

Extracts from a Basics of Full Bore Target Rifle publication
by the National Rifle Association of Australia, 1982

The explanation of the basics techniques of the Target Rifle discipline as copied into this document is as relevant now as it was in 1982. Please excuse the imperial measurements. There have been “concessions” in the equipment that is legal in Target Rifle competition now compared to 1982: in particular “eagle eyes” in the foresight tunnel to enlarge the sighting picture. The biggest reason, however, for the shrinking of group sizes since 1982 has been the better projectiles that are now legal in Target Rifle and our bullseye sizes continue to shrink in order to restore the challenge.

No eagle eye, and no projectile can make up for a less than perfectly executed shot. The only way to master the basics of full bore target rifle is via live practice and dry practice. And except for the gifted few, it will takes someone at least 100 hours of actual practice, and lots of trial and error, to just get slings / coats / mitts / spotting scopes / ... and yourself to all work together effectively.

You will soon also have to take on wind reading – knowing how much to adjust your sights for the effect of the wind’s speed and direction. Learning to care for your own equipment is then the next big thing, and then you might think on how to manage your own sports psychology – 35 years later ...

Compared to F Class Standard, the degree of difficulty of Target Rifle is about 20 times greater – to support that assertion, just think on why the central bullseye and the ordinary bullseye both get 5 points in Target Rifle while they get 6 points and 5 points respectively in F Class Standard. That said F Class Standard competitions are just as much fun and increasingly more difficult to win as their relative popularity grows. The discipline you pursue is your choice entirely.

Readers are also invited to revisit the e-target demonstration video available on the internet at: <http://www.electarget.com/links.html> As noted elsewhere, this will give you a feel for target rifle (except that we load singly rather than via a magazine) in the form of moving, colour pictures.

David McIntosh, July 2009

AN INTRODUCTION TO FULL BORE TARGET RIFLE SHOOTING

PUBLISHED BY THE

NATIONAL RIFLE ASSOCIATION OF AUSTRALIA
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THIS BOOKLET INTRODUCES THE BEGINNER TO THE
SPORT OF FULLBORE TARGET RIFLE SHOOTING. MANY
FACTORS CONTRIBUTE TO THE SCIENCE OF
MARKSMANSHIP. HEREIN ARE SET OUT SOME BASICS
OF THE SKILLS. TEXTBOOKS RECOMMENDED WILL
PROVIDE ADVANCED INFORMATION AS YOU DEVELOP
YOUR SKILLS AND APPETITE FOR ADVANCED
INFORMATION.

SIGHTING

Target

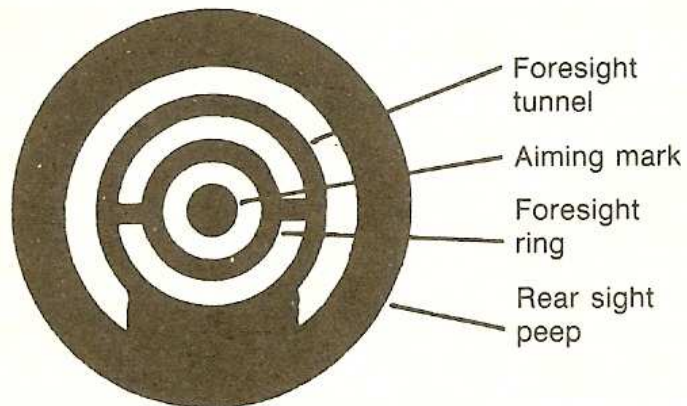
Check your target number for every shot fired. Don't fire at the wrong target.

Rifle Upright

Check that cross bars in foresight, wind arm on rear sight are horizontal to ensure rifle is not canted to left or right.

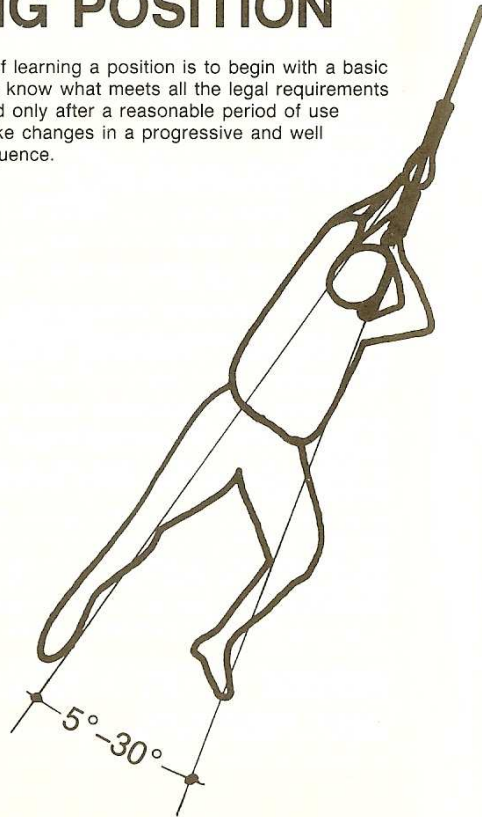
Sight Alignment

Centralise the foresight in the rear peep sight and then concentrate on placing the aiming mark on the target in the centre of the foresight ring. Focus on the foresight ring and if the aiming mark is central, fire with minimum delay.



FIRING POSITION

The best way of learning a position is to begin with a basic position. Get to know what meets all the legal requirements of our rules and only after a reasonable period of use should one make changes in a progressive and well considered sequence.



1. **Orienting the position:** Should be oriented so that the natural aim is spot on. Fine changes may be made with slight movement of the leg or moving forwards or backwards of upper body. Major changes should be made by reorienting the whole position.
2. **Assuming the position:** To assume a good prone position, the shooter lies between 5 and 30 degrees to the left of the line of fire. The body is not twisted but is stretched out and relaxed—the spine is straight.
3. **Position of the left leg:** The left leg is roughly parallel to the spine with the toes pointed to the right or inward. The heel should not be forced down to the ground but relaxed. Pointing the toes outwards places a strain on the muscles of the left leg and forces too much body weight onto the right side and elbow.
4. **Position of the right leg:** The right leg is drawn up with the knee bent and is roughly parallel to the left leg with the toe pointed outward. The leg is brought up to—
 - (1) level the shoulders
 - (2) to free the right side of the diaphragm from the ground to allow for easier breathing.

However, drawing the right leg up too far adds too much pressure on the left elbow and can quickly become painful.

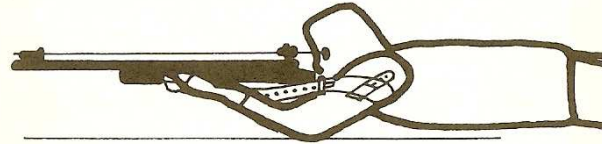
5. **Position of the left arm:** The left elbow is placed slightly to the left of the rifle. Under or to the right of the rifle strains the ligaments and muscle of the upper torso. The placement of the forend stop is determined by the length of the shooter's arm. Normally the hand exerts no pressure on the rifle.
6. **Adjusting the Sling:** The sling should be adjusted so that it supports the weight of the rifle. The left hand should be snug against the forend stop, and the sling adjusted so that it will produce the least amount of pulsebeat.

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7. **Positioning the right arm:** The right elbow is placed a comfortable distance away from the body. Too close to the right side it will raise the shoulder to an uncomfortable position and an unstable position will result. The right hand may grip the stock with any degree of pressure. The important factor is that it be the same for each shot. The thumb can be over or alongside the stock. The position of the finger on trigger is also a shooter preference but it should be clear of the stock so when pressure is applied to the trigger it is also not applied to the stock.
8. **Positioning the Rifle:** The butt must fit snugly into the shoulder. The point of greatest importance is that the rifle is placed in the same place each shot.
9. **Positioning the Head:** When the shooter is in position and places his head on the stock, he is looking through the sights. The head pressure on the stock should be constant. Erect as possible with good eye relief 5-15cm. (e.g. The distance of your eye from the back sight).

Sling

The sling may be single or double point and its arrangement in relation to the rifle and forward arm will vary according to the individual preference of the shooter. It may be supported on the forward upper arm by a cuff or hook and a hand stop and glove may be used for the forward hand.



Height

The wrist must be, by the rules, at least 10cm from the firing mound beneath the holding arm.



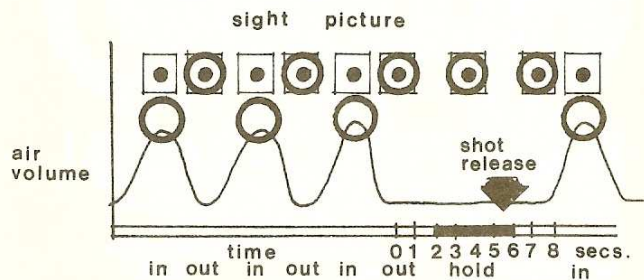
BREATHING

Correct breathing is essential for steady and proper body functioning. Oxygen in the right amounts is important to—

1. Muscle steadiness and control
2. Peace of mind and concentration.
3. Clear vision.

Therefore, as explained in the diagram below—

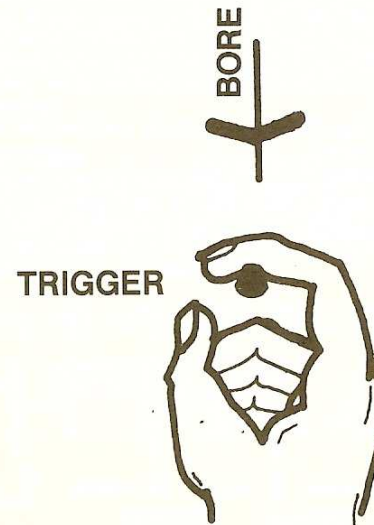
4. Breathe normally until hold settles and is steady.
5. Then suspend breathing when sight picture appears correct.
6. Only hold breath for a maximum of 6-8 secs.
7. Release trigger evenly in this time.
8. If shot not fired in time, start again.



TRIGGER

Most full bore target rifles are fitted with a single stage trigger, i.e. one movement releases the shot.

Sensitivity of feel is required to release the trigger without causing any movement to the rifle and pressure is gradually applied as the aim picture is seen to be correct, by the first crease, or joint of the index finger of the firing hand, in a direct line with the bore of the rifle.



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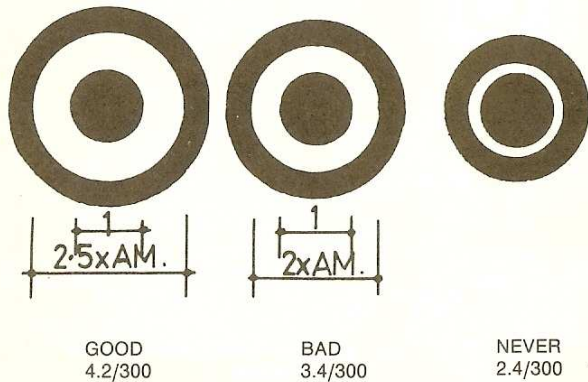
SIGHT SIZES

Principles

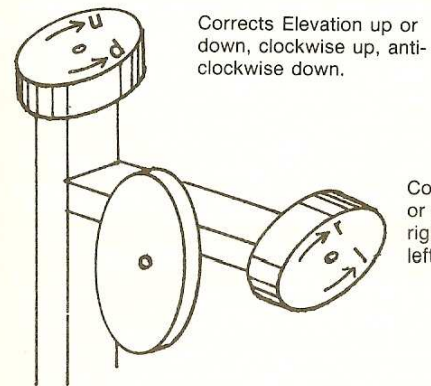
Ring size **must** be large enough to enable the shooter to visually detect a change in sight picture.

The aiming marks (black centres to targets) currently in use in Australia subtend a size from 1.7mm at 300 yards down to 1.0mm at 900 yards, therefore recommended ring sizes are from 4.2mm to 300 yards down to 2.5mm at 900 yards.

Rear peep size should always be small enough to provide clear focus of both the aiming mark and the foresight element, usually between 1.0mm and 1.5mm.



REAR SIGHT USE



On most popular sights in use on target rifles, a degree of elevation or windage movement on the rear sight will move the shot on the target one inch (1") for each one hundred yards (100 yds.) of range, 3" at 300 yds. up to 9" at 900 yards. Various sights use differing numbers of clicks per point, varying from 2 to 3 to 4. Know what sight you are using.