

## Temporary Change to 100 Yard Range

Recently, on two consecutive days, bullets fired from pistols at the 100 Yard Range bounced off the turf and ended up falling on the Dynamic Range. In the first instance, the bullet hit a car that was parked down range for a training class. The second incident involved a bullet impacting near a group of people involved in a training class near the Dynamic Range impact berm. Chief Range Safety Officer Mike Holder brought this issue to the attention of the Board at the September Board Meeting. After discussion of alternative actions to take, the Board approve the CRSO to issue the following statement:

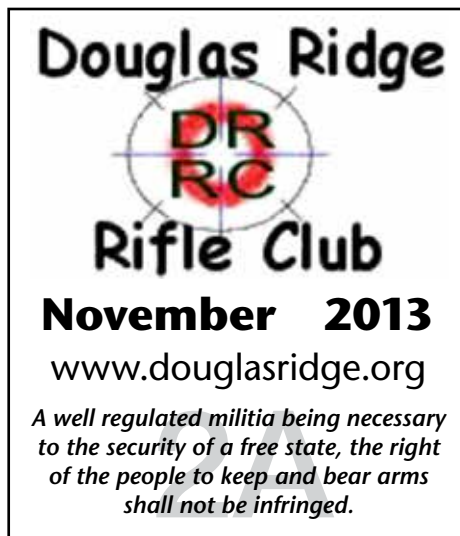
“Due to hazards observed from falling bullets being ricocheting over to the Dynamic Range, all pistol shooting from the 100/200 yard line is now temporarily suspended. You may still shoot your pistols on the Indoor Range, Silhouette Range, Dynamic Range and the Tactical Shotgun Range.”

While long term solutions are being explored, all questions and comments about this issue can be addressed to Mike Holder. His contact information is listed on the web site and in the newsletter directory.

## Watch Out Here Comes Christmas

*Nils Bittner, Christmas Party Chmn*

The Christmas party is getting near. I would like to thank all the folks who volunteered to help with the party. We have selected new Chefs this year. They are Jerry and Becky Cook. I would also like to thank Joe Keller and his wife for being the head Chefs



the last 5 years. For all of the members the Christmas party is Saturday, December 7th at the Mountain View Christian Church, 1890 N.E. Cleveland Ave., Gresham. The party starts at 6 pm till 9 pm. This party will be a potluck with the club furnishing turkey, ham, mashed potatoes, and homemade gravy, stuffing, rolls and butter. Along with the food the club will also furnish all of the eating utensils and beverages. I would like everyone else to bring your favorite dish or dessert. In addition to the great food. There will also be a raffle for a rifle of some type A spotting scope and gift cards. There will also be approximately \$2,000 worth of gifts to be given away you must be present to win. Put this date on your calendar we would love to see lots of DRRC members and their families.

## Ammo Restriction Reminder

*Joe Keller*

This year the clangers have all been replaced and rebuilt with AR500 steel. However, Ron Carey reports that recent damage has been observed that is due to armor piercing bullets. Please

remember that the Club SOPs restrict the use of armor piercing bullets on the range.

## Shot Curtain Project Sign Up

*Joe Keller*

Project Coordinator Ron Carey put out a call for volunteers at the October Membership Meeting on the 3rd. He is looking to collect a list of members willing to help on the project for a day, a week, or longer. All types of construction skills will be needed. Timing on the project is dependent on receiving final approvals from several government agencies, so it will be either this Fall or likely next Spring. The more help Ron can enlist from the membership, obviously the less he will have to contract out for additional project expenses.

If you are willing to assist in some way on the shot curtain project, please contact Ron and let him know, at 503/880-3076, or [ron.careycon@ipns.com](mailto:ron.careycon@ipns.com).

## New Secretary

At the Board Meeting on September 26th, Dyan Kirkpatrick was selected from a group of willing members and appointed by the Board as Secretary. Dyan fills the unfinished term that expires in 2014. Dyan joined the Club in February 2013. She lives in Estacada with her husband Tim, who is a Family Associate member. Her favorite shooting activity is Trap, so she is eagerly looking forward to completion of the shotgun curtain project. Please welcome Dyan to the Board and thank her for her service.

Thanks also go to the several

other members who were willing to serve, including Steve Lents, Lin Hledik and Patrick Meyer, who came to the Board meeting and volunteered.

## Minute Of Angle

*Ben Edman*

### *Minute Of Angle (MOA)*

One of the most important pieces of an Appleseed® is learning how to zero your rifle using Inches, Minutes & Clicks.

MOA and IMC can be a difficult concept to grasp, particularly when you're already overwhelmed with new information so here's a little primer on what is MOA and how to use IMC to make sight adjustments.

### *What is MOA?*

Most of the time when you are talking about angles we use degrees. One degree at 100 yd is 60". That's too big an increment to work with for most sighting systems. "Minute" equals 1/60th. So a Minute Of Angle is 1/60th of 1 degree.

What's the formula for calculating 1 MOA?

One MOA is 1 inch "PER" 100 yards (it's actually 1.047" but for all intents and purposes 1" works)

- 1 MOA is 1" at 100y
- 1 MOA is 2" at 200y
- 1 MOA is 5" at 500y
- 1 MOA is 3 3/4" at 375y
- 1 MOA is 1/2" at 50y
- 1 MOA is 1/4" at 25y

So if you have a "sub" MOA gun that means it will group less than 1" at 100 yd.

Appleseed® teaches techniques to be a 4 MOA shooter from unsupported (no bi pods or shooting benches) field shooting positions (standing, sitting, kneeling & prone). This means that at 25 yd you should be able

to shoot 1" groups. Four inch groups at 100 yd, 8" groups at 200 yd, 12" groups at 300 yd, 16" groups at 400 yd and be able to hit a 20" target (roughly man sized) at 500 yd.

Once you understand MOA and it's relation to the size and location of your groups on your target you can now make precision sight adjustments.

If you have a 5 shot group that measures approx. 1-1/2" at 25 yd. That means you shot a 6 MOA group (1 MOA at 25 yd = 1/4" - 1/4" goes into 1-1/2" 6 times = 6 MOA group). If that group was 3" left and 1-3/4" low and you want to make a sight adjustment:

Step 1: Calculate how many inches you want to move. 3" right and 1-3/4" up

Step 2: Convert inches to Minutes. 1 MOA= 1/4" at this distance and 1/4" goes into 3" 12 times or 12 Minutes. 1/4" goes into 1-3/4" 7 times or 7 Minutes

Step 3: Make the appropriate sight adjustment

This can be a little tricky. You really have to know your specific sighting system as to how many Clicks to put in per Minute. Generally speaking stock military sights (AR15, M1, M14) are 1 click per MOA. Most scopes are labeled under the cap rings 1/4" at 100 yd (or 1/4 MOA = 4 clicks per MOA) or 1/8" at 100 yd (or 1/8 MOA = 8 clicks per MOA) Red dots tend to be 1/2 MOA per click. It varies by sighting system.

Lets assume you have a 1/4" at 100 yd scope, you would put 48 clicks (12 MOA\*4 clicks per MOA) right and 28 clicks (7 MOA\*4 clicks per MOA) up.

If you had a 1/2" at 100 yd red dot, you would put in 24 clicks (12 MOA\*2 clicks per

*"Where an excess of power prevails, property of no sort is duly respected."*

James Madison

### General Meetings

2013: 12/05; 2014: 01/02, 02/06, 03/06

### Board Meetings

2013: 12/26; 2014: 01/30, 02/27, 03/27

## Club Directory

### Officers

President, Hal Halverson .....	503/667-4360
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Vice President, Joe Keller.....	503/760-3454
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Hunter's Safety, Larry Warren.....	503/816-7366
Hunter's Sight-In, Mark Edwards .....	503/705-5407
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USPSA Dan Carpenter.....	503/637-3537
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Youth Shotgun, Dick Jennings.....	503/655-5405

### Others

Chief Environmental Officer, Stan Pate.....	503/652-9931
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Club House .....	503/637-3131

# November 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<div style="border: 1px solid black; padding: 5px;"> <p><b>Calendar Codes</b></p> <ul style="list-style-type: none"> <li>• Trap      Trap Range</li> <li>• TH        Trap House</li> <li>• SC        Sporting Clays Range</li> <li>• LE        Law Enforcement (training)</li> <li>• NRA . . . NRA Classes</li> <li>• TSB       Tactical Shotgun Bay</li> </ul> </div>		<div style="border: 1px solid black; padding: 5px;"> <p><b>Calendar Codes</b></p> <ul style="list-style-type: none"> <li>• CH/Ind   Clubhouse &amp; Indoor Range</li> <li>• Arch     Archery Range</li> <li>• 100/200   100/200 Yard Range</li> <li>• Silh      Silhouette Range</li> <li>• LR        Long Range</li> </ul> </div>			<b>1</b>	<b>2</b>  <i>8:00 am - 7:00 pm NRA Basic Pistol Class (Ch/Ind)</i>  <i>9:00 am - 4:00 pm USPSA (Silh/TSB)</i>
<b>3</b> Daylight Saving Ends  <i>9:00 am - 3:00 pm Handgun Silhouette (Silh)</i>  10:00 am - 1:30 pm Trap At Sandy Gun Club	<b>4</b>	<b>5</b>  8:00 am - 12:00 pm All ranges Closed For maintenance  <i>4:30 pm - 8:00 pm JR Small Bore (Ch/Ind)</i>	<b>6</b>  <i>6:00 pm - 9:00 pm Ladies Night (Ch/Ind)</i>	<b>7</b>  8:00 am - 4:30 pm Long Range Day 8am-1pm (800/1000yd ) 1pm-4:30pm (300/600yd)  <i>7:00 pm - 9:00 pm General Meeting (CH/Ind)</i>	<b>8</b>  <i>4:00 pm - 10:00 pm Adult smallbore (Ch/Ind)</i>	<b>9</b>  8:00 am - 9:00 am Set Up time For Orientation(Ch/Ind)  <i>9:00 am - 5:00 pm Apple Seed (Shil)</i>  9:00 am - 12:00 pm Orientation (CH/Ind)
<b>10</b>  <i>9:00 am - 5:00 pm Apple Seed (Shil)</i>	<b>11</b> Veterans Day	<b>12</b>  8:00 am - 12:00 pm All ranges Closed For maintenance  1:00 pm - 6:00 pm Black Powder Cartridge (300- 800yd)  <i>4:30 pm - 8:00 pm JR Small Bore (Ch/Ind)</i>	<b>13</b>	<b>14</b>  8:00 am - 4:30 pm Long Range Day 8am-1pm (300/600yd ) 1pm-4:30pm (800/1000yd)	<b>15</b>	<b>16</b>  <i>9:00 am - 2:00 pm Black Powder Muzzle Loader(Shil/TSB )</i>  <i>9:00 am - 1:00 pm Hi Power (100yd ) reduced 800agg</i>  1:00 pm - 2:00 pm Boy Scout Troop 544 (Camp area)  1:00 pm - 5:00 pm Boy Scout Troop 544 (Ch/Ind)
<b>17</b>  10:00 am - 1:30 pm Trap At Sandy Gun Club  1:00 pm - 2:00 pm Boy Scout Troop 544 (Camp area)	<b>18</b>  <i>6:30 pm - 8:00 pm Long range Planning (Ch/Ind)</i>	<b>19</b>  8:00 am - 12:00 pm All ranges Closed For maintenance  <i>4:30 pm - 8:00 pm JR Small Bore (Ch/Ind)</i>	<b>20</b>  <i>6:00 pm - 9:00 pm Ladies Night (Ch/Ind)</i>	<b>21</b>  8:00 am - 2:00 pm PPB SERT Long Range (200/600yd )  <i>7:00 pm - 9:00 pm Board Meeting (Ch/Ind )</i>	<b>22</b>  <i>4:00 pm - 10:00 pm Adult smallbore (Ch/Ind)</i>	<b>23</b>  <i>8:00 am - 5:00 pm NRA Basic Reloading Class (Ch/Ind)</i>
<b>24</b>  <i>9:00 am - 5:00 pm 3Gun (Silh /TSB)</i>	<b>25</b>	<b>26</b>  8:00 am - 12:00 pm All ranges Closed For maintenance  <i>4:30 pm - 8:00 pm JR Small Bore (Ch/Ind)</i>	<b>27</b>	<b>28</b> Thanksgiving Day	<b>29</b>	<b>30</b>
				8:00 am - 4:30 pm Long Range Day 8am-1pm (800/1000yd ) 1pm-4:30pm (300/600yd)		

# Douglas Ridge Rifle Club

PO Box 307 • Boring, OR 97009

## Affiliations:



C5459



Formerly DCM



MOA) right and 14 clicks (7 MOA\*2 clicks per MOA) up.

Irons are even easier as they are frequently 1 to 1. Twelve clicks right and 7 clicks up.

This works no matter what distance you are shooting at. Put your target up at 100 yd and if you shoot 3" left and 1 3/4" low then you need to make a 3MOA (1 MOA at 100 yd is 1") adjustment right and a 1-3/4 MOA adjustment up. 12 clicks and 7 clicks in our 1/4" scope example.

Put your target up at 75 yd and if you shoot 3" left and 1-3/4" low then you need to make a 4 MOA (1 MOA at 75 yd is 3/4") adjustment right and a 2-1/4 MOA adjustment up. 16 clicks and 9 clicks in our 1/4" scope example.

If you don't know (or you want to verify) you can shoot a group at a known distance; say 25 yd.

Then make a 10 click adjustment and shoot another group (keep your Point Of AIM the same). Measure the distance between the groups and calculate how many minutes you moved and divide by the number of clicks you put in. You will now know how many clicks per MOA.

If you want to know how good your sighting system is: Shoot a 5 shot group. Make a 10 MOA adjustment to the right. Keep your same POA and shoot another 5 shot group. Make a 10 MOA adjustment down. Keep your same POA and shoot another 5 shot group. Make a 10 MOA adjustment left. Keep your same POA and shoot another 5 shot group. Make a 10 MOA adjustment up. Keep your same POA and shoot another 5 shot group. If you end up on top of

your first group then you have a very repeatable sighting system.

If all you want to engage is paper targets at the same fixed distance then there really is no reason not to guess and check; however, if you want to take your shooting to the next level where you can fully understand bullet drop, wind calculations and engage targets at varying distances you "must" understand how your sighting system works. Inches converts to Minutes converts to Clicks.

What about milliradians? 3.6 MOA per millirad. Maybe some other time.

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*"It has been said that all Government is an evil. It would be more proper to say that the necessity of any Government is a misfortune."*

James Madison