JUDGES' OATH

I hereby promise that I shall officiate in each Combat Robot Tournament with complete impartiality and fairness. I will respect and abide by the rules that govern them, in the true spirit of sportsmanship and fair competition.

Judging Guidelines

Introduction

Judging a combat robot tournament can be challenging, and requires knowledge of the rules, good concentration, and most importantly impartiality. Bouts involve a wide variety of combat robot designs and weapons, Judges must maintain an open and flexible point of view yet remain objective. In the end though, judging frequently involves a measure of subjectivity. To help maintain consistency in judging, the following outline will provide Judges with the guidelines and criteria for scoring bouts.

Scoring the performance of a combat robot is based on three categories:

Aggression
Damage
Control/Strategy

The three categories for scoring should be treated as being as mutually exclusive as possible.

Aggression

A combat robot's aggression score is based on the severity, frequency, boldness and effectiveness of the attacks intentionally initiated by a combat robot against their opponent. Combat robot control is a factor in scoring aggression points, this refers to competitors control of an opponent, not the operation of the combat robot and driver ability. When a combat robot accidentally strikes an opponent, that act should not be considered as aggression.

The following items should be used together to score a combat robot's aggression:

Boldness: The risk-taking of each attack as in attacking an opponent's weapon vs. attacking the body.
Frequency: The number times a combat robot initiates attacks during the bout.

Effectiveness: The result of each attack. Was the attack intended to go after a weakness of the other opponent, did the attack have a measure of success? Was the attack a targeted or a random hit?

Severity: The intensity or forcefulness of each attack.

Control: How well a combat robot is able to force an opponent to expose a weakness or prevent an opponent from using their strengths. Such as continually preventing an opponent's spinning weapon from attaining full speed.

Avoiding contact with an opponent does not necessarily count against aggression. If a combat robot is moving away from an opponent in order to get its weapon ready for attack, moving away should not count against aggression. Examples of this are when a spinner combat robot is trying to spin up its weapon, or when a lifter-bot or crush-bot is repositioning its weapon. Points should be taken off aggression if the combat robot continues to avoid its opponent when the weapon is judged to be ready.

A Combat robot has control when it limits its opponent's actions in ways that provide it with an advantage. This occurs when a combat robot keeps an opponent from driving their combat robot where they want it to go or prevents an opponent from employing its weapon.

Pushing an opponent can count somewhat as aggression, but this is primarily a strategy action.

Damage

Damage that occurs through deliberate controlled action, when a combat robot either directly, or indirectly using the arena hazards reduces the function, effectiveness or defenses of the opponent. It will be considered damage if an opponent combat robot inadvertently harms itself, however self inflicted damage should be significantly less weighted than damage inflicted by an opponent.

Use all of the following factors together to get an overall impression of a combat robot's damage:

Functions: There is a wide variation in the weapons and functions of different combat robots. One combat robot may be a simple ram-bot or push-bot while another may have active weapons, passive weapons and a self-righting mechanism. In general, a combat robot that has more functions should be penalized less for the loss of any single function.

Effectiveness: Not all damage to a combat robot's functional parts should be weighted equally. Certain functions on a combat robot are more significant to a combat robot's effectiveness over others. Damaging an opponent's chassis or drive system that results in a reduction of mobility should count more than damage to a weapon. Damaging a primary spinning weapon should count more than damaging a self-righting mechanism. Damage to a passive weapon should count less than damage to an active weapon.

Defense: Refers to reducing an opponent's protective capability. Typical types of defensive systems damage include damage to armor, protective skirting and passive weapons such as spikes mounted on the side of a combat robot.

If discernable damage is not done to either combat robot, the judge should divide their damage score with a slight advantage going to the combat robot that seemed to attack harder.

If a combat robot inflicts minor damage such as dents or gouges on its opponent, and its opponent never caused damage in return, the attacking combat robot should receive the majority of damage points. However, if the opponent caused incidental damage in return, the opponent should receive some consideration for incidental damage.

Cosmetic damage should be used only for the purpose of breaking a tie. If both combat robots have inflicted equal functional damage on their opponents, the combat robot that inflicted more cosmetic damage should receive more points. Cosmetic damage can also give the edge to a combat robot in the case where no other forms of damage have been caused.

Self-inflicted damage can be counted against a combat robot's damage. Self inflicted damage should count less than damage caused an attacking opponent. Self-inflicted damage can count against a combat robots strategy if the damage appears to have adversely affected its strategy or intent at the time.

If a combat robot is charging an opponent and encounters an arena hazard, strategy points should not be affected unless the hazard damage adversely affected the attack.

If a combat robot encounters a hazard for "no apparent reason", strategy points should be taken off damage to ablative armor should not count as highly as damage to more traditional armor. Examples of ablative armor are large pieces of wood, rubber strips or phone books. Ablative armor is used to absorb the impact of an attack by breaking apart when hit by an opponent. If a judge is unsure if part of a combat robot's armor was intended to be ablative, they should ask the combatants in accordance with the TR&P.

Short puffs of white smoke are usually from a normal CO2 release. Smoke coming from tires usually means nothing although it may indicate that something has been bent and is rubbing on the tire. Grey smoke coming from the interior of a combat robot may indicate that something is burning or melting. Interior smoke indicates damage, even if the exterior looks undamaged and the combat robot is still mobile.

Control/Strategy

Control/Strategy is shown when a combat robot displays a controlled offensive plan that uses its strengths against the weaknesses of its opponent. Control also means that a combat robot exhibits a deliberate defensive plan that protects its weaknesses against the strengths of the opponent. Control/Strategy can also involve using the arena hazards to gain a relative offensive or defensive advantage. The following factors should be considered together to assess a combat robot's strategy and control:

Planning: Does the combat robot have obvious defensive and/or offensive plans, or is it just randomly trying things?

Flexibility: If either combat robot is damaged or partially disabled, or the arena conditions change (e.g., debris on floor) does the combat robot modify its plans to allow for changing conditions?

Control: If a combat robot has an obvious plan, how well is it actually carrying it out? Specifically, is lack of driver control affecting the plan? An effective offensive strategy should receive more points than an effective defensive strategy.

If a combat robot appears to be randomly trying different strategies, it should not count as highly as a combat robot that appears to be consistently carrying out a pre-planned strategy. On the other hand, if one or both combat robots become damaged, changing strategy to account for the changed circumstances should be rewarded.

Losing power at the end of a match should be counted against strategy if it adversely affects combat robot performance. Examples of losing power are when a combat robot's pneumatics runs out of gas, or when it becomes sluggish due to low batteries.

If a combat robot becomes stuck due to its own action, it should lose strategy points. If the combat robot then dislodges itself, it can gain back some of its strategy points, but not all, depending on how quickly and by what means it used to get unstuck.

When a combat robot becomes stuck due to the actions of the opponent, the non-stuck combat robot should receive strategy points.

The length of time a combat robot is stuck should also affect the strategy score. A combat robot that is stuck for 29 seconds and avoids a Knockout due to time running out, should have more strategy points scored against it than a combat robot that is stuck for the last few seconds of the bout.

Freeing an opponent may be considered a good strategy if it was done in an apparent effort to gain a competitive advantage, such as by increasing aggression and damage scores. Freeing an opponent should not be counted against strategy.

Notes:

Judges should be familiar with how different materials are damaged. Some materials such as titanium will send off bright sparks when hit but are still very strong and may be largely undamaged. Other materials such as aluminum will not send off sparks when hit. Judges should try not to be influenced by things like sparks, but rather how deep or incapacitating the damage is.

Try not to be unduly influenced by highly visual damage that does not alter a combat robot's defensive systems, functioning or effectiveness. A gash in a combat robot's armor may be very visible but only minimally reduce the armor's effectiveness or not expose the combat robot's inner workings or electronics.

Look for damage that may not be visually striking but reduces the ability of the combat robot to function.

A small bend in a lifting arm may dramatically affect its effectiveness by reducing its range of motion; a bent spinner weapon may not be as effective due to being out of balance.

A bent drive axle or wheel hub will reduce a combat robots traction and drivability. Cuts or holes through armor means there is more likely to be internal damage.

Judges should feel free to examine combat robots for damage if they are unsure how to assign points. Judge should inform the referees that they want to examine the combat robots.

Judges should always inspect both combat robots when they enter the arena, to ensure they do not award points for damage caused in previous bouts.

If a Judge has a question for a contestant, they should relay their question through a Referee. If that is not satisfactory, the Judges may discuss the matter directly with the Contestants. Any time a contestant is being questioned, at least one member of the opposing team must be present as an observer.

Keep track of which combat robot is which. Some combat robots are similar in appearance. A competitor guide will be provided to each judge, feel free to make notes regarding damage from previous bouts. At the end of a bout you do not want to be confused about which combat robot is which.

Keep track of aggression, damage and control/strategy from the beginning of the bout until the very end. Don't be unduly influenced by what happens at the end of the match. These records can be as simple as categorized hash marks made in the competitor guide as the fight progresses.