VIRTUAL ⊕ RANGE TARGETING™

The Long Distance Training Solution target has two options for the grid in either MilRadian (MRAD or MIL) or Minute Of Angle (MOA). Each "cell" in the grid is measured at .1 MIL or .36 inches square for MIL and .25 inches square for MOA. Each RED line represents a full MIL (or full MOA), colored red for easier readability when counting MILS and MOA. Additionally, black hash marks are place at the .5 MIL locations on the MIL grid (only), again, for quicker acquisition of elevation and/or windage adjustments.

ELEVATION

Description:

Lane 3 is comprised of a series of different sized bullseyes stacked vertically on the page. They are labelled as R0 through R6. Each bullseye and gray background square represents a 10 inch plate at the certain yardages, yet to be determined as part of your ongoing education.

Lane 3 can be thought of as a continuation of Lane 1 when it comes to dialing your scope's elevation turret to hit a simulated further target. (See "Recommended Uses, subsection 3 in the "Zero and Practice" guide.)

In this sense, you will be AIMing (remember POINT Of AIM) at R0, dialing to certain values on your scope's elevation turret, and IMPACTing (remember Point Of Impact) various targets R1 through R6. However, we do not give you such obvious details as yardage or the appropriate click values for your scope. This is our introduction to the use of a DOPE card or ballistic calculator. We have developed a DOPE card "cheat sheet" for you which corresponds specifically to this target. You can refer to this DOPE card, find the target you wish to IMPACT, and dial the value(s) on the DOPE card.

Things begin to get confusing here, but bear with us. We MUST discuss a DOPE card and how it is developed. Grab a cup of coffee and read on.

You have a rifle. You go to the store and buy a box of ammo. If you buy the SAME ammo every time, you can develop a reasonably consistent DOPE. If you jump around and buy the cheapest sale item each time, your accuracy will fail. Don't worry, I am not trying to talk you into expensive ammo. Yet. You will make that determination all by yourself, somewhere down the line. For now, let us assume you have a rifle, a zeroed scope, and decent ammo that you buy every time.

On that box of ammo, you will find some data. Velocity. Bullet weight. Ballistic Coefficient or BC. Sometimes you will see the barrel length that determined the velocity. These are good STARTING numbers but they will change based on YOUR experience shooting them out of your gun.

For now, we will input those data points into a ballistic calculator. These calculators can be found online for free, or free downloadable apps for your smart phones. Some allow you to export tables so you can print your ballistics table. Some popular apps include Hornady and Athlon. It would be counterproductive to try and teach you how to use the calculators. Suffice it to say, you will need the numbers on that box of ammo, as well as features of your gun and scope. Your barrel has a certain "twist rate", and whether it is a RIGHT or LEFT twist. Your scope rings are a certain height from the center point of your barrel, altitude of your location, humidity and barometric pressure....all this will be fed into the calculator to give you the best shot at an accurate table.

Here is a sample of MY ballistic table. I use custom handloads developed specifically for my rifle. That is where you realize the most accuracy.

6.5 CREEDMOOR BALLISTICS

	SMK 140gr	SMK 140gr	6.5 CM	SMK 1.31"	H4350 - 41.7	2800 FPS	
Range	Drop MIL	Velocity	Time	Spin Drift	Spin MIL	Drop "	Energy
0	0.0	2786	0	0.0	0.00	-3.0	2406
25	-2.0	2743	0.03	0.0	0.01	-1.8	2344
50	0.5	2701	0.06	0.0	0.01	-0.9	2283
75	0.1	2659	0.08	0.1	0.02	-0.3	2222
100	0.0	2618	0.11	0.1	0.02	0.0	2165
125	0.0	2576	0.14	0.1	0.03	0.0	2108
150	0.1	2536	0.17	0.2	0.03	-0.4	2051
175	0.2	2495	0.2	0.2	0.04	-1.1	1997
200	0.3	2455	0.23	0.3	0.04	-2.1	1944
225	0.4	2416	0.26	0.4	0.05	-3.5	1892
250	0.6	2377	0.29	0.5	0.05	-5.3	1840
275	0.7	2338	0.32	0.6	0.06	-7.4	1789
300	0.9	2299	0.36	0.7	0.07	-10.0	1740
325	1.1	2261	0.39	0.8	0.07	-12.9	1692
350	1.3	2223	0.42	1.0	0.08	-16.3	1646
375	1.5	2186	0.46	1.1	0.08	-20.1	1599
400	1.7	2148	0.49	1.3	0.09	-24.4	1554
425	1.9	2112	0.53	1.4	0.09	-29.2	1510
450	2.1	2075	0.56	1.6	0.10	-34.4	1466
475	2.3	2039	0.6	1.8	0.11	-40.2	1425
500	2.6	2003	0.64	2.0	0.11	-46.4	1384

This table continues according to my settings. You could develop a table that increments every 100 yards, or every 50 yards. Each yardage will tell you how much to dial your scope in order to put the crosshairs on target at that distance and fire.

This is an invaluable tool to help you QUICKLY acquire the proper settings for your scope to fire and hit targets at known ranges. Most apps will allow you to type or dial a yardage, estimate a wind speed and direction, and it will give you your firing solution in elevation and windage.

Will you need to develop your own DOPE in order to use this system accurately?

No.

We developed a DOPE card that matches every bullseye on this target. Since this is a SIMULATION of long range shooting, we also simulate the DOPE values you have to use in order to make it work. However, when you get to a real long range, you will need to have developed your own DOPE as described above. For now, let us move on to the DOPE card which was included in this system by way of a QR Code printed on the bottom of the target.