



## 2022 KING OF 1 MILE SOUTH AFRICA (KO1M SA) 2022 KING OF 2 MILES SOUTH AFRICA (KO2M SA)

### MATCH RULES [Version 2/2022]

#### GENERAL

1. Standard Range Rules & Etiquette as internationally accepted will be enforced & expected. For example, competitors will be adequately dressed in appropriate shooting attire, the Range Officers commands will be followed without question & are accepted as final.
2. It is envisaged that all competitors are deemed competent to transport & operate their respective firearms in a legal & safe manner. A copy of the applicable license or permit for the weapon must be presented at the registration & weigh-in day as verification.
3. Two Shooting Positions will be used, each approximately 3m x 3m, separated either by a blast barrier or sufficient distance apart. For high count match registrations, both shooting platforms may be used simultaneously. For days with a lower number of participants like Finals, the general format is that the one Team engages the course of fire, whilst the other Team will have the opportunity to setup & make ready.
4. A generic blast mat (tarp) will be on the shooting position at all firing positions.
5. All shooting will be done prone from the shooting platform. No Bench rest shooting is allowed; however this may be modified & possibly vetted by KO2M/FCSA to enable participation by shooters with specific disabilities.
6. Each Shooting Position will have a dedicated SAFE AREA. Shooting Teams will be called up by the Range Officer to wait in their respective Safety Areas with all their equipment. Once the preceding Team has vacated the shooting position & on command of the Range Officer, the next Team may proceed from the Safety Area to the respective shooting position. Any equipment malfunctions may be addressed in this area under the Range Officer &/or Match Director's control.
7. Event Format: Day 1 KO1M SA Qualification; Day2 KO2M SA Qualification. Day3 KO1M SA & KO2M SA Finals.
8. Only one Team will be allowed on each shooting position at a time.
9. A random sequence generator will determine the shooting order.
10. Radio & wireless communication style hearing protection is not allowed unless it operates on a hardwired connection between shooter & spotter only. No person besides the spotter & shooter may be able to receive or transmit on this hardwired system. Noise cancelling hearing protection is allowed.



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11. Eyewear & Hearing Protection is mandatory whilst on the shooting position. The shooter must keep their eyewear correctly fitted at all times whilst shooting. Raising the glasses onto ones forehead is not permitted whilst shooting as this negates the very protective function they were designed for. Spotters may raise their glasses whilst on the spotting scope.
12. Chamber Flags are mandatory. Before any firearm is moved, it must have a clearly visible chamber flag inserted into the chamber. If you do not have a chamber flag, these may be obtained at the event. Any rifle found being moved or handled behind the shooting positions without chamber flag inserted will result in immediate disqualification of the Shooter. No firearm to be pointed in the direction of the crowd, judges or range officers when leaving the platform, even if the bolt is removed or a chamber flag inserted.
13. Commencement of fire will only take place with the Range Officer in attendance & by his command. Similarly, a ceasefire command issued by the Range Officer must be immediately complied with, no objections will be entertained.
14. The “failure to do right/to follow the” rule is in effect for this competition. The Match Director can disqualify any competitor for attempting to stretch the letter of the rules or trying to gain an unfair advantage, which is against the spirit of the competition.
15. Within the confines of the competition, NO rifle is permitted to be used more than once a day. If a weapon is shared, the following criteria applies:
  - The Competitors must volunteer this information during registration & prior to the qualification shoot.
  - Should both competitors qualify for the Finals, then they must nominate which shooter will go through to the Finals.
16. No Team will be permitted to participate whilst carrying a handgun, holstered or not. Typically with the Shooter lying prone, his sidearm will be pointing back at his spotter, the spectators & the dedicated scorers/spotters & thus is viewed as unsafe. Please stow your handgun in an appropriate & secure place prior to accessing the shooting positions.
17. All Impact Xtreme Shooting Ranges are sterile ranges, meaning no practicing is allowed on the course prior to the competition. Any team found guilty of this, will be immediately disqualified from the match.
18. Spectators must stand far enough away so that they will not disturb (or communicate with) the team currently shooting. A spectator area & tent will be demarcated where live target cam feed may be streamed.
19. Nobody may assist the spotter or shooter Team with Impacts or wind information as this provides the Team with an unfair advantage. This may lead to loss of points or in some cases disqualification. This will be decided by the Match Director at the time & this decision is final.
20. A further concession with the sole aim of promoting & growing the ELR Sport is as follows: Once the official KO1M SA & KO2M SA Qualification & Finals has been shot, scored & completed, the range/s may be kept open to give shooters the opportunity to engage any of the Targets. This is subject to the amount of daylight remaining & is at the Match Directors discretion.
21. The Range will not be equipped with any wind flags. Shooters must read conditions & use natural phenomena to determine wind velocity & direction. No wind instruments or indicators will be allowed forward of the shooting position.

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### TEAM

22. This is a team competition. Each team consists of up to 2 people, namely shooter & spotter. This team remains the same from the preliminaries all the way through the finals. No addition or substitution will be allowed for the finals. A Team may also consist of 1 Shooter only.
23. The Spotter/Shooter Team must remain the same throughout the Qualification & Finals stages. The same 2 people may switch roles as shooter/spotter to form & register another Team, which must remain the same throughout the particular events Qualification & Finals stages.
24. A Spotter can spot for one Shooter only. A spotter cannot spot for multiple Shooters.
25. The Team is responsible for its own sighting and adjustments after impacts.
26. The shooter must make all adjustments to his/her rifle system once the string of fire begins. Examples, adjusting height of bipod, adjusting the scope dials or handling the ammo/loading the rifle. Once the string of fire begins, the shooter will obtain any forgotten equipment they require.
27. No Team may directly view the video feed from cameras, drones or receive ANY signal of any type (i.e. Doppler Radar, Thermal etc) from outside the firing point whilst shooting.
28. The Event's dedicated Spotter will provide a clear and concise auditory indicator when a target has been hit. This will be on the form of a bell or chime only, there will be no calling of "IMPACT" or "HIT". Similarly, a MISS will not be acknowledged or called by the official scoring Team.
29. With exception of the ammunition, shooting mat and blast sheet, the shooter has to be able to carry all his equipment to the line in only one trip. Allowances will be made for shooters over 65, shooters with medical mobility conditions and disabled people.
30. Once shooters have finished their shooting string, they must quickly remove their equipment to allow the next team to set up. Both the previous and next teams will handle weapons UNLOADED (magazine out) and with a CHAMBER FLAG inserted to indicate an EMPTY CHAMBER.
31. Teams are responsible for knowing their shooting order. Failure to arrive on time could lead to disqualification. Teams that are deemed to purposely "no-show" to get weather advantage will be disqualified.

### EQUIPMENT

32. Max Rifle mass in ready to fire configuration: KO1M SA <11.8kg (26lbs); KO2M SA max. <18.14kg (40lbs) is allowed.
33. Rifle weight is determined by its "Ready to fire" configuration. This includes bipod, monopod, brake/suppressor, charlie tarac, wedge etc: Only centrefire rifles are approved for this Event.
34. Mass of all other shooting equipment is limited to 11.3kg (25lbs).
35. Conventional Tactical rifle optics and spotting scope systems are allowed. (except Laser Scopes with computing ballistic software).
36. Suppressors & Muzzle Brakes are allowed.

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37. KO1M SA Caliber Restriction: max .338 (8.585mm)
38. KO2M SA Caliber Restrictions: max 50BMG (12.7mm)
39. Only Tactical Type Bipods are allowed as described in point 41, no F-Class Bipods.
40. The bipod can only be attached to the rifle at a single point. Having it attached to a RRS/ARCA rail or BipodExT system (in each case is mounted parallel to the bore) is allowed & can be moved during the course of fire. Bipod legs must be capable of folding or otherwise collapsing along the length of the rifle. In the collapsed position, the bipod & everything else on the rifle cannot exceed a width of 203.2mm (8 inches). The only mechanical elevation adjustment in the front portion of the rifle & bipod system must come from the independent movement of each of the bipod legs. (Note: This does not limit the use of a monopod located near the rear of the rifle). The leg can only be attached to the rest of the bipod (with the exception of springs designed for rapid deployment like on a Harris) at a single point. The folding or extending portions of the legs do not require tools to deploy/operate & if asked to demonstrate, the shooter must be able to deploy the bipod from the fully folded & collapsed position into the firing position in under 10s.
41. The bipod may only have two points of contact with the ground. The foot of the leg that comes in contact with the ground may not exceed 100mm (4") in width or length. The rifle and bipod must remain ridged when firing; there can be no recoil damping or movement of the rifle in relation to the bipod in anyway. Nothing can be placed at the top of the bipod/rifle to put additional weight/support. Common example is a sandbag etc.
42. No electrically operated raise/lower bipod adjusters are allowed. Exception is made for competitors with handicaps that have been cleared by KO2M/FCSA prior to the competition.
43. Sharp pointed bipod feet will be allowed, but must be used on a wooden, plastic or aluminium block or any other material so as not to damage the blast sheet.
44. The rear of the rifle may be supported by a bag or pad of any kind, a monopod or the shooter (with his arm for example) but not an adjustable style rest that is not attached to the rifle.
45. No weapon alibis. After a rifle has a second malfunction of the same type, any additional malfunction will disqualify the shooter and the rifle will be removed from the line. Once a malfunction has been detected, wait for the dedicated range official to inspect & determine course of action. Permission may be given by the range officials to the shooter to get additional help in clearing it.
46. Time does not stop for rifle or equipment malfunctions.
47. At anytime, the match director/range officer may disqualify the shooting team if he deems the weapon or team to be unsafe.

### PROTESTS

48. Any Hit/Score protests must be submitted within 1.5hours after the completion of the days official course of fire & range closure. The protest must state which target & which shot on that target is at question. After this challenge period has ceased, all hits as recorded will be deemed final.
49. A fee of R250 will be charged per hit challenge. If you are successful, you will receive the R250 back. However, if the official scoring is deemed correct, the R250 will be retained.

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50. Should a Teams score be affected by an organisational mistake by the KO2M SA Team, incorrect hit/miss call the Team acted on, camera failure or broken target etc... the Match Director may allow the Team to re-engage the stage as follows:

- The team will repeat the stage from the moment the problem occurred. They will fire 1 round, not for score, on the previous target (as required) and then continue for score until the end of their time or alibi session. The goal is to give the team a fair chance to finish the stage without a complete reshoot, due to time constraints.
- The Match Director as always will decide on how to proceed, and his decision is final.

### *TARGETS*

51. KO1M SA Distances: Qual. 600-1150m (656-1257yds); Finals 1256-1660m (1374-1815yds).

52. KO2M SA Distances: Qual. 1400-2257m (1531-2468yds); Finals 2500-3272m (2734-3578yds).

53. Target locations, ranges & incline angles will be posted the evening before the first day of competition on the KO2M SA Facebook Page & Telegram Group. Teams will be given a map of the target locations and ranges as determined by a Professional Land Surveyor. Competitors are welcome to use their own range finding equipment if they so prefer.

54. A target is deemed "IMPACT" when it is the first thing that the bullet strikes after leaving the muzzle. Frame, strap and ground strikes that may cause the target to move are considered missed. The call of the dedicated spotters & scorers is final & will be indicated by primarily an auditory or verbal confirmation. No misses will be announced.

55. The Cold Bore Target must be directly engaged & cannot be used as an opportunity to shoot at other targets or land features to gain unfair wind data advantage. Shooters found guilty of this will be disqualified immediately.

56. Target Hit/Misses verification will be determined primarily by the Target Camera Feed & secondary by dedicated spotters. A HIT will be announced by auditory means, for example a bell or chime. Misses will not be indicated audibly.

### COURSE OF FIRE:

57. Teams will be given a map of the Target locations & officially Surveyed ranges in Horizontal distance (corrected) & incline distance with angles. Competitors are welcome to use their own rangefinders if they choose to.

58. All KO1M & KO2M Competitions are HIT TO ADVANCE, instead of the previous DISQUALIFICATION style format.

### DAY 1 & 2: KO1M SA & KO2M SA QUALIFICATIONS [Round Count 13]

59. Shooters will have 5 minutes to set up and 9 minutes to complete the 5 Target string. Minimum scoring shots per target are as follows:

- CB: 1 Shot
- T1: 3 shots
- T2: 3 shots
- T3: 3 shots
- T4: 3 shots

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60. Time permitting, the shooter must fire a minimum of allocated shots as above & hit the target at least once in order to score & advance to the next target. If no hits are achieved within the allowable scoring shots, the shooter must carry on shooting until an impact is achieved.
61. Hits after the minimum allocated number of shots per Target will allow progression to the next target, but will accrue no points.
62. For example a shooter may continue to shoot all remaining 12 shots after the cold bore at Target1 in an attempt to try hit it.
63. Shooter's course of fire is halted by either Time or number of rounds fired.
64. The top scoring teams will advance to the Finals. The number of top teams selected will be determined on the day & announced that evening. Generally, a minimum of 10 Finalists or if equal or greater than 55 shooters, Finalist value is determined by dividing number of shooters by 5.

### DAY 3: KO1M SA & KO2M SA FINALS [Round Count 15]

65. Shooters will have 5 minutes to set up and 10 minutes to complete their 3 Target string.  
T1: 5 shots  
T2: 5 shots  
T3: 5 shots
66. Time permitting, the shooter must fire a minimum of five shots & hit the target at least once in order to score & advance to the next target.
67. Hits after the fifth shot will allow progression to the next target, but will accrue no points.
68. Shooter's course of fire is halted by either Time or number of rounds fired.

### *SCORING:*

69. The following new scoring formulae has been adopted to fix some problems associated with the old one.

$$\text{SCORE} = \text{Int}((\text{Dist} * ((\text{Dist} + 100) / 1500)) / 2)$$

Mathematically, the curve of the new formulae is a power law, but it can be linearised by making a simple logarithmic transformation of the form:  $\text{Ln}(P) = \text{Ln}(A) + B * \text{Ln}(\text{Dist})$   
Where: **Dist.** - is the distance to the target; **P** – is the score; **A & B** – are constants

71. While this or any other scoring formulae is not unit-specific, its recommended to use YARDS to establish a common scoring system among all countries hosting KO1M & KO2M matches. Not adopting a standardised formulae with a common distance unit is not desirable for all countries, regardless of their official distance unit.

The design of this formulae is based on the following criteria:

- Mathematically robust, not exhibiting the problems of the old formulae at shorter distances.
- The regression curve yields a  $R^2$  value of 0.999 which demonstrates that the constants have been the result of a calculation & not arbitrary choice.
- The correlation at any distance, whether low, intermediate, or high, is perfect.
- It is a universal formula, since it can be applied to any desired distance, without any restriction.
- It is correlated to the reality of ballistic performance in terms of the probability of impact at

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different distances, in a proportionate & logical way.

- Consequently, the value of the score is fair at any distance since it follows a progression comparable to the increase in ballistic dispersion.