# **TEAM UPDATE #9**

# **GENERAL NOTICES**

No changes.

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

No changes.

#### Section 7 - The Game

**Section 7 – The Game, Rev G** has been updated to include the following edit:

**<G20>** ROBOT Out of Bounds - ROBOTS may not touch any surface outside of the FIELD boundary during the TELEOPERATED PERIOD. *Violation: PENALTY and Disablement.* 

### Section 8 – The Robot

**Section 8 – The Robot, Rev H** has been updated to include the following edits:

<R12> The color of the BUMPERS will be used to identify the ALLIANCE to which the ROBOT has been assigned, red or blue. Therefore, each ROBOT must be able to display red BUMPERS and blue BUMPERS. This may be done via either of two acceptable methods:

- A. Each ROBOT may be built with two complete sets of interchangeable BUMPERS, one red and one blue. If this method is chosen, the BUMPERS must be identical except for the color of the covering fabric (see Rule <R07-F>).
- B. Alternately, the ROBOT may use changeable BUMPER covers. The BUMPER covers
  - may be removable, reversible, or fixed
  - must completely enclose the BUMPERS
  - must show only a single color such that when the BUMPER covers are in use, only fabric of the assigned ALLIANCE color may be visible. The BUMPERS may be constructed with a fabric covering of one color (see Rule-R07-F>), and then covered with a removable fabric shroud of the opposite color when appropriate. The removable cover must completely enclose the BUMPERS and conceal the contrasting fabric.
  - must be constructed solely of fabric and a fastening/restraining system to hold the cover in place. The fastening/restraining system must extend no further than one inch beyond the FRAME PERIMETER (i.e. no further than any other hard parts of the BUMPER - see Rule <R07-N>). Please note that the fastening/restraining system MUST be designed with robust performance in mind. The restraints must hold the removable cover in place during

vigorous interactions with other ROBOTS and FIELD elements during the MATCH without allowing the cover to come off.

<R19> ROBOTS must be designed so that in normal operation BALLS cannot extend more than 3 inches inside

- a) the FRAME PERIMETER below the level of the BUMPER ZONE (see Figure 8-5),
- b) a MECHANISM or feature designed or used to deflect BALLS in a controlled manner that is above the level of the BUMPER ZONE.

<R38> Teams may bring a maximum of 40 pounds of custom FABRICATED ITEMS (SPARE PARTS, REPLACEMENT PARTS, and UPGRADE PARTS, plus all WITHHOLDING ALLOWANCE items) to each competition event to be used to repair and/or upgrade their ROBOT at the competition site. All other FABRICATED ITEMS to be used on the ROBOT during the competition shall arrive at the competition venue packed in the shipping crate or lockout bag with the ROBOT.

- A. Exception: the OPERATOR CONSOLE is not included in the incoming parts weight restriction.
- B. Exception: Any competition legal12V batteries and their associated half of the Anderson cable quick connect/disconnect pair (including no more than 12 inches of cable per leg, the associated cable lugs, connecting bolts, and insulating electrical tape) are not included in the incoming parts weight restriction.

### Section 9 – The Tournament

**Section 9 – The Tournament, Rev B** has been updated to include the following edit:

## 9.3.8 Highest Coopertition Bonus

The Field Management System will keep track of the highest coopertition bonus earned by each TEAM during the qualification matches. This value will be available on the Pit Display and the Ranking HTML pages linked on the FIRST website (<a href="http://www.usfirst.org/roboticsprograms/frc/content.aspx?id=902">http://www.usfirst.org/roboticsprograms/frc/content.aspx?id=902</a>). but this value will not be displayed.

#### Section 10 – The Kit of Parts

No changes.