

Effective Stage Design Strategies

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Purpose - The primary objective for the Effective Stage Design Strategies Course is to help Stage Designers create Fun, Challenging and Legal Stages which makes competitors enjoy and want to shoot.

Effective Stage Design Strategies

- Create Field Course Stage Designs which offers multiple competitive stage plans to complete. One way to shoot it style field course stages are not as fun and also missing the “Figure it out” puzzle portion of the challenge.
- Stage Designs should be founded in testing realistic & common Practical Shooting Skills. The average Target distance for USPSA style matches is 7 yards with a handful of closer or further targets sprinkled in here or there.
- Every Stage Prop used within the diagram must serve a definitive purpose towards achieving the skill testing goal(s) of the stage. Adding extra props to the stage which have no value in testing the shooting or movement challenge only delay the stage setup and teardown efforts.
- The Stage Diagram should match the Bay Size restrictions within the local Range. Measure your local club bays width and depth then create a stage diagram restriction around those physical limitations. Most stage design size failures are associated with a Bay width limitation that wasn’t considered during the Stage Diagram creation process.
- The Stage Diagram should only use Club Props which actually exist in the clubs inventory. Also consider the total quantity of available common props used for your stage in conjunction with what will be needed for the remaining stages within the match.
- Shot Difficulty should be biased to what the “Average” B-Class skillset competitor can realistically perform. Competitors usually determine enjoyment or success while attending a match by being able to hit the targets. Excessively difficult or punitive shooting challenges turn the stage into one to “Survive” versus one to “Enjoy”. Ask yourself honestly, “Could I make that difficult shot successfully with a high level of consistency?”. If the answer is “No”, then the shot difficulty is likely too high.
- Try to imagine how each Gun Division would attempt to shoot the stage during the design and build process. Stage designers who normally shoot High Capacity divisions commonly forget to look at the stage from the vantage point of a Low Capacity division stage plan. I have seen plenty of stage designs which were technically legal per USPSA rules yet forced Low Capacity division shooters to perform standing reloads as the optimal stage plan. Look at hard leans within shooting positions from both Pistol and Carbine perspectives. Many Walls, Barrels or other props within stages that require a hard left side lean to access targets have been destroyed due to hits from PCC’s.

- Ensure the shooting positions and movement challenges are as equitable as possible given the wide range of physical capabilities or limitations of the attending competitors. Short competitors are at a disadvantage when required to shoot over props or through high ports. Tall competitors may have an advantage when reaching around or over props making targets accessible when they shouldn't be. The average age of competitors attending Practical Shooting matches is 45 - 50 years old. Athleticism and Mobility tests need to be biased towards what is reasonably achievable from competitors within that age bracket.
- Non-Shooting Movement tasks should be biased to reasonable movements that don't require a significant amount of athleticism. Excessive non-shooting movement within a stage should be eliminated. Competitors attend Practical Shooting matches to primarily test their Shooting skills. It's not a track meet where winners and losers are primarily determined by who can run the fastest within stages.
- Proactive Consideration must be taken for how the stage will be consistently reset or safely and effectively officiated. Avoid using difficult to replicate partial targets. Create foot traffic clearance between props which will allow the RO to score the targets and competitors to rest the targets efficiently. Avoid prop placement which would restrict the movement of the RO while officiating competitors.
- Large Field Course stages should take less than 30 seconds to complete for the "Average" B-Class skillset competitor. Stages which take longer than 30 seconds to complete usually create a Squad Log Jam type of scenario in the middle of the match.
- An optimally Sized, Shooting/Movement Challenge balanced and Officiated Stage should take 2 - 2.5 minutes to complete from one competitor to the next. If the stage is taking longer than 2.5 minutes from one competitor to the next, they are usually failing at one or more of these guidelines.
- After Setting up the Stage, move everywhere within the shooting area while observing the positioning of the targets. Lean excessively outside of common shooting areas to determine if extra targets become visible or shoot through scenarios are available. Make no assumptions as to how the competitors would shoot the stage. Every possible target engagement method or movement strategy must be considered. Look at the stage from a "Gamers" vantage point by trying to exploit flaws within the stage design. Assume that if a target engagement can be performed, regardless of how ineffective of a stage strategy it may be, some competitors will do it. A common attitude towards this is "Nobody would do that..." then someone does it.
- When using Activated Targets use a prop configuration methodology which is simple, reliable and easily repeatable. Activated targets must present the exact same activation timing for every competitor. Assess potential target engagement angles to avoid activation mechanisms (Cables, Activator, Activator Rods, etc.) from getting shot. Make the activated prop set/reset as obvious as possible. Painting the ends of an activation rod different colors along with the corresponding locations on the activator & ground makes it more obvious as to how it should be set. If possible use real hard cover to block the activated targets when they are in the "away" position to make scoring misses due to hard cover hits obvious. If real hard cover targets are not available ensure the the visual blocking props are properly repaired or restored as they get hit.

- When using Activated Targets attempt to provide an opportunity for the competitors to engage other targets while waiting for the activated target to appear. This is part of the “Puzzle” in figuring out the optimal stage plan. This also allows competitors to determine if they want to risk adding in other targets between the activator and the activated target.
- Avoid placing Steel Targets in close proximity to one another on the same depth plane. Ricochets or Splatter from one Steel Target can cause the Steel Target(s) next to the one being shot to prematurely fall. Also avoid placing Cardboard Targets next to or on the same depth plane as Steel Targets. Cardboard Targets placed close to Steel Targets will get peppered with splatter from the steel and become difficult to score.
- Assess Common Shooting Positions versus props which serve as visual barriers from a perspective of the prop getting shot. It's best to hang No Shoot Target(s) on the end of Walls or on edges of Ports which overhang the end of the prop to serve as the observable limitation versus the target's location. At a minimum the cost of a competitor's hits impacting a No Shoot target is much less expensive than it impacting the Prop. The added benefit is that it's much easier to score and restore hits on a No Shoot target. Props which get shot excessively through a match can actually change the target availability through the course of the match. Such as a 2x4 board on the end of a wall which gets blasted away one chunk at a time through the match.
- In general try to keep the stage design and or requirements with the following “No More than Four...” recommendations. Most of the “This is Not Fun & I need to Survive this” types of stages are breaking multiple of the below recommendations. Breaking one or two of these recommendations on a stage design can translate to an enjoyable experience if other accommodations are made to offset the variance.
 - No More than Four....
 - Gun Handling Tasks required to complete the Stage.
 - Consecutive Strides of non-shooting movement within the Stage.
 - Using the same main Stage Props (Walls, Barrels, etc).
 - Cardboard Targets Required to be engaged within a single position.
 - Shots per Cardboard Target being required.
 - Excessively difficult Targets within the Stage.
 - Shooting Positions required to engage all of the targets within the Stage.
 - Minutes for the Average Skillset competitor to identify a stage plan.
 - Mandated non-shooting Tasks or Actions to perform during the stage

Effective Written Stage Briefing Strategies

- Create WSB Verbiage which offers the competitor the freedom to choose how to complete the stage. Overzealous Stage Procedures which dictate many actions or requirements are not as fun and also missing the “Figure it out” puzzle portion of the challenge.
- Use Clear, Complete, and Conceise verbiage within the Written Stage Briefing (WSB). Ensure that all required content is clearly defined with the WSB. Read the WSB verbiage out loud to ensure that the content can be effectively spoken and clearly understood by others. Every word within the WSB must serve a definitive purpose towards achieving the skill testing goal(s) of the stage.
- Test the WSB verbiage by attempting to “Game” the WSB while intentionally looking for holes in the content as written. In general, the more verbiage that exists, the greater the chance that the content will be misunderstood or potentially gamed.
- The Effective or Ineffective completion of Gun Handling or Start Position Requirement tasks should have a tangible impact on the competitors overall stage score. Requiring abnormal Hand Position or Gun Load Condition scenarios when the first shooting position is 3 or more strides away from the start position have very little tangible impact to the competitors overall stage score.
- If the Written Stage Briefing consists of a Diagram Page and a Written Briefing Page, ensure that the verbiage on both pages is identical. Content on either page which contradicts one another will at a minimum cause confusion. It can also lead to inconsistent deployment of the stage requirements, such as start positions or mandated actions. This can lead to the stage being thrown out due to the squads inconsistently deploying the Stage requirements as the squads cycle through the stage.
- The Stage Diagram used within the WSB needs to contain all of the requirements listed within the verbiage. Target Quantity, Start Position X's, Gun Position X, Quantity of Props needed for the stage, and General similar look of the final product once the stage is setup. If the Stage Diagram shows 4 walls and 6 barrels, but the final product ends up with way more walls and barrels to achieve the desired shooting or movement goals, that is a failure in the stage design phase.
- When listing Steel Targets within the WSB verbiage try to do so in a generic manner. Such as “5 Steel Targets” instead of “2 Plates, 1 Pepper Popper, and 2 Mini Poppers”. Using a generic naming convention allows you to use alternate Steel Target types on match day if needed. Your club may not have enough of the same type of steel to use on all of the stages. The limitations of the berm and how the stage is placed within the berm may require using a steel plate instead of a popper to set it at a safe minimum distance or avoid a shoot through scenario.
- Replicate common Start Position verbiage from one stage to the next when they are the same or similar. The following start position descriptions achieve the same goal but get there using vastly different verbiage. “*Standing inside the shooting area, toes touching X's and Wrists below belt. Handgun is loaded and holstered*” vs “*Standing fully inside the shooting area facing down range with toes of each foot touching respective X's. Arms are relaxed at sides with wrists below the belt. Handgun is loaded, safety engaged and holstered per rule 8.1*”. The first version is concise and to the point. The second version is too wordy and can lead to potential misinterpretation.