

March 9, 2010

## TEAM UPDATE #16

### GENERAL NOTICES

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No changes.

#### Section 0 – Introduction through Section 6 – The Arena

No changes.

#### Section 7 – The Game

**Section 7, The Game, Rev K** has been updated to include the following updates:

**<G15>** BALL Handling – BALLS may be handled by any TEAM member when BALLS are in the CORRAL or ALLIANCE STATION. BALLS may not be handled until they have exited from the BALL COUNTER and are in the CORRAL. *Violation: PENALTY.*

In the event that BALLS become jammed in the GOAL at the mouth of the BALL COUNTER, a HUMAN PLAYER may use the handle end of the TRIDENT to dislodge the BALLS by placing it through the hole in the clear Lexan cover on top of the GOAL. Only balls dislodged before the automatic counter stops counting will be SCORED. Note that the TRIDENT or anything else may not be placed through this access hole at any other time or the TEAM will be charged with a violation of <S02>. Similarly, when dislodging BALLS, if the TRIDENT comes in contact with a ROBOT, <S02> will be invoked.

**<G30>** ROBOT Volume – During a MATCH, no part of the ROBOT shall extend outside the vertical projection of the FRAME PERIMETER, except as follows:

- a. BALL Interaction Volume – Solely for the purposes of interacting with a BALL, MECHANISMS that are below the BUMPER may extend up to the BUMPER PERIMETER, for a period not exceeding two seconds. After returning inside the FRAME PERIMETER, such MECHANISMS are not permitted to re-extend beyond the FRAME PERIMETER for at least two seconds.
- b. ROBOT Righting Volume - ROBOTS attempting to right themselves or their ALLIANCE partners may expand up to the FINALE CONFIGURATION maximum volume while, and only while, performing the righting operation. While beyond the NORMAL CONFIGURATION volume and righting, ROBOTS may not actively interact with BALLS or opponent ROBOTS.
- c. TOWER Contact ROBOT Volume - During a MATCH, ROBOTS in contact with their ALLIANCE TOWER may extend beyond their NORMAL CONFIGURATION volume but may not exceed the FINALE CONFIGURATION maximum volume.
- d. FINALE ROBOT Volume - During the FINALE, ROBOTS may extend up to the limits of the FINALE CONFIGURATION maximum volume.
- e. BUMPERS may extend outside the FRAME PERIMETER, within the constraints defined in Rule <R07>.

*Violation: PENALTY and potential YELLOW CARD.*

<G46> BALL Penetration Restriction – The BALL must not extend more than 3 inches inside the FRAME PERIMETER as defined in Rule <R19>. Incidental protrusions of the BALL within this boundary will not be penalized if the TEAM corrects the condition before resuming game play. Violation: PENALTY for a basic infraction, plus a YELLOW CARD if no immediate attempt to remedy and/or the action is deemed intentional.

A BALL trapped under a ROBOT, intentionally or unintentionally, will be considered POSSESSED until it is dislodged from the ROBOT. Teams are encouraged to design and drive with this in mind. Note that this does not alleviate the inspection requirements for 3 inch intrusion.

Examples of game play include, but are not limited to, actively engaging with another ROBOT, navigating toward a GOAL, controlling the position or direction of another BALL (e.g. kicking or herding), and changing regions (crossing a BUMP or under a TOWER).

## Section 8 – The Robot

No changes.

## Section 9 – The Tournament

### Comments regarding Team Seeding Points:

Now that the competition season has begun, and teams exposed to the 2010 ranking system, we would like to elaborate on the intent behind the system. Coopertition™ is a core tenet of FIRST, as evidenced by the patent FIRST received for it last year. Breakaway's ranking system uses the combination of alliance scores and Coopertition Bonuses to rank teams based on their ROBOT performance during the Qualification Matches. The objective of the system is to reward high-scoring, close, competitive matches. Furthermore, we intended to make a disincentive for teams to win with a high margin.

Several members of the community have identified opportunities within the ranking system to achieve very high scores, but at the cost of the competitive nature of the event. In an effort to remedy the issue, we have amended the ranking system to add 5 seeding points for the winners' score. The expectation is that winning will be a priority, but still values the high, close-scoring, matches.

**Section 9, The Tournament, Rev D** has been updated to include the following updates:

#### 9.3.4 Match Seeding Points

All teams on the winning ALLIANCE will receive a number of seeding points equal to the penalized score (the score with any assessed penalties) of the winning ALLIANCE plus 5 additional points for winning the match.

All teams on the losing ALLIANCE will receive a number of seeding points equal to un-penalized score (the score without any assessed penalties) of the winning ALLIANCE.

In the case of a tie, all participating teams will receive a number of seeding points equal to their ALLIANCE score (with any assessed penalties).

#### 9.3.6 Seeding Point Exceptions

A SURROGATE TEAM will receive zero seeding points and zero coopertition bonus.

A TEAM that does not field a ROBOT because it has not passed inspection will receive zero

seeding points and zero cooptition bonus.

A TEAM is declared a no-show if **no** member of the team is in the ALLIANCE ZONE at the start of the MATCH; a no-show team will receive a RED CARD for that MATCH.

During the qualification matches, TEAMS can individually receive RED CARDS. A RED CARDED TEAM will receive zero seeding points and zero cooptition bonus.

In the very unlikely case that all three TEAMS on an ALLIANCE receive RED CARDS, all three TEAMS on the winning ALLIANCE would get their own ALLIANCE score as their seeding points for that MATCH.

## Section 10 – The Kit of Parts

No changes.