

February 24, 2009

## TEAM UPDATE #15

### GENERAL NOTICES

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#### General Notes from *FIRST* Headquarters:

##### Compliance Confirmation:

We'd like to remind teams that, at the conclusion of your inspection, when you sign the statement at the bottom of the Inspection Checklist, you're also acknowledging that you're within compliance with the *Lunacy* rules. This confirmation includes that your team's Withholding Allowance is within the limitations at the beginning, and throughout, the competition. Event staff will be performing spot checks of Withholding Allowances during team load in.

##### Withholding Allowance Exception:

Often the GDC is caught in a bind. For reasons easy to understand, *FIRST* community members suggest changes and less literal interpretations of the rules.

Changing a rule is risky in the extreme. Someone is almost always hurt. "Softening" a rule almost always shifts responsibility for a decision to someone else and creates inconsistent competitions.

The GDC has long debates about "unintended consequences." The group tries hard to anticipate, but has no chance of staying ahead of 30,000 smart people. The guiding philosophy is to try to be very literal and consistent even when seemingly stubborn and pedantic.

Occasionally, a change seems to be worth the gamble that the change might cause angst. Allowing the battery connectors to remain attached to the batteries seems justified because properly/carefully insulated connections are more likely to be made "at home" than at an event and, unnecessary tasks are avoided. In conclusion, spare battery assemblies (battery, lugs, connectors, shrink tubing, and/or electrical tape) will not be included in the Withholding Allowance weight limit.

##### WPA Encryption Update:

As announced in Team Update 13, FRC will be implementing the use of WPA encryption at all FRC events in 2009. Each team must have their WPA encryption checked before they play any match, including a practice match. Once the WPA encryption has been confirmed, teams will receive a white sticker, which will then gain them access to the Competition Field. The stickers are available at the WPA table, which is located in the pit near the Inspection area.

The WPA table staff will be able to not only check the encryption for teams who set it themselves, but also help teams who have trouble or are uncomfortable setting the radio parameters.

When you go to the table to have your WPA encryption checked, you must bring with you, at minimum, your team's robot radio. You may bring your complete robot, but in that case, must also bring a battery.

The table will be available into Thursday afternoon.

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

No changes.

## Section 7 – The Game

After seeing the variety of robots built during build season, we are concerned about the potential for excessive penalties in relation to Section 7's Rule <G32-E>. To mitigate this risk, we are introducing verbiage that communicates that aggressive contact outside the bumper zone will be penalized, but incidental contact, which is fully expected in *Lunacy*, will not.

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

**<G32>** ROBOT to ROBOT Interaction - Strategies aimed solely at the destruction, damage, tipping over, or entanglement of ROBOTS or TRAILERS are not in the spirit of the FRC and are not allowed. In all cases involving ROBOT-to-ROBOT or ROBOT-to-TRAILER contact, the TEAM may receive a PENALTY and/or their ROBOT may be disqualified if the interaction is inappropriate or excessive. However, it is noted that *Lunacy* is a highly interactive game. Robust construction of ROBOTS will be very important in this high-speed competition. ROBOTS should be designed to withstand the contact that will occur during the MATCH. Appropriate contact is allowed under the following guidelines:

- A. High speed accidental collisions may occur during the MATCH, and are an expected part of the game.
- B. Contact within the BUMPER ZONE is generally acceptable.
- C. If a portion of the BUMPER PERIMETER polygon is unprotected by BUMPERS, any contact by another ROBOT within the unprotected region (including the vertical projection of the unprotected region) will be considered incidental contact and will not be penalized.
- D. Contact with a tilted or tipped ROBOT outside the BUMPER ZONE (particularly by the BUMPERS of the contacting ROBOT) will generally be considered incidental contact and will not be penalized.
- E. **Aggressive or intentional** contact outside of the BUMPER ZONE is not acceptable, and will result in a PENALTY. The offending ROBOT may be disqualified from the MATCH if the offense is particularly egregious or if it results in substantial damage to another ROBOT.
- F. A ROBOT may not attach to and/or climb onto a ROBOT or TRAILER. Doing so will be interpreted as an attempt to damage an opposing ROBOT, and will be penalized as such.
- G. Use of any sloped or angled feature of the ROBOT as a wedge to overturn an opposing ROBOT or TRAILER is explicitly prohibited, and will be assigned a PENALTY.

## Section 8 – The Robot

The *Inspection Checklist* has been updated to Rev D and includes the following changes: \

- 1) moved RSL and firmware version checks to 1st two items
- 2) added check for WPA encryption of the robot radio as checklist item #3
- 3) added check for unpowered robot and driver station radios while in the pits (i.e. only tethered operation is allowed in the pits and on the practice field)

## Section 9 – The Tournament

This year 4FX Design has installed a Twitter message feed that is uploaded from the Field Management System (FMS) for teams to use. The intention is that teams have a reliable information source for Scouting Programs, match archives, video broadcasts and anything else they can dream up.

For week one, the Twitter message from each event will only happen when the field staff commits the score to the database while engineering data is collected. The hope is that in the near future, the Twitter feeds will provide a semi real-time update of the matches as they happen.

The teams or anyone can follow the frcfms user at Twitter <http://www.twitter.com/frcfms> for all match updates.

In addition to the frcfms twitter account, users can follow their favorite event based on the hash tag that represents the event. They can do this by going to <http://www.hashtags.org>. Here is an example hash tag view for #frc <http://www.hashtags.org/tag/frc>. As an example for the Championship Archimedes event you would follow <http://www.hashtags.org/tag/FRCArchimedes> (which doesn't exist yet).

A Twitter message cannot be larger than 140 characters, therefore 4FX Design has devised the following format to fit within Twitter's capabilities.

Example tweet:

```
#FRCArchimedes TYP P MCH 99 ST T TIM 120 RFIN 33 BFIN 27 RED 9994 9995 9996  
BLUE 9991 9992 9993 RCEL 1 BCEL 1 RROC 9 BROCC 6
```

Format of the tweet:

```
#FRCABC - where ABC is the Event Code (see below for event codes)  
TYP X - where x is P for Practice Q for qualification E for Elimination  
MCH X - where X is the match number  
ST X - where X is A for Autonomous T for Teloperated C for complete  
TIM XXX - where XXX is the time left  
RFIN XXX - where XXX is the Red Final Score  
BFIN XXX - where XXX is the Blue Final Score  
RED XXX YYY ZZZ - where XXX is red team 1 number, YYY is red team 2 number, ZZZ  
is red team 3 number  
BLUE XXX YYY ZZZ - where XXX is blue team 1 number, YYY is blue team 2 number,  
ZZZ is blue team 3 number  
RCEL X - where X is the red Super cell count  
BCEL X - where X is the blue Super cell count
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RROC X - where X is the red rock and red Empty Cell count  
 BROOC X - where X is the blue rock and blue Empty Cell count

There are no post match bonus points this year, so accessed penalties can be derived from adding up the score from the Super Cell, Empty Cell and Moon Rock counts and then subtracting the Final Score which will give you the alliances penalties.

Code	Event Name	Event Location	Start Date
NH	BAE Granite State Regional	Verizon Wireless Arena, Manchester, NH	2/26/2009
NJ	New Jersey Regional	Sovereign Bank Arena, Trenton, NJ	2/26/2009
KC	Greater Kansas City Regional	Hale Arena, Kansas City, MO	2/26/2009
IL	Midwest Regional	UIC Pavilion, Chicago, IL	2/26/2009
OH	Buckeye Regional	Wolstein Center, Cleveland, OH	2/26/2009
OK	Oklahoma City Regional	Cox Arena, Oklahoma City, OK	2/26/2009
DC	Washington DC Regional	Walter E. Washington Conv. Ctr., Washington, DC	2/26/2009
GT	Traverse City <i>FIRST</i> Robotics District Competition	Traverse City High School, Traverse City, MI	2/27/2009
MA	Boston Regional	Agannis Arena, Boston, MA	3/5/2009
SDC	San Diego Regional	San Diego Sports Arena, San Diego, CA	3/5/2009
ROC	Finger Lakes Regional	Gordon Field House, Rochester, NY	3/5/2009
OR	Oregon Regional	Portland Memorial Coliseum, Portland, OR	3/5/2009
NY	New York City Regional	Javits Convention Center, New York, NY	3/6/2009
GG	Kettering University <i>FIRST</i> Robotics District Competition	Kettering University, Flint, MI	3/6/2009
DA	Dallas Regional, Sponsored by JCPenney and the JCPenney Aftersch	Moody Coliseum, Dallas, TX	3/12/2009
GA	Peachtree Regional	Gwinnett Center, Duluth, GA	3/12/2009
SJ	Silicon Valley Regional	San Jose State University, San Jose, CA	3/12/2009
CA	Los Angeles Regional	Long Beach Arena, Long Beach, CA	3/12/2009
PIT	Pittsburgh Regional	PITT Petersen Event Center, Pittsburgh, PA	3/12/2009
WI	Wisconsin Regional	US Cellular Arena, Milwaukee, WI	3/12/2009
FL	Florida Regional	University of Central Florida Arena, Orlando, FL	3/12/2009
DT1	Cass Tech <i>FIRST</i> Robotics District Competition	Cass Technical High School, Detroit, MI	3/13/2009
IS	Israel Regional	Nokia Arena, Tel Aviv, IS	3/17/2009
WAT	Waterloo Regional	University of Waterloo, Waterloo, ON	3/19/2009
PA	Philadelphia Regional	Liacouras Center, Philadelphia, PA	3/19/2009
IN	Boilermaker Regional	Purdue Armory, West Lafayette, IN	3/19/2009
MD	Chesapeake Regional	US Naval Academy, Annapolis, MD	3/19/2009
MO	St. Louis Regional	Chaifetz Arena, St. Louis, MO	3/19/2009

<b>Code</b>	<b>Event Name</b>	<b>Event Location</b>	<b>Start Date</b>
AZ	Arizona Regional	Arizona Veteran's Coliseum, Phoenix, AZ	3/19/2009
LA	Bayou Regional	Lakefront Arena, New Orleans, LA	3/19/2009
VA	NASA VCU Regional	VCU Siegel Center - Richmond, Richmond, VA	3/19/2009
DT	Detroit <i>FIRST</i> Robotics District Competition	Wayne State University, Detroit, MI	3/20/2009

## **Section 10 – The Kit of Parts**

No changes.