FALKEN

Shot Pattern Analysis - Marcus Delgado - 2026-02-27

Shot Analysis Report — Marcus Delgado

Match: Diagnostic 3x10 — February 27, 2026 **Course:** 3x10 (Kneeling → Prone → Standing) **Total Score:** 249/300 | **X-Count:** 3 (10%)

Position Summary (Firing Order)

Position	Score	Avg	X-Count
Kneeling	75	7.5	1
Prone	87	8.7	1
Standing	87	8.7	1

1. Shot Group Analysis

Position 1: Kneeling (Shots 1-10) — Score: 75

Shot	Score	X	Y	Note
1	6	-2.1	-10.8	Low
2	**3**	-11.0	-14.1	**Extreme flyer — low-left**
3	10	-0.2	+0.4	X-ring — center
4	9	-0.9	+4.2	Slightly high
5	8	-4.7	-3.1	Left-low
6	8	+5.1	-1.7	Right

Shot	Score	X	Y	Note
7	6	-10.4	-5.8	**Hard left**
8	9	-3.8	-1.6	Near center
9	9	+2.4	-4.0	Slightly low-right
10	7	-0.3	-9.5	Low

Group Center (excluding shots 2 & 7): Approximately X: -1.5, Y: -2.5 — slight left and low bias **With flyers included:** Center shifts significantly left and low

Dispersion: Very large — approximately 16mm left-to-right, 18mm top-to-bottom. This is the widest group of the match by a significant margin.

Pattern Shape: Scattered, with a core cluster near center (shots 3, 4, 8, 9) surrounded by hard breaks in multiple directions. Two severe flyers (shots 2 and 7) dragged the score down by at least 8–10 points on their own. The core shots suggest the athlete *can* hold a respectable kneeling position — the problem is consistency and position stability breaking down unpredictably.

Position 2: Prone (Shots 11-20) — Score: 87

Shot	Score	X	Y	Note
11	9	+1.6	+2.3	Slightly high-right
12	8	+4.8	-2.8	Right-low
13	9	+3.8	-1.0	Right
14	10	+1.6	+0.9	X-ring — center
15	8	+4.7	-3.6	Right-low
16	9	+3.2	+0.7	Right
17	8	-4.5	-2.8	Left-low
18	9	+4.2	-0.3	Right
19	8	+3.9	-4.4	Right-low
20	9	-0.9	-4.0	Low

Group Center: Approximately X: +2.2, Y: -1.6 — consistent **right and slightly low bias**

Dispersion: Moderate — roughly 9mm left-to-right spread among the right-biased cluster. Shot 17 is a notable outlier to the left (-4.5), breaking the otherwise right-dominant pattern.

Pattern Shape: There is a clear and consistent rightward bias in 7 of 10 shots. The group has a horizontal elongation, with most shots clustering right of center between 3–5mm. This is a systematic, repeatable error — not random noise. Shot 17 (hard left) is likely a separate trigger/mental error rather than a position issue.

Position 3: Standing (Shots 21-30) — Score: 87

Shot	Score	X	Y	Note
21	10	-0.7	+0.7	X-ring — center
22	9	+3.7	-1.6	Right
23	10	+1.8	+1.3	Near center
24	9	-2.1	-2.0	Left-low
25	7	+4.4	-8.2	**Low flyer — right**
26	7	-7.8	-1.1	**Hard left flyer**
27	9	-2.5	-3.1	Left-low
28	9	-0.1	-2.5	Low
29	7	+1.2	-9.7	**Hard low flyer**
30	10	-2.0	+0.4	Near center

Group Center (excluding flyers 25, 26, 29): Approximately X: -0.1, Y: -1.0 — essentially centered with minimal bias. Excellent.

Dispersion (core shots): Tight — core shots 21, 22, 23, 24, 27, 28, 30 form a respectable group for standing. The three 7-ring shots (25, 26, 29) are all below-center or far left, pulling the score down.

Pattern Shape: A strong center core with three distinct breakdowns. The 7s are spread in different directions (right-low, left, straight down), suggesting they are **shot-execution failures** rather than a positional bias — likely trigger anticipation or loss of mental process during the string.

2. Technical Assessment

Kneeling — Primary Concerns

1. Position Instability / Inconsistent Natural Point of Aim (NPA)
The dramatic scatter — especially shots 2 (hard lower-left) and 7 (hard left) — points to the position physically shifting or collapsing between shots. In kneeling, the most common causes are:

- Sling tension inconsistency (sling slipping or reapplied differently)
- Heel/toe balance on the kneeling foot shifting under muscle fatigue
- Elbow not seated consistently on the knee — it may be riding off the kneecap between shots

2. Mental Reset Not Occurring Shots 1 and 2 coming out as a 6 and 3 in the opening of the match suggests the athlete may have rushed into position without fully establishing NPA or completing a quality shot routine. Shot 3 (10, X-ring) immediately following proves the position *can* produce excellent shots — the problem is committing to the full process every time.

3. Low Bias in Flyers Shots 1, 2, 7, and 10 all have significant negative Y values (downward). This consistent downward component on the worst shots suggests the support side may be dropping — either the sling loosening or the elbow drifting off the knee at the moment of firing.

Prone — Primary Concern: Consistent Right Bias

Seven of ten shots land to the right of center. This is almost certainly a **sight alignment or natural point of aim issue**, not a trigger problem — because the error is *consistent*, not random.

Most likely causes:

- **NPA is drifted right** — the rifle naturally wants to point right of target without the athlete correcting it. In prone, this often comes from body alignment (hips and legs angled slightly to one side)
- **Rear sight windage needs a left adjustment** — if the core group is consistently sitting 3–4mm right, a windage correction of 1–2 clicks left would immediately center the group
- **Head position** — if the cheekweld varies and the shooter is looking slightly through the right side of the rear aperture, this will produce a rightward group
- **Action Item:** Before adjusting sights, verify NPA by closing eyes, relaxing, and checking where the rifle naturally settles. If it settles right of target, adjust body position left. If NPA is correct and the group is still right, apply a sight correction.

Standing — Shot Execution Breakdowns

The core standing group is genuinely impressive for this level — shots 21, 23, and 30 are all 10s, and the centered NPA is excellent. The three 7s (shots 25, 26, 29) are the entire problem in standing. These are likely caused by:

- **Trigger anticipation** — the athlete fires early during a momentary alignment, rather than maintaining process and letting the shot break at the correct moment
- **Breathing timing error** — if the shot is fired at the wrong point in the respiratory pause, body movement can throw the shot significantly
- **Mental fatigue** — shots 25, 26, and 29 are dispersed in three different directions, which is the classic signature of **inconsistent shot routine execution** rather than a technique flaw

3. Coaching Recommendations

Kneeling — Immediate Priorities

1. Establish and Lock In Your Kneeling Position Routine Before each shot string in training, go through a strict position checklist:

- Sling tension: mark your sling setting and verify it is identical every time
- Elbow placement: the elbow tip must contact the same point on the kneecap every shot
- Heel position: consistent angle and location underfoot

2. Drill: Interrupted Position Between each shot in practice, fully stand up, then re-enter your kneeling position from scratch. This forces you to develop a reliable, repeatable position-entry sequence and reveals whether you can hold NPA consistently shot-to-shot.

3. NPA Check Before Every Shot Close eyes → relax muscles completely → open eyes → where is the front sight? If it is not on target, move your *body* — not the rifle. In kneeling, this means adjusting hip position on the heel.

4. Do Not Rush the First Two Shots The data shows your worst shots are early in the string (1, 2). Build your pre-shot routine time deliberately — don't begin the trigger pull until you feel fully settled.

Prone — Immediate Priorities

1. NPA Correction — Body Alignment Lie in prone, close your eyes, and take three relaxed breaths. Open eyes — where does the sight settle? If it is right of the bull, shuffle your hips 2–3 inches to the left (for a right-handed shooter) until the natural rest point is centered. Recheck after every sighter.

2. Sight Windage Adjustment (If NPA Is Correct) If your NPA is verified center and the group is still right by 3–4mm, apply **1–2 clicks of left windage**. Do not mix NPA correction and sight adjustment simultaneously — fix position first.

3. Drill: Blind NPA Test After setting position, fire one shot with eyes open normally. Then close eyes, relax, and see where the sight settles naturally. The two locations should match. If they do not, your NPA is drifted.

4. Address Shot 17 (Hard Left) This single left-side outlier in an otherwise right-biased group is almost certainly a trigger disturbance — likely a flinch or finger placement issue that occurred on that specific shot. Review your trigger finger placement and ensure consistent first-pad contact throughout the string.

Standing — Immediate Priorities

1. Prioritize Shot Routine Over Timing Your core standing shots are excellent — you clearly have the position and NPA dialed in. The only job now is executing the *same routine on every single shot*. When a 7 lands, it means the routine broke down. Practice naming every step of your routine out loud during dry-fire.

2. Drill: One-Shot Dry Fire with Full Routine Fire one dry-fire shot, then pause 15 seconds and reflect: Did you complete every step? Did you breathe correctly? Did you feel the trigger surprise you? Only move to the next shot when you can honestly say yes to all three. This builds the habit of process-first thinking.

3. Breathing Timing Drill For each shot in practice, call out your respiratory phase — "inhale... exhale... natural pause... firing." The 7s at shots 25 and 29 (both hard downward) suggest the shot may be breaking late in the breath, when the body is beginning to re-inhale and naturally drops.

4. Mental Reset After a Bad Shot If you sense a shot broke poorly, do not rush the next one. Take an extra breath, re-establish position, restart the routine. Chasing a bad shot with a hurried shot makes it worse.

4. Positive Observations

What's Working Well

Kneeling core competency is real. Shots 3, 4, 8, and 9 (10, 9, 9, 9) demonstrate that Marcus *has* a workable kneeling position. A 37/40 on those four shots alone shows genuine capability. The position is there — it just needs to be made reliable across all 10 shots.

Prone NPA is repeatable. Despite the rightward bias, the group is *consistent* — tight horizontal dispersion on the right side tells you the position is locking in the same way each shot. That consistency is the foundation for improvement; a systematic error is much easier to fix than random scatter.

Standing is genuinely strong. An 87 in standing with three 10s (including an X) is a real achievement. Shots 21, 23, 24, 27, 28, and 30 form a credible standing group centered beautifully on the bull. The standing position NPA appears well-established and centered — this is the strongest technical foundation of the three positions.

Improvement trend within the match. Moving from kneeling (75) → prone (87) → standing (87) shows the athlete settling into the match as it progresses. Whether this reflects physical warm-up, growing mental focus, or greater confidence in prone and standing, the upward trend is meaningful.

X-count is respectable. Three X-ring hits across 30 shots (10%) in a diagnostic match — with one in each position — shows the athlete is capable of elite-level shot placement when the full routine comes together.

Priority Action Plan

Priority	Position	Focus
High	Kneeling	Eliminate position instability — drill sling consistency, elbow placement, and NPA check every shot
Medium	Prone	Diagnose and correct rightward bias — NPA test first, then sight adjustment if needed
Medium	Standing	Protect the strong core — eliminate 7s through disciplined shot routine and breathing timing

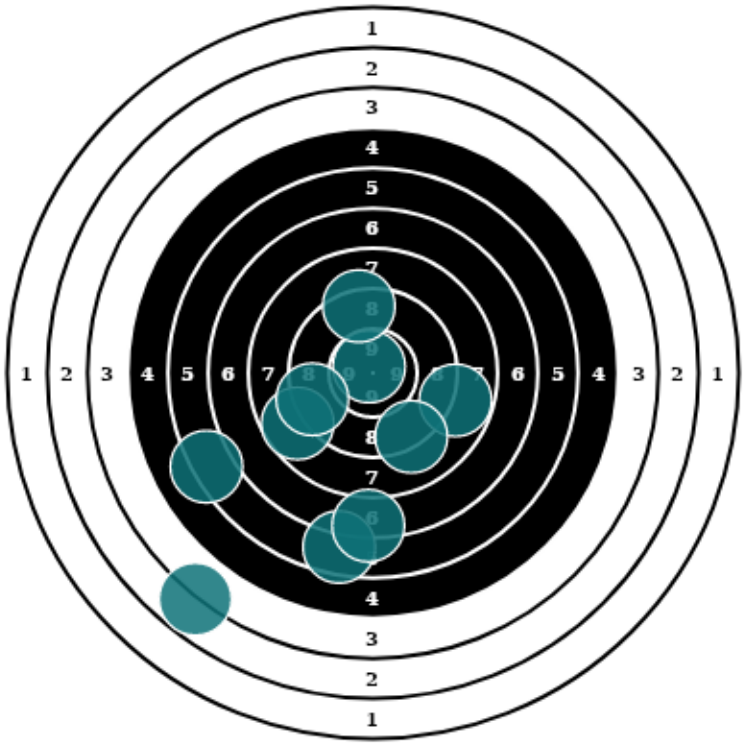
> **Bottom Line:** Marcus's 249 is being held back almost entirely by breakdowns — not by a lack of fundamental skill. Shots 2 and 7 in kneeling alone cost ~9 points. Eliminate the outliers, and a score in the **265–275 range is achievable in the near term** with the technique already present.

Target Visualizations by Stage

Marcus Delgado

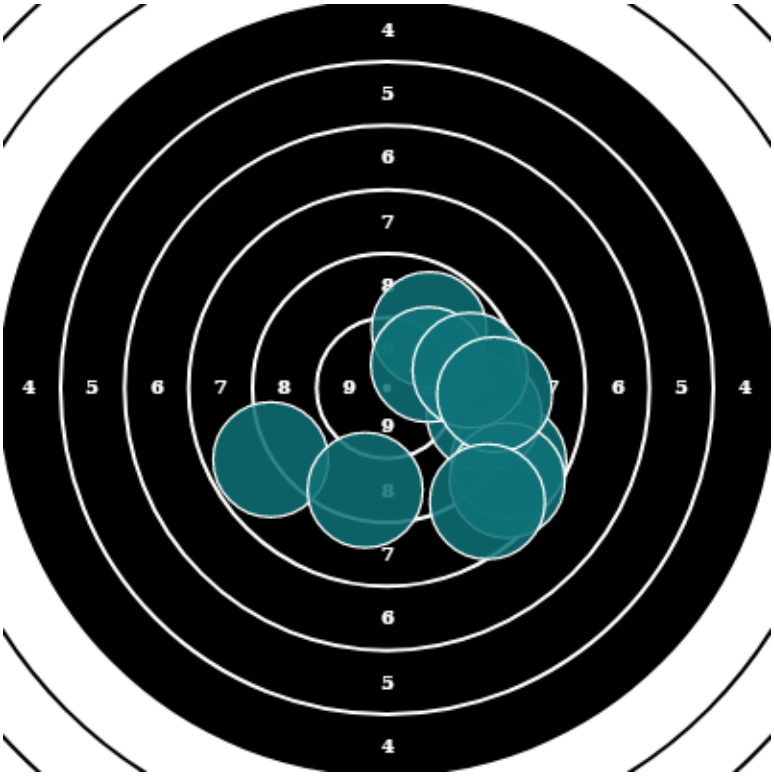
Kneeling

Score: 79.6 | **Shots:** 10 | **X's:** 1



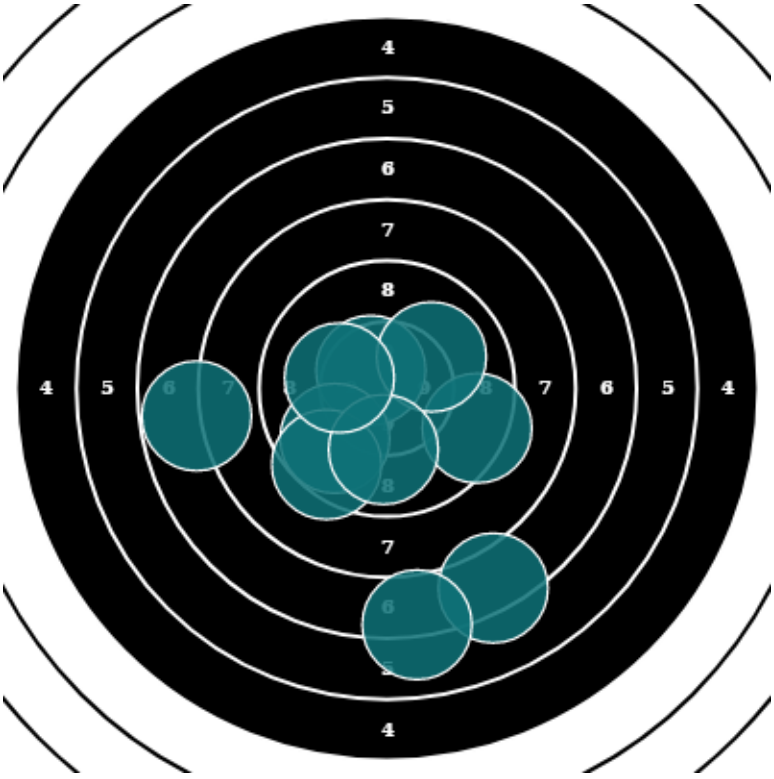
Prone

Score: 92.3 | **Shots:** 10 | **X's:** 1



Standing

Score: 91.2 | **Shots:** 10 | **X's:** 1



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