

Redraft of F Class rules to adapt to market conditions

- To accommodate rifles reflective of 2022 market place for “Sporter and Modified” (Formally Heavy Varmit)
- Why, to accommodate today’s potential new members entry pathways to target shooting

WASRA Rimfire Rifle F-Class Rules - Preliminary Page 1 of 4

WASRA – Western Australia Small Bore Rifle Association, F-Class Shooting Rules,
August 2022 Issue Draft - Version 5

(documents to be read in conjunction with the WASRA Bylaws

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PREAMBLE

The undermentioned Rules are to be adopted by the West Australian Smallbore Rifle Association [hereinafter called “WASRA”] for use by promoting bodies authorised to conduct rifle shooting competitions. WASRA promotes the development of competitive Smallbore Rifle Shooting across WA. Rim Fire F Class should be complementary to the development and growth of competitive Smallbore Rifle shooters in Western Australia.

1. F-CLASS / RIMFIRE RIFLES

- 1.1 TRA approved Rimfire F Class rifles will be chambered for the .22 long rifle cartridge and the loading of the cartridge into the breach will be by manual bolt action ONLY.
- 1.2 Breech Flags / indicators will be always used to provide visual, positive identification that the rifle action is clear and safe when not shooting
- 1.3 Magazines will be unloaded at completion of firing and presented so can be easily cleared visually by the range officer
- 1.4 “Power Firing” or rapid shooting is not allowed on any range as focus shall remain to be precision shooting.
- 1.5 Rimfire F-Class will be known as “F Class / RF”.
- 1.6 Commercially available, factory loaded, standard velocity .22 long rifle ammunition with a soft lead projectile must be used. This ammunition must be original and unaltered. Jacketed projectiles must not be used. Sorting is permitted.
- 1.7 The firing mechanism is mechanical and will not include the use of pressure fluid, gas, electric or remote control. (for triggers see the classes)
- 1.8 “F/RF” All shooting shall be from the prone position unless exempted under Rule 1.9
- 1.9 Where the shooter has a disability that precludes shooting from the prone position then, with prior approval of the organisers of the competition/training session, the use of suitable aids such as a portable table/bench or any other aid deemed suitable by the organisers is authorised.
- 1.10 Where a portable bench or table is used, it is to be set up so as not to inconvenience other shooters.
- 1.11 Shooting Mats – design & material is unrestricted. However, the mat must not be used to aid the stability of the bipod. A mat strap/sling must not be used to assist with securing the bipod legs in such a way to pin the rifle between the shooting mat strap and shooter.

2. F-CLASS – RF SPORTING RIFLE (F-Class / RF – SR)

- 2.1 F Class /RF- SR is a rifle class designed to encourage the use of “ex factory hunting type rifles” with rifles that have no significant advantage over their competitors’ rifles.

The rules have been established to discourage the use of custom-made, lightweight target rifles which would have a clear advantage over the rifles for which these rules have been introduced. Accordingly, competitors should be aware that these rules are subject to ongoing change to specifically exclude rifles which are outside the spirit of this Class.

The Chief RO, Equipment Control officer or organising committee for the competition can make a judgement as to whether they will allow the rifle.

Appeals can be made in line with current TRA Rules.

2.2 “F Class / RF-SR”

2.2.1 F-Class Sporting Rifle (F Class / RF-SR) – Is a rifle restricted to unmodified factory .22LR Ammunition.

2.2.2 The rifle is any hunting bolt action rifle with a detachable magazine. Single shot rifles are not permitted.

2.2.3 Barrel

2.2.3.1 Has a barrel with 406 mm minimum length measured from face of breach to the muzzle. (Note rifle overall minimum length is 660mm).

2.2.3.2 Nothing may be fastened to the barrel except sights and sight bases, thread protector (if threaded from the factory), recoil lug and stock. Any such fitting must not be constructed to act like a barrel tuner. Sights and sight bases maybe removed.

2.2.3.3 If a barrel is faulty or worn, recrowning can be completed, or a replacement genuine barrel can be fitted by a licenced repairer. The rifle must be inspected by the Equipment Control officer after modification to ensure continued compliance. The CRO has final determination as to whether the replacement barrel can be permitted in competition.

2.2.4 Trigger

2.2.4.1 Triggers must be “original factory” as supplied with the rifle. Only Minor adjustments such as trigger springs changes, adjusting/polishing the sear engagement and trigger pull are permitted to ensure safe operation. If a trigger is in doubt, a cycle test will be completed by the CRO to ensure safe operation.

2.2.5 Magazine

2.2.5.1 A Detachable magazine may be used.

2.2.5.2 Magazine must have a maximum capacity of 10 rounds

2.2.5.3 A tube magazine is prohibited.

2.2.5.4 A single load adaptor may be used in lieu of a magazine. An adaptor can be fitted and removed in the same way as a 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 Bruno/CZ rifles are examples of such permitted devices.

2.2.6 Weight

2.2.6.1 Weight of rifle shall not exceed 4.250kg including bipod and scope. The heaviest magazine must be used during weigh in where more than one magazine is to be used. The rifle must be weighed as it is intended to be shot in competition. Any changes/additions after weigh-in and certification will require the rifle to be re-weighed to ensure compliance.

2.2.7 Stock

2.2.7.1 Stock shall be of traditional hunting style used by major manufacturers such as CZ,

Ruger, Kimber etc. Chassis stocks on rifles are permitted, if the rifle is/was available from factory with that chassis/stock. Stocks must be ORIGINAL factory equipment for the model of rifle being used and only genuine factory replacement stock may be used. Equipment Control officer and the CRO reserves right to inspect stocks to ensure compliance. If such a stock is out of production, a faithful replacement can be obtained and used but will be inspected by the CRO/ Equipment Control officer/Technical committee to ensure compliance.

2.2.8 Sights/Scope

2.2.8.1 A telescopic sight shall not exceed 16 power magnification. Variable magnification telescopic sights to be set at or less than 16 power and taped by the Range Officer or Equipment Control Officer.

2.2.9 Bipod / Rest

2.2.9.1 A Bipod is a commercially available standard folding hunting bipod . Homemade bipods are at discretion of the CRO. It must remain as a standard bipod as bought. Eg Harris or Atlas Style folding bipods.

2.2.9.2 Front Rest must be a basic support unit with with an open rounded bag that does not provide lateral support and no windage, or joystick adjustment. The rifle can not be clamped in the rest and an RO must be able to easily lift it from the rest.

2.2.10 Rear Rifle support

2.2.10.1 Support is provided by shoulder, hand or rear bag. Rear bag must not have a solid base built into it. Its construction should be like a soft bean. Packers under the rear bag are permitted where needed for extra height or by different surface types.

2.2.11 Aftermarket/Homemade Parts

2.2.11.1 Only genuine trigger guards, and butt plates are to be fitted. Permitted aftermarket parts are scope bases, scope rings, and sling swivel bipod adaptors. None of these parts must permanently change the action, barrel, or stock/chassis. Not permitted to be fitted are aftermarket or homemade trigger guards and butt plates. These are only permitted on Heavy Varmint or Open class rifles.

3. F Class / RF – Modified (F-Class / RF – Mod)

3.1. F-Class RF Modified “F Class / RF- Mod” is a rifle restricted to unmodified .22LR Ammunition.

3.1.1 This class is intended to allow shooters a more liberal approach with their rifles and to include the current trend of Precision Long Range Rimfire Rifles. Eg, Vudoo Gunworks, Zermatt Arms RimX, Bergara B-14R, CZ 457 Long Range Precision. These rifles have a higher weight, and this makes them unsuitable for F-Class – Sporting Rifle. Customisation is permitted and encouraged if it’s deemed a safe modification. The Equipment Control officer and CRO will have final determination if rifle setup is considered safe or not. The class is still intended to shoot off a hunting type bipod and soft rear bag.

3.1.2 F Class / RF Modified is typically any heavy barrelled bolt action rifle with a detachable magazine. Single shot rifles are not permitted.

3.2. Barrel

3.3.1 Barrel with 406mm minimum length measured from face of breach to muzzle.

3.3.2 Barrel Tuners, and weights may be used. Muzzle breaks are not permitted.

3.3. Trigger

3.4.1 Any safe, manually operated trigger is permitted.

3.5 Magazine

3.5.1 A detachable magazine may be used.

3.5.2 Magazine must have a maximum capacity of 10 rounds

- 3.5.3 A tube magazine is prohibited.
- 3.5.4 A single load adaptor may be used in lieu of a magazine.
- 3.6. Weight
 - 3.6.1 Weight of rifle shall not exceed 7.500kg inclusive of all attachments as shot.
- 3.7. Stock
 - 3.7.1 Benchrest style stocks not permitted.
- 3.8. Sights
 - 3.8.1 Telescopic sight magnification shall be unrestricted.
- 3.9. Front Bipod / Rest
 - 3.9.1 Bipod is a standard commercially available folding hunting bipod. Any homemade bipods can only be used at discretion of Equipment Control officer and CRO.
 - 3.9.2 A Front Rest which is not a bipod must be a basic support unit with no windage, or joystick adjustment, with an open rounded bag that does not provide lateral support. The rifle is not to be clamped in the rest and rifle must be easily removed from the rest by the CRO.
- 3.10. Rear Rifle support
 - 3.10.1 Shoulder, hand or soft bag is permitted to support rifle. A bag can not have a solid base built into the bag and it be a soft bean bag style. Packers may be used by a shooter to account for different surface types or extra height being needed.

4. F Class / RF Open Target Rifle (F-Class / RF – OTR).

- 4.1. F-Class Rim Fire Open Target Rifle – Is restricted to unmodified .22LR ammunition. Rifle may use any bipod, inclusive of Ski-Type F/TR bipods or any front rest that is not rigidly attached to rifle's forend. Not permitted are "Rail guns" and positive mechanical methods of returning to the precise point of aim for the prior shot. The area of contact between the front bag and the rifle fore-end will not exceed 76.3mm. The front rest may have up to three "feet". Each such "foot" may terminate in a spike,
- 4.2. Rifle
 - 4.2.1. Is any rifle chambered in unmodified .22LR
- 4.3. Barrel
 - 4.3.1. Minimum 406mm barrel length measured from face of breach to muzzle.
 - 4.3.2. Barrel tuning devices are allowed.
- 4.4. Trigger
 - 4.4.1. Any safe, manually operated mechanical trigger is permitted
- 4.5. Magazine
 - 4.5.1 A detachable magazine are permitted.
 - 4.5.2 Maximum 10 rounds capacity magazines are permitted.
 - 4.5.3 A tube magazine is prohibited.
 - 4.5.4 A single load adaptor in lieu of a magazine is permitted to be used.
- 4.6. Weight
 - 4.5.5 Rifle Weight shall not exceed 8kg, inclusive of all fitted attachments that recoils with the rifle, plus unloaded magazine or single load adaptor (if applicable) and the heaviest magazine must be used where more than one magazine is to be used.
- 4.7. Stock
 - 4.5.6 Width of stock at any point shall not exceed 76.3mm.
 - 4.5.7 Width of any part of stock in contact with rear rest bag shall not exceed 30mm.
- 4.8. Sights
 - 4.5.8 Telescopic sight magnification is unrestricted.
- 4.9. Rifle Support

- 4.9.1 A front rest or bipod can support the front of rifle and a rear bag to support the rear. Only connection permitted between front and rear rest is the rifle and ground surface.
- 4.9.2 One-piece rests are not permitted.

5. F Class Rim Fire - Targets & Ranges

5.1. Target Specifications

Distance	Approved Target
20m	20m TRA Benchrest
50m	50m Club or 50m Electronic Offset 50m TRA/ISSF 20 Bull
90m	90m Club or 90m TRA Benchrest

5.1.1 20 metre TRA BENCHREST TARGET

Each target card will have 20 competition aiming marks and minimum of 2 clearly marked sighting aiming marks.

10 ring	-1.6mm (± 0.05 mm)	7 ring	- 15.0mm (± 0.15 mm)
9 ring	- 5.5mm (± 0.1 mm)	6 ring	- 21.0mm (± 0.15 mm)
8 ring	- 10.0mm (± 0.1 mm)	5 ring	- 30.0mm (± 0.15 mm)

Black area is 5 ring region - (21.0mm –30.0mm)

10 Ring thickness - 0.2 to 0.3mm

9, 6, & 5, Ring thickness - 0.7 to 0.8mm

For scoring see ISSF Annex 5.2.2,3,4,5 – Rules for Paper Target Scoring.

Inner 10 is when a ten ring [dot] has been shot out completely as determined by use of 5.6mm plug gauge.

5.1.2 50 metre TRA CLUB SMALLBORE TARGET.

Each target card will have 4 competition targets plus 1 clearly marked sighting target.

5 scoring shots per competition target.

X Bull	- 10.4mm (± 0.1 mm)	5 ring	- 106.8mm (± 1.0 mm).
10 ring	- 23.5mm (± 0.1 mm)	4 ring	- 123.5mm (± 1.0 mm).
9 ring	- 40.2mm (± 0.2 mm)	3 ring	- 140.1mm (± 1.0 mm).
8 ring	- 56.8mm (± 0.2 mm)	2 ring	- 156.8mm (± 1.0 mm).
7 ring	- 73.5mm (± 0.2 mm)	1 ring	- 173.4mm (± 1.0 mm).
6 ring	- 90.1mm (± 1.0 mm).		

Black: solid from part of 4 - 112.4mm to middle of target

Ring thickness: - 0.2 to 0.3mm.

Inner ten: marked with a cross through the target centre.

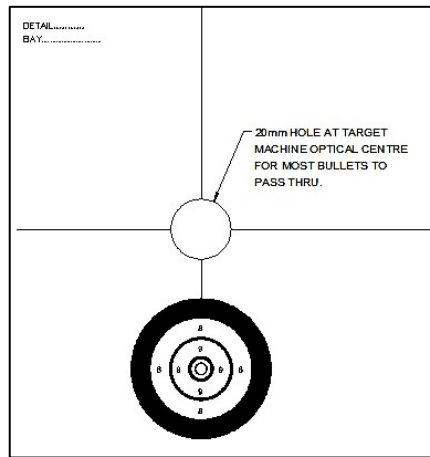
Separation between target centres: minimum 180mm.

Minimum visible size of target card: 500mm x 380mm.

5.1.3 50 Metre "F/RF" BENCHREST ELECTRONIC OFFSET TARGET.

An offset target as specified in TRA Rule A.21.4 will be used by scoped rifles for sighting when shooting on electronic target machines which do not normally provide a suitable target.

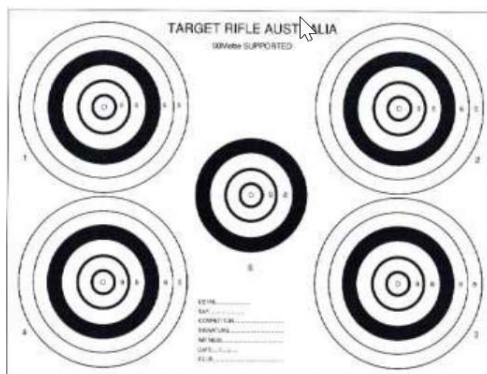
This target is to be positioned as close as practical to the centre of the electronic target, but not within the zone where the electronics would register a valid score. (Suggest 45 to 50mm above and/or below centre of the electronic target)



Typical offset target for 50 metre electronic machines

5.1.4 90 metre "F/RF" TARGET

Each target card will have 4 competition targets plus 1 clearly marked sighting target. 5 scoring shots per competition target.



- Inner ten: - 5.2mm (±0.2mm)
- 10 ring - 26.8mm (±0.2mm)
- 9 ring - 56.8mm (±0.2mm)
- 8 ring - 86.8mm (±0.2mm)
- 7 ring - 117.8mm (±0.2mm)
- 6 ring - 146.8mm (±1.0mm)
- 5 ring - 176.8mm (±1.0mm)

Typical 90 metre F/RF target allowing 20 x Competition shots.

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

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

10 & 9 Ring thickness: - 3.0 to 3.1mm

6 & 5 Ring thickness: - 1.0 to 1.1mm

Inner 10 Ring thickness: - 0.5 to 0.6mm.

Separation between target centres: - Minimum 178mm.

Minimum visible size: - 510m x 380mm for
4 competition targets plus sighter.

For Paper Target scoring Rules see ISSF Annex 5.2.2,3,4,5

6 F Class - COURSE OF FIRE

The "competition Course of fire" for all F Class Rimfire 20m, 50m & 90m ranges will be thirty (30) minutes for unlimited sighters plus twenty competition shots.

END OF DOCUMENT