



TOURNAMENT RULES

2009 Season

BattleBots Inc.
1024 Nimitz Ave
Building 140 – Mare Island
Vallejo, CA 94592

rules@battlebots.com

All Tournament Rules subject to change at any time.
BattleBots® has no affiliation with any other robotic sports organization.

Table of Contents

1.0 INTRODUCTION	1	5.0 SAFETY/TECHNICAL COMPLIANCE	21
1.1 BattleBots Tournament	1	5.1 The Safety/Tech Inspection.....	21
1.2 Robot Safety	1	5.2 Builders Jury	21
1.3 Primary Definitions.....	1	5.3 Inspection Time Schedule	21
1.4 Documents and Information Sources.....	2	5.4 Safety/Tech Checks	22
1.5 BattleBots Inc. Exclusion Privileges	3	5.5 Inspection Procedure	22
1.6 Rules Interpretation.....	3	5.6 Robot Weighing.....	23
1.7 Contacting BattleBots Inc.....	4	5.7 Additional Inspections and Testing.....	23
2.0 GENERAL TOURNAMENT RULES	5	5.8 Damaged-Robot Requirements.....	24
2.1 BattleBots Teams.....	5	5.9 BattleBots Officials and Safety	25
2.2 BattleBots Entry Classes.....	5	6.0 MATCH DESCRIPTIONS	26
2.3 General Definitions	6	6.1 Competition Terminology	26
2.4 Registration Procedures	7	6.2 The BattleBox.....	27
2.5 Entry Conditions.....	8	6.3 BotBout Matches.....	28
2.6 Participant Responsibilities	9	6.4 Robot Rumbles	29
2.7 Operators.....	9	6.5 Judges.....	29
2.8 Age Limits and Restrictions.....	10	6.6 Referees.....	30
2.9 Robot Completeness	10	6.7 CrewBots.....	30
2.10 Robot Readiness	11	7.0 MATCH PROCEDURES	31
2.11 Active Weapon Requirement	11	7.1 Application of Procedures	31
2.12 Recording of Tournament Contests	11	7.2 Prior to Match Start	31
2.13 Sponsorship and Advertising	12	7.3 Start of Battle	31
2.14 Prohibited Activities.....	12	7.4 During a Match.....	32
3.0 PIT AND TESTING AREA RULES	14	7.5 BotBout or Grudge Match Winner	34
3.1 Pit Crew	14	7.6 Rumble Winner	35
3.2 Children in the Pit Area	14	7.7 Disqualification and Forfeit.....	36
3.3 Pit Safety Requirements	15	7.8 Executive Officer Decisions.....	36
3.4 Welding/Grinding Area	16	8.0 RULES ENFORCEMENT	37
3.5 Robot Testing.....	16	8.1 Rules Compliance	37
3.6 Fueling Area.....	17	8.2 Serious Offenses.....	37
3.7 Pressure Refill Station	17	8.3 Repeated Warnings.....	37
3.8 CO ₂ Tank Filling.....	17	9.0 PROTESTS AND APPEALS	38
3.9 Pre-Heaters.....	17	9.1 Protests.....	38
3.10 Lithium Polymer Batteries	18	9.2 Appeals	38
3.11 Trash, Debris and Hazardous Waste	18		
3.12 Security Cameras	18		
4.0 REMOTE-CONTROL RADIO USE	19		
4.1 Building Rules Compliance	19		
4.2 Unauthorized Use	19		
4.3 Radio Operation Restrictions	19		
4.4 Tethered Testing.....	19		
4.5 Legacy Radio Control Systems.....	19		
4.6 Custom/Modified Control Systems.....	19		
4.7 Unauthorized Radio Control Use	20		
4.8 BattleBots Rights	20		

1.0 Introduction

1.1 BattleBots Tournament

A BattleBots Tournament celebrates the sport of robotic combat through a contest of battling machines. Teams design, build and control combat robots to demonstrate their creativity, engineering skills, strategy, and driving ability.

A BattleBots Tournament may be structured as either single or double elimination Matches. BattleBots Inc. will notify participants of the type prior to the beginning of competition.

1.2 Robot Safety

The safety of all concerned must be foremost at all times during the design, construction, testing, shipping, preparation, maintenance, staging, activation, competition, deactivation and any other activity involving a combat robot. Common sense and safety awareness are foremost in all areas of construction and operation.

Building and operating combat robots can be dangerous. Do not build or operate a combat robot unless you are qualified to do so, or are supervised by a responsible and qualified supervising adult. Owners are solely responsible for their robot whether or not it complies with the rules of BattleBots Inc. or has been inspected for safety or otherwise by BattleBots Inc. The robot builder's responsibility includes all matters of safety, condition, design, conformity to law, operation, merchantability and fitness for use and for any particular purpose.

1.3 Primary Definitions

1.3.1 BattleBots Inc.

"BattleBots Inc." refers, collectively, to the incorporated entity, all its officers, employees and authorized agents.

1.3.2 BattleBots Executive Officers

"BattleBots Executive Officers" have jurisdiction on all BattleBots matters, as follows:

- a. **BattleBots CEO** – Has overriding authority on all BattleBots matters.
- b. **BattleBots President** – Has overriding authority on all BattleBots matters, unless specifically overridden by the BattleBots CEO.
- c. **Authorized Proxy** – The BattleBots CEO or President may authorize certain persons to have specific Executive Officer rights for a specific time period.

1.3.3 BattleBots-Qualified Combat Robot

A "BattleBots-Qualified Combat Robot" ("BattleBots Robot") is robot that has passed the Safety/Technical ("Safety/Tech") Inspection, and is thus allowed to compete in a BattleBots contest, subject to the rules and restrictions contained in this and other BattleBots documents.

1.3.4 BattleBox

The "BattleBox" is the arena in which BattleBots combat takes place. The BattleBox may also be used for robot testing purposes.

1.3.5 BattleBots Officials

"BattleBots Officials" are authorized officers, employees or agents of BattleBots Inc., and have overlapping jurisdictions, as follows:

- a. **Check-in Staff** – Robot check-in procedures.
- b. **CrewBots** – BattleBox and Staging Area operations. BattleBox weapons.
- c. **Frequency Coordinator** – Use of radio devices anywhere in the Tournament.
- d. **Judges** – Rules interpretation and winner determination for certain Matches.
- e. **Pit Coordinators** – Pit, Queuing and Staging area operations.
- f. **Production Coordinator** -- All third-party vendor and service operations.
- g. **Referees** – BattleBox operations during Matches. Certain rule interpretations.
- h. **Safety/Tech Inspectors** – Safety/Tech, Testing, BattleBox and Pit Area operations.
- i. **Security** – Access to all areas.
- j. **Tournament Scoring & Scheduling** – Timing, scoring and scheduling of all Matches.

1.3.6 Team

A "Team" is a person or group of people associated with the design, construction and/or support of one or more combat robots.

1.3.7 Entrant

An "Entrant" is a Team that has registered to enter a combat robot into a BattleBots Tournament. Entrant may refer to the Team as whole or to each individual or organizational member of the Team.

1.3.8 Entry Class

The "Entry Class" defines what kind of combat robot may be entered, and the allowed composition of the Entrant's Team.

1.4 Documents and Information Sources

Multiple documents and information sources define the requirements for participation in BattleBots. All Entrants must be familiar with the contents of these documents and sources.

1.4.1 Primary Documents

These [BattleBots Tournament Rules](#) define the operational rules for a safe, fair and efficient BattleBots Tournament.

The [BattleBots Building Rules](#) ("Building Rules") define the requirements specific to the design and construction of a BattleBots-compliant combat robot. There may be different Building Rules for each Entry Class.

There may be other BattleBots Inc. documents that provide additional information.

1.4.2 BattleBots Internet Information

The BattleBots website contains general information on BattleBots and also makes available copies of BattleBots documents.

BattleBots Inc. may send e-mail messages to current and former Entrants to provide event and/or competition-specific information on a timely basis.

1.4.3 Entrant Responsibility

It is the sole responsibility of every potential Entrant to verify that they are referencing the last-updated version of any BattleBots document available on the BattleBots website. It is also each Entrant's responsibility to check their e-mail regularly.

1.4.4 Participant/Owner Agreement

The BattleBots Participant/Owner Agreement is a legal document that is the primary Tournament entry document, and must be submitted by each BattleBots Team in order to enter a BattleBots competition. The BattleBots Participant/Owner Agreement describes a Team's rights and their relationship with BattleBots Inc. and is used to document the name and type of participation of each Team member or owner, and also grants certain rights to BattleBots Inc.

The Participant/Owner Agreement is part of the online registration system and becomes available when registration opens for a BattleBots Tournament.

1.5 BattleBots Inc. Exclusion Privileges

Authorized BattleBots Officials may exclude from competition any combat robot that, due to its design, construction or usage, they judge to be a hazard to safe competition, even if that robot has met all of the requirements in the Building Rules or any other BattleBots document.

BattleBots Executive Officers may at any time exclude or Disqualify from competition any robot for any reason.

1.6 Rules Interpretation

1.6.1 Applicability

These Tournament Rules supersede any previously-published rules and regulations regarding BattleBots Tournament operations.

1.6.2 Overlapping/Conflicting Requirements

A reasonable effort is made to ensure that the requirements in all BattleBots documents are consistent with each other. However, in case of an inconsistency:

- a. If any requirements appear to overlap, then the effective requirement will be the combination of all of the overlapping requirements.
- b. If any requirements appear to conflict, then the effective requirement will be the most restrictive of the conflicting requirements.

1.6.3 Additional Requirements

At the discretion of BattleBots Executive Officers, additional rules and requirements may be applied to all potential or BattleBots-Qualified Combat Robots, or to all such robots in a specific Entry Class.

1.6.4 Final Authority

BattleBots Executive Officers have the final authority over the interpretation of the rules and procedures in this and all other BattleBots Inc. documents.

1.6.5 Change Publication

Any changes or special interpretations of these Rules will be published on the official BattleBots website.

1.6.6 Rules Clarification

If a proposed robot's configuration or component design is not adequately addressed by the rules set forth in the Building Rules, it is the builder's responsibility to contact BattleBots Inc. for clarification in advance of constructing the robot.

The sole responsibility of BattleBots Inc. will be to notify the requestor if the proposed design does not comply with the applicable Building Rules. BattleBots Officials will not provide any guarantees that a robot will be accepted to compete in a BattleBots Tournament.

No "waivers", release forms or other documents will be issued to allow a robot to compete if that robot does not meet the requirements -- as interpreted by BattleBots Officials -- of the Building Rules for the robot's Entry Class.

1.7 Contacting BattleBots Inc.

For questions, comments, requests and clarifications regarding the rules and procedures in this or any other BattleBots documents, contact BattleBots Inc. at the following:

Address: BattleBots Inc.

1024 Nimitz Ave.

Bldg. 140 – Mare Island

Vallejo, CA 94592

E-mail: rules@battlebots.com

Website: <http://www.battlebots.com/>

2.0 General Tournament Rules

2.1 BattleBots Teams

A BattleBots "Team" is a person or group of people associated with the design, construction and/or support of one or more combat robots. Teams are subject to the following:

2.1.1 Team Name

The Team name must be unique and not be identical or very similar to the name of a previously-registered Team. BattleBots Inc. reserves the right to reject entries from any Team whose name it deems inappropriate, offensive or conflicting.

BattleBots Inc. must be notified during Tournament registration if a Team's name has been changed.

2.1.2 Designated Team Representative

The "Designated Team Representative" (DTR) describes the entity or person chosen by each Team to manage the Team's entry into a BattleBots Tournament. In many cases the DTR is a Builder, but the DTR can also be a corporation, parent, legal guardian, sponsor, etc. Refer to "2.4 Registration Procedures" for additional information.

Any and all amounts payable by BattleBots Inc. to the Team or its members will be paid to the name of the Designated Team Representative. Once payment has been issued to the DTR, BattleBots Inc. assumes no responsibility for any subsequent disbursements by the DTR.

2.1.3 Team Size Limits

There are no specific limits to the maximum number of people that may be on any Team. However, there are limits on the number of Team members who can be on the Pit Crew(s). Refer to "3.1.1 Pit Crew Size".

2.1.4 Team Age Restrictions

There are no specific age restrictions for Team members. However, there are age restrictions on those Team members who are allowed to be on a Pit Crew (ref. "3.1 Pit Crew", below).

2.2 BattleBots Entry Classes

There are three Entry Classes of combat robots that may compete in BattleBots Tournaments: The High-School Class, the College Class and the Professional Class. BattleBots Robots within each Entry Class do not compete against robots in other Classes.

2.2.1 Rules Applicability

BattleBots Robots in different Entry Classes have different construction/configuration requirements, as defined in the Building Rules. However, unless otherwise noted, the Tournament Rules in this document apply to all Entry Classes.

2.2.2 High School Definition

A "High School" is defined herein as a High School, Middle School, Junior High, or legally-established youth organization. Documentation may be required to prove the validity of any non-school youth organization.

2.2.3 High School Class Teams

High School Class Teams are subject to the following:

- a. The Team has to be composed solely of students and faculty from a single school.
- b. The Team requires a minimum of **three** members, at least **two** who are students at the school.
- c. Faculty members have to be currently teaching at the school.
- d. Each High School Team may only enter a single robot.

- e. A school may have multiple Teams
- f. A student cannot be on more than **one** school's Team.
- g. At least **two** team members must attend the Tournament.

A High School Team may use advisors who are not students or faculty, but such advisors will not be granted access to the Tournament as Team members.

2.2.4 College Definition

A "College" is defined herein as a bona fide College, University or other Post-Secondary Educational Institution. Documentation may be required to prove that the institution qualifies as a "College".

2.2.5 College Class Teams

College Class Teams are subject to the following:

- a. The Team has to be composed solely of students and faculty from a single College.
- b. The Team requires a minimum of **three** members, at least **two** who are part or full-time students at the College.
- c. Faculty members have to be currently teaching at the College.
- d. Each College Team may only enter a single Robot.
- e. A College may have multiple Teams
- f. A student cannot be on more than **one** College Team.
- g. At least **two** team members must attend the Tournament.

A College Team may use advisors who are not students or faculty, but such advisors will not be granted access to the Tournament as Team members.

2.2.6 Professional Class Teams

Professional Class ("Pro-Class") Teams have no general affiliation restrictions and may include members of College or High School Class Teams.

2.2.7 Pro-Class Team Requirements

Pro-Class Teams are subject to the following:

- a. The Team can have as few as **one** member.
- b. No person can be a member of more than **two** Pro-Class Teams.
- c. No two Pro-Class Teams can have more than **one** Team member in common.
- d. A Pro-Class Team may enter only one combat robot at any BattleBots Tournament.

2.2.8 Additional Team Requirements

Teams in all Entry Classes are subject to the additional requirements specified in "2.1 BattleBots Team".

2.3 General Definitions

Below are definitions of terms used throughout this document. Many are explained in more detail in other sections.

2.3.1 Builder

"Builder" includes all people who participated in the design, construction or modification of a combat robot.

2.3.2 BattleBots Robot

A "BattleBots Robot" refers to a robot which has met all BattleBots requirements and has qualified for competing in the BattleBots Tournament.

2.3.3 Competitor

“Competitor” refers to one or more members of a Team whose combat robot has passed the BattleBots Safety/Tech Inspection, and has been declared a BattleBots Robot.

2.3.4 Designated Team Representative

The "Designated Team Representative" describes the entity who manages the Team's entry into a BattleBots competition. Refer to “2.1.2 Designated Team Representative”.

2.3.5 Disqualification

“Disqualification” or being “Disqualified” means that, at a minimum, a Team’s robot is no longer allowed to compete in the BattleBots Tournament.

2.3.6 Expulsion

“Expulsion” of one or more Team members requires, at a minimum, that they leave the Tournament premises for the duration of the Tournament.

2.3.7 Operators

"Operators" refers to the Team members who control the Team’s robot during a BattleBots competition.

2.3.8 Participant

A "Participant" at a BattleBots Tournament refers to either an Entrant or a Competitor, depending upon whether the Participant’s combat robot has qualified to compete in the Tournament.

2.3.9 Pit Area

The "Pit Area" refers to the tables at which robots and associated support equipment are prepared, maintained and stored during a Tournament.

2.3.10 Pit Crew

The "Pit Crew" includes those members of a BattleBots Team who provide direct support work for a combat robot at a BattleBots Tournament.

2.3.11 Pit Passes

The "Pit Passes" are laminated cards issued by BattleBots to the Pit Crew. A Pit Pass is required to be worn and visible at all times when a person is in the Pit Area.

2.3.12 Pit Table

The "Pit Table" refers to the specific table in the Pit Area that is assigned by BattleBots Inc. to a specific Team's combat robot.

2.3.13 Supervising Adult

A "Supervising Adult" is an adult of age **21 years** or older who has read and understands all appropriate BattleBots documents, and who takes full responsibility for the actions of any minors under his/her charge.

2.4 Registration Procedures

To compete in a BattleBots Tournament, Entrants must complete, submit and, as necessary, sign any and all entry and related documents as required by BattleBots Inc.

2.4.1 Online Registration

Basic registration for BattleBots is done using an online Tournament Registration System, which will be made available on the BattleBots website at least **30 days** prior to the Tournament. Each Team must completely fill out and electronically submit their registration data.

2.4.2 ID Photos

As part of the registration, a Team must also submit electronic (.JPG) photos of each Pit Crew member as requested by the Tournament Registration System. These photos are used on the Pit Passes.

2.4.3 Participant/Owner Agreement Form

When the online registration has been filled out and submitted correctly, a customized Participant/Owner Agreement form will be made available for download and printing. If all Team members agree with the terms of the Participant/Owner Agreement, they all must sign the form.

2.4.4 Entry Fees

Prior to competition registration, BattleBots Inc will post the entry fees both on the website and in the Tournament Registration System. All Entrants are required to fully pay the appropriate entry fees when submitting their signed Participants' Agreement Form.

Any additional fees that may result from changes in a robot's sponsorship status may be paid when checking-in at the event.

2.4.5 Tax Forms

IRS Tax forms will also be available for printout from the Tournament Registration System. The appropriate form must be printed, filled out and submitted along with the signed Participants' Agreement and Entry Fees.

2.4.6 Registration Mail-In

To complete the registration procedure, originals of the signed Participant/Owner Agreement form, the filled-out tax forms and the appropriate Entry Fees must then be surface-mailed (Post Office, Fed Ex, UPS, etc.) to BattleBots Inc. at the address given in "1.7 Contacting BattleBots Inc.", or to an alternate address that may be posted on the Online Tournament Registration System.

2.5 Entry Conditions

A Team may need to meet additional requirements in order to be allowed to enter a BattleBots Tournament.

2.5.1 Proof of Functionality Video

Unless otherwise specified in advance by BattleBots Inc, if a robot has not previously competed in actual BattleBots or BotsIQ combat, the Entrant has to submit a full-motion video of their robot's operation.

Requirements for the video are as follows:

- a. The video media has to be received by BattleBots Inc. no later than **14 days** prior to the first day of the Tournament.
- b. The allowed formats are NTSC format DVD's, VHS or Mini-DV videos, Flash Video, QuickTime files or Windows Media Player files.
- c. Only the first **2 minutes** of any video will be reviewed. Additional length will be ignored.
- d. The robot has to be shown being remotely operated, and moving around on the ground in a controllable manner for a period of at least **60 seconds** without editing breaks.
- e. The remote operation of at least one Active Weapon has to be shown.
- f. For at least some of the time while the robot is moving, the video has to simultaneously show both the person/people controlling the robot and the robot itself.
- g. The basic features of the robot (i.e., wheels, legs, chassis shape, weapons, etc.) must be clearly seen at some time during the video.

Note: This is not an "audition" video for the Team. Only the basic completeness, functionality and controllability of the robot need be shown.

Videos will only be viewed by official BattleBots personnel and will otherwise be treated as Confidential. Submitted video media will become the property of BattleBots Inc., and cannot be returned.

If there is some reason why a video cannot be submitted (other than because the robot is not functional) contact BattleBots directly.

2.5.2 Robot Eligibility

If a combat robot has previously competed in another non-BattleBots nationally televised robotic tournament, an Entrant must specifically request in writing that the robot be allowed to compete at a BattleBots Tournament. Contact BattleBots Inc. at the address defined in "1.7 Contacting BattleBots Inc."

2.5.3 Pit Table Assignment

An Entrant must notify BattleBots in advance if they have specific Pit Table requests. BattleBots Inc. assigns Pit Tables based on many factors and makes no guarantees that certain locations will be assigned.

If a combat robot entry has a length greater than **5 feet** or a width greater than **4 feet**, it may require a special Pit Table location. Notify BattleBots as specified in "1.7 Contacting BattleBots Inc."

2.5.4 BattleBots Inc. Rights

BattleBots Inc. reserves the right to reject any entry for any reason.

2.6 Participant Responsibilities

All Participants at a BattleBots Tournament have certain duties and responsibilities.

2.6.1 Response to Officials

Participants must follow the verbal instructions of BattleBots Executive Officers and BattleBots Officials at all times.

2.6.2 Regulations, Rules and Procedures

Participants are ultimately responsible for knowing the BattleBots Regulations, Rules and Procedures as defined in this and other official BattleBots' documents.

2.6.3 Promptness

Participants are responsible for showing up on time for all meetings, inspections, ceremonies or other events that require their participation.

2.6.4 Knowing Match Times

Competitors are ultimately responsible for knowing when their Match will take place, and for having their robot combat-ready at least **60 minutes** in advance of the scheduled time.

Note: BattleBots Inc. will provide ways for Competitors to learn approximately when their Matches are scheduled. However, some Matches cannot be scheduled until a previous Match's outcome has been determined.

2.6.5 Pit Crew Member Availability

Any Team either must have a person available at their designated Pit Table, or must leave a note clearly visible on the top of their Pit Table indicating where key Pit Crew members may be found.

If a Team's robot is scheduled to fight and BattleBots Officials cannot find a member of the Pit Crew, the robot's Team will Forfeit the Match.

2.6.6 Informing Officials

Competitors are responsible for informing the appropriate BattleBots Officials of any problems with radios, their robot, or any other factor that could affect the Team's Match participation.

2.7 Operators

"Operators" refers to the Team members who actually control the BattleBots Robot during a Match. Note that the plural form ("Operators") may refer to a single person who is the only one controlling the robot. When the singular form is used ("Operator"), it always refers to one person.

Operators also include any Team member who may be using additional equipment to "target" a competing robot, or who is operating some of the Arena weapon systems.

2.7.1 Multiple Operators

Multiple people may control a robot during a Match. The number of Operators is limited to the number of members allowed on the Pit Crew for that robot, as defined in "3.1.1 Pit Crew Size". All Operators must be on the Team of the competing robot.

2.7.2 Entry Class Exclusion

No person, regardless of their Team affiliation(s), may be an Operator for more than one robot in each Entry Class. There is no restriction on the same person being an Operator for robots in different Entry Classes.

2.7.3 Operators' Position

Operators may only control a robot from the "Driver's Platforms" adjacent to the BattleBox arena. This includes any Team members who may be using additional equipment to "target" a competing robot.

2.8 Age Limits and Restrictions

BattleBots Inc. Tournaments have specific age limits and requirements:

2.8.1 Minimum Age

Children younger than **10 years old** are not eligible to compete in a BattleBots Tournament. Children under this minimum age are not allowed in the Pit, Testing, Fueling, Welding/Grinding, Queuing or Staging Areas.

2.8.2 Adult-Supervised Minors

Minors between the ages of **10 years** through **17 years** old may enter a BattleBots Tournament so long as there is at least one Supervising Adult on the minor's Pit Crew, and the adult is present at all times during the Tournament.

2.8.3 Children at Winner Announcement

Subject to the approval and direction of the BattleBox CrewBots, children under 10 years old, under strict control and always holding the hand of one of their parents, can accompany that adult into the BattleBox if there is a winner announcement following a BattleBots Match.

2.9 Robot Completeness

Each robot must be designed to be complete. It cannot be dependent upon components from any other robot entered at the Tournament.

2.9.1 Sharing of Parts

A BattleBots Robot, including its control system, must not contain any parts from any other robot that is still eligible to compete in Tournament elimination Matches. Thus, a BattleBots Robot may utilize parts from another only if that other robot has been eliminated from Match competition.

2.9.2 Sharing of a Transmitter

Two BattleBots Robots in the same Entry Class cannot be required to use the same Remote Control transmitter unit. BattleBots Robots in different Entry Classes may share one or more transmitters.

2.9.3 Single Entry Class

No BattleBots Robot may compete in more than one Entry Class at a Tournament via the addition, removal or exchange of components, or by any other means.

2.10 Robot Readiness

2.10.1 Completion Confirmation

At Tournament check-in, a Team may have to sign a written form for their entry, indicating that they are entering a completed and tested combat robot.

2.10.2 Robot Verification

At the request of a BattleBots Official, a Team must, within a reasonable amount of time, present their robot to demonstrate that it exists and is complete and functional.

2.10.3 BattleBots Removal Rights

If at any time, a BattleBots Official determines that a registered robot either does not exist, or was not completed and tested at the time the Team checked-in, the robot will be Disqualified, and the Team will be required to vacate their Pit Table. All Pit Crew members assigned to that Team will have their Pit Passes revoked.

At their discretion, BattleBots Executive Officers may allow the former Pit Crew members access to the BattleBox Arena viewing stands.

There will be no refund of entry fees for any such Disqualification.

2.11 Active Weapon Requirement

In order to qualify as a BattleBots Robot, a robot has to initially demonstrate that it has an effective and operational Active Weapon system. At least one Active Weapon must be operational at the beginning of a robot's first Match.

However, if a sole Active Weapon system gets damaged during combat, yet the robot still wins, it can continue to compete subject to the following:

- a. If at all possible without compromising safety, the Active Weapon should be repaired, even if it loses some effectiveness due to the repairs.
- b. If the robot uses a modular Active Weapon, an alternate Active Weapon can be used to replace the damaged one.
- c. The robot may compete with the non-functional Active Weapon. The weapon can be locked or otherwise restrained from moving.
- d. The robot may compete with the Active Weapon fully or partially removed. However, the removed Active Weapon cannot be replaced by a passive weapon, or by any armor.

2.12 Recording of Tournament Contests

Unless otherwise specifically approved in advance by BattleBots Inc., BattleBots Participants are not allowed to videotape, photograph or otherwise record or transmit any Matches, Rumbles or any other combat contests at a Tournament.

If BattleBots Inc. approves the recording of contests, it may place restrictions on who can record the contests, which contests can be recorded, who may have access to such recordings and how they may be used. Participants must comply with any and all such restrictions.

Unless BattleBots Inc. specifies otherwise, Participants may record activities outside the Tournament arena and spectator areas, provided that they do not indirectly record or transmit any contests being shown on video monitors or screens.

Unauthorized recording or transmission of Tournament contests represents a legal breach of contract, and may result in the confiscation of the recorded data.

2.13 Sponsorship and Advertising

Due to possible arrangements with marketing and sponsorship organizations ("Sponsors"), BattleBots Inc. reserves certain rights as set forth below:

2.13.1 Sponsor Conflicts

BattleBots Inc. can require removal from the robot of any logos, signage or other materials that it determines to be offensive or in conflict with BattleBots Inc., its Sponsors or its affiliates' Sponsors.

2.13.2 Sponsorship Space Allocation

A BattleBots Robot is required to have allocated space on the camera-visible exterior of the robot for a minimum of two separate **5 inch by 8 inch** "TV Panels" to be used by BattleBots Sponsors for the display of Sponsor logos. At BattleBots' discretion, additional panels may be required, using up to a maximum of **25%** of the external camera-visible area of the robot's chassis. The locations of the panels are to be, where possible, on diametrically opposite sides of the robot.

The Team will be required to submit a drawing or picture of the robot with its available TV Panel locations no later than **3 weeks** prior to the first day of the Tournament.

The size, number and placement of the TV Panels may be modified by mutual agreement between BattleBots Inc. and the Designated Team Representative, taking into account the nature and structure of the robot.

Note: BattleBots entry documents contain additional information on BattleBots sponsorship requirements and restrictions.

2.13.3 BattleBots Inc. Rights

BattleBots Inc. reserves the right to modify in advance the required TV Panel areas as set forth above. BattleBots Inc. also has the future right to define or modify any other sponsorship display specifications and regulations.

Note: If there are questions regarding sponsorship and advertising, contact BattleBots Inc. at the address defined in "1.7 Contacting BattleBots Inc."

2.14 Prohibited Activities

BattleBots expects all Participants to act in a safe and reasonable manner. Certain activities are not permitted in certain areas, and violation can result in the Disqualification or Expulsion of the entire BattleBots Team.

2.14.1 No Unruly Behavior

Fighting, belligerence, or other unruly behavior, including abusive physical contact with any BattleBots Official, will not be tolerated and can result in the immediate Expulsion of the offending Participant's entire Team from the Tournament.

2.14.2 Scooters, Bicycles, Skates

Scooters, Bicycles, skateboards and skates cannot be used in the Pit Area. Their use is also prohibited in the Testing, Fueling, Welding/Grinding, Queuing or Staging Areas.

2.14.3 Running and Playing

Running in the Pit Area, except in an emergency, is not allowed. Running while carrying a charged pneumatic tank, or any sharp or otherwise dangerous part, may result in the revoking of the Pit Pass of the offender.

Engaging in horseplay, tossing balls or other items, or operating remote-control toys in the Pit Area is also not allowed.

2.14.4 Smoking

Smoking is specifically prohibited in the Pit Area, the Fueling Area and any other area specifically so marked. Depending on the venue, smoking may be totally prohibited in any indoor area.

2.14.5 Alcohol and Drugs

The consumption of alcohol is specifically not allowed in the Pit Area, and generally not allowed at a BattleBots Tournament. However, BattleBots Inc. may permit the consumption of alcoholic beverages during a specific time and at a location outside the Pit Area.

The use of illegal drugs is strictly prohibited at all times anywhere at a BattleBots Tournament.

2.14.6 No Pets

No pets of any kind are allowed anywhere at a BattleBots Tournament. The only exception is trained and certified dogs used to assist the disabled.

3.0 Pit and Testing Area Rules

3.1 Pit Crew

The Pit Crew is composed of those members of a Team who are allowed to enter the Pit Area to work on a specific robot. All members of the Pit Crew for a robot must also be members of the Team that entered that robot.

3.1.1 Pit Crew Size

Each Team will be allowed a maximum of **4 persons** per Pit Crew, regardless of the Entry Class.

3.1.2 Pit Crew Age Restrictions

There are specific age restrictions for participating on a Pit Crew:

- a. Children under the age of **10 years old** are not permitted to be on a Pit Crew.
- b. If any member of the Pit Crew is under the age of **18 years old**, there must be at least one Supervising Adult on the Pit Crew.

3.1.3 Pit Passes

All BattleBots Pit Crew members are required to wear official BattleBots Pit Passes at all times during a Tournament. Pit Passes are non-transferable and non-exchangeable.

3.1.4 Transferring a Pit Pass

Anyone caught transferring their Pit Pass to another person will be required to turn in their Pit Pass and leave the Pit Area immediately. No new Pit Pass will be issued for a replacement Pit Crew member.

3.1.5 Family and Friends

Family and friends of Pit Crew members are not allowed in the Pit Area, unless the friend or family member also has a Pit Pass.

3.2 Children in the Pit Area

For safety reasons, there are strict rules for children in the Pit Area.

3.2.1 Minimum Age

All children under **10 years** old are prohibited in or near the Pit Area, even if their parents or family are Participants. Parents may be required to submit valid evidence of the age of children who appear to be under that age limit.

3.2.2 Children Under 12 Years

Children under **12 years** old must be closely supervised by at least one of their parents or guardians at all times while in the Pit Area. If such a child Team member is found unsupervised in the Pit Area, the entire Team may be Disqualified.

3.2.3 Children Under 18 Years

Minors under **18 years** old must be under the supervision of a Supervising Adult. This means that the Supervising Adult has to be at the Tournament whenever the minor is present, and must know the whereabouts of the minor at all times.

3.3 Pit Safety Requirements

It is expected that Pit Crew members will practice safety and exhibit common sense at all times. However, certain specific safety requirements must be adhered to in the Pit Area, as defined below.

3.3.1 Pit Pass Revocation

BattleBots Inc. reserves the right to permanently or temporarily revoke the Pit Pass of any Team member is caught violating any Pit Safety Requirements defined herein.

3.3.2 Eye/Face Protection

All persons standing in the Pit Area must at all times wear shatterproof safety glasses or face masks.

Corrective-lens eyeglasses are not considered to be a substitute for safety glasses unless the eyeglasses have shatterproof lenses and some degree of side-entry protection.

3.3.3 Foot Protection

All persons in the Pit Area must at all times be wearing closed-toe shoes with full soles. Bare feet, socks-only, sandals and open-toe shoes are specifically prohibited.

3.3.4 Runaway Prevention

When a robot is being stored at its Pit Table, all robot motion system wheels/tracks/legs/etc. must be suspended in the air, with a clearance of at least **1/4 inch**, such that the robot is incapable of translational motion even if its motion system was Activated and moving.

3.3.5 Protective Covers/Restraints

All sharp objects and edges of the robot must have the Safety Covers installed, all pinch hazards must be blocked, and any Safety Restraints must be installed.

The only exception is when a Pit Crew member is working on a specific robot part that requires removal of a cover, block or restraint.

3.3.6 No Welding/Grinding/Sanding

No welding or power grinding/sanding of any kind is to be done in the Pit Area. This includes grinding and sanding of plastic and fiber composite materials (e.g. Lexan, fiberglass, Kevlar, etc.).

Drilling a small number of holes at a Pit Table is allowed, provided that all shavings fall within the Team's Pit Table area and are cleaned up immediately after the drilling operation is complete.

3.3.7 No Flammable Fuels

No refueling containers may be stored in the Pit Area. There must be no refueling of a robot in the Pit Area.

3.3.8 No Robot Activation

Under no circumstances can a robot be activated in the Pit Area.

Any switch which controls the primary-power electrical system must not be turned on in the Pit Area. The primary-power system may only be activated in the BattleBox or in a Testing Area

If the robot employs pneumatic or hydraulic systems, the downstream pneumatic system must not be pressurized in the Pit Area. That is: all Shut-Off valves must be closed and all Pressure-Relief valves must be opened.

A robot pneumatic or hydraulic actuation system may only be pressurized in the BattleBox or Test Box. Refer to section "3.5.1 Testing Areas" for more information on the Test Box.

3.3.9 Robot Pressure Tanks

Pressurized primary pneumatic storage tanks specifically for use in a robot are allowed in the Pit Area, provided that:

- a. Any tank is completely undamaged, as defined in "5.8.5 Pneumatic Systems".
- b. The pressure in any tank does not exceed the limit specified in the Building Rules.
- c. Each tank has an attached pressure relief valve or a burst disk.
- d. Each tank is either properly installed in a robot or is placed in a container that prevents it from moving.

All pneumatic tanks in the Pit Area, whether discharged or not, must either be installed in a robot or placed in a secure container. There must be no pressure storage tanks laying about loose at any time.

Improper use, handling or storage of pneumatic tanks can result in the Disqualification of a Team.

3.3.10 Pneumatic Supply Tanks

Pressurized supply tanks used for pneumatic tank charging are specifically prohibited in the Pit Area.

3.3.11 Pit Table Usage

No Team may use an empty adjacent Pit Table until Check-In has been closed for all Entrants to the Tournament. If such an empty table becomes available, the Teams on either side of the empty table may each use half of the table, unless one Team agrees to allow the other Team full use.

3.4 Welding/Grinding Area

All welding and power grinding/sanding must be done in a Welding/Grinding Area specifically set aside for those purposes. When working in the Welding/Grinding Area, these procedures must be followed:

- a. Shatterproof safety glasses or facemasks must be worn by all persons in the Welding/Grinding Area, regardless of whether the person is performing any welding or grinding operations.
- b. When grinding metal, the part and the grinding tool must be positioned such that no metal particles are thrown toward another person, or outside the Welding/Grinding Area.
- c. For welding or torch-cutting, darkened welder's goggles or a darkened face shield must be used by the welder and by anyone observing. The parts being welded or cut must be sufficiently shielded such that others cannot directly view the arc or flame.

3.5 Robot Testing

Robots may only be tested in specific areas and only when supervised by BattleBots personnel.

3.5.1 Testing Areas

Specific areas for robot testing purposes will be provided at the Tournament site. Each Testing Area will be supervised by a BattleBots Official. This Official will control entry and exit from that Testing Area and determine what the type of testing may be safely performed.

In addition, a designated BattleBots Safety/Tech Inspector may in some circumstances choose to allow a robot to be tested in a safe area away from the standard Testing Areas. During such testing, the robot and supporting personnel must at all times be under the direct observation and supervision of the Inspector.

Unauthorized or unsupervised testing of a robot at the Tournament site can result in the immediate Disqualification a Team.

3.5.2 Robot Transport

When transporting any robot to or from a Testing Area:

- a. The robot must be moved on a rolling dolly or cart. Driving or hand carrying is prohibited.
- b. All Safety Covers and Restraints must be installed.
- c. The robot must be completely Deactivated.

3.5.3 Testing Safety

When testing a robot, all Pit Crew members participating in the test must:

- a. Stand in a protected area.
- b. Make sure any bystanders are protected also.
- c. Comply with any and all requests of BattleBots Officials.

Absolutely no riding or carrying of passengers on robots is permitted at any time. Violators may have their Team Disqualified.

3.6 Fueling Area

All liquid fueling has to take place outside in the Fueling Area specifically set aside for that purpose. There must be no smoking or other open flames in Fueling Area.

3.7 Pressure Refill Station

BattleBots Inc. will provide official pneumatic refilling equipment for Nitrogen and CO₂. All robot pneumatic storage pressure tanks should be equipped with, or have an attachment for, the filling adapter specified in the Building Rules.

3.8 CO₂ Tank Filling

Due to the risk of overpressure if a CO₂ tank is overfilled, and in order to ensure that no competitor gains an unfair advantage, CO₂ tank filling will be done as follows:

BattleBots will provide scales with either one-tenth pound (0.1 lb.) or one ounce (1 oz.) resolution for filling tanks. Depending upon the resolution of the scale, each CO₂ tank must be filled to one increment (0.1 lb. or 1 ounce) less than the amount allowed for that tank.

If a robot's CO₂ tanks are not removable, then the entire robot may have to be weighed on a scale with half-pound (0.5 lb.) resolution. In this case, tanks will be filled to 0.5 lb. less than the amount allowed for that tank.

Participants are allowed to bring their own digital scale for weighing CO₂ tanks, provided that it is demonstrated to BattleBots personnel that the scale is accurate.

3.9 Pre-Heaters

Robots with pneumatic tank pre-heaters cannot turn on their heaters in the Pit Area. All tank pre-heating must be done only in a special area that will be so designated by BattleBots Officials at the Tournament.

3.10 Lithium Polymer Batteries

Robots using Lithium Polymer (LiPo) batteries are subject to several restrictions on their use, storage and charging.

3.10.1 Charging Area

LiPo batteries can only be charged in a specific area that will be designated by BattleBots officials. If the LiPo batteries are not removable from the robot, then the entire robot must be moved to the designated Charging Area when the batteries are being charged.

3.10.2 LiPo Chargers

LiPo batteries must be charged using chargers specifically designed for LiPo batteries. Any LiPo charger must have automatic overcharge protection.

3.10.3 Charger Labeling

All LiPo batteries being charged must have the name of the Team and their Pit Table clearly labeled on the battery charger.

3.10.4 Battery Fire Procedures

Salt water baths and containment envelopes will be available in the LiPo charging area. If a LiPo battery begins to swell, smoke or catch fire, it will be immediately disposed of in either the salt water bath or the containment envelope.

3.10.5 Robot Pit Location

Robots using LiPo batteries may be required to be located in a special part of the Pit Area segregated from the non-LiPo robots.

3.10.6 Robot Fire Procedures

If LiPo batteries contained in a robot begin to burn, then the fire will be allowed to burn itself completely out and no attempt will be made, or allowed to be made, to save the batteries or the robot. Where safely possible, other robots and equipment will be cleared from the area of the fire.

This “no attempt” policy is regardless of the location of the robot, whether in the Charging Area, the Pit Area, the Arena or any other area at the Tournament.

3.11 Trash, Debris and Hazardous Waste

For the safety of all, Pit Crew members should at all times minimize the amount of trash and debris in their specific Pit Table location. In addition, when a Pit Crew vacates their Pit Table, they must remove all debris and other items on the table, on the floor beneath and beside the table and on any walls adjacent to the table.

BattleBots Inc. will provide specific containers for the disposal of hazardous materials. These must be used at all times when disposing of fuels, oil, hydraulic fluid and damaged batteries.

Disposal in other areas in violation of local ordinances and/or state and federal codes can result in Team Disqualification.

3.12 Security Cameras

Teams are hereby notified that there may be recording security cameras in the Pit Area, the Testing Area and any other location at the Tournament.

4.0 Remote-Control Radio Use

4.1 Building Rules Compliance

All robot radio control equipment must at all times comply with all the requirements and restrictions of the Building Rules document, including frequency used and control type.

4.2 Unauthorized Use

To avoid dangerous radio interference issues, all BattleBots Participants must at all times follow the instructions of the Frequency Coordinator, or of any other BattleBots Official.

The unauthorized or improper use of any radio control transmitter is grounds for Disqualification of a robot and/or Expulsion of a Team.

4.3 Radio Operation Restrictions

Radio transmitters or receivers are not allowed to be turned on in the Pit Area, or any other locations other than the Testing Area or the Arena, unless specifically authorized by a BattleBots Official who is present during the time that the radio is in operation.

4.4 Tethered Testing

Using Remote Control equipment for testing using an electrical tether or factory provided directly connected cable between the transmitter and receiver will only be allowed provided that:

- a. There is a positive method of locking out any transmitter radio broadcast while using the tether.
- b. Operation with the tether does not require putting any body part in the path of any robot weapon system.
- c. The robot is tested in a designated Testing Area following all the requirements specified in "3.5 Robot Testing".

4.5 Legacy Radio Control Systems

Legacy Radio Control ("R/C") systems are those that use FM, non-spread-spectrum radio transmission. Legacy systems must conform to the requirements specified in the Building Rules.

Effective **July 1, 2009**, all Legacy Radio Control Equipment will no longer be allowed to be used at any BattleBots Tournament.

4.5.1 Frequency Crystals

If the Legacy R/C system uses crystals for specific frequency selection, a Competitor must have, and be able to use, at least **2 sets** of crystals with different frequency values.

4.6 Custom/Modified Control Systems

Robots using custom made or modified equipment of any kind must disclose during the Safety/Tech Inspection that the equipment is either custom-made or modified.

Deliberate misrepresentation of any radio equipment to BattleBots Officials may result in the Disqualification of the Team from the Tournament.

4.7 Unauthorized Radio Control Use

There is to be no operation of robot Radio Control equipment at a BattleBots Tournament at any time or place specifically forbidden by these Tournament Rules, or announced or posted in advance or at the Tournament, or as specifically requested by a BattleBots Official.

Such unauthorized use of Radio Control equipment may result in the Disqualification of the Team from the Tournament.

4.8 BattleBots Rights

Notwithstanding the above, BattleBots, at its sole discretion, has the right to impound or otherwise limit access to any or all R/C equipment as it deems necessary for safety or other practical reasons. Such added and/or changed procedures may be announced prior to or at the Tournament.

Failure to comply with any such procedures may result in the Disqualification of the Team from the Tournament.

5.0 Safety/Technical Compliance

5.1 The Safety/Tech Inspection

To be eligible to compete in a BattleBots Tournament and be defined as a BattleBots Robot, an Entrant's robot and any associated auxiliary systems must pass a Safety and Technical Inspection ("Safety/Tech Inspection").

5.1.1 Safety Administrator

The Safety Administrator ("SA") is the BattleBots Official responsible for the scheduling of robots for Safety/Tech Inspection and the recording of Inspection results. The SA is also the contact point for any questions or disagreements about the inspection scheduling and procedures.

5.1.2 Secure Inspection

If an Entrant wishes to protect certain features of their robot from scrutiny by competitors, they may request that Safety/Tech personnel inspect their robot in a private or secure location. Safety/Tech personnel will attempt to accommodate such requests, but can make no guarantees.

5.1.3 Disagreement With Inspector

If an Entrant disagrees with an Inspector about whether their robot complies with certain rules and regulations, they can notify the SA to request a review of that Inspector's decision.

Similarly, if an Entrant is asked to perform a test that they believe is unnecessary and could damage their robot, they may refuse to do the test and notify the SA to request a review.

Any review regarding the safety of the robot will be done by the Chief Safety Inspector, or a designated proxy, and his or her decision will be final. Reviews regarding the compliance of an Active Weapon system will be done by the Builders Jury.

5.2 Builders Jury

If a Team's robot is declared by BattleBots Technical Inspectors to not have a valid Active Weapon (as defined in the Building Rules), the Team has the right to request a hearing by a "Builders Jury".

The Builder's Jury is composed of **5 people** who are either BattleBots Officials or veteran robot builders who do not have any financial, personal or professional relationship with the contested robot's Team.

The contested robot's Team will be required to display, and if so requested, demonstrate their robot and its weapon(s) to the Builder's Jury. The Jury will then vote, and a majority will determine whether the robot complies with the Active Weapon requirement.

The decision of the Builders Jury will be final, and not subject to Appeal (ref. "9.2 Appeals").

5.3 Inspection Time Schedule

Safety/Tech Inspection will take place only during specified time periods during the Tournament. BattleBots Inc. will schedule Tournaments to allow adequate time for initial Safety/Tech Inspections.

5.3.1 Advance Notification

All Teams will be notified of the Safety/Tech Inspection time schedules prior to the Tournament. It is the responsibility of each Team to be aware of these times and to plan accordingly.

5.3.2 Inspection Time Periods

The time periods for initial Safety/Tech Inspection will be announced by BattleBots Inc. prior to the Tournament. BattleBots Officials, at their discretion, may lengthen any of the time periods, but will not shorten them once Inspections have started.

5.3.3 Readiness for Inspection

Any robot not ready for Inspection **4 hours** prior to the end of the last official Inspection time period may not be inspected, and thus would not qualify to compete in the Tournament.

5.3.4 Special Inspections

Initial Inspections outside the specified time periods require advance authorization from a BattleBots Executive Officer.

5.4 Safety/Tech Checks

The Safety/Tech Inspection is intended to confirm that the robot complies with all of the Rules as defined in the Building Rules and in this document. Some of the checks that can be performed include:

- a. That all Safety Covers and Restraints meet the point/edge and pinch protection requirements.
- b. That the robot complies with the weight limits for its Entry Class, using the methods defined in "5.6 Robot Weighing".
- c. That remote-control and telemetry systems comply with all requirements for allowed frequency, control-type and non-interference.
- d. That electrical systems comply with battery-type, voltage limitations and insulation requirements.
- e. That fuel-powered engines comply with the engine type, fuel type and fuel quantity requirements.
- f. That all pneumatics comply with the pressure limitations, component type, component rating, tank location, tank fill and pressure-indicating requirements.
- g. A demonstration that the robot can comply with the specified Activation and Deactivation time limits and fail-safe requirements.
- h. A demonstration that the robot is readily controllable and maneuverable using the remote-control.
- i. A demonstration that all Active Weapon systems operation is predictable and fail-safe.

5.5 Inspection Procedure

The inspection procedure has two primary parts: the Internal Inspection and the Functional Testing. The robot weighing can be performed at any time. A robot's weight may be checked more than once during the inspection procedure.

5.5.1 Internal Inspection

Internal Inspection involves the inspection of all of the components of the robot to confirm that its components and their configurations comply with the requirements of the Building Rules. For this part of the inspection, the robot is partly disassembled to allow access to all internal components.

The Internal Inspection is usually performed at the Pit Table for the robot. By mutual agreement between the Team and the Inspector, the Internal Inspection may be performed at an alternate location to allow for secure inspection.

5.5.2 Functional Testing

Functional Testing of a robot is not begun until the robot has completely passed its Internal Inspection and has been reassembled. Functional Testing involves a demonstration that the robot can be safely controlled and meets all of the Activation, Fail-Safe, Mobility, Deactivation and other requirements specified in the Building Rules. Operation and compliance of all Active Weapons on the robot will be tested also.

5.5.3 Inspection and Testing Completion

If a robot fails any part of the Internal Inspection, it must again be inspected and pass completely before it can be eligible for the Functional Testing. Similarly, if a robot fails any part of the Functional Test, it must again be tested and pass before it will be allowed to compete in any Matches.

At the discretion of the Inspector, the robot may be required to re-pass all parts of the Internal Inspection or the Functional Test, even if some parts were passed on the initial inspection or testing.

5.5.4 Full Disclosure

During any Safety/Tech Inspection, an Entrant must fully and accurately disclose all features and characteristics of the robot that could affect safety or compliance with all BattleBots Rules. Deliberate misrepresentation or obfuscation of any robot feature or characteristic may result in Disqualification of the robot.

5.6 Robot Weighing

5.6.1 BattleBots Official Scale

One scale at the Tournament will be designated the BattleBots "Official Scale". This scale can be used by any robot for official weigh-in and will be used for any subsequent weight challenges.

BattleBots Inc. will make reasonable efforts to insure the accuracy, sensitivity and consistency of the Official Scale so that all robots are treated equally.

5.6.2 Other Scales

BattleBots Inc. may make other scales available for use by Participants. If such scales are available, a Participant may use them to weigh parts or to do comparative weighing. However, the initial robot weighing and any subsequent re-weighing for compliance checking will use the Official Scale.

5.6.3 Dithering

If the reading on a digital scale is "dithering" (changing between two values) the weight value used will be the highest of the weights displayed. The scale will be considered to be dithering if it does not maintain a consistent value for at least **5 seconds**.

5.6.4 Weight Limits

Entry Class weight limits, as specified in the Building Rules, will be strictly enforced. The weight reading on the Official Scale is the weight that will be used to determine whether a robot complies with the limits of its Entry Class.

5.6.5 MultiBot Segment Weight

The weight of a MultiBot will be determined by weighing all segments together at one time.

Each segment must be weighed separately. A sticker will be applied to each segment indicating that segment's weight.

Any time a change is made that affects the weight of a segment, that segment must be re-weighed and the sticker changed if necessary.

5.7 Additional Inspections and Testing

The initial Safety/Tech inspection and testing is intended to determine if a robot, as initially entered, appears to comply with the Building Rules. Passing the initial Safety/Tech Inspection does not in any way exclude a BattleBots Robot from being inspected or tested at any later time during the duration of the Tournament.

5.7.1 Right to Request

If any BattleBots Official or Tournament Competitor has reason to believe that a BattleBots Robot does not comply with the requirements of any official BattleBots document, they can request that the robot be re-weighed and/or re-inspected at any time except while the robot is in the Arena competing in a Match.

A Competitor or a BattleBots Official must verbally notify any Safety/Tech Inspector of their request to have a robot re-weighed and/or re-inspected. Any Safety/Tech Inspector may initiate a re-weigh or re-inspection at their discretion.

5.7.2 Best Effort

If a Team's robot has been selected for re-weighing and/or re-inspection, they must make their best effort to move and/or prepare their robot for the procedure. Failure to do so may result in the Disqualification of the robot.

5.7.3 Re-Inspection Time

Any re-inspection time will not count towards a Competitor's guaranteed time between Matches, as specified in "6.3.5 Time Between BotBouts".

5.7.4 Non-Compliant

If as the result of the re-weighing and/or re-inspection, a robot is found to not comply with any applicable BattleBots Rules, the remedy will depend on the nature of the non-compliance as follows:

- a. If the non-compliance was accidental, and would not have affected the outcome of any Match in which it participated, the robot will have to be modified to make it comply.
- b. If the non-compliance was accidental, but could have affected the outcome of any Match in which it participated, the robot will be Disqualified.
- c. If the non-compliance was deliberate, the robot will be Disqualified.
- d. If the non-compliance was deliberate, and the non-compliance endangered personnel at the Tournament, the Team may be subject to Expulsion, as defined in "8.1.3 Team Expulsion".

5.7.5 Harassment

If one Team makes **more than two** requests for re-weigh or re-inspection of the same BattleBots Robot for the same alleged rules infraction, and if that robot was found to be in compliance both previous times, then the accusing Team is deemed to be engaging in Harassment.

Any Team determined to be Harassing another will be warned or Disqualified as provided for in "8.3 Repeated Warnings".

There are no restrictions on the number of re-weigh or re-inspection requests that may be made by any BattleBots Official.

5.8 Damaged-Robot Requirements

If a robot has been damaged, either by combat or by any other means, it must comply with the requirements specified below, as is applicable.

5.8.1 Activation/Deactivation Access

If a robot is damaged such that it cannot meet the Activation or Deactivation time requirements of the Building Rules, it must not be Activated. Before any Activation, the robot must be repaired such that both the Activation and Deactivation time requirements can be met.

5.8.2 Safety Covers and Restraints

If damage to the robot precludes the use of an existing Safety Cover or Restraint, a new cover or restraint may be fabricated, provided that it complies with all the requirements of the Building Rules.

5.8.3 Electrical Systems

If any primary-power Master Switch or its mounting, is damaged in such a way that it can no longer function safely and reliably, the switch system must either be replaced, or it must be repaired in such a manner that its full functionality and safety are restored before any Activation.

5.8.4 Fuel-Powered Engines

Damaged Fuel-Powered Engine systems cannot be operational on a robot, as follows:

- a. If a fuel line has any cuts or abrasions, other than superficial damage, then it must be replaced.
- b. If any fuel or oil tank or its mounting system is damaged, it must be either replaced or repaired such that the original functionality and structural integrity of the fuel or oil tank and/or its mounting system is fully restored.
- c. If any engine fail-safe cut-off system is damaged, it must be either replaced or repaired such that the full fail-safe functionality is restored.

Damaged Fuel-Powered Engine components may be carried aboard an Activated robot provided that no fuel is carried on board.

5.8.5 Pneumatic Systems

Damaged pressurized pneumatic systems cannot be operational on a robot, as follows:

- a. If any pneumatic pressure storage tank sustains damage that in any way compromises its structural integrity, it must be immediately depressurized as soon as the damage is discovered. This tank can never again be used to store pressurized gas aboard a robot at a BattleBots Tournament.
- b. If any pneumatic component other than a pressure tank is damaged in any way that compromises its structural integrity, then that component must be replaced before the pneumatic system is pressurized.

Damaged pneumatic components may be carried aboard an Activated robot provided that the damaged components are completely depressurized at all times.

5.8.6 Hydraulic Systems

Damaged pressurized hydraulic systems cannot be operational on a robot, as follows:

- a. If any low-pressure hydraulic storage reservoir or its mounting system is damaged, it must be either replaced or repaired such that the original functionality and structural integrity of the reservoir and/or its mounting system is fully restored.
- b. If any hydraulic component, other than the storage reservoir, is damaged in any way that compromises its structural integrity, then that component must be replaced before the hydraulic system is pressurized.

Damaged hydraulic components may be carried aboard an Activated robot provided that the damaged components are completely depressurized and contain only residual hydraulic fluid.

5.8.7 Competitor Responsibility

It is the responsibility of all Competitors to constantly check if their robot has sustained any damage that requires repair or replacement as described herein. Checking for damage is particularly important immediately following a Match.

Any deliberate Activation of a damaged robot that fails to comply with the requirements of the Building Rules, or of this section 5.8, can result in the Disqualification of the robot.

5.9 BattleBots Officials and Safety

If at any time during the Tournament, any BattleBots Official determines that a BattleBots Robot poses a threat to safe competition, BattleBots Inc. reserves the right to require that specific modifications be made to the robot. If such modifications are not possible, then the robot will be Disqualified.

6.0 Match Descriptions

6.1 Competition Terminology

The following are definitions of terms used within this document.

6.1.1 Tournament Definitions

These are the basic terms used at a BattleBots Tournament:

- a. **Arena** – An alternate word used to refer to the BattleBox.
- b. **BattleBox** – The armored venue where the Matches take place.
- c. **BattleBots Robot** – A single competing robot. It can also refer to the collection of MultiBot segments which compete as a single robot (see "MultiSeg").
- d. **BotBout** – The standard Match format used for Tournament eliminations, where two BattleBots Robots within an Entry Class battle in one-on-one combat. May also be referred to as a "Bout".
- e. **Bye** – A BattleBots Robot does not have to compete in a Match and is automatically advanced to the next Round. Byes occur in an Elimination Tournament when it is not possible to schedule an opponent in the current Round.
- f. **Eliminations** – The standard Tournament format composed of successive Rounds of competition. Two formats are Single Eliminations and Double Eliminations.
- g. **Grudge Match** – A Match format where two BattleBots Robots battle one-on-one, but the combat is not part of the standard Tournament Eliminations.
- h. **Hazards** – Powered weapons located in the BattleBox that are controlled by persons outside the BattleBox. Also referred to as "Arena Hazards".
- i. **Match** – Any competition between robots in the Arena. The three Match formats are: the "BotBout", the "Robot Rumble" and the "Grudge Match".
- j. **MultiSeg** – Refers to any single segment of a MultiBot.
- k. **Robot Rumble** – A Match format where more than two BattleBots Robots within an Entry Class battle each other in the Arena. May also be referred to as a "Rumble".
- l. **Rounds** – One set of Matches, where all remaining Competitors are paired off and compete (or receive Byes), in order to advance in the Eliminations.

6.1.2 Match-Specific Definitions

These are terms used to describe situations that can occur during Match competition:

- a. **Disabled** – A robot is not functioning correctly due to either an internal malfunction, or contact with the opposing robot or Arena Hazard.
- b. **Disqualification** – A BattleBots Robot is no longer permitted to compete in the current BattleBots Tournament.
- c. **Fault** – Occurs when a robot starts moving along the Arena floor, starts a weapon moving or initiates certain other actions before the official start of a Match.
- d. **Forfeit** – A robot loses a Match, either because it was not ready to compete at the scheduled time, or because of some specific Operator or robot action during a Match.
- e. **Incapacitated** – In a Referee's opinion, a robot is not Responsive for a specified period of time. See "7.4.7 Incapacitation" for a more detailed description.
- f. **KnockOut** – Occurs when the attack or deliberate actions of one robot causes its opponent to become Incapacitated.
- g. **Lifting** – Occurs when one robot controls an opponent's translational motion by lifting the drive mechanism of the opponent off of the Arena floor. Also referred to as a "Mobile Pin".

- h. **No Contact** – Occurs when neither robot makes contact with each other, or with the Arena Hazards for a specified period of time.
- i. **Pinning** – Occurs when one robot, through sheer force, holds an opponent stationary in order to Incapacitate it. Also referred to as a "Stationary Pin".
- j. **Postponement** – Occurs when a BotBout is delayed from the originally scheduled time.
- k. **Radio Interference** – Refers to the situation where at least one robot becomes non-Responsive or non-controllable due to the effect of the other robot's remote-control signal.
- l. **Responsive** – In a Referee's opinion, the robot cannot display some kind of controlled translational movement along the Arena floor. See "7.4.6 Responsiveness" for a more detailed description.
- m. **Restart** – Occurs after a Fault or a Timeout has been declared and the competing robots are ready to continue.
- n. **Stuck** – A robot is hung-up on a part of the Arena, an Arena Hazard or an opponent, such that it is effectively non-Responsive.
- o. **Tap-Out** – Occurs in a BotBout or Grudge Match when a robot's Operators decide that they no longer want to continue the Match, and concede the win to the opposing Team.
- p. **Technical KnockOut** – Occurs when a robot wins due to Incapacitation of its opponent even though, in the Judges' opinion, no action of the winning robot caused the opponent's Incapacitation.
- q. **Timeout** – A temporary halting of a Match. Timeouts are usually called to separate or free Stuck robots, but can be called for other reasons.

6.1.3 Judging Criteria Definitions

These terms describe the criteria that are used by Judges to determine a Match winner.

- a. **Aggression** – Aggression is judged by the frequency, severity, boldness and effectiveness of attacks deliberately initiated by the robot against its opponent. If a robot appears to have accidentally attacked an opponent, that act will not be considered Aggression.
- b. **Control** – Control means a robot is able to attack an opponent at its weakest point, use its weapons in the most effective way, avoid Arena Hazards, and minimize the damage caused by the opponent or its weapons.
- c. **Damage** – Through deliberate action, a robot either directly, or indirectly using the Arena Hazards, reduces the functionality, effectiveness or defensibility of an opponent. Damage is not considered relevant if a robot inadvertently harms itself. Also, if a pressure vessel or a rapidly spinning device on a robot fragments, any damage to the opponent will not be considered "deliberate".
- d. **Strategy** – The robot exhibits a combat plan that exploits the robot's strengths against the weaknesses of its opponent. Strategy is also defined as a robot exhibiting a deliberate defense plan that guards its weaknesses against the strengths of the opponent. Strategy can also involve using the Arena Hazards to gain an advantage.

6.2 The BattleBox

The BattleBox is the area in which BattleBots combat takes place.

6.2.1 Standard BattleBox Configuration

The standard BattleBox is a **48 foot** by **48 foot** rectangle raised **2 feet** off the ground. The BattleBox employs certain hazards and obstacles that can damage and/or disable a combat robot. Competitors are encouraged to use the hazards and obstacles to their advantage.

6.2.2 Alternate BattleBox Configurations

At its discretion, BattleBots Inc. may employ a BattleBox with smaller dimensions and fewer hazards and obstacles than the standard BattleBox configuration. In some cases, there may be no hazards or obstacles in the smaller BattleBox.

6.3 BotBout Matches

6.3.1 BotBout Format

BotBouts are started with the two BattleBots Robots in colored squares on opposite sides of the BattleBox. Before the start, the robots must be motionless within their respective squares. After the official start, the robots fight in an attempt to Incapacitate their opponent.

6.3.2 BotBout Time Limits

Unless a BotBout terminates early, the Match will end after a maximum of **3 minutes** of actual fighting. The time limit does not include any time elapsed as a result of Timeouts.

Some or all BotBouts may have a shorter time limit if so decided by BattleBots Inc., and the affected Competitors are notified in advance.

6.3.3 Stuck Robots

If both robots become Stuck, the Referees may declare a Timeout to free them.

6.3.4 Early Termination

A BotBout can be terminated early by Tap-Out, Forfeit, Disqualification, Incapacitation or No Contact.

6.3.5 Time Between BotBouts

In BotBouts, no robot will be required to compete in more than one Bout in any **20 minute** period. Competitors who are not prepared to compete after this period may be required to Forfeit.

Time spent in a post-Match interview or for post-Match re-inspection or re-weighing will not be counted toward the time limit.

Note: As the Tournament moves to the final rounds, the time between Matches will generally become shorter.

6.3.6 Match Postponement

If a Team will not be able to compete in a BotBout as originally scheduled, due to problems with their robot, they may request that the Match be postponed, subject to the following:

- a. A BattleBots Robot is guaranteed only **one** Team-requested Postponement during a Tournament.
- b. The opponent Team agrees to the Postponement.
- c. BattleBots Officials agree to the Postponement.
- d. BattleBots Officials determine that the Match can be re-scheduled.

BattleBots Inc. reserves the additional right to postpone any Match for any reason. Any such Postponement will not count as a Team-requested Postponement.

6.3.7 Grudge Matches

Grudge Matches allow two BattleBots Robots to fight in a demonstration Match. The format for a Grudge Match is the same as for a regular BotBout Match.

The requirements for a Grudge Match are:

- a. Both robots have been eliminated from the regular Tournament Matches.
- b. Both Competitors agree to the Match.
- c. BattleBots Officials approve of the Match.
- d. Time is available for scheduling the Match.

There is no requirement that both robots in a Grudge Match be in the same Entry Class.

6.4 Robot Rumbles

Robot Rumbles may be scheduled during the Tournament at the discretion of BattleBots Officials.

6.4.1 Selection of Competitors

Only BattleBots Robots that have been eliminated from the regular Tournament Matches can compete in a Rumble.

Based on various factors, BattleBots Officials will decide which robots, and the number of them that can compete in any given Rumble.

6.4.2 Rumble Format

Robot Rumbles are started with multiple robots arranged around the edge of the BattleBox. Before the start, all robots must be motionless in their positions. After the official start, each robot fights in an attempt to incapacitate all the other robots.

If any robots become Stuck during a Rumble, no Timeout will be declared and no attempt will be made to free them.

6.4.3 Rumble Duration

The normal length of time for a Rumble is **5 minutes**. However, this time period may be changed at the discretion of BattleBots Officials.

A Rumble will be terminated early for safety reasons only. There will be no Timeouts or Tap-Outs during a Rumble.

6.4.4 Time Between Rumbles

Due to scheduling limitations, there is no guarantee of a minimum time between two Rumbles.

6.5 Judges

BattleBots Judges provide informed subjective decisions on the outcome of certain Matches.

6.5.1 Number of Judges

There will be either **3 Judges** or **5 Judges** for a Match. The number of Judges for each Match will be determined by BattleBots Officials and need not be announced in advance of the Match.

6.5.2 Judges' Duties

Specific duties of Judges are defined in the chapter: "7.0 Match Procedures". Their general duties are:

- a. Deciding the outcome of Matches when neither robot is Incapacitated
- b. Watching for technical or safety violations
- c. Deciding if a BattleBots Robot is to be Disqualified

6.5.3 Discussion Among Judges

Judges are not prohibited from discussing among themselves technical or other information about the identity, starting square color, or features of one or more of the competing robots.

6.5.4 Consulting Others

To resolve ambiguous situations, Judges may individually or collectively discuss rules interpretation issues with BattleBots Officials.

If necessary, the Judges may also consult with one or more Operators or Team members. However, during any such discussion with one Team, one member of the opposing Team has the right to be present as an observer.

6.6 Referees

Referees supervise the Competitors during Matches.

6.6.1 Referee Assignment

There are **two** Referees for a Match, assigned as follows:

- a. For BotBouts, each Referee is assigned to a single robot and its Operators.
- b. For a Robot Rumble, each Referee is assigned to a group of Operators and their robots.

6.6.2 Referees' Duties

Specific duties and actions of Referees are specified in the chapter: "7.0 Match Procedures". The general duties of Referees are:

- a. Starting Matches
- b. Stopping Matches early
- c. Declaring Timeouts
- d. Watching for safety violations

6.6.3 Referee Authority

If at any time before or during a Match, a Referee observes disruptive or other inappropriate behavior by any Operator or Team support person on the Arena platform, the Referee has the authority to instruct that person to leave the platform immediately.

6.7 CrewBots

CrewBots coordinate the movement and safety of robots near and inside the BattleBox.

6.7.1 Prior to Match

Prior to the Match, CrewBots escort the robots and Pit Crew members into place within the BattleBox. They then supervise and coordinate the Activation of the robots and the exit of the Crew members.

When the CrewBots are satisfied that everything is ready, they secure the BattleBox doors.

6.7.2 Timeout

If a Timeout is declared, CrewBots may enter the BattleBox to escort a Pit Crew member to their robot, to assist in the Pit Crew member in separating a robot from a Hazard or its opponent.

CrewBots may also enter the BattleBox for other reasons related to the safety or functioning of a Match.

6.7.3 After the Match

At the end of the Match, the CrewBots open the BattleBox doors when they deem it safe.

CrewBots then supervise the Deactivation and damage-checking of the robots. After Deactivation, the CrewBots coordinate the exit of the robots and Pit Crew members out of the BattleBox.

Time permitting, CrewBots will pick up any large pieces of debris from the floor of the BattleBox.

6.7.4 CrewBot Authority

If at any time during a Tournament, a CrewBot observes disruptive or other inappropriate behavior by any Participant in the Arena area, the CrewBot has the authority to instruct that Participant to leave the Arena area.

7.0 Match Procedures

7.1 Application of Procedures

Match procedures apply to BotBouts, Grudge Matches and Rumbles. However, there are some differences during the Rumbles due to the larger number of robots and Operators. Distinctions may also be made between individual robots, MultiBots and MultiSegs.

7.2 Prior to Match Start

7.2.1 BattleBox Pit Crew

At most **three** Pit Crew members can be used to move the robot into and out of the BattleBox.

During the Activation and Deactivation of a robot, at most **one** Pit Crew member per robot can be present in the BattleBox.

7.2.2 MultiBot Segment Weights

If a Competitor is a MultiBot, Judges must be informed, prior to the Match, of the weights and descriptions of each of the segments.

7.2.3 Failure To Start Engine

If a Pit Crew is unable to start their robot's Fuel-Powered Engine within **60 seconds**, the Team has the following options:

- Request a Postponement, subject to the restrictions of "6.3.6 Match Postponement".
- Compete without the engine running.
- Forfeit the Match.

7.2.4 Initial Robot States

Prior to the start of a battle, all robots must be in position and not moving. Specifically:

- For a BotBout or Grudge Match, robots must be completely inside their respective starting squares.
- For a Rumble, robots must be at their assigned starting positions.
- All robots must be motionless.
- Any robot-driven weapons must be motionless.
- Any Flywheel devices, whether internal or external, must be motionless.
- Any Fuel-Powered Engine must be running at idle speed.
- Spring-powered devices may have been armed via remote control.
- Autonomous functions may have been remotely enabled.

7.3 Start of Battle

7.3.1 Countdown to Start

Each Referee determines if their Operators' robot is ready to start. When all of the Operators have indicated that they are ready, the Referees will, at their discretion, activate the countdown sequence on the starting light tree.

In some circumstances, the Referees may verbally start the Match.

7.3.2 Match Start

The Match officially starts at the moment the starting light tree Green lights first turn on, or the Referees verbally declare the start.

7.3.3 Fault

If a Referee or Judge notices premature robot movement or any other violation of starting procedure, he or she may declare a Fault, and require a Restart. Operators must cease robot movement and follow the instructions of the Referees for a Restart.

If a robot Faults more than two times in a single BotBout Match, it will Forfeit the Match.

If a robot Faults during a Rumble, the Match will not be restarted, but the faulting robot will not be eligible to be the Rumble winner.

7.3.4 Restart After a Fault

A Restart must begin with the robots back in their starting positions and complying with all the requirements of "7.2.4 Initial Robot State". The Referees may choose to verbally restart the Match.

7.4 During a Match

7.4.1 Referee Decisions

During a Match, each Referee must observe his or her Operators and their robot to check and respond to one or more of the following:

- a. Tap-Out
- b. Pinning or Lifting
- c. One or both robots Stuck
- d. Incapacitation
- e. No Contact
- f. Radio Interference

Each is described in more detail below.

7.4.2 Tap-Out

A Tap-Out can be declared during a BotBout or Grudge Match, if a robot becomes Disabled, and any of its Operators wants to prematurely end the Match in order to avoid further damage.

The procedure for a Tap-Out is as follows:

- a. An Operator must say clearly to his or her Referee: "Tap-Out" or "Stop the Match".
- b. The Operators' Referee confirms the request by asking if they are Tapping Out. All of the robot's Operators must respond with "YES", or the request will not be considered confirmed.
- c. Once Tap-Out is confirmed, the robot has lost the Match. The Operators cannot revoke their decision and are required to stop controlling their robot.
- d. The Tap-Out robot's Referee notifies the opposing Referee of the confirmed Tap-Out request.
- e. The Tap-Out robot's Referee will begin a 10-count to the termination of the Match.
- f. The opposing robot's Operators will be advised of the Tap-Out and be asked (but not instructed) to refrain from attacking during the count out, as their robot has now been awarded a win by KnockOut.

Tap-Out is not allowed during a Rumble.

7.4.3 Pinning or Lifting

Robots may not win by pinning or lifting their opponents. Referees will allow pinning or lifting for a maximum of **20 seconds** per pin/lift then the Referee will instruct the attacker to release. If, after being instructed to do so, the attacker is able to release but does not, their robot may be Disqualified.

A weapon that is designed to partly or completely cover (smother) an opponent robot is allowed. However, covering a robot may be considered Pinning, depending upon which robot is in control.

7.4.4 Single Robot Stuck

If a single robot or MultiSeg becomes stuck, the action taken will depend upon the type of Match:

- a. During a BotBout or Grudge Match, if a robot or MultiSeg becomes stuck to any part of the BattleBox, the Operators must be able to remotely free their robot or MultiSeg in **20 seconds** or less. Otherwise, the robot or MultiSeg will be declared Incapacitated.
- b. During a Rumble, no Timeout will be declared if any robots and/or MultiSegs become stuck.

Note: There is no prohibition against a robot attempting to free a stuck opponent.

7.4.5 Both Robots Stuck

If two robots become simultaneously stuck during a BotBout or Grudge Match, the action taken will depend upon the situation, as follows:

- a. If the robots, or a robot and a MultiSeg are stuck together, or are both stuck on the BattleBox, the Referees will declare a Timeout for the CrewBots to separate the robots.
- b. If two robots are stuck together, and one robot is also stuck on a part of the BattleBox, the Referees will declare a Timeout and the robots will be separated. However, no deliberate attempt will be made to free the robot stuck on the BattleBox.
- c. If two or more segments of the same MultiBot become stuck together, or become simultaneously stuck on the BattleBox, no Timeout will be declared.

During a Rumble, no Timeout will be declared if any robots and/or MultiSegs become stuck together.

7.4.6 Responsiveness

A robot is considered Responsive if it can display some kind of controlled translational movement along the Arena floor. A robot that is randomly moving around the Arena, but does not respond correctly to remote controls is considered to be non-Responsive. A robot that can only rotate in place due to partial failure of the drive mechanism is considered to be non-Responsive.

7.4.7 Incapacitation

During a BotBout or Grudge Match, a robot or MultiSeg must at any time be able to demonstrate that it is Responsive. This is confirmed as follows:

- a. At any time, a Referee may request that the Operators show that their robot or MultiSeg is Responsive.
- b. The Referee will allow a maximum of **20 seconds** (the final 10 seconds of which will be verbally counted down) for the Operators to demonstrate that the robot or MultiSeg can exhibit controlled translational movement.
- c. If the robot or MultiSeg cannot demonstrate that it is Responsive within the required time, it will be declared Incapacitated.

If **50% or more**, by weight, of a MultiBot's segments become Incapacitated, then the robot (entire MultiBot cluster) is considered to be Incapacitated.

7.4.8 No Contact

If neither robot makes contact with the other, or with any of the Arena Hazards, for a period longer than **30 seconds**, then the Referees can declare "No Contact" and stop the Match.

7.4.9 Radio Interference

If Radio Interference occurs during a Match, a reasonable attempt will be made to eliminate the interference by having one or both Competitors change their radio channels and/or signal coding.

However, if it is not possible to eliminate the Radio Interference, then preference will be given to robots that are not using Custom Radio Equipment, as defined in the Building Rules.

Specifically:

- a. If one robot uses BattleBots-allowed commercial radio-control equipment and the other robot uses Custom R/C Equipment, then the robot using the custom equipment will be required to Forfeit the Match.
- b. If both robots are using Custom R/C Equipment, then both of the robots may be required to Forfeit the Match.

In the case of an unresolved Radio Interference issue, BattleBots Executive Officers reserve the right to declare that one robot is the Match winner.

7.4.10 Flame Effects

Flame Effects are intended for “showmanship” rather than as a weapon. However, if a robot using Flame Effects inadvertently damages an opponent, that damage will be considered valid.

7.4.11 LiPo Battery Fire

If a LiPo battery in on robot begins to smoke or catches fire, the Match will be stopped.

The opponent robot(s) will be moved as far from the burning robot as possible. If safe, CrewBots may attempt to move the burning robot to near the center of the BattleBox.

The fire will be allowed to burn itself out and no attempt will be made, or allowed to be made, to extinguish the fire or save the burning robot.

7.5 BotBout or Grudge Match Winner

At the conclusion of each BotBout or Grudge Match, the winner will be decided by the following criteria:

7.5.1 Rules Violation

If the Judges unanimously agree that one Team’s robot was violating any BattleBots Rule or Regulation, then the opponent robot will be declared the winner by Forfeit.

7.5.2 Single Incapacitation

If one robot becomes Incapacitated, then the opponent robot will be declared the winner. This win will be considered to be a KnockOut.

7.5.3 Multiple Incapacitation

If both robots become Incapacitated, but not simultaneously, the robot that became Incapacitated last will be declared the winner. The determination of which robot was last-Incapacitated will be decided by the Judges.

A robot win due to Multiple Incapacitation will be considered a Technical KnockOut.

7.5.4 Simultaneous Incapacitation

If the Judges cannot determine the order in which the robots became Incapacitated, then the robots will be declared to be Simultaneously Incapacitated, and the following procedure will be used:

- a. If one robot can display operation of an Active Weapon, and the other cannot, then the robot with the operating Weapon will be declared the winner.
- b. If more than 60 seconds of the Match has elapsed prior to the time the robots became non-Responsive, the Judges will decide the winner using the criteria defined in "7.5.5 Both Robots Responsive".
- c. If one of the Incapacitated robots can display some kind of remote-controlled activity, and the other cannot, then the partially-operable robot will be declared the winner.
- d. If none of the previous criteria can be used, BattleBots Executive Officers reserve the right to declare the winning robot, or to declare that neither robot won, and thus neither advances to the next Round.

A robot win due to Simultaneous Incapacitation will be considered a Technical KnockOut.

7.5.5 Both Robots Responsive

If both robots are Responsive at the end of the Match and the Match did not end prematurely due to the No Contact rule, the winner will be determined and indicated by the Judges, as follows:

- a. Each Judge will evaluate the Aggression, Control, Damage and Strategy of each robot during the Match.
- b. Each Judge will also consider the relative effectiveness of the Active Weapons on each robot.
- c. As allowed in "6.5.3 Discussion Among Judges" and "6.5.4 Consulting Others", Judges may consult with each other, BattleBots Officials, or Team members.
- d. Each Judge then indicates which robot they believe is the winner by holding up either a Red or a Blue card, denoting the starting square color of the robot.
- e. The robot with the majority vote of the Judges will be declared the winner.

7.5.6 No Contact Decision

If the Referees have stopped the Match due to No Contact (ref. "7.4.8 No Contact"), then the Judges decide the Match outcome as follows:

- a. If a Judge believes that one robot deserves the win, they hold up the appropriate colored card.
- b. If a Judge believes that neither robot deserves the win, they hold up an empty hand.
- c. If one robot gets a majority of the Judges' win votes, that robot will be declared the winner.
- d. If neither robot gets a majority of the votes, the Judges may allow a Match Restart.
- e. If there is no Restart, then both robots will be declared losers and neither advances to the next round.

If neither robot advances, the opponent for the next Round will receive a Bye.

7.6 Rumble Winner

At the conclusion of each Rumble, the winner will be decided as described below.

7.6.1 Faulting Robot

If the Referees or Judges determine that a robot Faulted at the start of the Rumble, then it cannot be declared the winner.

7.6.2 Single Robot Responsive

If only one robot is Responsive at the conclusion of the Rumble, it will be declared the winner.

7.6.3 Multiple Responsive Robots

If at the end of the Rumble, more than one robot is Responsive, or it cannot be determined which robot was last-Responsive, the winner will be selected from the Responsive or the last-Responsive robots as follows:

- a. Each Judge, based on their subjective evaluations of Aggression, Control, Damage and Strategy, will vote for the robot they think won the Rumble.
- b. If one robot receives more votes than any of the others, it will be declared the Rumble Winner.
- c. If there is a Judge's tie between two or more robots, a BattleBots Executive Officer will break the tie by adding his vote.

7.6.4 No Robots Responsive

If no robot is Responsive at the conclusion of the Rumble, the last robot to become non-Responsive will be declared the winner.

If it cannot be determined which robot became non-Responsive last, the Judges will declare a winner selected from the last-Responsive robots, using the method described in "7.6.3 Multiple Responsive Robots".

7.7 Disqualification and Forfeit

7.7.1 Complying with Officials

During a Match, any Team member who deliberately fails to comply with any Referee's or CrewBot's instruction will automatically have their robot Disqualified.

7.7.2 Disqualification

If a Judge, Referee or CrewBot observes a safety or technical violation, he or she may declare a Timeout to discuss the matter with all of the BattleBots Judges. If the Judges reach a unanimous decision, they can collectively Disqualify a robot.

7.7.3 Operator/Team Behavior

If a Referee observes disruptive or other inappropriate behavior by a Participant on the Arena platform, the Referee can call a Timeout to instruct the Team member to leave the platform. If the affected Participant is an Operator, and the robot cannot compete without that Operator, the robot will be declared to have lost by Forfeit.

7.7.4 Attacking Arena Hazards

Robots must not deliberately attack any BattleBox Hazard. If any Judge, Referee or CrewBot believes that a robot is deliberately attacking a Hazard, they must call a Timeout to discuss the situation with the Judges. If it is determined that the robot was deliberately attacking a Hazard, the robot will be declared to have lost by Forfeit.

7.8 Executive Officer Decisions

BattleBots Executive Officers may at any time, including during a Match, Disqualify any robot that they believe has committed a safety or technical violation.

8.0 Rules Enforcement

8.1 Rules Compliance

In all matters of compliance with these Tournament Rules, and any applicable civil or criminal laws, BattleBots Inc. and its Executive Officers reserve the right to Disqualify a robot or to warn, fine or subject any Team or individual Team member to Expulsion.

8.1.1 Team Responsibility

The action of any single Team member is considered to be the responsibility of the whole Team. If any individual Team member is found to be violating one or more requirements of this document, the Team as a whole may be warned, fined or Expelled.

8.1.2 Team Member Expulsion

If any Team member subject to Expulsion, he or she must leave the Tournament premises for the duration of the Tournament. If any member of a Team's Pit Crew is expelled, that member must turn in his/her Pit Pass, and the Team will not be allowed to add another member to their Pit Crew.

An expelled Team member may be declared ineligible to compete in any BattleBots Tournament for a time duration to be determined by a BattleBots Executive Officer.

8.1.3 Team Expulsion

If an entire Team subject to Expulsion, they must vacate their Pit Table(s), turn in all their Pit Passes and leave the Tournament premises for the duration of the Tournament. Any robot registered to the Expelled Team may face exclusion from future BattleBots Tournaments.

The expelled Team members may be declared to be ineligible to compete in any BattleBots Tournament for a time duration to be determined by a BattleBots Executive Officer.

8.2 Serious Offenses

8.2.1 Criminal Activity

If a person at a BattleBots Tournament is believed to be in violation of any Federal, State or local criminal laws, that person will be subject to Expulsion and reported to local authorities.

8.2.2 Sabotage

"Sabotage" is defined as the deliberate tampering with a robot without the specific authorization of that robot's Team. If any Team member is determined to have engaged in Sabotage, the entire Team will be subject to Expulsion.

8.2.3 Counterfeiting

If any Team member is determined to have counterfeited a Pit Pass or any other BattleBots Inc. entry passes, tickets or official documents, the entire Team will be subject to Expulsion.

8.3 Repeated Warnings

A Team or Team Member may unintentionally do something that fails to adhere to the requirements of these Tournament Rules. When that happens, the Team will receive a warning from a BattleBots Official. However, if a Team is repeatedly warned for the same violation:

- a. On the first warning, the violation is explained, and the Team is told that it must not occur again.
- b. On the second warning for the same offense, the Team is told that if they commit the same offense again, the Team will be Disqualified.
- c. On the third warning for the same offense, the entire Team will be Disqualified.

9.0 Protests And Appeals

9.1 Protests

A Team has the right to protest the decision of a BattleBots Official, Judge, Referee or CrewBot on certain Match-related events.

9.1.1 Allowed Issues

Allowed Protest issues include, but are not limited to:

- a. Failure to comply with Match procedures.
- b. Match Forfeit due to Operator or robot action during a Match.
- c. Match Forfeit as the result of non-availability.
- d. Disqualification due to an inadvertent rules violation.

9.1.2 Inadmissible Protests

For certain specific items, a Protest cannot be lodged. These are:

- a. Any Judges' declaration of a Match winner.
- b. Disqualification due to a deliberate safety violation.
- c. Disqualification for failure to obey a Referee's instructions.

9.1.3 Protest Procedure

The protest requirements and procedure are as follows:

- a. Any Protest must be lodged within **15 minutes** of the time the protested event occurred.
- b. The protesting party will have a maximum of **5 minutes** to present their case to a BattleBots Executive Officer.
- c. Any contesting party will have a maximum of **5 minutes** to present their opposing case to the same BattleBots Executive Officer.
- d. After all parties have presented their cases, the BattleBots Executive Officer will make a final decision within **60 minutes** after the conclusion of the case presentations.

The decision of the BattleBots Executive Officer will be final and not subject to further Protest or Appeal.

9.1.4 Protest Limitations

If a BattleBots Executive Officer determines that a Team is lodging frivolous Protests to the detriment of the functioning of the Tournament, that Team may be excluded from making further Protests.

9.2 Appeals

For certain serious matters involving the decision of a BattleBots Executive Officer, a BattleBots Team may file an Appeal.

9.2.1 Right To Appeal

A Team may file an Appeal for the following:

- a. Disqualification due to repeated warnings.
- b. Disqualification due to a safety violation.
- c. Disqualification due to a technical violation during a re-weigh/re-inspect.

9.2.2 Inadmissible Appeals

For certain matters, an Appeal cannot be made. These include, but are not limited to:

- a. Expulsion due to criminal behavior
- b. Expulsion due to deliberate endangerment of any person at the Tournament.
- c. The decision of a Builder's Jury (ref. "5.2 Builders Jury").

- d. A decision on a Protest, as defined in "9.1 Protests"

9.2.3 Appeal Procedure

The Appeal requirements and procedure are as follows:

- a. Any Appeal must be made in writing within **2 hours** of the time the appealed event occurred.
- b. The Appeal must be presented to a BattleBots Official or directly to a BattleBots Executive Officer.
- c. The written Appeal should state the case of the appealing party in concise and direct terms.
- d. After receiving the Appeal, the BattleBots Executive Officer may consult other parties in the matter, and will render a final decision within **24 hours** after the time the Appeal was received.

9.2.4 Final Decision

On all Appeals, the decision of the BattleBots Executive Officer will be final and not subject to further Appeal.