

THREE IN A HOLE EXERCISE: FINAL *WHEATIES* SCORES



Best Scored Targets

Thirty-one days - 1,081 holes - 35 rounds a day - Four 1911s

Three in a hole!

(Plus two short papers written during the shootings)

Gary Heartsill

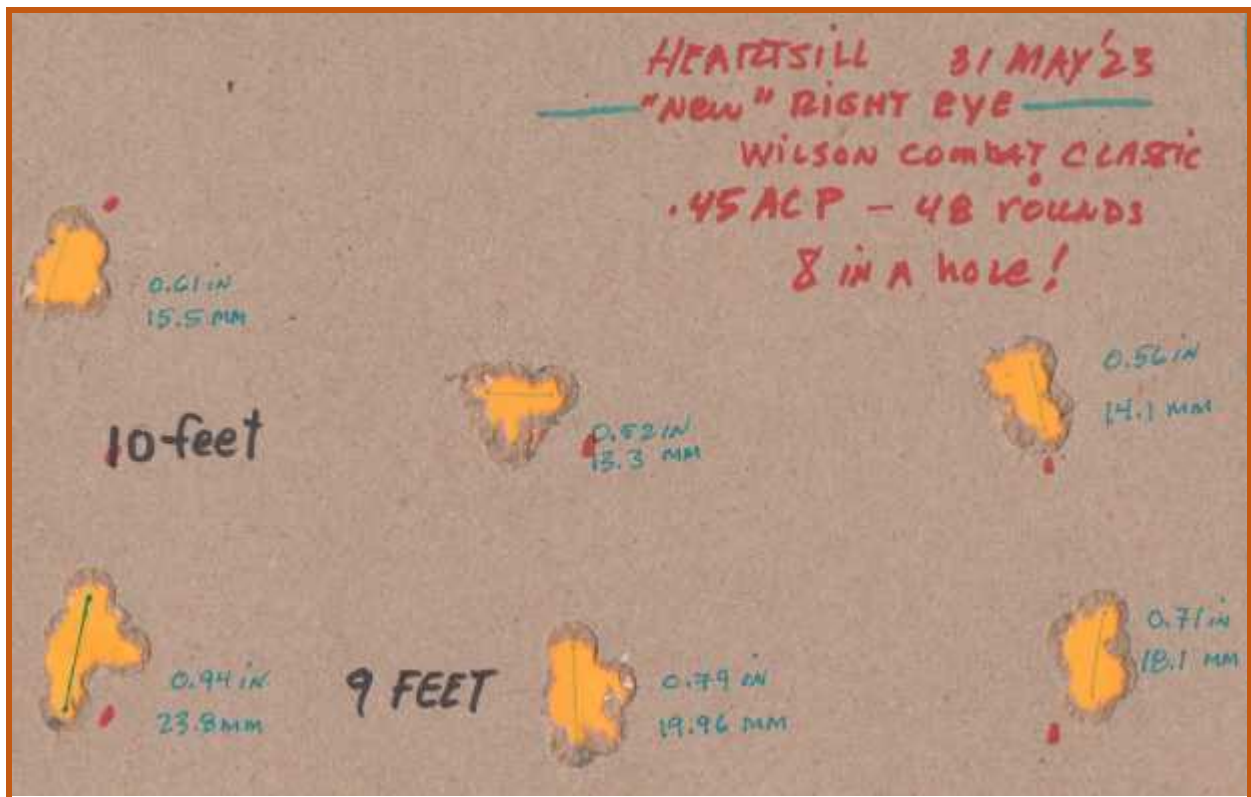
August 9, 2023

Method:

Having objectives for this shooting exercise is more appropriate than having a statistical hypothesis to prove something and claim significance at some level. Having objectives may tend to better promote more accurate and predictive shooting for future pistol shooting exercises. Again, this “lesson” is not set up to prove a hypothesis but to collect data to enhance positive results to guide one through some of the shooting issues.

Introduction:

A personal commitment was set up to shoot everyday during July. The shooting started off by doing what we all aim to do and that is put bullets through the same hole; well, actually shooting the smallest group we can shoot. I was encouraged earlier in May by going to my range and shooting a magazine at each of six spots on a piece of cardboard. The grouping I thought was pretty good as the average size of each hole was less than one inch (25.4 mm) – actually the average is 0.62 inches.



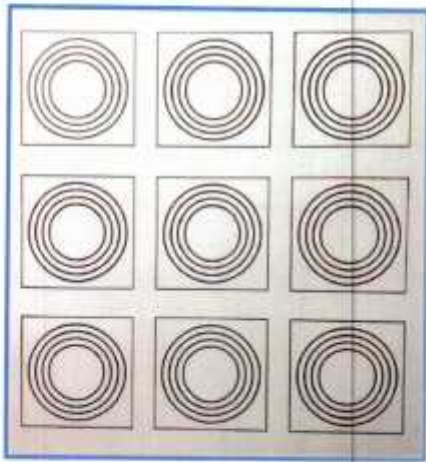
Once I figured out the shooting was done in 48 straight shots – and done with my big Wilson – it became a hanger on my hero wall. This shooting was the emphasis for setting up the three in hole shooting in July...better said, the nine bulls on one sheet (27 rounds) evolved into the main task for the month.

It will be instructive to insert the first four page **WHEATIES** document that will serve as a reminder of some of the targets, numbers, shooting, and the grouping holes. I would like to add these numbers now for you to quickly review and see where the final targets for the month will go.

Next four pages: “The **WHEATIES** Bowl!”

July Pistol Shooting: Three in a hole

The **WHEATIES** Bowl!



A square paper target about 7 by 6.5 inches



Each square is 1 and 15/16 inches a side.

The center circle is 15/16th of an inch or about 24 mm.

[Note an inch equals 25.4 millimeters. One half inch equals 12.7 mm.]

TASK: To shoot three bullets inside the center circle.

SCORING:

Three in one hole is an ACE – 10 points.

Three inside the circle with all rounds touching – 5 points.

Three inside the square, all rounds touching – one points.

SHOOTING:

Standing, off hand, ten feet from the target (leading foot behind the ten foot line).

Must shoot three rounds at each box and finish the paper with 27 holes in the paper target to be graded.



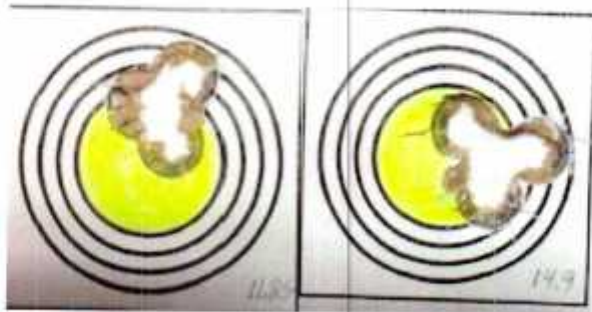
A five and an ACE – numbers are mm.



Two ACES!



Two fives.



Two more fives.

NOTES:

These eight bulls show the best of my shooting out of four pages of nine each square/circles or a total of 36 total squares. I have shot four rounds so far this month.

Did I meet the task? Well, maybe. Will tell you this is not only fun but something to get me to the range every morning. This Wheaties Bowl drill is just one way to enjoy my shooting range.

Shooting notes:

1. Try six rounds in each magazine to help with the proper count of three to a bull. It look like in a couple of places I may have shot four and maybe just hit a couple with two rounds.
2. Three to a hole is better than shooting eight as you can mostly count the holes with three.
3. Have to push to slow down on the third shot when I have two touching as this is a set up to have a flyer.
4. My Dan Norwood National Match Pistol (NMP) used so far this month on this drill did not shoot the 4.0 grains of Tight Group (TG) as well as I wanted and I didn't think it would. Will shoot the next batch with 4.5 grains as it will cycle better (which was the problem).
5. Still working on my new eyes to shoot. My last drops were yesterday and I'll see my Lady doc "Lema" on Thursday for reading glasses.
6. That being said I have made a note to shoot outside of my muffled barrel as it may help to keep the front sight in focus.
7. Still looking for the best color to use in the inner circle of the bull.
8. Pasting the paper on a cardboard back has improved the holes cut in the target paper. This is new and I need to work on it.

Well, don't have a hanger yet. Getting nine groups of three touching or going into the same hole – all on one piece of paper is "a shooting goal in progress."

Oh, ask me where and how I got Wheaties Bowl out of this shooting.

Some of us grew up eating this cereal – Breakfast of **Shooting Champions!**



Overall View



Laid out are all of the cardboard hole punching and paper popping targets (mounted on cereal boxes) for an over head look (a plane view).

The cardboard was for plinking and the **Wheaties** targets were for score.

There are 19 scored targets. Three were tossed as they were just not grade able (couldn't hit squat...).

As shown on the title page the best of the show are five targets that stand out in grading.

Norwood Matched Pistole had 7 targets (one tossed) and shot 189 rounds. Score average **11.75 mm**.

Wilson Combat Classic had only 2 targets (2 tossed) and shot 54 rounds. Score average was **9.33 mm**.

Springfield Range Officer had 3 targets and shot 81 rounds. Score average was **11.32**.

My **MK IV/Series 70 Colt** had four targets and shot 108 rounds. Score average was **11.64**.

The scoring was done with the NMP and the Colt. The WCC barely got on the scoring cards/targets as it had four low mm scores on one card. The SRO only had three card and failed to score but had average mm.

The Best of Show



The best of show targets above are #12, #20, #19, #8, and #7.

These targets were taken from the July Scores – see Worksheet at the end of this review. However, these five are noted as “significant” and/or the best shooting targets of the exercise.

#7. **NMP** - Had 7 of 9 bullseyes scored and is significant. Two aces and a 9.76 mm score.

#8. **NMP** - Had 6 of 9 bulls. Four aces (significant) and a 9.73 mm.

#12. **WCC** - Had 4 of 9 bulls. Significant with the second lowest score of the 16 with a 7.46 mm.

#19. **COLT** – Had 6 of 9 bulls. One ace with a 11.05 score. Significant with 3 in a hole on card – see the extra hole top center.

#20. **COLT** – Had 6 of 9 bulls. Significant with lowest score of all targets with 9.41 mm.

NOTICE: For examples...

In the targets above the pink below the bulls designates the group score of “CLOSE” or an “ACE.”

Left to right are two, two, one (in #19) ‘CLOSE ones’ and bottom right in #7 is an ACE.

The examples above will make the Worksheet easier to understand. For example, the statistics will show there were 29 CLOSE and 12 ACES in the group scores columns.

The email sent out on 29 July discussing the 3-In a whole on target #19 is added in on the next page.

Wheaties update (from 4 July report).

Have been shooting every day for the heck of it but with the task of putting three inside the one-inch bull on nine yellow bulls-eyes.

This shooting day number 29 and the 19th time to shoot this target and I want to point out just how severe this 'hunt' is.

Of course, will have more stats when I complete the assignment Monday – but I should just quit today.

My big Colt (13,540) shooting 60 rounds today put the stats at 1010 rounds for the month so far (fourth .45 – a week on each).

Target #19 is just about normal shooting as top right are spoilers (after my dry firing)...obviously a tad low, and I then shot 1, 2, and 3 down on the right side. One was rejected as the holes must touch. The rest will count in the group distance scoring noting number 8 is rejected also.

I decided to finish the mag at 10 and eleven.

Look close at 11. Shots #s 984, 985, 986.

The diameter of the hole is 13.17 mm (0.517 in)

A half inch is 12.71 mm (0.500 in)

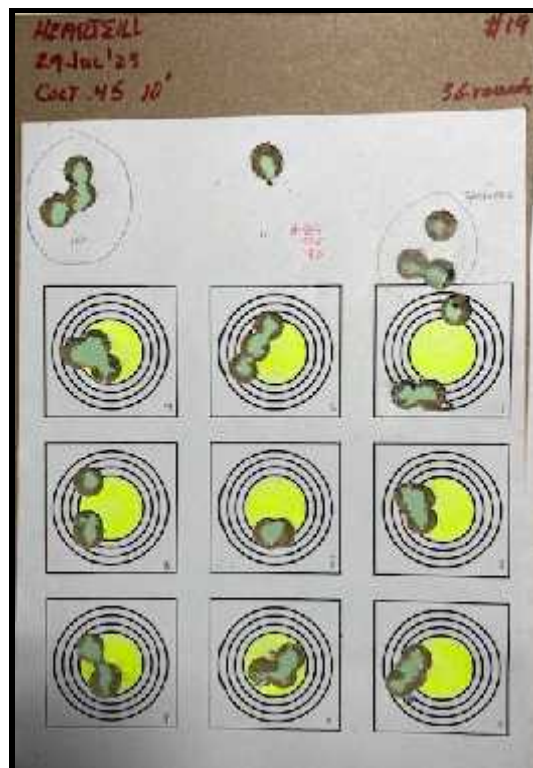
A 200 grain SWC is 11.46 mm (0.451 in)

Have had some close ones this month – just like number five measures 16.07 mm across or (0.632 in).

Three in a hole - really!

Will enjoy my J.T.S. Brown tonight.

Cheers!



WORKSHEET FOR THE 16 TARGETS

		7/9 JULY SCORES - Worksheet					SIGNIFICANCE & DISTANCE SCORES		HEAT/SILL July 2023	
		GROUP SCORES							NOTES	
TARGET #	G # N N	HITS # TOT	2	3	4	5	SIG. group scores	AVG MM SCORE	AVG MM	STATS/MATH
	2	4/9	-	3	1	-		12.47		TOTAL SHOTS 189 54 81 108 432 55% TOTAL SCORES 111 21 36 69 237
	3	5/9	-	2	3	-		11.03		
	4	4/9	-	1	1	2		11.13		
⑦	5	6/9	-	1	4	1		13.18	11.75	
7x27 = 189	6	5/9	1	-	4	-		14.96		
37x3 = 111	7	3/9	1	2	2	2	X	9.76		
	8	6/9	-	-	2	4	X	9.73		
		37/63 = .59								
②	12	4/9	-	2	2	-	X	7.46	9.33	GROUP SCORES 12 26 29 12 79 x 3 = 237
2x27 = 54 7x3 = 21	13	3/9	1	2	-	-		11.20		
	14	3/9	-	2	1	-		10.44		
	15	5/9	-	4	1	-		11.77	11.32	
③	16	4/9	1	2	1	-		11.75		TARGETS X Bulls/eps 3 x 9 = 63 2 x 9 = 18 3 x 9 = 27 4 x 9 = 36 16 vs 144 x 3 432 TOTAL SHOTS
3x27 = 81 12x3 = 36		12/33 = .36								
	17	4/9	2	-	1	1		13.40		MEAN & CENTRAL TENDENCY: High - 14.96 MEAN - 11.01 LOW - 9.41 STANB DEVIATION - 1.6
④	18	3/9	4	-	2	1		13.68		
4x27 = 108	19	6/9	2	2	1	1	*X	11.05	11.64	
23x3 = 69	20	6/9	-	3	3	-	X	9.41		
⑩	16	23/63	12	26	29	12				37 / 63 7 / 18 12 / 27 23 / 36 79 / 144 = 55% HITS / BULLS
⑩		.64	15%	33%	37%	15%				79/144 = 48% + 50% = 100% HITS/BULLS * HITS/eps X Lowest scores 11.01 AVG

SEE COMMENTS on the next page.

WORKSHEET RESULTS/STATISTICS

The first column shows the number of targets with each gun: 7, 2, 3, and 4. The 7, for instance, shows 7 targets with my NMP. The 7 targets times 27 bulls is 189 bulls shot at. The number of bulls hit (scored) is $37 \times 3 = 111$.

Noting this is the most confusing stat on this page. Look at column two. There are two numbers for each target. Number of hits / total number of bulls. The total bulls (second # or 9 each day) are seven targets times 9 bulls each or 63. The first number total of hits for these seven targets is 37. The total comes from 37×3 bullets each or 111.

Compare the stats to the right under notes and observe the total shot vs total scored. These are the same numbers on the left side showing shots fired/shots hit. Totals are 432 fired and vs 237 hit.

Group Scores 2 3 4 5

See Target 7. Had 7 out of 9 hits. The first column 1 shows one group all (3) touched, the 2 score shows two close bulls grouping, the 2 in the third column is 2 bulls were close to being inside the one inch bull, and the 2 in the fourth column shows 2 ACES or three in a hole (or touching) inside the one inch bull.

If you add up the four columns of all 16 targets you have 12, 26, 29, and 12 hits (3 in each). These four numbers add up to 79 hits out of 144 bulls to shot at. These four numbers (237) also equal the total bullets fired (237).

[If you go back and review page 8 you can see how the pink scores add up as shown on this WORKSHEET]

Having gone with the number of hits by groups I also measured the distance between the longest distance of the two farthest holes (measured from center to center) in millimeters. Each gun results are noted and averaged and then the four shows the average of 11.01 mm.

Notice the lower RH corner of measures high, mean, low, and standard deviation (SD):

Or 14.96, 11.01, 9.41, and 1.6

To compare the 1.6 (measured distance from the mean) in SD is a method, for instance of taking the extreme mean like an outlier which will really effect the average, the SD is sometimes more helpful for just what the scores mean. For instance, I ran the SD on the three means not using the low of 9.33 with my SRO. Would you expect the number to higher or lower than 1.6? Actually the SD for these three means is 0.26 – showing how close the relationship is of the other three means.

A statistical highlight of the paper is seeing how close each gun is in these target tests. It is kinda hard to believe the numbers (SD) show so little variation...a good thing, by the way.

More stats on days shooting the four guns and with the ammo fired:

NMP	1 July - 9 July	378 rounds fired	35%	
WCC	10 July - 17	196 rounds fired	21%	(shot one target on 31 July)
SRO	18 July - 25	274 rounds fired	19%	
COLT	26 July - 30	201 rounds fired	19%	
		<u>1081 total</u> rounds	100%	

ROBUST, REMEMBERABLE, REMINISCENT, ROSEANT, REFLECTIONS on my **Wheaties** Shooting.

[These notes are more for me than anyone else but they may be instructive to scan.]

The one thing that sticks out is the absolute autocratic (despotic) unconditional focus on where the front sight is when the trigger is pressed with an unexpected release ("*the hammer faw down and go boom*"¹ p. 35).

A second issue is holding my breath to release. Sometimes I do and sometimes I don't...just normal breathing. How good is that? Bill Wilson² says "You can't shoot well if you are breathing while pressing the trigger" (p. 311).

The third issue, almost as important as the first two is the trigger. Must have a good trigger. The trigger is just about the most important shooting item on your gun. Better: *The trigger is everything...*

Why shoot at 10 feet? Well, five feet would be (should be) more easier to shoot three in a hole, 15 feet would be a bit more difficult than 10, but at ten feet I can see the one inch bull (yellow) and move my front sight where I want to from 10 to 2 to four. It is called placing your shot. I can do this about half the time but this is the great sport about popping holes in paper. My next rounds will be at 44 feet to see how my new eyes work at that distance.

For this three hole shooting most of the time is taking a quick breath between shots rather than hold my gun out and keep shooting. Depends. If I have the first two in the hole do I rest or keep the same picture and shoot the third shot? A good question.

Have found out dry firing is like fouling your barrel before shooting for score. It was dry firing during this exercise that I notice at the snap I could sometimes see the front sight move a 32nd of an inch. This is called jerking it off. Have wasted a lot of ammo doing this. Shooting with some three hole hits normally slows me down so that I can focus and stay in sync with the holes. Every time I pull rather than press I waste a bullet.

Before each event I pause and get my sh*t together. I get my shooting face on. Time is spent 'getting ready' – one must clear your head or tell what ever story you tell to "GET SET." Jerry Miculek (and Lena both) seem to pause and do their thing before they set their timer. Maybe Jerry is correct with this when he says "Get Some!"

This round of shooting was using my MATCH ammo of selected brass, Federal Primers, Dallas .451 200 grain SWC, laser cast Oregon Trail 200 grain .451 SWC, 4.0 grains Bullseye, 4.0/4.5 grains Tite Group, and a small batch of 4.8 Unique. As each batch was reloaded in 100 rd. lots I tried to shoot the same bullets in each gun trying to maintain some sort of consistency.

I pretty much know now what each gun will shoot and my next lots in the brass I have now will be with 4.3 grains of Tite Group or 4.0 grains of Bullseye.

¹ Philip B. Sharpe (1953). *Complete guide to handloading*. New York, NY: Funk & Wagnalls.

² Bill Wilson & Michael Bane (2016). *Bill Wilson Gun Guy*. Berryville, AR: Wilson Combat.



SRO with one of three stove pipes

This jam put me out of the fight and it took in all three jams a few minutes to get it unjammed. It happened on the last of three mags using the light 4.0 grains of Tite Group. There may be some more issues like a poor spring in one of my mags but don't think so. Three jams in a thousand rounds is not that bad – and I knew I had have an issue with these loads. My Springfield did just as well as the other guns in the mm distance average but I was unable to shoot any good group scores.



New shooting glasses like Lena wears.

Finally now have a pair of shooting glasses after not having anything that would fit under my hat and muffs – and that I could see the front sight. These were only \$14 but the address lives in my computer and it is being overhauled even as we speak.

Speaking of glasses, my issue I will need to keep working on is the one where the front sight or target has a habit of doubling. I will sometimes see two front sights - or two targets. This happens when I aim at the bull and then look at my front sight. It just goes click and I am looking at two targets - or two front sights. Looks like I will just have to improvise, overcome, and adapt – which I damn sure can do.

Lastly

This 31 day experiment in shooting my four guns at nine bullseyes has been adventures to say the least. Was surprised at how the numbers came out so close and how well all four of my 1911s did.

I intend to shoot my Wilson and Springfield and maybe figure out why they did not do as well as the other two in group scores...no ACES with either gun. Course, having compared these guns before in more than one experiment, one day it could be anyone of the guns winning the contest.

This drill reminds me of an exercise shooting basketball free throws. It is with the same degree of determinism but not really relying on hardware to support the outcome. One still has to take a stand, stance, breath, aim, and shoot. Wonder how many free throws it would take to get 10 strings of 10 hoops in a row – of course, it must be a swish - one can't use the backboard or the rim to count aces.

Shooting 16 targets and hitting 79 of 144 bulls or hitting 237 out of 432 rounds – both at 55% - means the numbers of CLOSE and ACE hits are 52% of the Group Scores.

The average score in millimeter (mm) distance is 11.01 with the four guns.

This means about one-half the time, actually 55%, the hits are less than 1/2 of an inch (12.7 mm).

