

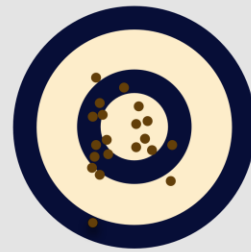


®

**ORION**  
SCORING SYSTEM

**DAISY NATIONAL BB GUN CHAMPIONSHIP  
STAT OFFICER AND LEAGUE TRAINING**

**ERIK ANDERSON PH.D.  
SHOOTER'S TECHNOLOGY LLC  
3 JULY 2016**



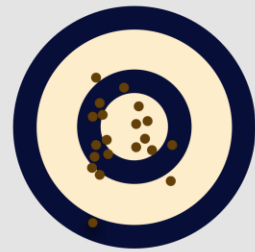
# LOGISTICS

- **Team Leaders Briefing**  
Saturday 14:15 to 15:00, team coaches only.
- ***Stat Officers and Coaches Clinic***  
*Sunday 10:00 to 11:00, open to all.*
- **Orion's Advance Topics: Online Results**  
Sunday 13:00 to 14:00, open to all but intended for experienced Orion users.
- **Please ask questions, make comments.**
- **Today's presentation available for pickup.  
Tomorrow's presentations via email.**  
[www.orionscoringsystem.com/52](http://www.orionscoringsystem.com/52)

**Read More**

[Past Clinics and Videos](#)

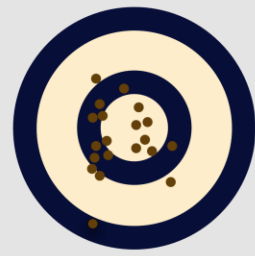
[Join Orion's Email List](#)



# AGENDA

---

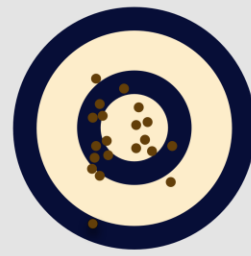
- Introduction to Orion
- BB Gun Competition Best Practices
- Teaching Marksmanship with Orion



# AGENDA

---

- **Introduction to Orion**
- **BB Gun Competition Best Practices**
- **Teaching Marksmanship with Orion**



# BB GUN SCORING AND ORION



**2012 Virginia 4-H Championship**  
World's First Electronically Scored BB Gun Match  
Scored with Orion



**2013 Georgia 4-H Championship**  
World's Largest BB Gun Competition  
Scored with Orion

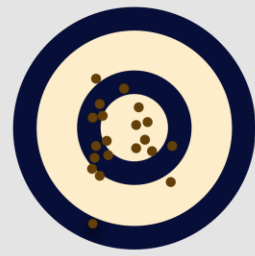


**2014 Daisy National Championships**  
First National BB Gun Championship  
Scored Electronically with Orion

**Q: Why is the sport going digital?**

**A: Orion is fairer, faster, and much more accurate.**

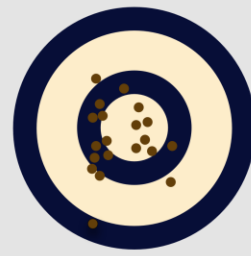
# WHAT IS THE ORION SCORING SYSTEM?



- An electronic scoring system: A tool to score targets.
  - Windows based software combined with commodity scanners.
- A tool to help run competitions.
- Online results provider.
- A tool to help teach marksmanship.

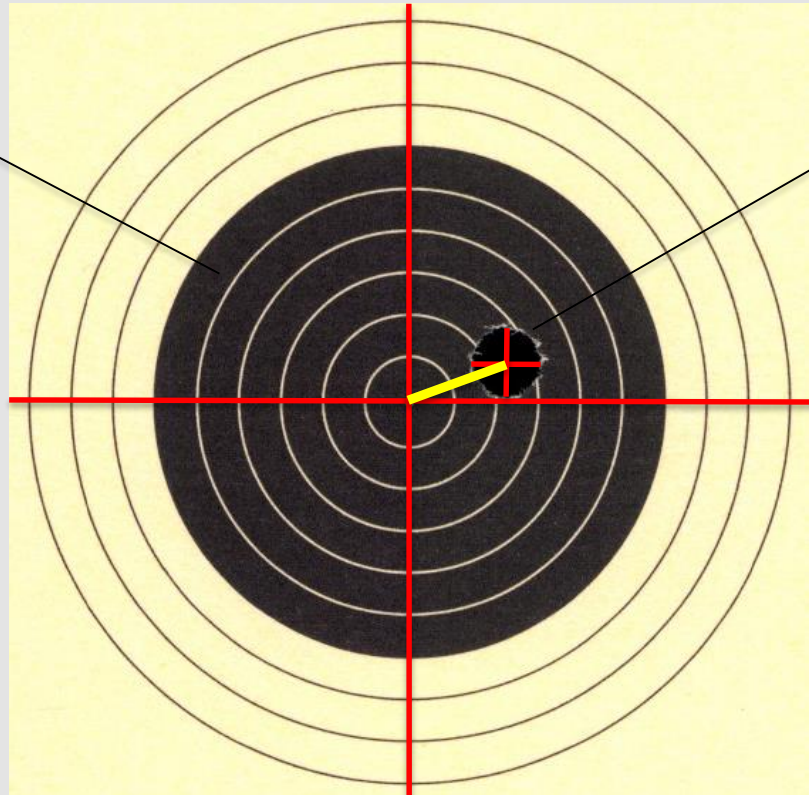






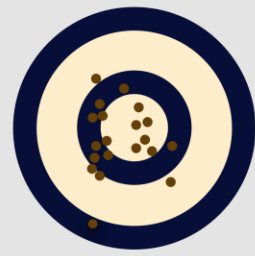
# HOW DOES ORION SCORE?

1. Orion uses the edge of the aiming bull to find the center of the target.

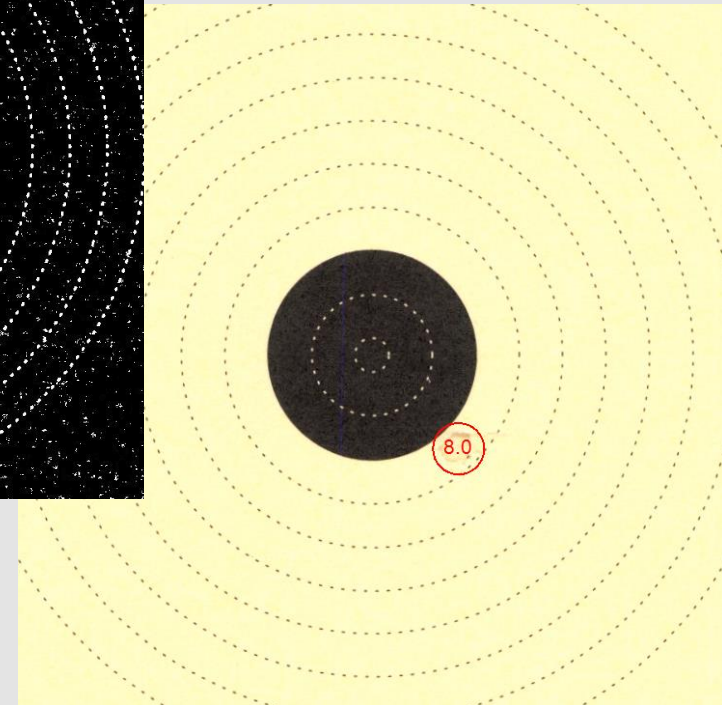
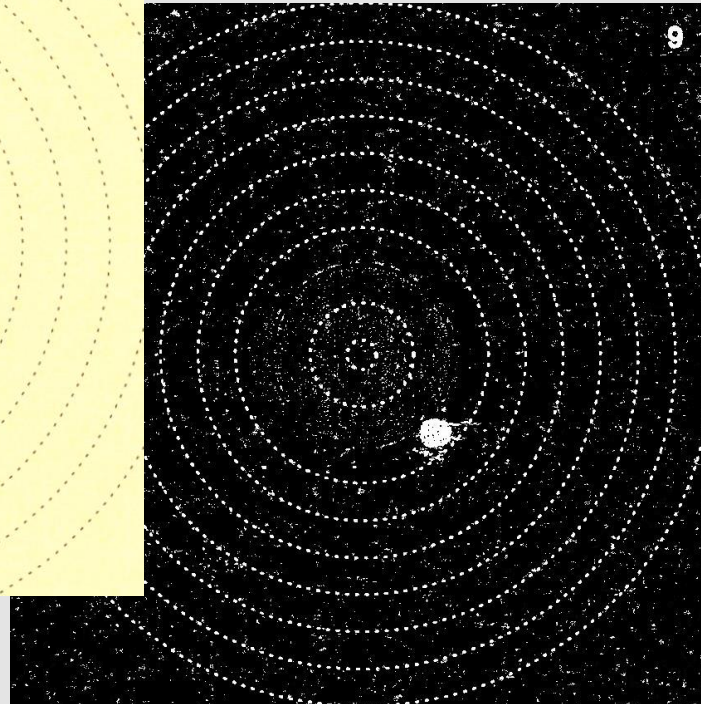
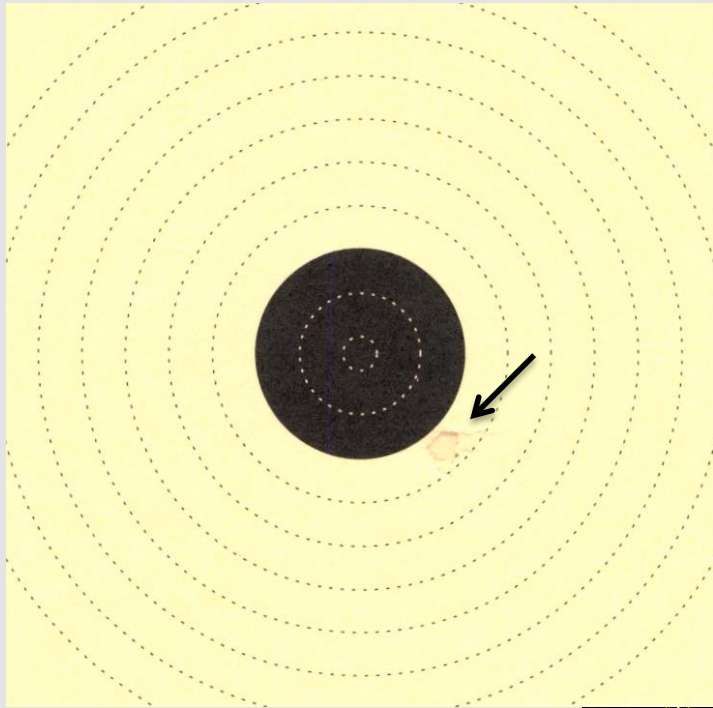


2. Orion uses the edge of the bullet hole to find the center of the shot.

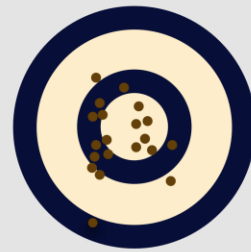
3. The distance between the center of the aiming bull to the center of the shot (i.e. the radial distance) is used to calculate the score value.



# HOW DOES ORION SCORE

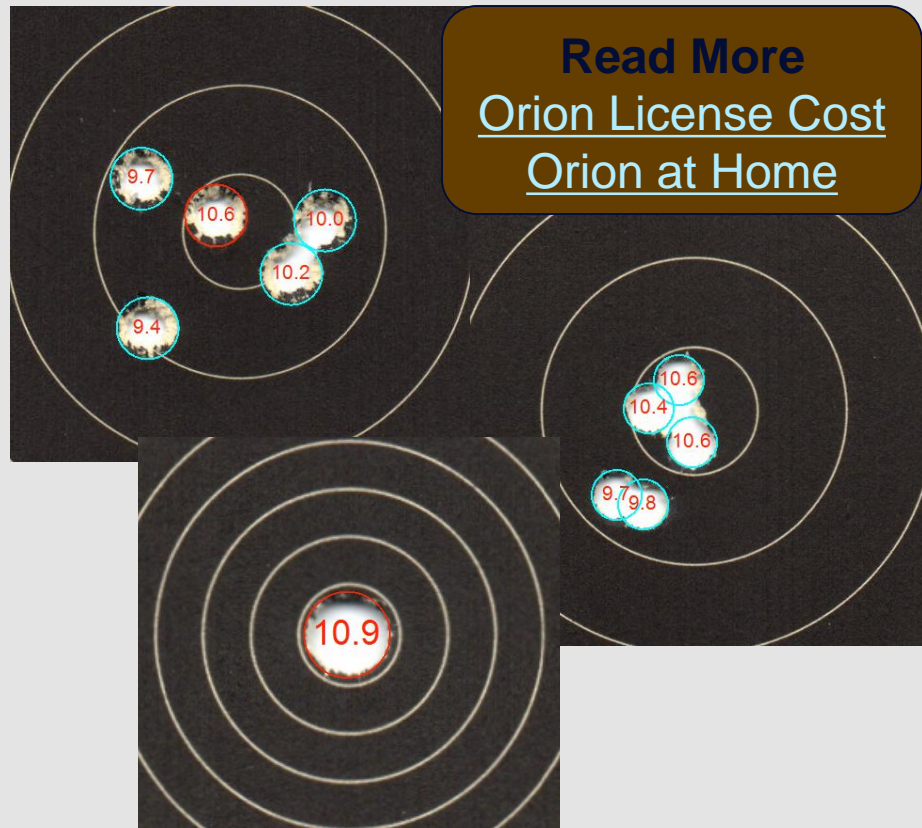




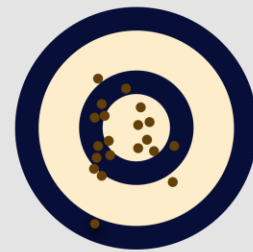


# LICENSING

- All encompassing license.
  - Scores all available disciplines.
- “Clubs” Pricing
  - \$498 first year license.
    - Includes first year league registration fee
  - \$98 each subsequent year.
- “Orion at Home” Pricing
  - \$58 per year.
- Includes software upgrades, online results, and support.



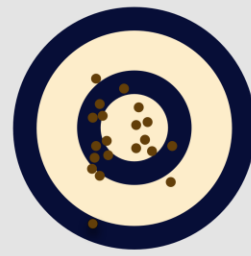
All Orion customers can now score, Air Rifle, Air Pistol, Smallbore Rifle, and more.



# SCORING TECHNOLOGIES

Discipline	Targets *
Air Rifle	10m Air Rifle (AR-5/10) 10m Air Rifle 5 Bull (AR-5/5) BMC Target
Air Pistol	10m Air Pistol (B-40)
BB Gun	5m BB Gun Competition (AR-4/10) 5m BB Gun Practice (AR-4/10) Test Answer Sheets
Smallbore Rifle	50ft Rifle (USA-50) Gallery League (A-17) 50m Rifle (A-50) 50yd. Rifle (A-51)
Smallbore Pistol	Slow Fire (B-2) Timed and Rapid Fire (B-3)
High Power Rifle Rimfire Sporter Silhouette Shotgun	Scanable Scorecards

\* Closest NRA equivalent target listed in parenthesis



# ORION'S SCANNERS



**Canon DR-M160ii**  
About 55 targets a minute.  
Ideal for small to large ranges with frequent use.



**Canon DR-6010C**  
About 55 targets a minute.  
Ideal for large ranges, frequent use, and single bull targets.



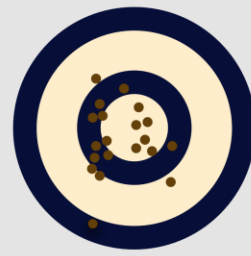
**Canon P-208**  
About 6 targets a minute.  
Ideal for home use and very small clubs.



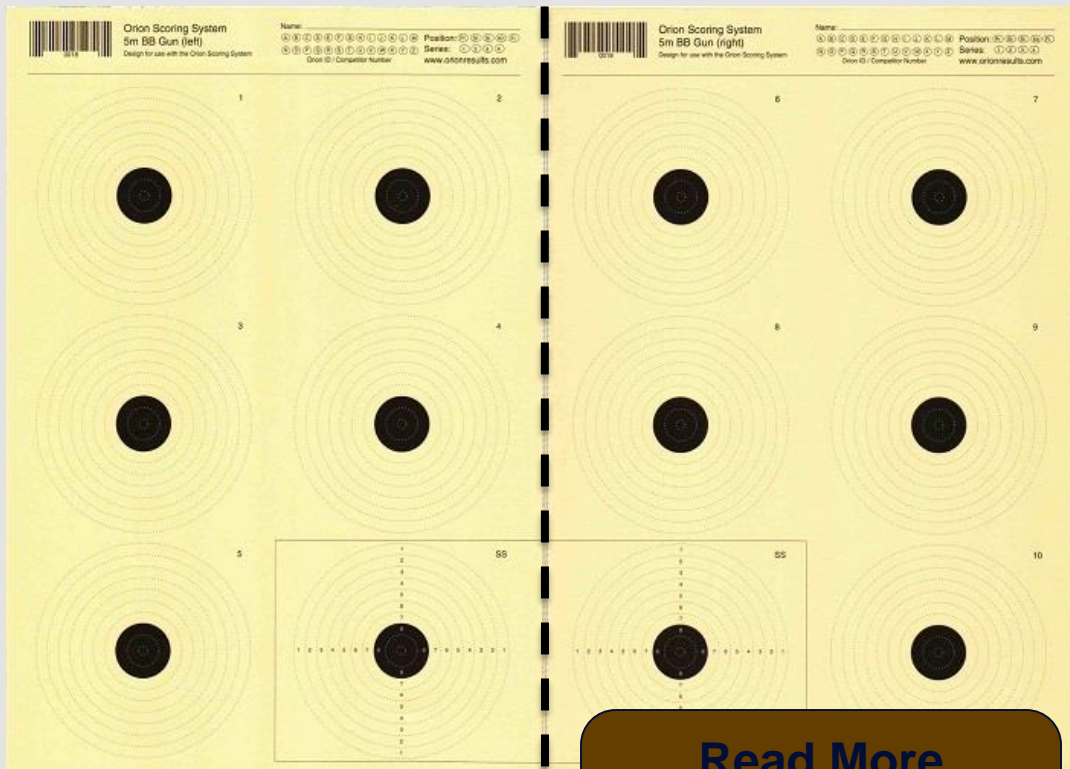
**Canon DR-C240**  
About 25 targets a minute.  
Small and medium ranges.

**Canon**

**Read More**  
[Orion Bundles](#)  
[Support Scanners](#)

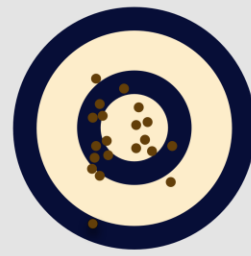


# ORION BB GUN COMPETITION

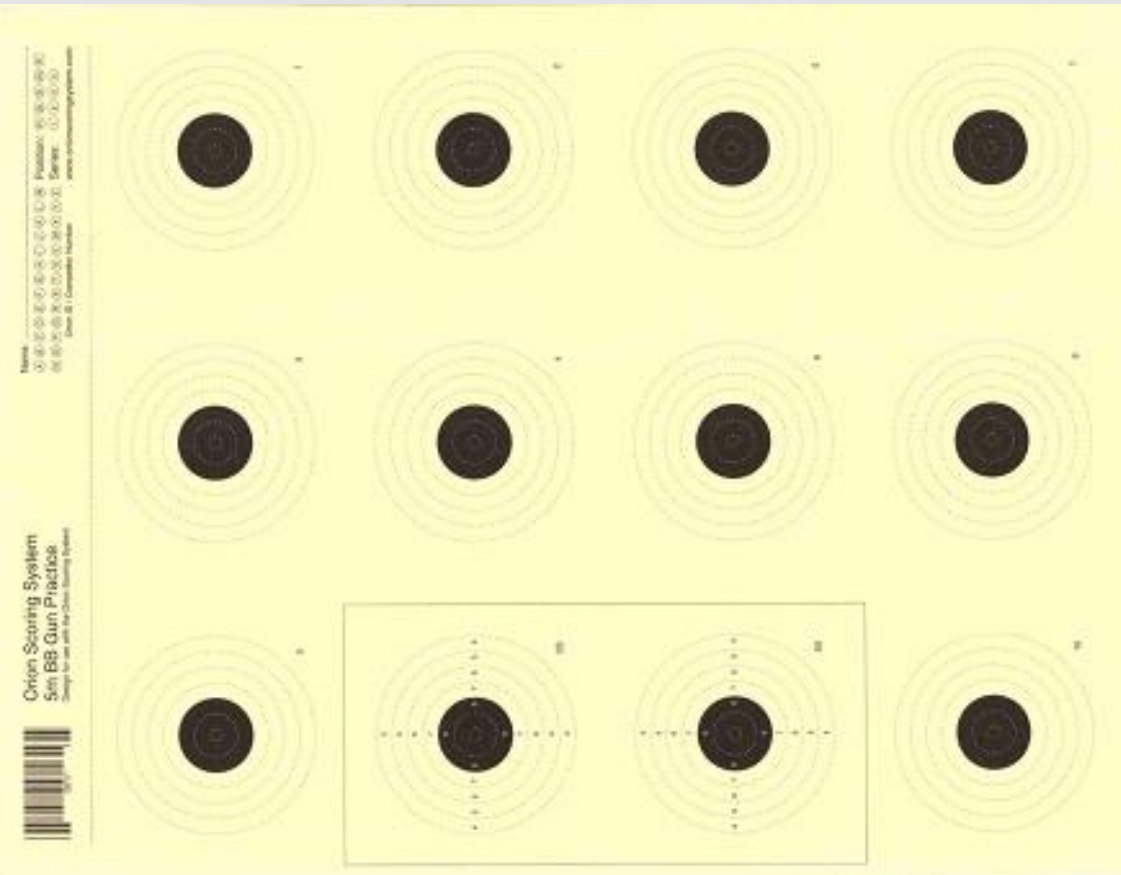


- High quality target paper
- Perforated down the center; sized to fit commodity scanners.
- Scoring rings are printed for the shooters reference only.
- Full sized scoring rings.

**Read More**  
[Competition Targets](#)  
[All Orion Targets](#)



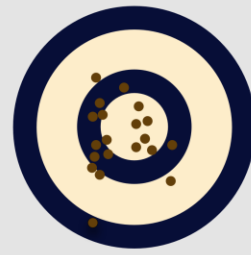
# ORION BB GUN PRACTICE



- Introduced Spring 2015
  - Single sheet – no perforation
  - Sighter bulls third row center.
  - Much less expensive.
- High quality target paper
- Aiming bulls printed out to 4 ring. However, Orion still scores all shots.


**Read More**  
[Practice Targets](#)  
[All Orion Targets](#)





# SCANABLE TEST SHEETS

**BB Gun Test Scorecard**


  
**Athlete's Name:** \_\_\_\_\_

**Athlete's Competitor Number**  

<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9

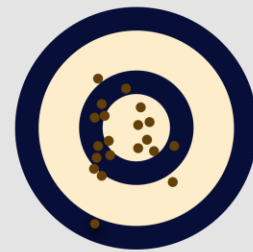
**General Instructions**  
Use a number 2 pencil, with an eraser, do not use ink.  
Write your name and fill in the bubbles corresponding to your competitor number.  
For each question, fill in the circle corresponding to your answer.  
- **T** is for true.  
- **F** is for false.  
To change an answer, erase the old mark completely, then fill in the new bubble.  
Not all tests have 50 questions, only fill in an answer if there is a question.

Question 1 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 26 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 2 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 27 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 3 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 28 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 4 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 29 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 5 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 30 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 6 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 31 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 7 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 32 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 8 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 33 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 9 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 34 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 10 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 35 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 11 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 36 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 12 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 37 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 13 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 38 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 14 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 39 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 15 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 40 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 16 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 41 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 17 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 42 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 18 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 43 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 19 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 44 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 20 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 45 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 21 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 46 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 22 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 47 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 23 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 48 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 24 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 49 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
Question 25 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	Question 50 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E



- Fill in the bubble.
- Orion treats scannable test sheets like a target.
- Orion just scores the test, it does not create it.
- True / False and Multiple Choice.

**Read More**  
[Test Answer Sheets](#)  
[All Orion Targets](#)



# RESULT CENTER

- [www.orionresults.com](http://www.orionresults.com)
- Integrated online results.
  - Every club gets their own page.
  - Orion uploads scores automatically.
- Available for *any* Orion scored match.
- Included in Orion license fee.

Carroll County 4-H

Result Center's Home Recent Competitions Upcoming Matches Team Home Pages Join Orion's Email List

Carroll County 4-H's Home Recent Results Upcoming Matches

### Team Information

Location: Carrollton, GA  
Carroll County 4-H (S.A.F.E.) Shooting Sports BB Program

### Contact Information

Head Coach: Scott Carroll  
Phone Number: 770-845-6888

### Range Information

Carroll County Agriculture Center  
900 Newman Road  
Carrollton, GA 30117-6477  
Office: (770) 836-8546  
Fax: (770) 836-2959

### Recent Competitions

Match	Gun	Score	Date
Match 2013 Jun 21	BB Gun	4x10 with Test	Fri, 21 Jun 2013
Practice Match 2013 Jun 17	BB Gun	4x10 with Test	Mon, 17 Jun 2013
Practice Match 2013 Jun 10	BB Gun	4x10 with Test	Mon, 10 Jun 2013
Practice Match 2013 Jun 03	BB Gun	4x10 with Test	Mon, 03 Jun 2013
Practice Match 2013 May 31	BB Gun	4x10 with Test	Fri, 31 May 2013
Practice Match 2013 May 24	BB Gun	4x10 with Test	Fri, 24 May 2013
Practice Match 2013 May 20	BB Gun	4x10 with Test	Mon, 20 May 2013
Practice Match 2013 May 17	BB Gun	4x10 with Test	Fri, 17 May 2013
Practice Match 2013 May 06	BB Gun	4x10 with Test	Mon, 06 May 2013
Practice Match 2013 May 03	BB Gun	4x10 with Test	Fri, 03 May 2013
Practice Match 2013 Apr 29	BB Gun	4x10 with Test	Mon, 29 Apr 2013
Practice Match 2013 Apr 22	BB Gun	4x10 with Test	Mon, 22 Apr 2013

### Scoreboard

Match 2013 Jun 21: Individual - All Fri, 21 Jun 2013

Rank	Participant	Prone	Standing	Sitting	Kneeling	Test	Individual
1	Bearden, Holly (102)	100 - 7	82 - 1	92 - 2	94 - 4	100	468 - 14
2	Burney, Mark (106)	92 - 4	76 - 1	90 - 1	92 - 2	86	436 - 8
3	Carroll, Hadley (107)	96 - 4	84 - 0	96 - 6	90 - 2	67	433 - 12
4	Boogs, Maddi (104)	94 - 5	76 - 1	88 - 2	89 - 2	65	412 - 10
5	Grubbs, Collin (111)	92 - 4	84 - 0	96 - 6	87 - 2	0	359 - 12
6	King, Chyanon (115)	93 - 4	79 - 1	90 - 5	88 - 2	0	350 - 12
7	Frank, Morgan (109)	73 - 1	46 - 0	81 - 1	82 - 1	58	340 - 3

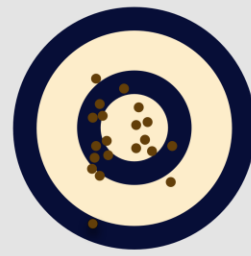
Promote your website

Web Design Online

MyFax Online Fax Service

AdChoices

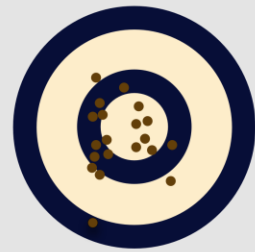
**Read More**  
[Enable Result Center](#)  
[Upload Results](#)



# BUNDLE PRICING

- Orion bundles include:
  - Scoring license
  - Scanner
  - Targets
  - Labels
- Grants / Loans available:
  - Friends of the NRA
  - USA Shooting Foundation
- Orion for Clubs:
  - C225 Bundle: \$1078
  - M240 Bundle: \$1378
  - M160 Bundle: \$1498
  - 6010 Bundle: \$2998
- Orion at Home: \$278

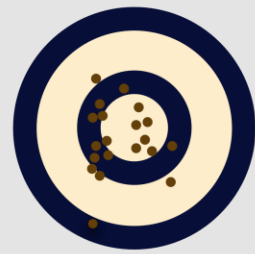
**Read More**  
[Orion Bundles](#)  
[Orion at Home](#)



# AGENDA

---

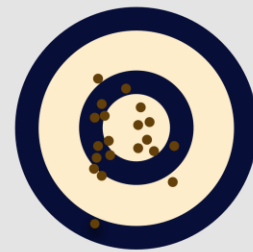
- Introduction to Orion
- **BB Gun Competition Best Practices**
- Teaching Marksmanship with Orion



# **ORION'S GOLDEN RULE**

Never use Orion for the first time at a match.





# MATCH SETUP: RULEBOOK

Use meaningful names

Dates are informational and for online listing.

Always select the BB Gun rulebook

Match Properties (Virtual Match Parent) X

Match Name: Haralson County BB Invitational

Image Directory: C:\Users\Enik\Documents\My Matches\Haralson County BB Invitational

Match File: Haralson County BB Invitational.xml

---

Basics / Rulebook | Course Of Fire | Result Center | Comp. Num. | Sanctioning | Categories

Start Date: Saturday, February 27, 2016

End Date: Saturday, February 27, 2016

Type of Match: Local Match Backup: No Online Backup

Rulebook

- National Standard Three-Position Air Rifle Rules
- NRA Air Rifle: Air Rifle
- USA Shooting: Air Rifle
- USA Shooting: Air Pistol
- USA Shooting: Progressive-Position Air Pistol
- USA Shooting: Smallbore Rifle
- NRA Rifle: Smallbore Rifle
- NRA BB Gun**
- NRA High Power Rifle
- NRA Pistol: Smallbore Pistol

The rulebook may not be modified after the match is created.

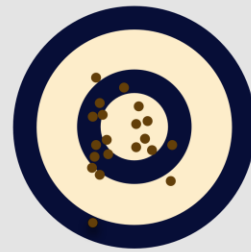
Decimal Scoring ☐

Reentry: No Reentry

Save Exit

Automatically backup your Match data files.

**Read More**  
[Tie Breaking](#)  
[Reentry Matches](#)



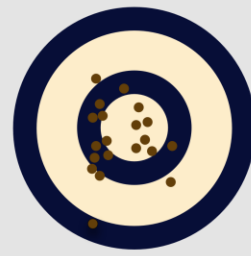
# CLOUD BACKUP

- Orion can backup both Athlete Database and Match files to Cloud (offsite) storage.
- Recommended to always backup at least your match files.
  - Include Images files If you have a good Internet connection.
- Automatically backs up data every 15 minutes.
- Data files can easily be restored if needed.
- Requires free update to license.



**Read More**  
[Cloud Backup](#)  
[Minimizing Computer Problems](#)

# MATCH SETUP : COURSE OF FIRE



Options for with or without test and with or without Finals

Used to drive Barcode Label Printing.

Only use 1 shot per bull.

Orion will take the top 5 team member scores as the team aggregate. Orion will limit to maximum 7 members on team.

Match Properties (Virtual Match Parent)

Match Name: Haralson County BB Invitational

Image Directory: C:\Users\Erik\Documents\My Matches\Haralson County BB Invitational

Match File: Haralson County BB Invitational.xml

Basics / Rulebook **Course Of Fire** Result Center Comp. Num. Sanctioning Categories

3x10  
3x20  
4x10  
4x20  
10 Prone  
20 Prone  
40 Prone  
3x10 with Test  
3x20 with Test  
4x10 with Test

The course of fire may not be modified after the match is created.

Target Type: Ten Bull Target with Single Perforation

Shots per bull: 1

Number of Team Members: 5

Max Num of Team Members: 7

Dynamic Team Generation: ☐

Invert Group Analysis: None

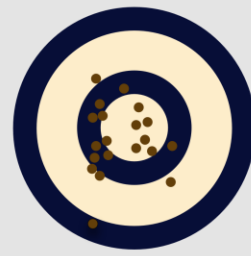
Save Exit

**Read More**  
[Creating a Team](#)  
[Dynamic Team Generation](#)

Top 4 team members form team "1", numbers 5-8 form team "2" etc.

Set Invert Group Analysis to Odd Target Series when hanging right side target upside down (only for old BB Gun targets).

# MATCH SETUP: RESULT CENTER



Turns Internet Results on or off.

Optional but recommended fields. City and State required for Virtual Matches.

Tournaments group matches together.

Match Properties

Match Name: BB Gun Test Match

Image Directory: C:\Users\Erik\Documents\My Matches\BB Gun Test Match

Match File: BB Gun Test Match.xml

Basics / Rulebook | Course Of Fire | **Result Center** | Comp. Num. | Sanctioning | Categories

☒ List and Report Scores Online

Contact Information

Match Director: Erik Anderson

Email: support@shooterstech.net

City: Bristow State: VA Zipcode: 20136

Phone Number: 703 596 0099 Country: [Dropdown]

If enabled, this match will be listed in the Result Center and the information will be displayed online. The city and state fields are required for Virtual Matches. All other fields are optional.

Tournaments

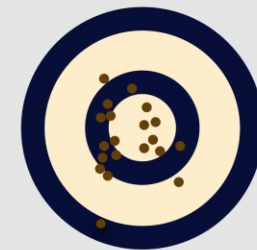
- ☐ Orion's Three Position Air Rifle Virtual Matches
- ☐ Orion's Standing Air Rifle Virtual Matches
- ☐ Orion's Air Pistol Virtual Matches
- ☐ Orion's Three Position Smallbore Rifle Virtual Matches
- ☒ Orion's BB Gun Virtual Matches

Save Exit

City and State become the default address for all competitors. Always use 2 letter state code.

**Read More**  
[Upload Results](#)  
[Create a Tournament](#)

# MATCH SETUP: COMPETITOR NUMBER



To successfully use barcode labels, every competitor must have a numeric competitor number.

Orion can assign sequential competitor numbers.

Independent of competitor numbers, may track other organization membership.

Match Properties

Match Name BB Gun Test Match

Image Directory C:\Users\Erik\Documents\My Matches\BB Gun Test Match

Match File BB Gun Test Match.xml

Basics / Rulebook Course Of Fire Result Center Comp. N

Default Competitor Number

☐ Do not automatically assign a competitor number.

☒ Use Membership Field value CMP Competitor ID  
Only for shooters added from the Shooter Database

☐ Use a sequential competitor number starting at 101  
☐ Use sequential competitor number as secondary source

☐ Use text based name abbreviation  
☒ Use text based name abbreviation as secondary source  
For use with fill-in-the-bubble Orion ID targets.

☐ Separately, track Membership Field

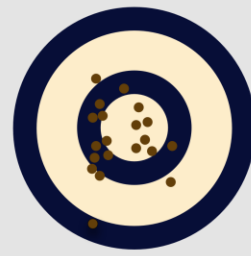
Save Exit

Changing these settings only effects new shooters added to the match. Existing shooters are not modified.

Text based competitor numbers for use in practice.

**Read More**  
[Using Barcode Labels](#)  
[Track Membership Numbers](#)





# TEXT BASED COMPETITOR NUMBERS

Name: \_\_\_\_\_

Position: \_\_\_\_\_

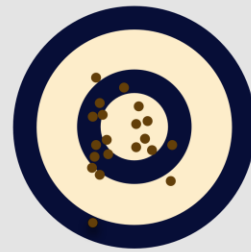
Series: \_\_\_\_\_

Orion ID / Competitor Number

www.orionscoringsystem.com

**Read More**  
[Using Text Based  
Comp. Numbers](#)

- Intended for practice, replacing barcode labels.
  - Still recommended to use barcode labels for matches.
- Orion assigns a text based competitor number, based on the athletes name.
  - e.g. “ERIK” or “EKA”
  - Use membership fields to make the competitor number constant.
- Athletes fill in the bubbles, at the top of the target, with their competitor number, position and series.
- Orion reads the competitor number, as if it was a barcode label.



# MATCH SETUP: CATEGORIES

Match Properties

Match Name: BB Gun Test Match

Image Directory: C:\Users\Erik\Documents\My Matches\BB Gun Test Match

Match File: BB Gun Test Match.xml

Basics / Rulebook | Course Of Fire | Result Center | Comp. Num. | Sanctioning | **Categories**

☐ NRA BB Gun Classification

☐ Gender Award

☐ Regions

☒ Skill Level

Multiple categories may be selected.

Some categories may be customized below.

Ages 8-10	
Ages 11 - 12	
Ages 13 - 14	

Save Exit

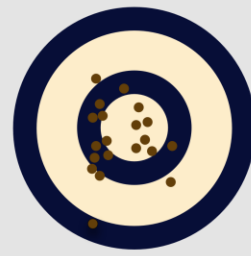
Rulebook defined categories are not customizable.

Skill level is a customizable category where you may type in your own values.

Use the Skill Level category to create your own definitions.

**Read More**  
[Create Custom Categories](#)

# ORION'S MATCH SCORING SCREEN



Highlighted targets need to be resolved!

**Yellow:** Too many or too few shots.

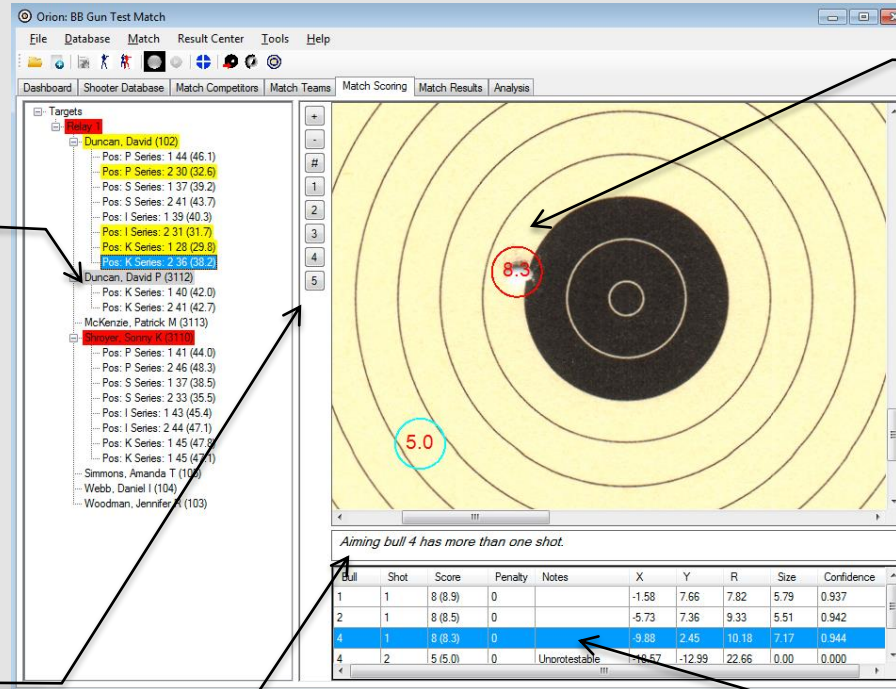
**Red:** Two targets with the same series.

**Grey:** Not all targets assigned.

**Green:** Not scored yet.

**Bold:** Currently selected target.

***Italicized:*** Target has not been viewed.



Red shot is the currently selected shot. Blue are non-selected shots.

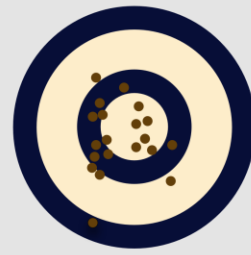
**Read More**  
[Color Highlighting](#)  
[Red vs Blue Shot Holes](#)

Zoom buttons.

Warnings on the target.

Shot list. Double click on a line to zoom in on the shot.

# WORKING WITH UNSCORED SHOTS.



BB Gun Orion Scoring System  
BB Gun  
Patent Pending

Hobbs, Fenelope (3111181)  
Position: ①②③④⑤  
Series: ①②③④

www.orionscoring.com

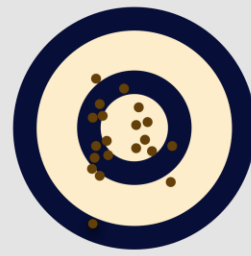
Expected 5 but instead have 4

Bull	Shot	Score	Penalty	Notes	X	Y	R	Size	Confidence
1	1	7 (7.1)	0		-7.29	12.89	14.81	9.49	0.935
2	1	5 (5.4)	0		20.96	-1.44	21.01	9.95	0.948
3	1	8 (8.9)	0		6.80	4.22	8.00	8.52	0.899
4	1	8 (8.4)	0		-5.69	7.98	9.80	6.97	0.910

- Orion will highlight targets with too many or too few found shots.
- Select the target.
- Find the missing shot.
  - May be on a different bull or target, may also be a miss.
  - If needed look at the physical targets.
- Zoom in on the bull, using your mouse double click at the center of impact.
  - Orion will “identify” the shot using your mouse location as an initial hint, and the image file to digitally score it.

**Read More**  
[Add vs Identify a Shot](#)  
[Double Click Commands](#)

# ODDITIES IN BB GUN SCORING



Barcode labels that were placed low may get interpreted as a shot.



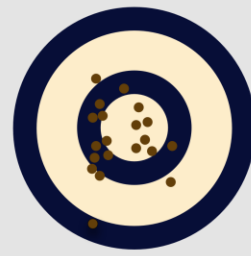
Large push pin holes (or other tears) could get interpreted as a shot.

Orion works very hard to find the first shot on each aiming bull. While it continues to look for more shots on each aiming bull, it does not perform as exhaustive of a search.

**Read More**

[Special Considerations](#)  
[Too many Shots on a target](#)



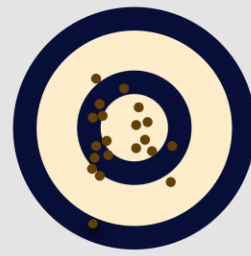


# INTERNAL CROSS-FIRES

- An internal cross-fire is when the shooter fires two shots on the same aiming bull.
  - Shooter should skip the next aiming bull (other wise it's a extra shot fired).
- Per rule 14.7, there is a 1 point penalty applied to the highest value shot on the aiming bull.
- If the internal cross-fire is between targets (6 hits on one, 4 on the other).
  - Mark the highest value shot as an internal cross-fire.
  - 'Ignore Warning Message' on both targets.

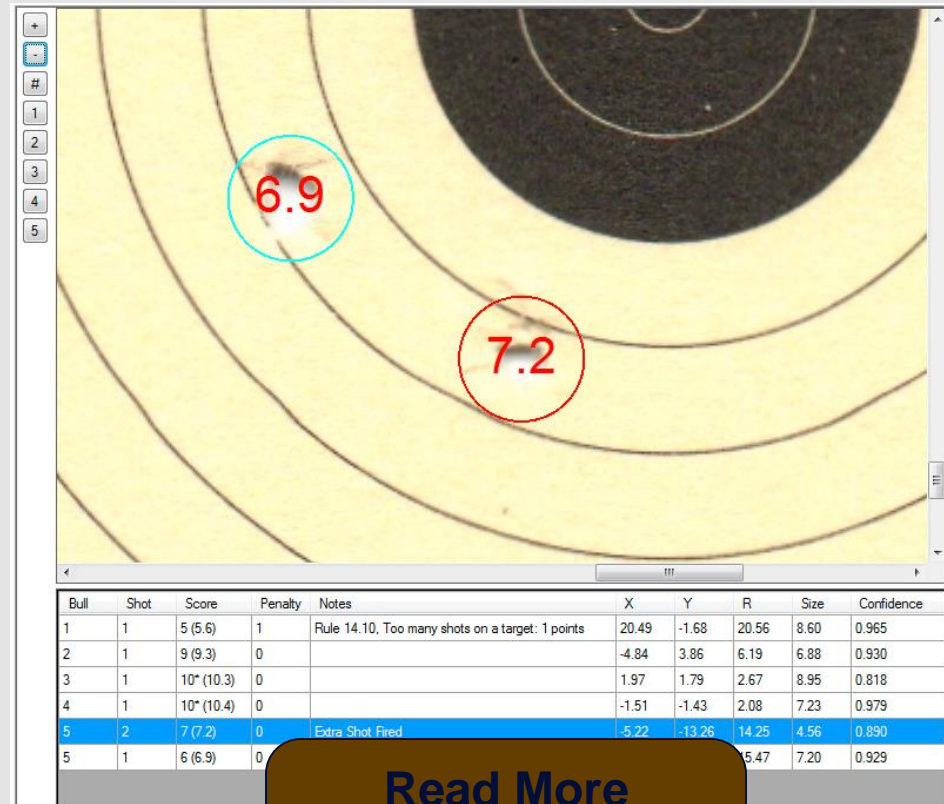


**Read More**  
[Internal Crossfire](#)  
[Too Many Shots](#)



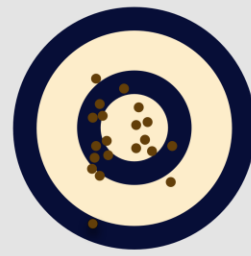
# EXTRA SHOT FIRED

- An extra shot fired is when the shooter fires 11 (or more) shots in a position.
- Per rule 14.10, the highest value shot is annulled and a 1 point penalty is applied.
- Orion's Extra Shot Fired function annuls the selected shot and applies the 1 point penalty to the lowest value shot in the series.
  - May have to 'Ignore Warning Message' on target.



**Read More**

[Two Shots Found in One Hole](#)  
[Too Many Shots](#)



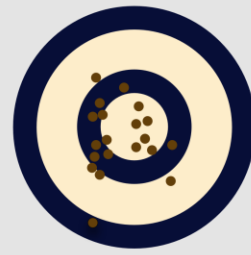
# MISSES

- A miss is when the athlete failed to hit the target or did not fire the shot within the allotted time.
- Add a miss by:
  - Right click -> Add a Shot  
-> Missed Shot
  - Control + Double click




**Read More**  
[Double Click](#)  
[Commands](#)

# WORKING WITH TEST SHEETS



- Up to 50 true / false or multiple choice question (10 is minimum).
- Orion doesn't come up with the questions, just scores the answers.
- Works with barcodes or fill-in-the-bubble competitor numbers.
- Orion treats the answer sheet just like a target.
- One answer sheet must be designated as the "Master Answer Sheet."
  - Select the answer sheet, right click -> "Set as Master Answer Sheet."
- Report printed on Individual Score Sheet

BB Gun Test Scorecard



Athlete's Name: \_\_\_\_\_

General Instructions  
Use a number 2 pencil, with an eraser, do not use ink.  
Write your name and fill in the bubbles corresponding to your competitor number.  
For each question, fill in the circle corresponding to your answer.  
- T is for true.  
- F is for false.  
To change an answer, erase the old mark completely, then fill in the new bubble.  
Not all tests have 50 questions, only fill in an answer if there is a question.

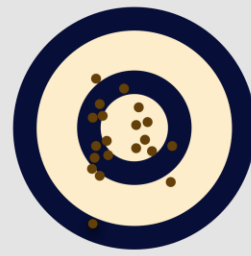
Athlete's Competitor Number

<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9
<input type="checkbox"/>	0	1	2	3	4	5	6	7	8	9

Question 1	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 2	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 3	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 4	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 5	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 6	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 7	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 8	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 9	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 10	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 11	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 12	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 13	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 14	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 15	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 16	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 17	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 18	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 19	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 20	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 21	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 22	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 23	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 24	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 25	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 26	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 27	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 28	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 29	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 30	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 31	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 32	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 33	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 34	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 35	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 36	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 37	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 38	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 39	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 40	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 41	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 42	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 43	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 44	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 45	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 46	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 47	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
Question 48	<input type="radio"/> A	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E

**Read More**  
[Grade a Test](#)  
[Import Test Scores](#)

# RAISE THE QUALITY OF YOUR COMPETITIONS

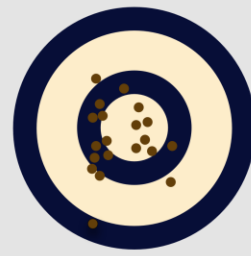


- Quality competitions will:
  - Provide an even playing field for all competitors.
  - Build excitement among shooters and spectators.
  - Help promote the sport both internally and externally.
- Orion provides the tools to raise the quality of your competition.
  - Fair and accurate results.
  - Timely results and awards.
  - Widespread distribution of results.



**Read More**  
[Best Practices](#)  
[Running a Large Match](#)





# PREP-WORK

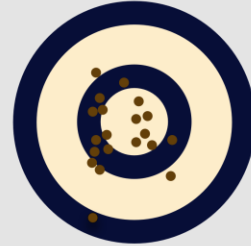
- Use Orion in day to day practices.
- Keep your version of Orion up to date.
- Create the match early.
  - Add as many shooters, coaches, teams as you can before the day of the match.
- Use meaningful names.
  - Name of the Match
  - Team Names
- Pre-print and apply barcode labels to targets.
- Make sure you have plenty of supplies.
  - Targets, backers, barcode labels, roller kits.
  - Print toner, paper, push-pins.
  - Internet connection.

## Team Names

Which is easier to read?  
WPV or West Potomac  
Varsity

## Read More

[Using Barcode Labels](#)  
[Updating Orion](#)



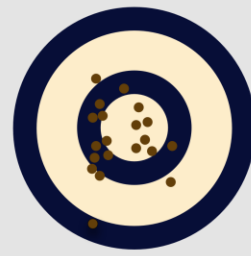
# DAY OF THE MATCH

- Clean your scanner.
- Have at least one assistant available.
- Turn on Internet results.
- Resolve all highlighted targets before printing results.
- Print and post results often.
- Print individual score sheets for each shooter and organize with the shooter's targets.
  - Shot groups and shot by shot scores are also available online.



**Read More**  
[Color Highlighting](#)  
[Uploading Results](#)





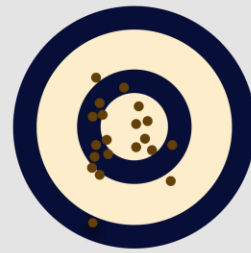
# CLEANING YOUR SCANNER

- Open you scanner to clean.
- Between relays or series of targets use canned air to blow out any debris.
- At the start of the day, use a dry clean cloth to wipe down the scanner lines.
- If your scanner continuously double feeds, the roller kit may need to be cleaned or replaced.



**Read More**  
[Cleaning Scanner](#)

# GET THE WORD OUT ABOUT RESULTS



2013 Hinds 3PAR

<http://www.orionresults.com/team/QRCode.aspx?MatchID=12>

- Shooters, coaches, and spectators want online results.
  - *Its not enough to turn on online results you must communicate to the shooters, coaches, and spectators where they can find the results.*
- List the match URL in the bulletin.
- Make an announcement before and after each relay.
- Post links on social media.
- Print QR codes on the range pointing to the match page.
  - Orion can generate this page for you.
- Works with matches and tournaments.

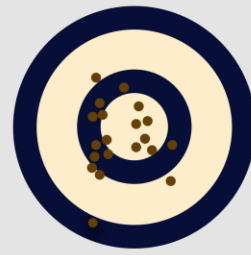
## 2013 Hinds 3PAR Georgia Competitive Shooters



**Online Results Available at  
[www.orion](http://www.orionresults.com)**



**Read More**  
[Printing QR Codes](#)  
[Creating a Tournament](#)



# SCOREBOARD

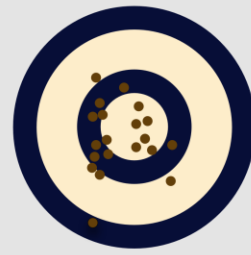
- Scoreboard is meant to be projected on the range *during* the match.
- Ranks athletes and teams according to average shot fired.
- Accessible from [orionresults.com](http://orionresults.com) for any match.

The screenshot shows a web browser displaying the Orion Scoring System interface. The title bar indicates the URL is <http://localhost:49721/team/ScoreBoard.aspx?MatchID=1.1.520459465.1>. The page title is "Match2014Jul01 BB PreTest". The main heading is "Individual - All". The table lists 13 participants with their ranks, names, regions, and scores in various positions (Prone, Standing, Sitting, Kneeling, Test) and an overall Individual score.

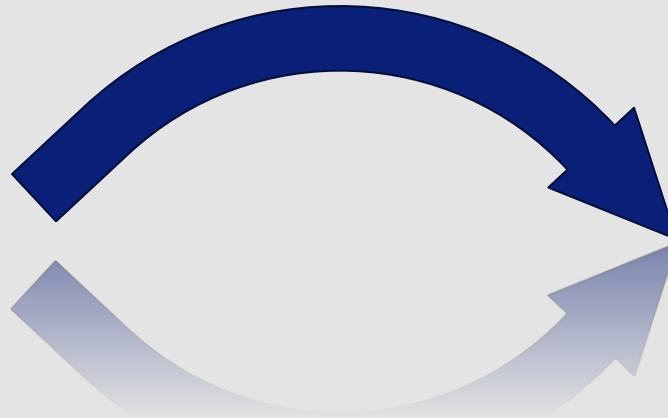
Rank	Participant	Region	Prone	Standing	Sitting	Kneeling	Test	Individual
1	Schmidt, David C (3119) Mount Vernon High School, Parent, VA	Parent, VA	94 - 5	83 - 0	88 - 1	86 - 1	100	451 - 7
2	Georgi, Kirsten A (3113) Parent, VA	Parent, VA	88 - 3	73 - 1	89 - 0	88 - 2	98	436 - 6
3	Anderson, Erik E (3110) Shooter's Technology, Bristow, VA Anniston, AL	Parent, VA	83 - 4	81 - 2	93 - 2	84 - 1	88	429 - 9
6	Webb, Daniel I (3123) Parent, VA	Parent, VA	94 - 6	80 - 0	85 - 3	69 - 1	92	420 - 10
7	Simmons, Amanda T (3127) Mount Vernon High School, Child, VA	Child, VA	87 - 3	70 - 0	87 - 0	88 - 2	88	420 - 5
8	Duncan, David P (3126) Potomac High School, Child, VA	Child, VA	79 - 0	82 - 1	85 - 1	74 - 2	96	416 - 4
9	Denver, Christopher (3108) Parent, VA	Parent, VA	89 - 0	55 - 0	90 - 4	93 - 2	88	415 - 6
10	Duncan, David P (3112) Potomac High School, Parent, VA	Parent, VA	67 - 0	82 - 1	84 - 2	81 - 1	100	414 - 4
11	McKenzie, Patrick M (3125) Mount Vernon High School, Child, VA	Child, VA	86 - 0	83 - 4	77 - 0	77 - 0	88	411 - 4
12	Duke, Bo K (3109) Parent, VA	Parent, VA	83 - 0	77 - 0	85 - 0	78 - 2	82	405 - 2
13	Shroyer, Sonny K (3121) Potomac High School, Parent, VA	Parent, VA	89 - 2	66 - 1	66 - 1	81 - 0	100	402 - 4

For complete results visit [www.orionresults.com/shootertech](http://www.orionresults.com/shootertech)

**Read More**  
[Opening the Scoreboard](#)  
[Pre & Post Match Write Ups](#)



# ORION'S COMPETITION GOAL



Area 11 NJROTC: AREA 11 RIFLE MATCH WEST

Area 11 NJROTC: AREA 11 RIFLE MATCH WEST

Area 11 NJROTC's Home Recent Results Upcoming Matches Team Home Pages Join Orion's Email List

Area 11 RIFLE MATCH WEST Aggregate Team Prone Standing Kneeling

Area 11 RIFLE MATCH WEST

3 Position Air Rifle : 3x10

Competition in this match is by invitation only.

Results at a Glance

Aggregate - All

Rank	Participant	Prone	Standing	Kneeling	Individual
1	Gonzalez, Joe (3031)	92 - 2	79 - 1	89 - 2	260 - 5
2	Jones, Spencer (156383)	94 - 4	88 - 2	77 - 1	259 - 7
3	Lopez, Felipe (176657)	94 - 4	78 - 0	86 - 1	258 - 5
4	Stockings, Esther (117578)	95 - 5	80 - 0	81 - 2	256 - 7
5	Capelle, Joshua (303)	94 - 4	78 - 0	84 - 2	256 - 6
6	Horton, Kenne (118219)	93 - 3	73 - 0	87 - 0	253 - 3
7	Marshall, Robert (118930)	97 - 6	64 - 0	90 - 2	251 - 8
8	Arceo, Daniel (120352)	91 - 1	75 - 1	85 - 3	251 - 5

Team - All

Rank	Participant	Prone	Standing	Kneeling	Team
1	LEMOORE	366 - 13	306 - 2	337 - 6	1009 - 21
2	WESTVIEW	363 - 20	289 - 1	336 - 6	1008 - 27
3	SAN YSIDRO	369 - 10	257 - 1	343 - 6	969 - 17
4	RESEDA	363 - 13	276 - 2	325 - 1	964 - 16
5	REEDLEY	360 - 7	266 - 2	318 - 6	944 - 15
6	RAMONA	338 - 6	284 - 4	322 - 2	944 - 12
7	TROY	316 - 2	282 - 1	320 - 5	918 - 8
8	PASADENA	325 - 3	270 - 1	287 - 2	882 - 6

Complete Results

Individual Results All Team Results All

Area 11 NJROTC

Area 11 Competition Results Page for Individual Area unit matches and Area 11 Championship Matches.

Search For Matches : zip Go

Orion A4 Backer

Provides a larger writing surface for the shooter.

Reusable and works with any air rifle.

Introduces the target.

New low price 20 for \$12

Navy - Online Degrees

Choose from 87 Online Degrees for the Navy. Accredited. Apply Now! [www.nmci.af.mil/edu/navy](http://www.nmci.af.mil/edu/navy)

Before & After Program

Get Transported To & From The Local Schoolist. Call Us At (866) 247-8429. [www.wmwood.com](http://www.wmwood.com)

Are You Writing a Book?

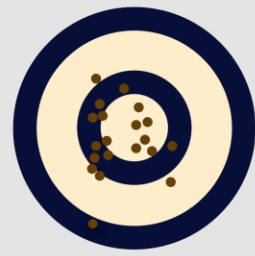
Get a free guide to professional editing & publishing options. [www.livetrace.com](http://www.livetrace.com)

AIChoices

## Go from last shot fired to results online in 10 minutes.

[Read More Best Practices](#)

# RESULTS READY IN 10 MINUTES



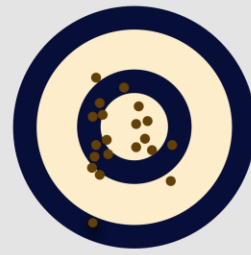
- Make it your goal to have results available on the Internet within 10 minutes of the last shot fired.
- Practice, time yourself in mock competitions.
- Have target pullers ready to retrieve targets.
- Experienced stat officers.
- Cut the chit-chat.

Timely results enables award ceremony directly after the match.



**Read More**  
[Best Practices](#)

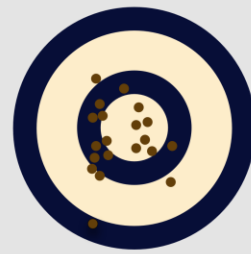
# RUNNING A REVIEW PERIOD



- During a review, athletes and coaches should look for obvious errors and classification errors.
  - Run review periods after the conclusion of the match, or after each relay.
  - Stack fired targets and printed individual score sheets according to teams or firing points.
  - Print and display ranked results, including all category results.
- There is a difference between an obvious error and protesting a shot.
  - An “obvious error” is an incorrectly scored shot. It is when the scored shot is not a reasonable representation of the physical shot hole.
    - It is the correct use of Orion to correct obvious errors in all circumstances.
    - Name comes from the fact that if a shot is scored incorrectly by Orion, you can visually see the error within Orion.
  - It is the responsibility of the statistical officer to determine if a shot was scored as an obvious error.
  - Shooter's may ask the statistical officer to review a scored shot for an obvious error.

When an obvious error does occur with Orion scoring, the Statistical Officer can and should make a manual correction in all circumstances.

**Read More**  
[Challenging Shots](#)  
[Obvious Errors](#)

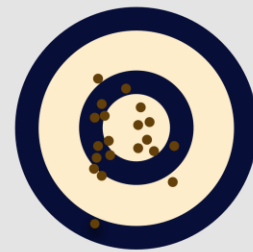


# STATISTICAL OFFICER'S RESPONSIBILITY FOR IMPARTIALITY

- Every sport has referees or judges.
  - The integrity of the sport is dependent on the impartiality of the referees.
- Being a statistical officer is much like being a instant replay official.
  - Looking for incontrovertible evidence to overturn a score.
- Statistical officers/referees are still human.
  - Two different stat officers may disagree on a call.
  - Errors occasionally will be made.
  - Right or wrong their judgment is final and must be respected.
- Statistical officers should:
  - Judge a shot based only on the relationship between the physical shot hole and the ring depicting the scored shot.
  - Make manual corrections only to align the scored shot (ring) and the physical shot. Which may or may not change the score value.
- Statistical officers should not:
  - Use scoring rings on the target to judge an obvious error.
  - Be influenced by arguments or pressure from a shooter or coach.

**Read More**  
[Challenging Shots](#)  
[Using Plugs with Orion](#)



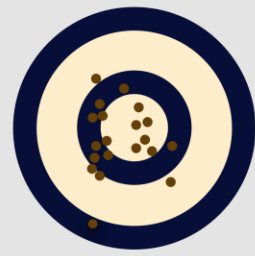


# PROTESTING SHOTS WITHIN ORION

- Plugging shots scored electronically is wrong, unsupported and unfair.
  - Electronic scoring and manual scoring use two different scoring methods; one cannot accurately or responsibly use one to evaluate the other.
  - Did you know, the International Shooting Sports Federation, all National Federations worldwide, including USA Shooting, the NCAA, and the National Three-Position Council has never allowed plugging electronically scored shots?
  - Plugging selected shots is unfair because it uses a second and different method of scoring only on shots that might go up in value.
- Orion does have a protest algorithm.
- Best practice is to state in your match bulletin that plugging shots will not be allowed.
  - Precedent set by the NRA Competition Division and today's Daisy match.

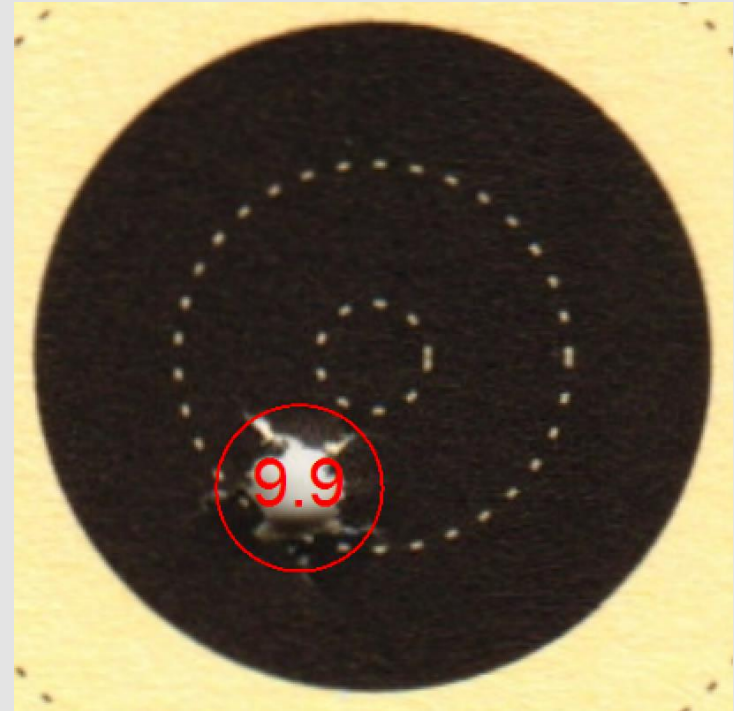
**Recommend Match Bulletin Wording:**  
*No score challenges or protests will be allowed.*

**Read More**  
[Challenging Shots](#)  
[Obvious Errors](#)

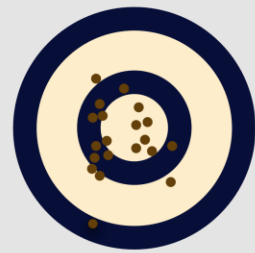


# WHAT TO LOOK FOR DURING THE REVIEW

- Obvious errors, scored shots that are not a reasonable interpretation of the physical shot hole.
- Obvious errors mostly caused by:
  - Tears around the shot hole or near the corners of the target.
  - Two shots very near each other.
  - A shot hole that collapse in on itself.
- Correctly assigned penalties.
- Bring any questions you have to the statistical officer.
- Its unethical to ask for every 9.9, 8.9, etc to be looked at.



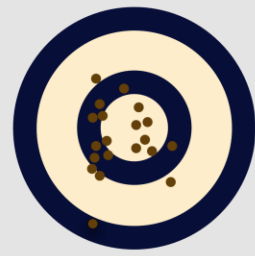
This is not an obvious error, this is an 9!



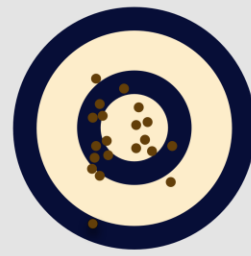
# AGENDA

---

- Introduction to Orion
- BB Gun Competition Best Practices
- **Participating in a League**



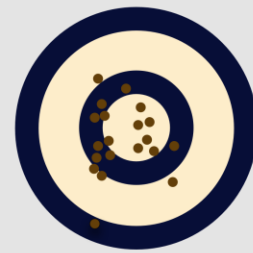
**Orion Leagues were developed out of  
the simple goal to dramatically  
improve the sport's spectator appeal.**



# PROBLEM BACKGROUND

- Traditional competition model emphasizes individual performance over team performance, with large single day, shoulder-to-shoulder events.
- In BB Gun and Air Rifle though, more spectators are interested in team results rather than individual results.
  - Based on Result Center's web statistics.
- *Conclusion:* Shooting's competition model does not match interest level.
- *Solution:* Adopt a competition model that is:
  - Team focused.
  - Spectator friendly.
  - Inexpensive to participate.





# ORION LEAGUES

## Orions National BB Gun League Champions Division

BB Gun: 4x10

25 Jan-20 Mar 16

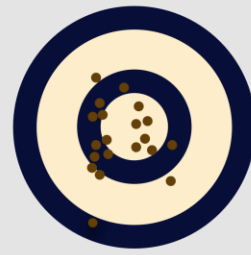
### Teams

Team	Record	Avg. Score	Club	Location
<u>Carroll County Guns-n-Clovers</u>	6 - 1	1876.14	<u>Carroll County 4-H (2316)</u>	Bowden, GA
<u>Humboldt Sharpshooters</u>	6 - 1	1869.57	<u>Humboldt Sharpshooters (2448)</u>	Sioux Falls, SD
<u>Walton County 4-H</u>	4 - 3	1877.71	<u>Walton County 4-H (2422)</u>	Monroe, GA
<u>Forsyth Aces</u>	2 - 5	1801.00	<u>Forsyth County 4-H (2455)</u>	Dahlonega, GA
<u>Lake Houston 4-H</u>	2 - 5	1752.17	<u>Lake Houston 4-H (8019)</u>	Crosby, TX
<u>Bullmasters 4-H</u>	1 - 6	1773.14	<u>JA/NM Bullmasters (8001)</u>	Holton, KS

- A *Team* is a club participating in the league.
- A *Game* is a competition between two teams.
  - Games can be local or virtual!
- The *Winner* of a game is the team with the highest score.
- A *Schedule* is the complete set of games for a team.
- The *Season* is the complete set of games for all teams.
- Teams are *Ranked* according to their win-loss *Record*.
  - Seasonal average is used for tie breaking.

### Read More

[Creating a League](#)  
[Managing a League](#)



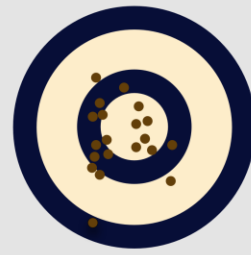
# ORION LEAGUES

- Any Orion customer can create a League, any Orion customer can participate in a League.
  - Result Center is required.
- A League has to have a “League Administrator” responsible for managing the schedule.
- Leagues are created and managed online.
- Current support for 4 to 12 teams per league.



**Read More**  
[Creating a League](#)  
[Managing a League](#)



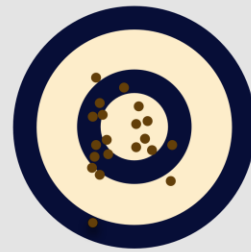


# LEAGUE ADMINISTRATOR

- Point of contact for the league.
- Adds teams to the league.
- Creates and edits the schedule.
  - Orion creates a basic schedule, round robin, one game per week.
- Creates the games, virtual or local.
- Declares winning team for each game.



**Read More**  
[Creating a League](#)  
[Managing a League](#)



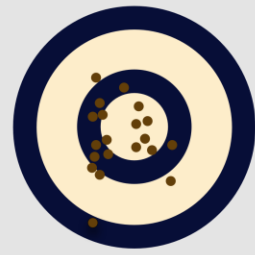
# LEAGUE GAMES

- Competing in a League Game is easy, its just like competing in any other Virtual Match.
- Games by default are Monday through Sunday.
  1. Download the Game.
  2. Specify team members.
  3. Score targets.
  4. Upload results by deadline.



**Read More**  
[Competing in a  
League Game](#)

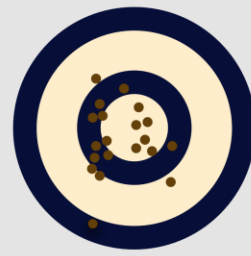
# ORION NATIONAL BB GUN LEAGUE



- National team competition for all BB Gun teams.
- Organized and managed by Orion.
- Held every year, January through March/April.
- Teams organized into divisions according to skill level or geography.
- Low cost, \$60 per team.
- Weekly Press Releases for every game.
- Lots of awards, nearly 30% of participating teams will get medals, everyone gets a participation pin.



**Read More**  
[Facebook Page](#)  
[League Program](#)



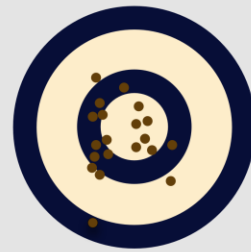
# DIVISIONS

## ■ Skill level divisions:

- Teams grouped together based on historic performance regardless of geography.
- Top teams compete against each other in the Champions Division.
- Additional divisions are added based on skill level and number of teams. Distinguished, Elite, Governor etc.
- All games are virtual.

## ■ Geography divisions:

- New for 2017.
- Teams grouped together by special request.
- 6 to 12 teams in a division.
- Games can be virtual or local.

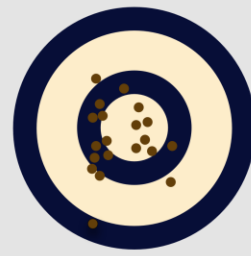


# REGULAR SEASON

- 8 weeks long starting in second half of January.
- 6 or 7 games per team via round-robin schedule.
- Compete against teams within your division.
- All athletes on a team may participate, top five scores count to team aggregate.
- Top three-teams in each division gets medals and a banner (new for 2017).
- All athletes get pins and participation stickers.





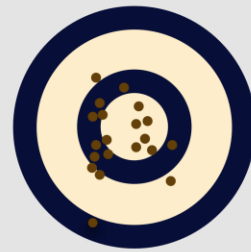


# WEEKLY MEDIA OUTREACH

- Goal: Promote the sport and participating teams to a wider audience.
- Orion will distribute press releases for every game, including to your local news outlets.
- Facebook page is maintained and regularly updated.
- Team photos are required from every team.



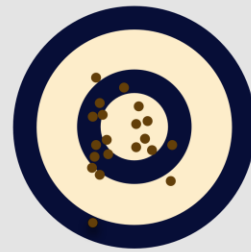




# POST SEASON

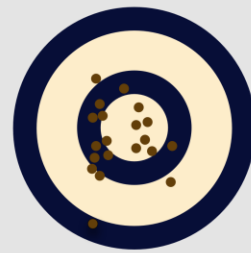
- Single elimination tournament determines the league champion.
- Top four teams are invited to participate.
  - Top two teams from Champions.
  - Top two at large teams from any division.
- Seeding based on regular season performance.
- Teams limited to five athletes, with all scores counting.
- Each team receives a plaque.
- Each participating athlete receives participation medal (new for 2017).
- MVP Awarded to top performing athlete.





# ADDITIONAL LEAGUES





# QUESTIONS



[facebook.com/orionscoring](https://facebook.com/orionscoring)  
[facebook.com/nationalairriflege](https://facebook.com/nationalairriflege)  
[facebook.com/nationalbbgunleague](https://facebook.com/nationalbbgunleague)



Channel: Orion Scoring System

## **Office Hours and Contact Information**

Tuesday through Friday 10AM – 6PM

Saturday : 9 AM – 4PM

703 596 0099

[support@shooterstech.net](mailto:support@shooterstech.net)