# Benchrest Rules for Target Rifle South Australia



## Enclosed are:

- Benchrest Rifle Lightweight Hunting Rifle
- Benchrest Rifle Customised Hunting Rifle
- Benchrest Rifle Open & Restricted Classes TRA version 2021
- Benchrest Rifle 20m Air Rifle

Includes General rules, Targets and Equipment for TRSA Benchrest shooting events.

| <b>Version Number:</b> | Date:                        | Updated By:                |  |
|------------------------|------------------------------|----------------------------|--|
| 1                      | 5 <sup>th</sup> January 2022 | M.Muehlberg and TRSA Board |  |
|                        |                              |                            |  |
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Copied into this document directly from TRA Rules.

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# A. GENERAL

A.1 The following rules and regulations have been compiled for use by members of Target Rifle South Australia Inc to cover local events, namely Benchrest Lightweight Hunting Rifle and Customised Hunting Rifle, 20 metres Air Rifle Benchrest.

Please note that the TRA Benchrest event (Open) rules appear in this document but are **copied** from the Australian Supplementary Rules that came into force in January 2021.

Any-questions arising in connection with the conduct of a competition in accordance with these rules will be resolved on the day by the official Jury at that event, and then reported to Target Rifle South Australia for future consideration and ruling.

Where the rules state left or right hand, this is for a right-handed shooter. The opposite applies to the left-handed shooter.

#### A.2 BENCHREST SHOOTING

Benchrest Shooting is rifle shooting done from a seated position at a table or bench.

The rifle is supported with the use of a front rest and rear bag to hold a rifle in a stable position as per Section E of these rules.

Benchrest shooting may be contested using varying types of .22lr calibre rifle – lightweight hunting rifles weighing up to 3.5 kg, medium weight customised hunting rifles weighing up to 4.5kg and heavier target style rifles weighing up to 8 kg. Refer to section F of these rules.

It can also be contested using an Air Rifle over 20 metres. Refer to section F.4.

## A.2.1. Benchrest Shooting position

The shooter sits on a chair or stool & the fore end of the rifle is supported on a rest and the butt is supported on a bag, both rests are supported on a table.:

The fore end of the rifle may rest :-

- On the bag of a benchrest stand.
- Or on a block with or without a bag &/or carpet.
- Or on a bipod fixed to the fore end of the rifle.

The butt of the rifle -

may rest on the rear bag.

Any part of the body may touch the table.

The left hand may touch, grip or support the rifle or front support at any point including the fore end in front of the front rest. It can also touch or support the rifle butt, rear bag or bench. This includes the area between the bottom of the pistol grip or any part of the rear of the stock (including butt plate).

The right hand may grip the pistol grip with a finger on the trigger.

The right cheek may touch the stock.

The stock may touch the right shoulder.

## A.3 ELIGIBILITY OF COMPETITORS

- A.3.1 Any person who is a member of Target Rifle Australia Inc.
- A.3.2 In the event that a competitor cannot compete in a shoulder-to-shoulder competition his/her entry fee less 10% will be refunded.
- A.3.3 Shooter's equipment must meet the requirements of the rules and be subject to Equipment Control.

#### A.4 COMMUNICATION

A.4.1 It shall be the competitor's responsibility to read any official announcement that is placed on the notice board by the authority of the organizing committee and understand that such announcement shall have the same force as these regulations. Such notice board must be placed in a conspicuous position.

A.4.2 Information on the competition and squadding arrangements will be communicated to the membership via the TRSA website. It is the competitor's responsibility to read this.

## A.5 AGE CATEGORIES.

#### A.5.1 Juniors.

Any person over the age of 10 years and under the age of 21 years at the start of the competition.

## A.6 RANGE STANDARDS

Ranges should be approved by the Range Inspector for the various styles of shooting that will be conducted at the range. The certificate of inspection should note the various disciplines that are approved for the range.

- A.6.1 Target Frames.
  - Target frames should be the same distance centre to centre as the firing points.
- A.6.2 All targets must be placed at a height to ensure that all lead projectiles are appropriately arrested safely by the range bullet catchers/backstop and because of the wide angles of bullet trajectory (from prone, supported on tables, through to standing) they don't ricochet off the ground or other range equipment.
- A.6.3. Target Bay numbering

Where rifle shooting is to be conducted using telescopic sights, then additional smaller numbers must be installed close to the targets so that they can be easily seen through the telescopic sight when aiming at the target.

#### A.7 EQUIPMENT CONTROL

All rifles to undergo Equipment Control prior to competition. To acknowledge compliance with the rules:

- i) an appropriate sticker will be placed on the rifle and
- ii) the competitor will be provided with an original copy of the Control sheet which should be kept and produced to the Range Officer at all subsequent competitions (unless changes have been made to the rifle, where the rifle must be rechecked) and
- iii) the Technical Committee will retain a copy of the Control sheet for future reference.

## A.8 TARGET CHANGING

At the completion of the squad and on instruction from the CRO and/or Range Officer, competitors shall remove their equipment from the firing point and change target cards for the next squad.

## A.9 AMMUNITION

Any commercially available, factory loaded, standard velocity.22 long rifle ammunition with a soft lead projectile may be used. This ammunition must be original and unaltered. Jacketed projectiles are not to be used.

## A.10 CROSS FIRING

- A.10.1 **Team Matches:** Team members cross firing onto any other card will lose the full value of the
- A.10.2 **Individual:** Competitors cross firing onto any other card will lose the full value of the shot.

## A.11 TIE BREAKING RULES

For all benchrest competitions tie breaking shall be:

- I. Highest score including inner tens ("x")
- II. If ties remain, highest score of last 10 shots (then working backwards to first 10 shots)
- III. If ties still remain, compare on a shot by shot basis from last shot fired (or if at 90 metres where only a 5 shot group, base the countback on the total of the 5 shot group.

## A.12 SIGHTING SHOTS

- A.12.1 Unlimited sighting shots may only be used before firing a shot on the first competition aiming mark.
- A.12.2 If the first sighter fired should hit or be in close proximity of a competition aiming mark, the shooter must advise the Range Officer who can advise the scorers to ignore that shot.
- A.12.3 It is not permitted to return to sighting shots after commencing the competition shots.

## A.13 COACHING (in State, Territory or Club Team Competition.)

In team matches coaches may be used unless the match is shot in conjunction with an individual match. No individual record will be recognized for coached events.

## A.14 CLOTHING

- A.14.1 The use of a sling, shooting jacket, shooting pants, shooting boots or a glove is not permitted.
- A.14.2 Camouflage clothing is not permitted.

## A.15 WIND FLAGS

Only standard ISSF wind flags or other TRA approved wind indicators provided by organisers can be used. Private wind indicators are not permitted.

## A.16 BREECH FLAGS

The use of breech flags (Safety Flags) is mandatory in all firearms

No rifle is to have the safety flag removed until the Range Officer gives the START command, and it
must be inserted in the rifle after the completion of the detail or when directed by the Range Officer.

## A.17 MOBILE PHONES

Competitors may not have a mobile phone within the competition area.

# **B** RANGE SAFETY

**B.1** Range commands as per ISSF & TRA supplementary rules will apply.

Note that the TRA Supplementary Rule A.24.5, stating "Rifles fitting with magazines may only be loaded with one cartridge or pellet" does not apply to the TRSA Benchrest Classes for Lightweight Hunting Rifle and Customised Hunting Rifle.

- **B.2** No rifle is to have the safety flag removed until directed by the Range Officer.
- **B.3** A rifle with a magazine (loaded or unloaded) or a single shot adaptor fitted in the action is considered to be a loaded rifle irrespective of the position of the bolt or status of the breech.
- **B.4** Magazines may **only be loaded on the firing point AFTER** the command to "LOAD" or "START" is given. At all other times, rifles and magazines must be kept unloaded.
- **B.5** Rifles shall be pointed in the direction of the target area at all times.
- **B.6** No person is permitted forward of the firing line unless the Range Officer has given a command that it is safe to do so.
- **B.7** While personnel are forward of the firing line no rifle or equipment on the benches is to be handled. Competitors shall remain away from the benches until the range is clear and the Range Officer's command is given.
- B.8 In the event of any STOP call being made:
  - rifles shall immediately be unloaded, magazines and single load adaptors (if applicable) removed & safety flag inserted.
  - ii) the competitor shall move back from the bench to allow the range officer to check that the firing point is safe.
- **B.9** At the completion of each course of fire, rifles shall be left on the benches with actions open, magazines and single shot adaptors (if applicable) removed & safety flags inserted. Rifles can only be removed from the firing point when the Range Officer has checked & cleared them as safe.

When a shooter has finished shooting he may leave the firing point, however, in order to not disturb other competitors, all equipment must be left at the firing point until the match is finished. Shooters are not to return to the firing point until the Range Officer calls STOP and they are directed to do so.

B.10 Pressurised cylinders (This for 20M Air Rifle Benchrest matches – F.4)
It is the shooter's responsibility to ensure that any pressure cylinder has been certified as safe and is still within the validity date.

# **C TARGETS**

## C.1 20 METRES BENCHREST TARGET

- C.1.1 Each target card will have 30 competition aiming marks and 14 clearly marked sighting aiming marks for unlimited sighting shots.
- C.1.2 There will be 1 scoring shot per competition aiming mark.

## C.1.3 Ring sizes will be:

 10 ring 1.0mm
 (±0.05mm)
 7 ring 18.0mm
 (±0.15mm)

 9 ring 6.0mm
 (±0.1mm)
 6 ring 24.0mm
 (±0.15mm)

 8 ring 12.0mm
 (±0.1mm)
 5 ring 30.0mm
 (±0.15mm)

10 Ring black

9 ring thickness 1.0-1.1mm

Black area is only the 7 ring region - (12.0mm - 18mm)

6, & 5, Ring thickness 0.2 mm

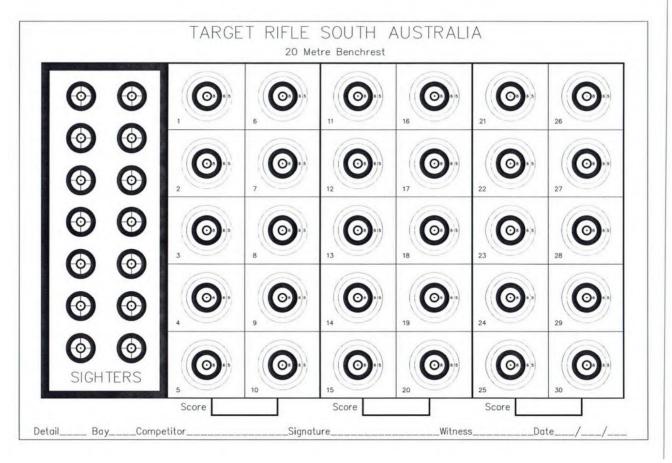
All other areas to be natural target card colour with black scoring rings.

Separation between target centres. - Minimum 38mm.

All aiming marks shall be numbered for scoring and count-back purposes

## C.1.4 Scoring 20 metres

- i. A 10 is scored by the complete removal of the 10 (1mm dot in the centre)
- ii. An "x" is scored by the complete removal of the entire white section out to the 9 ring.



## C...2 **50 METRE BENCHREST TARGET.**

- C.2.1 Shall be the same specification as the ISSF 50 metre target out to the 7 ring and have a total target diameter of 58.4mm.
- C.2.2 Each target card will have 30 competition aiming marks and 4 clearly marked sighting aiming marks for unlimited sighting shots
- C.2.3 There will be 1 scoring shot per competition aiming mark.
- C.2.4 Ring sizes will be:

10 ring 10.4mm (±0.1mm) 8 ring 42.4mm (±0.2mm) 9 ring 26.4mm (±0.1mm) 7 ring 58.4mm (±0.5mm)

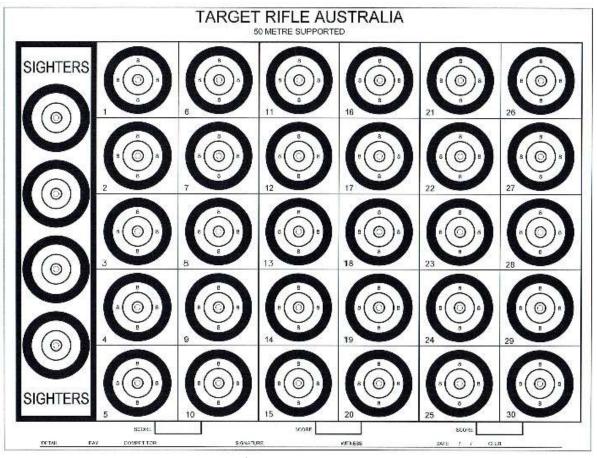
Inner ten [5mm (±0.1mm)] Ring thickness. 0.2 to 0.3mm. 10 & 9 Ring thickness 1.0 to 1.1mm

Black area is only the 7 ring region - (42.4mm – 58.4mm)

All other areas to be natural target card colour with black scoring rings.

Separation between target centres. - Minimum 62mm.

All aiming marks shall be numbered for scoring & count back purposes.



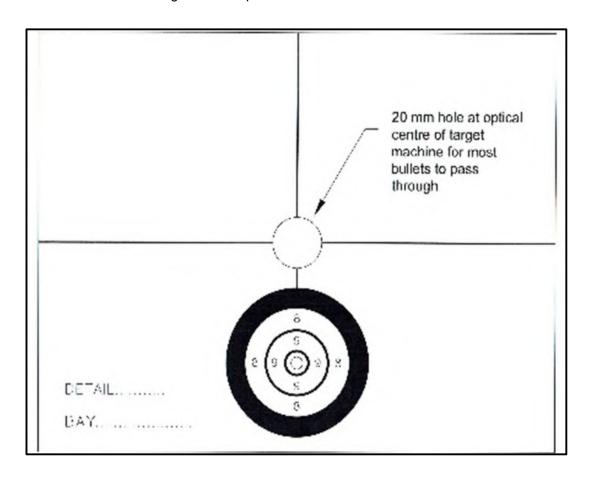
Minimum visible size of 30 competition target card and sighters is 510m x 380mm Typical 50 metre benchrest target allowing 10 shot or 20 shot or 30 shot strings.

## C.2.5 50 metre Benchrest AIMING MARK FOR ELECTRONIC MACHINES.

C.2.5.1 An aiming mark in preference to a dot or cross be used as the aiming point. It shall be the same specification as the TRA 50 metre benchrest target out to the 7 ring and have a total target diameter of 58.4mm. (as per C.2,4)

This aiming mark to be positioned close to the centre of the electronic machine, but not so close as to have normal shots landing into the scoring rings. (Suggest 45 to 50mm below centre of machine)

C.2.5.2 Scoring will be full points and inner tens not decimal.



Typical 50 metre benchrest aiming mark for electronic machines.

# C.3 90 METRE BENCHREST TARGET.

- C.3.1 Shall be the same specification as the TRA 90 metre target out to the 5 ring and have a total target diameter of 176.8mm.
- C.3.2 Each target card will have a 4 competition aiming marks and 1 clearly marked sighting aiming mark in the centre for unlimited sighting shots.
- C.3.3 There will be 5 scoring shots per competition aiming mark.

| C.3.4 | 10 ring | 26.8mm | (±0.2mm) | 7 ring 117.8mm | (±0.2mm) |
|-------|---------|--------|----------|----------------|----------|
|       | 9 ring  | 56.8mm | (±0.2mm) | 6 ring 146.8mm | (±1.0mm) |
|       | 8 ring  | 86.8mm | (±0.2mm) | 5 ring 176.8mm | (±1.0mm) |

Inner ten [5.2mm] (±0.2mm)] Ring thickness. 0.5 to 0.6mm.

10 & 9 Ring thickness 3.0 to 3.1mm

6 & 5 Ring thickness 1.0 to1.1mm

Black area is only the 7 ring region - (86.8mm – 117.8mm)

All other areas to be natural target card colour with black scoring rings.

Separation between target centres. - Minimum 178mm.

All aiming marks shall be numbered for scoring & count back purposes.



Minimum visible size of 4 competition target card and sighter is 510m x 380mm

Typical 90 metre benchrest target allowing 20 shot strings

This target uses the same size backing board as the 50m 5 bull target used for prone shooting.

#### D THE COMPETITION

## **D.1 BENCHREST COMPETITIONS**

Will be unlimited sighters and 60 consecutive business shots to follow.

#### **D.2 FINALS**

Finals (as in ISSF matches) will not be shot.

## D.3 SIGHTING SHOTS (Please also refer to the specific target in Section "C")

- i. Unlimited sighters before the start of competition shots.
- ii. No return to sighters permitted.

## **D.4 TIME LIMITS**

i. Unlimited sighters and ten (10) competition shots: 15 minutes. ii. Unlimited sighters and twenty (20) competition shots: 30 minutes. iii. Unlimited sighters and thirty (30) competition shots: 45 minutes.

Unlimited sighters and sixty (60) competition shots: 1 hour 15 minutes. iv.

## **D.5 SCORING**

#### D.5.1 - General

- Scoring will be in integers and count centrals eg (600.53x) i.
- ii. If two scorers do not agree on the value of a shot a third opinion should be sought from the person in control of the score room.
- Hits outside the scoring rings of the shooter's own target are scored as misses. iii.
- iv. A cross-fire (a shot onto another competitor's target) will be counted as a miss.
- An overload (an additional shot on competitor's own target) (ISSF Rule 4.3 for ٧. paper targets) states if a competitor fires more shots on one of their Match targets than are provided for in the event, they must not be penalized for the first two (2) shots. The Range Officer should be notified, and the next aiming mark should be left free of a shot.
  - There will be a penalty of 2 points each for the 3<sup>rd</sup> and subsequent overload shots. The deduction should be made from the series in which the overload(s) occurred. (Note that a match is the whole event – 60 shot competition.)
- As a general rule, only those shots that are visible will be scored. An exception will νi. be made in the case where the grouping of several shots is so close that it is possible for a required shot or shots to have gone through an existing hole without leaving a mark. In this case the shooter shall be given the benefit of the doubt.
- Interfering with shot holes is prohibited. vii.
- viii. Scorers will use a suitable device such as a .22 calibre plug gauge and magnifying device to determine the correct value of any questionable shot.

## D.5.2 - Scoring 20 metres

- A 10 is scored by the complete removal of the 10 (1mm dot in the centre).
- ii) An "x" is scored by the complete removal of the entire white section out to the 9 ring.

## **D.6 TARGETS**

Targets as stated in section C will be used.

## D.7 20 METRES AIR RIFLE BENCHREST (REFER F.4)

- No additional time will be given to refill air cylinders during competition time. i.
- ii. A .22 gauge must be used to gauge shots regardless of air rifle calibre and the scoring method as in D.5 above.

## **E EQUIPMENT**

## **E.1 BENCHREST TABLE**

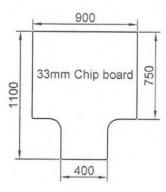
Is a solid rigidly constructed table with a height of 850 mm +/- 100 mm.

A cut out should be incorporated in the top to allow a shooter to sit comfortably on a chair or stool & be able to reach the rifle.

There should be right hand & left hand tables, or a table can be designed to suit both right & left hand shooters (see diagram).

The width of table for the right elbow should be 400 mm or more in width.

Where possible all tables on the firing point should be of the same design.



Typical top for a right hand / left hand Table

## E.2 REAR REST BAG

The rear rest shall be a bag or combination of bags of leather and/or cloth (i.e. Cordura).

The material will be a maximum of 3mm in thickness & only the base may be thicker. The base cannot be a rigid material like timber, plastic, steel or similar, but must be a similar material to the bag.



The contents of the bags shall be dry, finely divided non-metallic substances such as, but not limited to sand, garnet, gravel, plastic granules or grain without additives, packed loosely enough so that each bag shall be deformable by pressure of the fingers.

The sides of the rear bag cannot be constrained in any manner.

A vertical spacer shall be allowed between the rear bags and the bench. Any spacer or spacers shall not contain sides higher than 10mm or any protrusions which can be used to insert into the bench top or bags in order to locate and prevent movement.

Velcro, magic stop non slip matting or similar anti-slip surfaces on the bags and or spacers may be used.

Talc or non-friction compounds/tapes can be used on bags or stocks to aid tracking of the rifle.

The bags and/or spacers shall not incorporate any adjustments for windage and/or elevation.

## E.3 FRONT REST

**A Front Rest** may include mechanical adjustments for height & windage but shall not have any guiding means that would work with any addition, contour or dimension on the rifle to help return the rifle to the firing position.



A stop to locate the distance that the rifle is moved toward the target by the shooter is permitted.

The rest may be used in conjunction with a bag or series of bags to support the fore end of the rifle.

The bag or bags must only hold the fore end and not clamp it in position. The rifle must be able to be easily lifted vertically from the rest without any interference from the bags.

The benchrest stand & the rear bags must be separate from each other.

The cover & filling of bag/s shall meet the same requirements specified for the rear rest bag.

Any rigid material like leather, rubber, wood or similar material, to support, locate or guide the rifle is not permitted.

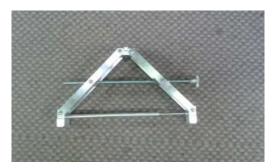
It should be noted that there are many such rests available on the market. The one illustrated is an example.

## Other examples of stands can be:

**E.3.1 A bi-pod** with or without height adjustment may be attached to the fore end of the rifle.

The feet of the bi-pod may have rubber or other non slip products to prevent the bi-pod sliding on the table. The bi-pod may attach to the hand-stop rail.





Typical bi-pods

- **E.3.2 A block**, no larger than 150mm in any height, width or length, with or without carpet or a bag may be used to support the fore end of the rifle. No means of clamping or guiding the rifle is permitted.
- **E.3.3** Either a front rest or a bipod may be used not both.

#### E.4 SIGHTS

Telescopic sights are permitted in all Benchrest matches. Please refer to **Section F** for the limits of each specific discipline (eg Lightweight Hunting Rifle, Customised Hunting Rifle, Open Class and 20m Air Rifle Benchrest).

# **F** BENCHREST RIFLE CLASSES

## Special Note:

It should be noted that TRSA Board have agreed that until 1<sup>st</sup> July 2022, the Technical Committee may approve a Lightweight Hunting Rifle with a minor alteration, which does not improve or seem to improve the rifle. **This does not apply to replacement stocks or barrels.** 

# F1. LIGHTWEIGHT HUNTING RIFLE

#### SPIRIT OF THIS CLASSIFICATION:

- This class of rifle is designed to encourage the use of a basic, low-cost rifle for both new and existing members, to enable them to compete in TRSA Benchrest competition.
- The use of custom-made rifles and/or alterations to the original rifle (with the exception of the modifications listed below) are not permitted.
- Competitors should be aware that these rules are subject to ongoing change to specifically exclude rifles which are outside the spirit of this class.
- It is the responsibility of the competitor to check that they abide by these rules and to ensure that the rifle has been approved by Equipment Control.

## **RIFLE**

#### Permitted:

- The rifle must have been mass produced by a major firearms manufacturer and have been/or is available from retail shops like gun shops and not from a gunsmith.
- It is a bolt action repeater hunting rifle with a detachable magazine chambered for .22 rimfire long rifle cartridge having a safe manually and mechanically operated firing mechanism which does not include the use of fluid, gas, or remote control.
- The rifle is as produced & only a few minor modifications can be made as discussed in these rules. To maintain the spirit of this class, any such modifications must be presented to the Equipment Control and noted on the Control sheet with copies retained by the Technical Committee.

## Not Permitted:

- The rifle cannot be custom made.
- It is limited to bolt action repeaters only, and single shot, automatic, lever action, pump action, Martini, straight pull bolts are not permitted.
- Target rifles, Biathalon rifles and combat looking rifles (eg fig 1) are not permitted
- Rifles with camouflage are not permitted.

## Special Note:

It is the competitors' responsibility to be able to produce documents to prove that the rifle is genuine. Eg. Manual or catalogue.



#### STOCK

#### Permitted:

- It must be the genuine stock for the rifle.
- Stocks can be wood, laminated wood, fiberglass or plastic.
- Adjustable cheek piece/butt/pistol grip
- Thumbhole or skeleton stock.
- A rubber butt plate can be fitted if the original is broken or slippery.
- Sling swivels can be removed, and flush fitting swivels can be installed.
- Max. width of the fore-end where it would touch the front benchrest bag is 45mm
- The stock may be bedded to the barrel &/or action but not glued.
- The length of pull can be changed by cutting the stock shorter or spacers can be fitted between butt plate & stock, but if fitted they must be constructed so there is not a flat rest for the rear bag.
- If a stock is damaged or broken:
  - A damaged stock can be repaired but shall be inspected by the Technical Committee before & after repair.
  - o A broken stock may be replaced with a **genuine** replacement for this rifle.
    - ➤ Where there is a situation like BRNO 1 to CZ 452 range, any stock from the **genuine** range can be fitted. This also applies to other manufacturers.

#### Not Permitted:

- Nothing can be fitted to the stock eg. bag riders, anti- slip pads or comb raisers or Teflon tape, or similar.
- If a stock is damaged or broken
  - No homemade, customised or aftermarket stocks can be used.
  - If a **genuine** stock cannot be found then the rifle must be moved into "customized hunting rifle" class.
- The stock may not be glued to the barrel and action
- No other alterations to the stock are permitted.

## Special Note:

• If the rifle is to be used in another competition an aluminium fore-end rail (eg Anschutz) no longer than 100mm may be fitted flush in the stock (nothing can be in this rail for lightweight hunting rifle Benchrest competitions).

## **ACTION**

#### Permitted:

 Firing pin, springs, extractors, bedding screws, bolt releases, magazines and magazine holder, bolt parts, safety catches, ejectors and trigger mechanism can be replaced with genuine or aftermarket products if required.

#### Not Permitted:

 Action can-not be modified in anyway except for means of fitting a scope if there are no dovetails on the action.

## **BARREL**

#### Permitted:

- Minimum barrel length of 460mm measured from the face of the breach to the muzzle.
- Sights and\or sight bases may be removed from the barrel.
- If the barrel is faulty or worn:
  - It may be recrowned if required, but the rifle shall be inspected by the Technical Committee before & after repair.
  - It can be replaced with a **genuine** barrel for this rifle, but the rifle shall be inspected by the Technical Committee before & after repair.

#### Not Permitted:

- If the barrel is faulty or worn
  - If a **genuine** barrel cannot be found then the rifle must be moved into "customized hunting rifle" class.
- Barrel cannot be fluted & the rifling must not stop more than 20mm short of the muzzle.

- Nothing may be fastened to the barrel except the action, sights and sight bases, recoil lug and stock.
- Thread protector not permitted.
- Barrel tuners are not permitted.

#### TRIGGER

#### Permitted:

- Triggers must be a mechanical type trigger.
- Triggers may be lightened/worked on.
- Safety test action must be closed at normal rate without discharging.

## Not Permitted:

- Set triggers not permitted.
- Electronic triggers not permitted
- Aftermarket triggers not permitted.
- Trigger shoes not permitted.

#### **MAGAZINE**

#### Permitted:

- A detachable magazine of no more than 10 shots.
- A detachable rotary magazine like the Ruger.
- A single load adaptor may be used in lieu of a magazine. The adaptor shall be able to be fitted and removed in the same way as the magazine and will typically be a magazine shaped device with a fixed top section for the bullet to rest on. Adaptors readily available for Anschutz and Brno/CZ rifles are examples of such permitted devices.

#### Not Permitted:

- A loading platform as used in target rifles like Anschutz Match 54 and 64 actions is not permitted.
- A tube magazine is not permitted.

## **SIGHTS**

## Permitted:

Any telescopic sight shall be limited to a maximum of 12 power magnification. Variable magnification telescopic sights to be set at or less than 12 power and taped by the Range Officer or equipment control and can only be changed after the end of the competition when the rifle has been removed from the firing point.

## Not Permitted

A spirit level is not permitted on the rifle, scope, or mounts.

## **WEIGHT**

#### Permitted:

- The weight of the rifle shall not exceed 3.5kg inclusive of sight, bolt and unloaded magazine or single load adaptor. (The heaviest magazine must be used where more than one magazine is to be used.)
- If a bi-pod is fixed to the stock it may be removed for weighing.

#### Not Permitted

No weights are to be fitted to the rifle.

# F2: CUSTOMISED HUNTING RIFLE

## SPIRIT OF THIS CLASSIFICATION

- This class of rifle is designed to allow members to use a customised .22 Hunting Rifle in TRSA Benchrest competitions.
- This is an experimental class, allowing members to use a range of permitted modifications as listed in the rules below.
- Competitors should be aware that these rules are subject to ongoing change to specifically exclude rifles which are outside the spirit of this class.
- It is the responsibility of the competitor to check that they abide by these rules and to ensure that the rifle has been approved by Equipment Control.

## RIFLE

#### Permitted:

- It is a bolt action repeater hunting rifle with a detachable magazine chambered for .22 rimfire long rifle cartridge having a safe manually and mechanically operated firing mechanism which does not include the use of fluid, gas or remote control.
- It is limited to bolt action repeaters only.

#### Not Permitted:

- Single shot rifles, automatic, lever action, pump action, Martini, and straight pull bolts are not permitted.
- Target rifles, Biathlon rifles and combat looking rifles (see fig 1) are not permitted
- Rifles with camouflage not permitted.

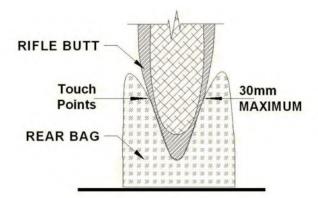
#### STOCK

## Permitted:

- No restriction on style of stock.
  - o May be a homemade, customised or aftermarket stock.
  - May be a thumbhole or skeleton stock.
  - May have adjustable cheek piece/butt/pistol grip.
  - o May be wood, laminated wood, fibreglass, or plastic.
- Max. width of the fore-end where it would touch the front benchrest bag is 60mm
- The stock may be bedded to the barrel and/or action.
- A rubber butt plate can be fitted.
- Sling swivels can be removed, and flush fitting swivels can be installed.
- The length of pull can be changed by cutting the stock shorter or spacers can be fitted between butt plate & stock.
- Anti- slip pads, comb raisers, replacement pistol grips or Teflon tape etc. may be fitted to the stock.
- A bag rider can be fitted to the fore-end. The base must be flat or convex. Any material may be used (Max. width is 60mm).
- The width of any part of the stock butt in contact with the rear rest bag shall not exceed 30mm (See Fig 2).

FIG 2

A bag rider can be fitted to the butt. (Max. width 30mm).



#### **ACTION**

#### Permitted:

- The action must be mass produced by a major firearms manufacturer and have been/or is available from retail shops like gun shops and not from a gunsmith.
- If there are no dovetails on the action, then it can be modified to have the means of fitting a scope.
- Firing pin, springs, extractors, bedding screws, bolt releases, magazines and magazine holder, bolt parts, safety catches, ejectors and trigger mechanism can be replaced with genuine or aftermarket products if required.

## **BARREL**

#### Permitted:

- Minimum length of 460mm measured from the face of the breach to the muzzle.
- Sights and\or sight bases may be removed from the barrel.
- The barrel can be replaced and/or recrowned.
- Barrel tuners are permitted.

#### Not Permitted

It cannot be fluted & the rifling must not stop more than 20mm short of the muzzle.

## **TRIGGER**

#### Permitted

- Triggers must be a mechanical type trigger.
- Triggers may be lightened/worked on.
- Aftermarket triggers permitted.
- Safety test action must be closed at normal rate without discharging.
- Trigger shoes permitted.

## Not Permitted

- Set triggers not permitted.
- Electronic triggers not permitted.

## **MAGAZINE**

#### Permitted:

- A detachable magazine of no more than 10 shots.
- A detachable rotary magazine like the Ruger.
- A single load adaptor may be used in lieu of a magazine. The adaptor shall be able to be fitted and removed in the same way as the magazine and will typically be a magazine shaped device with a fixed top section for the bullet to rest on. Adaptors readily available for Anschutz and Brno/CZ rifles are examples of such permitted devices.

#### Not Permitted

- A loading platform as used in target rifles like Anschutz Match 54 and 64 actions is not permitted.
- A tube magazine is not permitted.

#### **SIGHTS**

#### Permitted

- Any telescopic sight shall be unlimited power.
- A spirit level is permitted on the rifle, scope, or mounts.

#### **WEIGHT**

## Permitted

- The weight of the rifle shall not exceed 4.5kg inclusive of tuner, bag riders, sight, bolt and unloaded magazine or single load adaptor. (The heaviest magazine must be used where more than one magazine is to be used.)
- If a bi-pod is fixed to the stock it may be removed for weighing.

## F. 3 TRA RULES FOR OPEN BENCHREST RIFLE

Please note that the following is from the TRA Rule book 2021.

## TRA.24. OPEN TRA BENCHREST TARGET RIFLE.

## TRA.24.1 Benchrest Rifle is

 any TRA approved rifle chambered for .22 long rifle rimfire cartridge and complying with I.S.S.F 7.4.5a,c,e.

## TRA.24.2 Barrel

- The barrel must be a minimum length of 460mm measured from the face of the breach to the rifle muzzle.
- · Barrel tuning devises are allowed.

## TRA.24.3 Trigger

- Triggers of any type, including electronic, are allowed.
- Electronic triggers need all accessories associated with such trigger i.e. batteries etc.to be integrated as part of the rifle and included in the total rifle weight.
- Set triggers are not permitted.
- Safety test action must be closed at normal rate without discharging.

## TRA.24.4 Safety.

 Actions may have a manually operated safety firing mechanism, which does not include the use of pressure fluid, gas or remote control.

## TRA.24.5 Magazine

- Rifles fitted with magazines may only be loaded with one cartridge or pellet.
- All tube magazines are prohibited.
- Detachable magazine, capable of holding at least 3 rounds, are permitted.
- Detachable rotary magazine like the Ruger are permitted.
- Single load adaptors in lieu of a magazine are permitted. The adaptor shall need to be
  fitted and removed in the same way as the magazine. It will typically be a magazine
  shaped device with a fixed top section for the bullet to rest on. Examples of permitted
  devices are those readily available for Anschutz and Bruno/CZ rifles.
- A loading platform used in I.S.S.F. rifles is permitted.

## TRA.24.6 Stock

- Rifles may be fitted with a fore-end block not exceeding 76.2 mm (3 inch) in width as measured at 90 degrees to the line of the barrel.
- The fore-end block must be a flat or convex. Any material may be used. (A hand stop rail is permitted).
- The width of any part of the stock butt in contact with the rear rest bag shall not exceed 30mm.

## TRA.24.7 Weight

 The weight of a rifle shall not exceed 8kg inclusive of sight, single load adaptor (if applicable) or an unloaded magazine. The heaviest magazine when more than one is to be used.

(Note –TRA Rules 25 – 26 refer to Benchrest Equipment – Table, Front and Rear Rest/Bags, Wind Flags and seat.)

#### A.26.1 OPEN BENCHREST RIFLE

A shooter is seated adjacent to a benchrest table (TRA Rules A.25.1) on a permitted seat (TRA Rules A.25.5) with a smallbore rifle specified in rule A.24 or ISSF rules pointing in the direction of the targets with its fore end supported by a front rest or bags (TRA Rules A.25.2) and its butt supported in a rear rest bag ((TRA Rules A.25.3).

## A.26.1.1 When in the firing position:

The non-firing hand may touch, grip or support the rifle or front support at any point including the fore end in front of the front rest. It can also touch or support the rifle butt, rear bag or bench. This includes the area between the bottom of the pistol grip or any part of the rear of the stock (including buttplate).

## A.26.1.2 Sights

Unrestricted telescopic sight magnification shall be permitted.

## **A26.2 RESTRICTED BENCHREST RIFLE**

- A. 26.2.1 A shooter is seated adjacent to a bench or table with a smallbore rifle specified in TRA Rule A.24.1 or ISSF rules pointing in the direction of the targets
- A.26.2.2 When in the firing position
  - A.26.2.2 a) The rifle butt cannot be supported by a rear bag or rest or touch the bench, or any pad or other artificial rest or support on the bench.
  - A.26.2.2 b) The rifle can be in the shoulder or supported by the shooter's hand or a combination of both.
  - A.26.2.2 c) The non-firing hand may be placed under the fore-end as required to use a sling or anywhere between the bench top and the stock to support the rifle. This includes the area between the bottom of the pistol grip or any part of the rear of the stock (including buttplate). No pad or other support may be placed between either hand and the bench or rifle butt.
  - A.26.2.2 d) A shooters cheek may also be in contact with the stock however no other part of the shooters body may be in contact with the rifle.
- A.26.2.3 A rifle stock only with a normal profile is permitted and no extensions for the purpose of holding the rifle is allowed.

## A.26.2.4 Sights

Limited to 20 x telescopic sight magnification.

# F.4 TRSA Rules for 20m AIR RIFLE BENCHREST.

## The Rifle:

The Air Rifle Benchrest Rifle may be a .177 or .20 or .22 calibre air operated air rifle.

- Maximum weight including telescopic sight and attachments 6.00 kg?
- Maximum width of the fore-end of the stock where it contacts the front rest cannot be wider than 76.2mm. This can be in the form of a flat plate being attached to the fore-end.
- The rifle may be manual operation or compressed air.
- Maximum joules 16.3
- Scope power unlimited
- Muzzle Brakes, Muzzle Flips and Harmonic Tuners (Tuners) will <u>NOT</u> be permitted

## **Pressurised Air Cylinders.**

As per ISSF Rules. Refer to Range Safety - B.10

## **Benchrest Equipment**

Refer to Equipment Section E.

## **Ammunition**

Will be air pellets - either .177 calibre or .20 calibre or .22 calibre

## Scoring

Scoring will be integer as for the Target Rifle SA 20 metres target

A .22 gauge will always be used for all rifle calibres. Refer to The Competition Section D

## **The Range**

Air Rifle Benchrest competitions will be shot at a distance of 20 metres to the target. Ranges can be indoor or open air.

#### **Targets**

Targets will be the 30 shot 20 metres Benchrest targets used by Target Rifle SA for Benchrest Rifle competitions.

Refer to Targets Section C.1

## The Competition

Refer to The Competition section D for number of shots, time limits.

## **Shooting Position**

Refer to General Section A.2.1

## **Clothing**

Refer to General Rules A.13.

## Range Safety

Refer to Range Safety section B