

TO: Defense Counsel – State of Utah v. Tyler James Robinson

FROM: Independent Analytical Review (ZionPattern Solver Framework)

DATE: July 24, 2026 (Revised)

RE: Shooting-Performance Feasibility – Qualitative Assessment under Documented Constraints (Revised)

ANALYTICAL MEMORANDUM (REVISED)

Shooting Performance Feasibility – Tyler Robinson as Potential Assailant

1. Purpose and Scope

This revised memorandum evaluates the performance difficulty of the single fatal shot under conditions described in the public record. It deliberately excludes DNA evidence, surveillance-based identity conclusions, the planning note, post-event communications, and all other identity-linked evidence. The question is limited to performance feasibility: given the documented distance, environmental conditions, equipment, and limited practice evidence attributed to the defendant, how difficult was a first-round lethal hit.

Methodological note: This revision removes specific numerical probability estimates. No empirical dataset exists for the exact combination of variables present here. Any single percentage would be an informed judgment, not a reproducible calculation, and would be vulnerable to cross-examination on weighting, independence of factors, and lack of peer-reviewed validation. The analysis therefore stays qualitative while remaining precise about the sources of difficulty and uncertainty.

2. Documented Parameters

Parameter	Documented / Reported Condition
Distance	~130–150 yards (official account: ~430 ft from Losee Center roof)
Rounds expended	One only – no follow-up correction possible
Weapon	Scoped bolt-action rifle (.30-06 class per charging materials)
Defendant age	22 years
Practice evidence	Static practice targets and "TEST SHOT" casing recovered from residence – limited practice; no formal marksmanship training on record
Confirmed field zero at distance	No public evidence of a zero confirmed at or near 150 yards
Prior field experience	No public evidence of practice under wind, from an elevated position, or on a dynamic human-sized target
Wind – 10 Sep 2025	Wasatch Front regional forecast: south winds gusting 25–40 mph. Exact rooftop vector at 12:23 p.m. not publicly recorded
Target state	Live Q&A; – speaking, gesturing, interacting (dynamic)
Stress / time pressure	High-stress decision window in a live public event
Optical conditions	Midday sun; elevated-to-ground angle; potential heat shimmer / mirage

3. Sources of Performance Difficulty

Each factor below increases the difficulty of a first-round lethal hit. They are listed qualitatively. No claim is made that they are fully independent or that their combined effect can be expressed as a single validated probability.

- **Distance.** 130–150 yards is well within the mechanical capability of a .30-06 with a scoped rifle. It is outside the distance at which most limited-practice shooters reliably produce first-round hits on a human-sized target under non-range conditions.
- **Single-shot constraint.** No opportunity to observe impact and correct. The first round had to be both a hit and a lethal hit.
- **Wind.** Regional forecasts called for gusty south winds (25–40 mph range) along the Wasatch Front. A scope zero does not compensate for real-time gusts or directional changes. Exact wind at the rooftop at 12:23 p.m. is not publicly recorded; the day was not calm. Wind drift at this distance is a real error source for anyone without demonstrated wind-reading experience.
- **Absence of confirmed field zero and field experience.** "No public evidence" is not affirmative proof that zeroing or field practice never occurred. It is, however, the current state of the public record. Static paper targets do not demonstrate ability under wind, from an elevated position, or against a moving/speaking target.

- **Dynamic target and time pressure.** The shot occurred during live Q&A.; The target was speaking and gesturing. The shooter had a limited decision window.
- **Stress.** Acute stress degrades fine motor control, trigger press, and decision quality. This is documented in military and law-enforcement marksmanship literature. The magnitude of degradation for any specific individual is unknown.
- **Optical conditions.** Midday sun and an elevated-to-ground line of sight can introduce mirage and contrast issues. Their actual effect that day is unmeasured.

4. Qualitative Feasibility Assessment

Under the full set of constraints listed above, a first-round lethal hit by a 22-year-old with only limited static-target practice, no publicly documented field zero at distance, no publicly documented wind or elevated-position experience, under gusty regional wind conditions, against a dynamic target, in a single-shot scenario, and under stress, is a **low-probability performance outcome**.

This is an informed judgment based on the cumulative difficulty of the listed factors. It is not a laboratory-derived probability, not the product of a validated statistical model, and not a claim that the shot was impossible. A .30-06 with a properly zeroed scope is mechanically capable of accurate fire at 130–150 yards under favorable conditions. The public record does not establish that those favorable conditions (confirmed zero, wind compensation skill, stable position, calm nerves, static target) were present.

5. Significance for Defense Evaluation

This assessment does not prove the defendant did not fire the shot. It establishes that the performance demands of the official scenario are high relative to the limited practice evidence currently in the public record. The prosecution's case therefore depends heavily on identity-linked evidence (DNA, movement surveillance, documentary items) to connect the defendant to the act. Any material weakness in those identity layers increases the relevance of the performance-feasibility problem.

Further development that would strengthen or refute this analysis includes: exact wind data at the roof at 12:23 p.m., any evidence of a confirmed zero at distance, any evidence of prior field or wind practice, and optical conditions at the elevated position.

6. Limitations and Methodological Honesty

- No empirical dataset exists for the exact combination of variables present in this case. Specific percentages have therefore been omitted.
- “No public evidence” of training or zeroing is weaker than affirmative evidence that such training or zeroing did not occur.
- Regional wind forecasts do not establish the precise wind vector at the shooter's position or along the bullet's flight path.
- A .30-06 with a properly zeroed scope is capable of accurate fire at this distance under many conditions; the issue is whether the public record shows those conditions were met.
- This memorandum addresses performance feasibility only and takes no position on ultimate identity or guilt.
- The analysis has not been validated by peer-reviewed study or accepted by courts as a formal methodology. It is an analytical framework for evaluating cumulative difficulty, not an expert statistical model.