

January 12, 2007

## TEAM UPDATE #2

### GENERAL NOTICES

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#### Section 0 - Introduction

No changes.

#### Section 1 - Communication

No changes.

#### Section 2 – Team Organization

No changes.

#### Section 3 – At the Events

No changes.

#### Section 4 – Robot Transportation

No changes.

#### Section 5 - The Awards

Please re-download Section 5. The original Section 5 that was posted was a draft version. Revision A is the appropriate and current document.

#### Section 6 – The Arena

No changes.

#### Section 7 – The Game

**Section 7 – The Game, Rev B** has been modified to include the following changes:

Rule <G09> has been updated to state that:

<G09> POSSESSION - ROBOTS may only have 1 (one) GAME PIECE in their POSSESSION at any time during the match. A 10-point penalty will be assessed for each infraction. Inadvertent bulldozing of GAME PIECES while the ROBOT moves around the field is allowed. Controlled "herding" of a single GAME PIECE lying on the floor is permitted as long as no other GAME PIECE is in the POSSESSION of the ROBOT. Herding of multiple GAME PIECES, or herding of a GAME PIECE on the floor while in POSSESSION of another GAME PIECE is not permitted (as this would be considered POSSESSION of more than one GAME PIECE). GAME PIECES may fall on to a ROBOT during the course of normal game play (e.g. a RINGER falls on a ROBOT while attempting to HANG it on a Spider Leg). In such cases, GAME PIECES that are already in the POSSESSION of the ROBOT may be played. However, the additional GAME PIECE must be removed from the ROBOT (either by the ROBOT or by an ALLIANCE partner) before it can POSSESS a new GAME PIECE. GAME PIECES may not be intentionally placed on opposing ROBOTS for the purpose of causing a violation of this rule. Any such GAME PIECE placements will not be considered in POSSESSION of the affected ROBOT, and will be ignored.

Rule <G21> has been updated to state that:

<G21> SCORING for opponents - ROBOTS may not HANG a GAME PIECE of an opposing ALLIANCE. If this rule is violated a 10-point penalty will be assessed per infraction. If the ROBOT HANGS a KEEPER of from the opposing ALLIANCE, it will be ignored when determining the score. If the ROBOT HANGS a RINGER on an otherwise empty Spider Leg, it will be SCORED as if it were placed there by the opposing ALLIANCE. If the ROBOT HANGS an opposing RINGER on a Spider Leg on which their own RINGER is already HANGING, the two will cancel each other and the Spider Leg will be SCORED as "Null." If the ROBOT HANGS an opposing RINGER on a Spider Leg on which an opposing RINGER is already HANGING, the added RINGER will be ignored and the Spider Leg will continue to be SCORED for the opposing ALLIANCE.

The following text was added on to end of Rule <G57>

"Note: this chart is based on the premise that ROBOTS are HANGING GAME PIECES of their own color on the Rack. Exceptions to the chart occur when ROBOTS HANG opponent GAME PIECES. These exceptions are explained in Rules <G15> and <G21>."

## Section 8 – The Robot

There has been an additional item posted to the competition manual homepage, <http://www.usfirst.org/community/frc/content.aspx?id=452> 2007\_ROBOT\_SIGNAL\_LIGHT.pdf has been added as item 4.

**Preface statement:** Four rules having to do with the utilization of items obtained prior to the FRC kick-off are being updated. *FIRST* has recognized that the original intent was poorly expressed in the previous wording, and was not being communicated clearly. The original intent remains the same. But we hope that these revised rules do a better job of communicating that intent, and also eases any concern about undue financial hardship for teams that have limited options for purchasing methods.

**Section 8 – The Robot, Rev A** has been modified to include the following changes:

Rule <R17> has been updated to state that:

<R17> Prior to the Kick-off: Before the formal start of the Robot Build Season, teams are

encouraged to think as much as they please about their ROBOTS. They may develop prototypes, create proof-of-concept models, and conduct design exercises. Teams may gather all the raw stock materials and COTS COMPONENTS they want. But absolutely no fabrication or assembly of any elements intended for the final ROBOT is permitted prior to the Kick-off presentation.

Rule <R24> has been updated to state that:

“FABRICATED ITEMS from ROBOTS entered in previous *FIRST* competitions can not be used.”

Rule <R26> has been updated to state that:

<R26> Individual COMPONENTS or MECHANISMS retrieved from previous ROBOTS and used on 2007 ROBOTS must have their un-depreciated cost included in the 2007 robot cost accounting, and applied to the overall cost limits.

Rule <R28> has been updated to state that:

<R28> COTS ITEMS that are generally available may be used on the ROBOT. COTS ITEMS from ROBOTS entered in previous *FIRST* competitions or COTS ITEMS that are no longer commercially available may be used under the following conditions:

- The item must be unmodified, and still in its original condition as delivered from the VENDOR
- The item must not be a part custom made for the *FIRST* competition and provided in a previous FRC Kit Of Parts (e.g. 2006 FRC transmissions, custom-made motor couplers, custom sensor strips, IFI CMUcam II modules, etc. are not permitted)
- The item must satisfy ALL of the rules associated with materials/parts use for the 2007 *FIRST* Robotics Competition

## Section 9 – The Tournament

No changes.

## Section 10 – Kit of Parts

The **Kit of Parts Checklist, Rev C** reflects the following edits:

- Replaced picture of Denso motor coupler
- Replaced picture of Keyang motor couplers
- Changed quantity of FisherPrice motor from 1 to 2
- Changed part number of Panel Signal Device from 855PB-B12ME555 to 855PB-B12ME522
- Changed bore size of output sprocket from 1/5” to 1/2”
- Added part number for kit wheel, “am-0111”
- Changed the name of the EasyC item from “EasyC Flier” to “EasyC Pro Software Packet”
- Fixed photo of EasyC packet
- Corrected spelling of “solenoid”
- Changed PN of the Operator Interface from FR-2006-OI to FR-OI-2007
- Changed PN of the Radio Modem for the Operator Interface from ROBOT-RADIO-OI to IFI-OI-RADIO-A
- Changed the description of the Radio Modem for the Robot Controller from “rubber antenna” to “metal antenna”
- Changed PN of the Radio Modem for the Robot Controller from ROBOT-RADIO-

- RC to IFI-RC-RADIO-A  
- Changed PN of the Robot Controller from FR-2006-RC to FR-2007-RC

## **Documents and Updates**

No changes.

## **2007 *FIRST* Guidelines, Tips, and Good Practices**

No changes.

## **The *Question & Answer* System**

No changes.

