

Freedom Benchrest

Short Range Benchrest Competition Rule Book

Version 0.1

THIS DOCUMENT IS THE FIRST OFFICIAL DRAFT OF THE RULES FOR FREEDOM SHORT-RANGE BENCHREST.

COMMENTS AND SUGGESTIONS SENT TO

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WILL BE FORWARDED TO THE ACTING DIRECTORS.

Index

- 1. Objectives of the Freedom BR Short Range
- 2. Short Range Overview
- 3. Definitions
- 4. Equipment
- 5. Procedural and Safety Rules
- 6. Tournament Procedures
- 7. Targets

Objective of Freedom Benchrest Short Range Organization

- Development and encouragement of extreme accuracy in rifles, ammunition, equipment and shooting methods.
- Achievement of extreme precision in rifles, ammunition, equipment and shooting methods by shooting "group shooting" and "score shooting".
- Standardize on a national basis an entire Benchrest shooting program so that targets, ranges, scoring methods, records and match procedures will be uniform and comparable.
- Assist and encourage any individual or organization in the promotion of Benchrest Shooting.
- Gather and make available to its members and the shooting community pertinent statistics and technical data.

Short Range Benchrest Overview

Short range benchrest is unique among competitive, sanctioned shooting events. Whereas most shooting sports have their functional roots in either military or hunting applications, Short Range Benchrest is rooted in an almost scientific investigation of rifle accuracy and precision. The targets are relatively close, the time limits are generous, and the equipment restrictions are loose enough to encourage experimenting.

Two separate disciplines have evolved that emphasize the important distinction between precision and accuracy.

Group Shooting has an emphasis on **precision**. Targets are scored simply on the extreme spread (or group size) of the 5 or 10 shot group. Even though there are scoring rings, the group can be anywhere within the record portion of the target – there is no benefit nor penalty for not hitting the center of the bullseye.

Score Shooting emphasizes the **accuracy** objective by tallying points with the traditional bullseye and points based on how close each shot is to the absolute center of the target.

Rifle classes vary, but both disciplines share basic course-of-fire procedures and distances. The most common yardage format for Group is five targets each with a single 5 shot group. For Score, it is five targets each with individual shots on 5 separate bullseyes. Both disciplines include a sighter bull on the target where unlimited shots are allowed.

3. Definitions

Bench: Benchrest is shot from a rigid shooting bench or table, typically constructed of concrete for maximum stability. Benches are normally built to accommodate both right and left handed shooters. There are no specific dimensions, but the tops should be at a height that allows an average height shooter to sit comfortably just by adjusting a stool – generally 31"-32".

Match: A match is a single target within a *Yardage*. A Match is complete when all the shooters on all the relays have shot that target.

Yardage: The basic unit of competition - typically a series of 5 (or 8) matches for a rifle class and distance.

Shoot, Tournament: A tournament is a collection of Yardages combined and summarized to define a competitive event. Most shoots are a weekend affair with 2 yardages shot on Saturday, and 2 more on Sunday. There are ranges that hold one day events, and some larger shoots may span several days.

Rests: The "bag gun" benchrest classes are shot with the rifles supported by sandbags. The front rest and rear rest cannot be attached to each other, nor to the gun. Rests cannot be clamped or fastened to the bench in any fashion. It is good etiquette (and may be required by the range) to protect the bench tops from damage by spiked rest feet.

4. Equipment

4.1. General Rifle Rules

These are the general rifle specifications. Exceptions and additions are noted below with the individual class definitions.

4.1.1. Single Shot

Rifles are fired single-shot with manual loading between each shot - no automatic, semi-automatic or automatic feeding of the next round is allowed.

4.1.2. Mechanical Trigger

Triggers must be mechanical and manually operated. Electronic triggers, remote actuation, and the use of pressure fluids is not allowed.

4.1.3. Optic Magnification

Optics of any power magnification are allowed except as noted below. The weight of the optics is included in the weight limitations as noted.

4.1.4. Stock Width

Benchrest rifles in all classes except Hunter and Unlimited are limited to a 3" wide forestock.

4.1.5. Butt Stock Angle

The angle of the bottom edge of the butt stock relative to the centerline of the bore cannot be less than 5.3 degrees. This definition is intended to include rifles that are defined as legal from other benchrest sanctioning organizations with butt angle requirements.

4.1.6. Barrel Contour (Taper)

The maximum diameter of the barrel shall be 1.250 from the bolt face forward for up to 5 inches. Beyond that, the barrel must be tapered or contoured such that it would not be larger than .900" in diameter at a location projected 29" from the bolt face.

4.1.7. Muzzle Devices

Muzzle devices are allowed provided they do not redirect any muzzle blast in the direction of neighboring benches. This typically would include tuners and suppressors, but exclude most muzzle brake designs. It is the Match Director's discretion to determine if a particular muzzle device is allowed.

4.1.8. Weight Limits

The various classes (except Unlimited) include a weight limit. That limit is inclusive of all attachments (optics, muzzle devices, mirage shields, etc) on the gun as it is fired.

4.2. Rifle Classes - Group

4.2.1. Light Varmint (LV)

A Light Varmint rifle has a maximum weight of 10½ pounds as fired.

4.2.2. Sporter (SPT)

A Sporter rifle has a maximum weight of 10½ pounds as fired. It is also *not* subject to the stock design and barrel taper requirements (forestock width, butt angle requirements, barrel contour)

4.2.3. Heavy Varmint (HV)

A Heavy Varmint rifle has a maximum weight of 13½ pounds as fired.

4.2.4. Unlimited (UNL)

Unlimited class rifles are not subject to any weight, stock design, rest restriction, or barrel taper requirements. They must still be fired single shot and meet the mechanical trigger requirements

4.3. Rifle Classes - Score

4.3.1. Hunter (HTR)

Hunter class rifles are the most restricted of the benchrest classes with a weight limit of 10 pounds as fired, a maximum stock width of 2½ inches, and optics are limited to 6X magnification (or taped at 6X if the scope is a variable).

4.3.2. Varmint-For-Score (VFS)

A Varmint-For-Score rifle is the same as the Heavy Varmint group rifle. It has a weight limit of 13½ pounds as fired.

4.4. Out-Of-Class (OOC) Rifles

Out-Of-Class rifles are any rifles that do not meet the requirements for the Yardage being shot. A Light rifle can be shot in a HV Yardage, but a 13 pound HV rifle would be Out-Of-Class in a LV Yardage. Similarly the Sporter class can be shot with a LV rifle, but a Sporter rifle may or may not be legal in the LV class depending on the stock design.

Shooting in a yardage with Out-Of-Class equipment may be allowed at the Match Director's discretion. The targets will be scored but not ranked with the In-Class competitors and are not eligible for any record recognition.

5. Procedural and Safety Rules

5.1. Firing Line

The firing line is preferably coincident with the front edge of the shooting bench. If not (due to bench design), it should be clearly marked on the bench top. The muzzle of the rifle must extend beyond the firing line, while the receiver must be behind the firing line while shooting.

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5.2. Wind Flags

- 5.2.1. Wind flags may be set within the shooter's lane defined as the space bounded by the centerlines between the benches and the centerlines between the corresponding target frames. If an adjacent lane is unoccupied on all relays, then the shooter may also place flags in that lane.
- 5.2.2. The highest part of a flag must be set at or below the line from bench top to the bottom of the target card.
- 5.2.3. No competitor may set or adjust any wind flag once a Yardage has been started.
- 5.2.4. If it is verified that a flag is interfering with another shooter, the Match Director or the referees may order that the flag be laid down until the end of the yardage.
- 5.2.5. For shoots with sponsored flag rotations (i.e. Nationals), the rotation sponsor has final authority over the type and methods of flags for all benches on his rotation. If the sponsor is unable to fulfill those duties through the entire event another sponsor can be designated and approved by the Match Director.

5.3. Tuner Adjustment

The shooter must remove the bolt from the rifle before making any adjustments to the tuner. This rule is specifically to prevent putting hands near the muzzle with a potentially loaded rifle.

6. Tournament Procedures

General Tournament Activities

The typical Benchrest event starts with shooters arriving hours or even days before the event starts in order to get registered, to get set up, and possibly to practice in accordance with the range availability.

Registering includes locating the match officials, filling out the paperwork, paying fees, and confirming your bench assignment for the event.

Getting set up can include setting up your reloading area, setting wind flags, and prepping your equipment for either practice or for the actual competition.

At some point (usually in the late afternoon the day before the match) the Match Director will close the range to shooting and allow the competitors to start repositioning their flags and gear to their assigned benches in preparation for the first Yardage.

Before the first match of the day there is usually a shooter's meeting which includes event announcements and required safety briefings.

Following this the event starts. Each relay is called to the line in turn, given the match briefing, range commands, and the time allotted to complete their string of fire. When the time has expired, the Range Officer will call a Cease-Fire, verify that the line is safe, and send the target crew to fetch and replace the targets for the next relay.

The target crew delivers the targets to the Scorer who will score and then post the targets to the 'Wailing Wall' as well as post reports of the intermediate (or final) results of the Yardage (and Tournament) so far.

This process repeats through the matches of each yardage, and through each of the yardages of the tournament. Flags may be reset between yardages and competitors may have to reposition their equipment if bench rotation is required.

Following the last yardage, there is usually a short wait while final stats are tallied and competitors are packing their gear away. The last hurrah is an awards ceremony and recognition of the shooter performances.

6.1. Competitor Registration

Each competitor must fill out the required paperwork and pay any required fees to register for an event. All competitors in a Freedom Benchrest sanctioned match will be automatically enrolled as members of the Freedom Benchrest Shooters organization. Membership is free, and the only requirement is sufficient contact information to receive match results and organization notifications.

6.2. Bench Assignment

Each competitor is assigned a relay and bench for the whole event. This is designated by their Competitor Number which is a 3 digit number where the first digit is the relay and the next two are the bench assignment. For example, Competitor 105 is on the 1st relay, bench 5. The competitor should see his number on every target he shoots.

The competitor number does not change if bench rotation is implemented. It is up to the target crew to ensure that competitors have the correctly marked targets in front of their assigned benches.

If there are multiple relays, then there is a possibility that two or more competitors will be sharing the same bench. It is up to the competitors to negotiate any equipment sharing including wind flag arrangements. While it is considered to be poor etiquette, each shooter may set his own flags in the bench lane as long as the flags do not interfere with any other shooters - including those on the same bench but another relay.

6.3. Safety Briefing and Range Commands

6.3.1. General Instructions

These instructions (or in words equivalent) are announced at each relay of the first match of each day by recording or by the Range Officer.

If, during the match, an emergency arises which shall require an immediate cessation of fire, I shall command "Cease Fire - Unlock Your Bolt". This will permit all guns to be made safe without extracting the case from the chamber. This command will be given only in cases of such emergency that we cannot permit you to clear your rifle by firing.

If a condition should arise which shall require a temporary suspension of firing, I shall command "Hold your fire" and then "Clear your rifle by firing or by removing your bolt".

Do not place any ammunition in the action or breech of your rifle until the command "Commence Fire" is given by the Range Officer.

If during a match, a live round is stuck in the chamber and cannot be extracted or fired, remove the bolt and notify the range officer to call an immediate Cease-Fire. At this time, the rifle shall be cased and held by the Range Officer until the end of that relay. It is the competitor's responsibility to pick up the rifle and remove it to a safe place.

Any violation of these safety rules will result in disqualification.

Any time lost by such an interruption of shooting shall not be charged against your allotted time, and 2 minutes will be added to the remaining time.

You must report crossfires to the Range Officer immediately following the completion of the relay in which they occur. Your crossfire will be counted toward your own record number of required shots. Therefore, if you crossfire once, you should only shoot 4 times (9 times in a 10 shot match) on your record target.

6.3.2. Match Identification

Instructions identifying the match and relay are announced prior to each match of each relay.

This is Match (number), Relay (number)				
It is a shot match at yards.				
You will be allowed minutes to complete your fire.				
I shall give a time warning at 2 minutes before the cease fire command, 1 minute before, 30 seconds, 15 seconds, and 5 seconds before.				

Check your competitor number.

6.3.3. Range Commands

Range commands announced once the Range Officer is ready to allow shooting to begin.

Ready on the Right, (verify right side of the range is ready)
Ready on the Left, (verify left side of the range is ready)
Ready on the Firing Line, (verify range officer is ready)
Place bolts in rifles,
Commence Firing.

6.3.4. Remaining Time

At the appropriate intervals make the following announcements

You have 2 minutes to complete your fire.

You have 1 minutes to complete your fire.

You have 30 seconds to complete your fire.

You have 15 seconds to complete your fire.

You have 5 seconds to complete your fire.

6.3.5. End of the Match

When time is up, make the following announcements

Cease Fire.

Remove Your Bolts.

Clear the Benches.

Verify that the line is safe and that all bolts are removed, THEN call for the target Crew...

Target Crew Down Range.

The target crew should not cross the firing line until hearing that specific command from the Range Officer.

6.4. Time Limits

Each match has a time limit equivalent to 2 minutes plus 1 minute per required shot. This equates to:

- 7 minutes for 5-shot matches.
- 12 minutes for 10-shot matches.

6.4.1. No Warmup Match

If the Yardage does **not** include a Warmup Match prior to the 1st record match, then the **first** record match will have **3 additional minutes** added to the time limit.

- 10 minutes for the first 5-shot match of a yardage.
- 15 minutes for the first 10-shot match of a yardage.

6.4.2. **Delays**

If any match is delayed by the range officer, then two additional minutes will be added to the remaining time, except that the total time shall not exceed the original time limit of the match.

6.4.3. Match Timing

A competitor can require a minimum of 30 minutes from the end of his previous relay to the start of his next relay.

Wind flags may be set within the shooter's lane - defined as the space A bench shall be a rigidly constructed table being of a height to permit a shooter of more or less than average height to sit comfortably there at by merely

6.5. Other Tournament Rules

6.5.1. Referees

The Match Director shall appoint referees from the participating competitors to resolve rule infractions and review targets.

6.5.2. Coaching

Benchrest is an individual effort competition. No coaching is permitted on the firing line. The Match Director may authorize the possible exception of helping new shooters to understand and follow accepted procedures.

6.5.3. Scoring

Groups are measured to the nearest .001" using appropriate scoring calipers that directly measure center-to-center group sizes.

Score targets are scored with an appropriate official reticle for the caliber fired.

6.5.4. Lost Targets

If a target is lost (the fault of the range) and the shooter has 4 other targets at that yardage, the score for the lost target will be the average of the four remaining targets.

6.6. Sanctioned Match Yardages and Records

The Freedom Benchrest Short Range Shooters recognises and will maintain records for the following sanctioned Yardages:

6.6.1. Group Events

Individual Groups for all group classes including Unlimited

5 shots at 100 yards 5 shots at 200 yards 5 shots at 300 yards

Additional individual Groups for the Unlimited Class

10 shots at 100 yards 10 shots at 200 yards 10 shots at 300 yards

Aggregates for all group classes including Unlimited

100 Yards - 5 Shot - 5 Targets 200 Yards - 5 Shot - 5 Targets 300 Yards - 5 Shot - 5 Targets 100+200 Yard - 5 Shot - 10 targets 200+300 Yard - 5 Shot - 10 targets 100+200+300 Yard - 5 Shot - 15 targets

Additional aggregates for the Unlimited Class

100 Yards - 10 Shot - 5 Targets

200 Yards - 10 Shot - 5 Targets 300 Yards - 10 Shot - 5 Targets 100+200 Yard - 10 Shot - 10 targets 200+300 Yard - 10 Shot - 10 targets 100+200+300 Yard - 10 Shot - 15 targets

100 Yards - 10 Shot - 8 Targets 200 Yards - 10 Shot - 8 Targets 300 Yards - 10 Shot - 8 Targets 100+200 Yard - 10 Shot - 16 targets 200+300 Yard - 10 Shot - 16 targets 100+200+300 Yard - 10 Shot - 24 targets

6.6.2. Score Events

Aggregates for all score classes (HTR and VFS)

100 Yards - 5 Shot - 5 Targets 200 Yards - 5 Shot - 5 Targets 300 Yards - 5 Shot - 5 Targets 100+200 Yard - 5 Shot - 10 targets 200+300 Yard - 5 Shot - 10 targets 100+200+300 Yard - 5 Shot - 15 targets

7. Targets

One official set of targets is allowed per competitor per registered match. Each target must be marked in numerals as large as possible with the competitor's number and must be plainly legible at either yardage when installed in the target frame. It is the responsibility of the target crew to see that this number is not obscured.

Removal of Targets: At all matches, no competitor shall remove any target from the display area until 10 minutes after that aggregate for that course of fire is posted. If a target is to be protested, only a referee is permitted to remove and re-hang the target on the display wall. Competitors who remove their targets from the display wall prior to the end of the 10 minute period shall be disqualified. It is the Match Directors responsibility to ensure that the time the aggregate is posted is noted on the aggregate results.

In the event of a competitor protesting another competitor's target, make public the name of the protester by printing the protester's name on the protested target.

Benchrest Group Targets

The official 100-yard target for all registered bench rest rifle competition (designated as BR-100) shall have a "10 ring" of 1/2" outside diameter. The "9 ring" shall be 1" outside diameter. Succeeding rings shall increase 1/2" in outside diameter to and including the "6 ring". The aiming square shall be 1" square and placed at 12 o'clock tangent to the "8 ring". Older targets, with the aiming square tangent to the "9 ring", may be used until the supply is exhausted. The thickness of the sides of the aiming square will be 1/4". The target card shall measure 8"x16" and contain a record and sighter targets. Targets shall be centered inside a black border measuring 31/2"x43/4". The top of the border for the record target shall be approximately 1 1/2" from the top of the target card. The top border of the sighter target 14 shall be approximately 9 1/2" below the top of the target card and may contain 2 additional small targets in the lower portion of the target border. Both targets shall be designated by an "S" in each upper corner of the border. Overall size of the 200 yard target will be approximately 8"x16" and contain a record and sighter targets. Each target will be centered within a 7"x7" black border with the border of the top (record) target approximately 1/8" from the top of the target card and the border of the bottom sighter target will be approximately 83/4" from the top of the target card. The width of the 200 yard target will be approximately the same as the 100 yard target. The configuration of the rings will be the same as the 100 yard target except the 10 ring shall be 1" outside diameter. The 9 ring shall be 2" outside diameter. Succeeding rings shall increase 1" in outside diameter to and including the 6 ring. The aiming square shall be 2" x 2" and tangent to the 8 ring. The lower target (sighter) will be designated by an "S" in each upper corner and there shall be sighter bulls in each lower corner. The 300 yard target shall be proportional to the 200 yard target. Official targets shall be designated as BR-100 for 100 yards, BR-200 for 200 yards, and BR-300 for 300 yards.

Backers (Moving): A moving backer strip or card will be required for 100 yard, 200 yard, and 300 yard matches in all registered shoots. When the backer strip or card fails to operate at any

range during a match, only the number of shot holes that can be clearly distinguished on the target will be counted to determine the number of shots on the target. It is the Match Director's responsibility to ensure moving backers function properly to capture all shots regardless of weather conditions.

Backers (Stationary): In addition to the moving backer strip or card, a stationary backer is recommended for all National Tournaments. The stationary backer at 100 yards should be placed exactly 36" behind the record target and 72" behind the record target at 200 yards. When the required number of shots can be identified on the record target, a backer is not required for World Record measurement. Stationary Backers are recommended, but not required, at other matches to aid in identifying crossfire origination.