classes of competition. If still tied, then the tie is broken by the average group for the two best classes of competition.

6.7 Four Gun (Iron Man) Group

(a) The Iron Man Group shall be calculated as the average of the combo group for Light, Heavy, Unlimited, and Hunter Classes using the formula below.

Iron Man Group = (Light Class Combo + Heavy Class Combo

- + Unlimited Class Combo + Hunter Class Combo) / 4
- (b) Ties are broken by the total X count of the four classes of competition. If still tied, then the tie is broken by the average group for the four classes of competition.

6.8 <u>Unresolved Tie Scores</u>

Any tie score not resolved by the above requirements shall be decided by the toss of a coin.

7. TOURNAMENT OFFICIALS

7.1 Match Director

- (a) The Match Director is directly responsible for the conduct of the entire tournament. Instructions from the Match Director for the operation of the tournament will be complied with by all persons on the range. The Match Director will use the best judgment at all times and his behavior and decisions must be characterized by absolute impartiality, firmness, courtesy and constant vigilance.
- (b) Representative responsibilities of the Match Director are listed below.
 - finalize the dates for 50 caliber competitions at Rattlesnake,
 - advertise the match in the TCSA club newsletter and in the FCSA Very High Power,
 - · procure all necessary equipment and awards,
 - appoint Line and Pit Officers,
 - plan for emergency medical care for any injured shooter or spectator; also ensure the Line and Pit Officers know the location of first aid equipment and how to obtain emergency medical assistance
 - plan for emergency evacuation of the 1000 yd rifle range, which may be needed during a range fire
 - accepts entries and collects fees,
 - inspect competitor equipment for safety and rule compliance
 - · squad all competitors,

- with proper evidence may disqualify any competitor, or order his expulsion from the range, for violation of these rules or for other conduct considered discreditable or unsafe,
- translate the groups and scores from the pit data sheets into competitor rankings in each award category,
- issue the prizes/awards to the winners in each category,
- forward match summary information to the designated TCSA club representative,
- prepare a match report for publication in VHP,
- ensure the Rattlesnake Mountain Shooting Facility 1000 yd Range is at least as clean and usable after the match as it was before the match.
- 7.2 <u>Line Officer</u> The Line Officer is stationed on the firing line. The Line Officer must be constantly alert, impartial in his handling of competitors and courteous though firm. Additional responsibilities of the Line Officer are listed below.
 - Provides as-needed supervision of each competitor on the firing line,
 - Does quick inspection of competitor equipment when walking the line,
 - Communicates line commands,
 - At the completion of the record string verifies each rifle is not loaded,
 - Works with the pit crew to score any cross-fires fairly,
 - Welcomes visitors during the match.
- 7.3 <u>Pit Officer</u> The Pit Officer is stationed in the target pit area and may be providing target service. Pit Officer duties include the following:
 - Verify that the radios are working and assign individuals to communicate necessary information about rounds off target and "greens" to the line.
 - Ensure all target pullers are familiar with the job. The Pit Officer should be ready to introduce new pit workers to target marking requirements. Pit orientation must include location of porta potties and pit safety requirements.
 - Check that each target puller has the necessary equipment, namely, a box of spotters & pasters & pens, and a clipboard and a target sheet with the name of the person shooting.
 - Walk the line to verify with the Line Officer that the name and class shown on each target sheet matches the person on the firing line.
 - Score each target and write the score and measured group size on the pit summary sheet for that relay.
 - Work with the Line Officer and target puller to score any cross-fires.
- 7.4 <u>Duty to Competitors</u> It shall be the duty of all operating officials and personnel to be fair and impartial to all in carrying out their various duties. No official shall molest a competitor nor allow such practice by another official or other competitors. Should a competitor's equipment or demeanor warrant disqualification for an individual match or tournament, it should be done in such a manner as will cause the least inconvenience to all concerned. In so doing, the official must state to the competitor the Rule or section of Rules under which the disqualification is being made. Said official shall not handle any

of the competitor's equipment. Said official shall not disturb individual competitors during the sighter period or record group period except as required.

8. COMPETITOR'S DUTIES & RESPONSIBILITIES

- 8.1 <u>Equipment Vigilance</u> Mechanical devices may fail in ways that can cause serious injury. An example is a firing pin that does not retract and causes the round to detonate before the bolt handle can be lowered. Competitors must properly maintain their equipment and be vigilant to notice when their equipment doesn't seem "right".
- 8.2 <u>Cross-fire</u> No competitor will deliberately fire on the wrong target nor fire more than the required number of shots.
- 8.3 <u>Bribery</u> No person will offer a bribe of any kind to any of the operating officials, nor be an accessory thereto.
- 8.4 <u>Willful Destruction of Range Equipment</u> No competitor shall cause any range equipment to become damaged through a deliberate act, and anyone guilty of same will be expelled, without a warning, from the range. Expelled competitors will be disqualified from the competition with no return of entry fees.
- 8.5 <u>Disorderly Conduct</u> Disorderly conduct is strictly prohibited on the range and anyone guilty of same will be expelled from the range. Expelled competitors will be disqualified from the competition with no return of entry fees.
- 8.6 <u>Refusal to Obey</u> No person will refuse to obey instructions of the Match Director or any other officer of the tournament, if instructions are given in the proper conduct of his office.
- 8.7 Evasion of Rules No competitor will evade nor attempt to evade, nor be an accessory to the evasion of any of the conditions of a match as prescribed in the program or in these rules.
- 8.8 <u>Loud Language</u> Loud and/or abusive language that disturbs the operation of the match or the competitors while firing, is not permitted. Competitors, scorers and Line Officers will limit their conversation directly behind the firing line to official business. Verbal abuse and/or harrassment by competitors is grounds for disqualification. Verbal abuse and/or harrassment by match officials is grounds for replacement of those guilty of such action.
- 8.9 <u>Delaying a Match</u> No competitor will delay the start of a match through tardiness in reporting or undue delay in preparing to fire.
- 8.10 <u>Policing Range</u> It is the duty of competitors to police the firing points after the completion of each stage. The Line Officers will supervise such policing and will see that the firing points are kept clean.
- 8.11 <u>Competitors Will Score</u> Competitors will act as scorers when requested to do so by the Match Director, except that no competitor will score his own target.

Attachments:

Target Scoring Sheet

and

Relay Summary Sheet

and

Rule Differences

and

Match Sequence for Match Directors

and

Target Maintenance – Cardboard

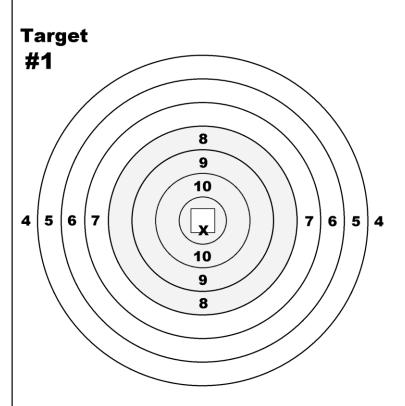
January 31, 2017

Date_____

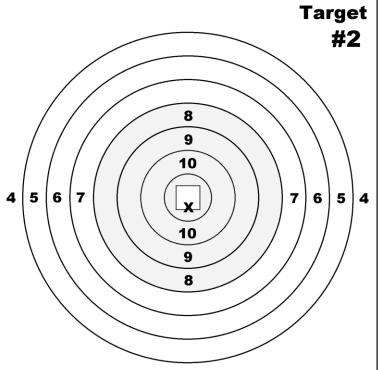
Target No.____ Relay____

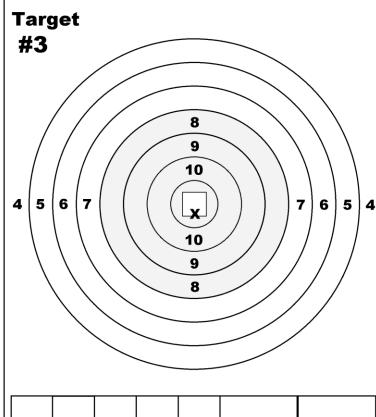
Class_____

Name____



1st shot	2nd Shot	3rd Shot	4th Shot	5th Shot	Total with X count	Group Size (inch)





2nd Shot | 3rd Shot | 4th Shot | 5th Shot | Total with X count | Group Size (inch) | 1st shot | 2nd Shot | 3rd Shot | 4th Shot | 5th Shot | Total with X count | Group Size (inch)

Summary of Rule Differences with FCSA

Items added include the following:

- Definition of Senior category
- Calibration and accuracy requirement for scales
- Guidance for physically disabled shooters
- Line commands
- How to enter a Hunter class rifle in a benchrest class (light or heavy)
- Firing order for relays on the second day of competition
- Guidance on what types of assistance are allowed during record fire
- More guidance about refiring a record group (alibi)
- How to handle target service problems
- How to score cross fires
- What to do if a match cannot be completed

Items changed include the following:

- FCSA membership requirement discarded
- FCSA liability waiver and registration forms discarded
- All electronic devices are allowed unless disruptive
- Minimum age for participation discarded
- Require supervision of all competitors rather than just juniors
- Require a colorful hat or vest be worn by FCSA board members rather than junior competitors
- Inspect rifles before pit changes rather than keeping away from rifles
- Hunter class allow more equipment options such as front support bag rather than bipod, having plywood under the bipod or front bag; discard bipod foot gauge
- Light and Heavy class rifle forend width limit discarded
- Method for deciding tie scores

Match Sequence for Match Directors

4 weeks before the Match

- order enough plaques to cover the 9 categories:
 light, heavy, unlimited, hunter score and group also 2-gun
- 4 wks gives you time to fix any problems with the order

Week before the Match

- Send an email reminder/invitation to the match to any who might be interested
- Stock the plastic boxes with spotters & pasters & pens for the match
- 7 boxes have fresh supplies plus baggies with extra spotter disks & tubes
- 3 boxes have well used stuff for practice days; they may need to be upgraded if more than 7 benches are used at the match
- Print out TCSA sign in sheets and enough FCSA forms for registration & membership
- · Check that the laptop & printer are working
- Arrange with John Julian or John Hauptmann to get the radios & PA speakers
- Find out whether the targets & target carriers are usable, replace any weak uprights as necessary

Thursday & Friday

- Arrive before 7:30 am, put up some wind flags, if needed, move the number bricks at the 1000 yd line so the bench numbers match the target numbers, flags can be left up overnight if the wind is not excessive
- Get out targets & buckets (targets 4 & 10 & 16 are all you need)
- Have first aid kits & black/white spotters available
- Collect FCSA registrations & waivers & match fees (if FCSA sanctioned event)
- Get everyone to sign the TCSA waiver sheet
- · Weigh rifles, begin work on squadding
- Possible 600 yd (or 800 yd) match
- Sometimes a 1000 yd RSO may want to shoot after we leave, so make sure the stuff for non-match use is available (recommend keeping our stuff not available)

Friday End of Day

- Targets ready for Saturday (paste repair centers on as many as needed)
- Separate the practice boxes from the regular match boxes, upgrade the practice boxes if needed for the match
- Have extra spotters & pasters available
- Put away match stuff, get out non-match stuff to allow non-match use
- Update spreadsheet with registration information, finalize bench assignments
- Print squadding sheets for everyone
- Print pit summary sheets and write names on target data sheets

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Saturday

- Arrive before 6:30 am, open containers, put up all flags (if needed)
- Open conex in pits, put away non-match stuff, replace with match stuff and leave radios for pit crew
- Get out targets and station near the door
- Distribute squadding sheets, set up PA speakers
- Begin shooters meeting at 7:30 am

Saturday End of Day

- Get targets ready for Sunday
- · Go through plastic boxes to remove trash and restock as needed
- Put away match stuff, get out non-match stuff to allow non-match use
- Update spreadsheet with today's scores & print current scores
- Print pit summary sheets and write names on target data sheets

Sunday

- Arrive before 6:30 am, open containers, put up all flags (if needed)
- Open conex in pits, put away non-match stuff, replace with match stuff and leave radios for pit crew
- Get out targets and station near the door
- Pass around scores from yesterday, set up PA speakers
- Begin shooters meeting at 7:30 am
- Update spreadsheet with scores from the first two relays

Sunday after Final Relay

- Update spreadsheet with scores from last two relays
- Print score summary pages
- Award ceremony recognize volunteers & juniors & screamers, give out plaques, get a group photo

Sunday End of Day

- Return the number bricks at the 1000 yd line to their proper position
- Put targets on the proper rack, note condition of cardboard & frames
- Load match supplies for safe storage at home, get out non-match stuff
- Note condition of target carriers uprights, replace as necessary
- Bag up trash leave the place better than you found it

Week after Match

- Email match scores to any who might be interested
- Make target photos available to any who might be interested
- Scan registrations & target sheets to have a copy of what is sent to FCSA; mail package to FCSA with paperwork
- Make up match report and send to FCSA
- Update screamer list and range record list

Target Maintenance - Cardboard Replacement

Remove the 12 screws holding the wood squares, remove cardboard which can be folded and placed in a dumpster or recycled with other cardboard.

Check condition of wood frame. Remove any staples remaining in the front. Glue & clamp additional wood strips to repair weak sides.

Staple new cardboard in place. Use 4 staples as shown in figure below.

Use paint roller to apply wallpaper paste (undiluted) to back of full face or half face target paper. Somehow get the cardboard and target together. I've pasted the full size (72" by 72") paper on the floor of my garage and lowered the frame & cardboard onto the pasted surface. Other methods are possible, being creative is part of the job. Be sure to brush out the air bubbles and remove as many wrinkles as possible.

Give the targets an hour or two to begin drying. This is also a good time to cover the NRA value numbers to avoid confusion when scoring. Then stack them to keep the cardboard from curling. Let them dry overnight.

Screw the 12 wood squares back in place (as shown in the figure). The cardboard may want to curl and may need to be restrained. Apply a 3" white square to the center.

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