



# Challenge Updates

**27 August 2015**

**Regional Contact information** – For the United States and Canada, the regional contact for Robot Game questions is [fillrobotgame@usfirst.org](mailto:fillrobotgame@usfirst.org). Please limit your questions to content and clarification. Questions about strategy will not be reviewed or answered. The United States and Canada regional contact for Project questions is [fillprojects@usfirst.org](mailto:fillprojects@usfirst.org).

# Project: Updates

**27 August 2015**

**1 – GASSES: “TRASH” VS. “A TRASH PROBLEM”** – Update. Your team is not allowed to choose a gas as your “piece of trash” or “trash item” this season. For example, car exhaust or the carbon dioxide you breathe out DO NOT count as trash. However, sometimes disposing of an item might cause a harmful gas to be released. For example, when food scraps decompose in a landfill, they may give off methane gas. The harmful gas may be your team’s problem as long as your original piece of trash is an allowed item.

**29 October 2015**

**2 – WATER** – Update. Water of any kind may NOT be your team’s “piece of trash” or “trash item.” However, sometimes trash causes specific problems when it gets into water. For example, cigarette butts are often discarded on the street, where they may get washed into storm drains by rainwater. The cigarette butts are valid trash items this season because they meet the TRASH TREK definition of trash: “any item you are done with and want to dispose of” (Challenge page 2). It is OK if your problem happens when your trash is in the water.

**3 – PUBLIC AWARENESS CAMPAIGN** – Update. We place some restrictions on the type of problems your team may choose, but we do not restrict the solutions. As long as your team proposes any solution to the problem you identified, then you have met the basic solution requirement. Public awareness campaigns already exist, so simply proposing a public awareness campaign would probably earn your team a “Beginning” level of achievement in the Innovation category. If you are starting with an existing solution (like a public awareness campaign), look for ways to change and improve it so that the end result is better than the existing solutions.





# Robot Game: Updates

## 27 August 2015

Corrections to Mission M04

**WAS:** “Value: (See M01 Above) per bar”

**CHANGED TO:** “Value: (See M01 Above) Per **Bin**”

Also: In 4 places:

**WAS:** “East Transfer”

**CHANGED TO:** “**West** Transfer”

Correction to Mission M05

**WAS:** “any West chute blockage”

**CHANGED TO:** “any **east** chute blockage”

## 4 September 2015

**Corrections for Mission M04** (9-4-15)

Under “Specific physical requirement, visible at the end of the match;”

Under “Yellow/blue bars are in their matching green bin and the bin (bins score independently),”

The first and third sentences describing VALUE should start with an asterisk.

**ALSO (Related):** The sentence:

“Method Constraint: Bars must only enter Green Bins directly from the Sorter’s east chute or CAREERS BONUS”

should be indented to the left, and a space down.

**Clarifications for Mission M04** (9-4-15)

The sentence:

“Method Constraint: Bars must only enter Green Bins directly from the Sorter’s east chute or CAREERS BONUS”

applies to Bars of every color, and not just the Black Bars.

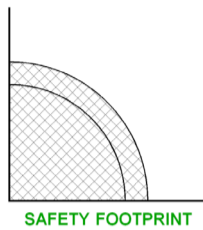
**ALSO:** If the Match ended immediately after it began, the Black Bars would be worth 96 points.

**ALSO:** If the Package with Black Bars is no longer in the Factory, its Bars are no longer in original setup position.



### Correction to **D11** (9-3-15)

The diagram showing the footprint of Safety should look like this one instead:



### Clarification for **M05** (9-3-15)

The leniency allowing you to unclog east chute blockage by hand does NOT allow you to remove the Plastic Bag from the Sorter by hand. The robot game video is misleading about this – sorry – this is why Rule GP5 tells you to pay attention to TEXT and NOT VIDEO.

### Clarification for **M07** (9-3-15)

If the Robot can get the Chicken completely in the small circle (far east)...

---Is the Chicken in an circle? Yes. 20 points.

---Is the Chicken in the small circle? Yes. 35 points.

Total 55 points. This is the meaning you were supposed to take from “Score Any That Apply.”

## 15 October 2015

### 1 - **“ALL” BARS ENTERING GREEN BINS** **M04** Clarification (9-3-15)

The sentence: “Method Constraint: Bars must only enter Green Bins directly from the Sorter’s east chute or CAREERS BONUS” applies to Bars of every color, and not just the Black Bars.

**ALSO:** If the Match ended immediately after it began, the Black Bars would be worth 96 points.

**ALSO:** If the Package with Black Bars is no longer in the Factory, its Bars are no longer in original setup position.

### 2 - **PLASTIC BAG REMOVAL** **M05** Clarification (9-3-15)

The leniency allowing you to unclog the east chute blockage by hand does NOT allow you to remove the Plastic Bag from the Sorter by hand. The robot game video is misleading about this – sorry – this is why Rule GP5 tells you to PLEASE pay attention to the TEXT, and NOT the video.

### 3 - **CHICKEN 55** **M07** Clarification (9-3-15)

If the Robot can get the Chicken completely in the small circle (at far east)...

---Is the Chicken in a circle? Yes, right? 20 points.

---Is the Chicken in the small circle? Yes, right? 35 points.





Total 55 points. This is the meaning you were supposed to take from “Score Any That Apply.”

**4 - THINGS OUTSIDE SAFETY ARE IRRELEVANT DURING A LAUNCH R12 Clarification** (10-12-15)

For Launching, where we say “everything related” to the next Autonomous period has to fit in Base, that only includes things you’re actually allowed to HANDLE. See R10 and R14.

**5 - OBJECTS STRADDLING THE SAFETY LINE ARE MOVED IMMEDIATELY R14 Clarification** (10-12-15)

When the Robot Strands something partly in Safety, that thing is not allowed to be left there. Its consequence (depending on what it is) must be applied immediately.

**6 - STRADDLING EXCEPTION FOR THE BARS R14 + R10 / M10 Ruling** (10-12-15)

When a **BAR** comes to rest partly in Safety after ANY action, you must immediately take it completely into Safety. Normal rules and scoring will then apply to these Bars the same way they would for any Bars completely in Safety. This ruling is part leniency and part clarification, since Bars will often land on the Safety line without being Stranded, and giving them to the Ref “out of play” would be problematic. It’s amazing how many months I stared at this, and how many expert reviewers I gave it to, and none of us caught it... But YOU did!

**7 - PEOPLE/ANIMALS M07 Ruling** (10-12-15)

People will not count as Animals. By Rule GP2 they should, but most scoring systems (already written) could not handle this interpretation, so regrettably this Update must over-rule GP2.

**8 - COMPASS CIRCLE M07 Ruling** (10-12-15)

The direction “compass” will not count as a circle. By Rule GP2 it should, but the compass as a circle would be SUCH an easy target, it would ruin the integrity of the Mission and affect the game’s MoJo.

**9 - YOU MAY NOT MOVE BARS AROUND BY HAND M05 Clarification** (10-29-15)

The exception described in M05 only allows you correct rare situations resulting from Bars getting stuck on your Sorter’s east chute:

--If a Bar gets to a hole, but doesn’t fall through... You can put it through.

--If a Bar lands in the wrong Bin, or on the mat, FROM THE EAST CHUTE... You can put it into the correct Bin.

That’s all the leniency allows. It is the ROBOT’S job to transport Bars, and to load and activate the Sorter, and to move the Plastic Bag.

**10 - ROBOT DOESN’T HAVE TO “END” ANYWHERE D09 + R14 Clarification** (10-12-15)

By D09, the Robot is unable to Strand itself, so it can never count as R14 Junk.

**11 - M04 REPHRASED, BUT NOT CHANGED M04 Clarification** (10-12-15)

There are three possible end-of-Match scoring situations related to the Blue/Yellow Bars and Green Bins, and ANY ONE BIN can only score in ONE of these ways:

**Requirement:** A bin from one team containing at least one of THEIR matching bars is completely in THE OTHER TEAM’S safety (for each such Bin, BOTH teams score 60 points each).

Path Constraint: The Bin changed Fields by way of the SENDING TEAM’S West Transfer.

Method Constraint: The Bar or Bars got into the Bin by way of the SENDING TEAM’S Sorter (or hand-unclogging of the Sorter).

Points (60) are for the Bin. One or more Bars must be in the Bin, but the Bars are not worth points.

>>>OR<<<

**Requirement:** On YOUR West Transfer and/or completely in YOUR West Transfer area is one of YOUR Bins with at least one of YOUR matching Bars in it.





Method Constraint: The Bar or Bars got into the Bin by way of YOUR Sorter (or hand-unclogging of the Sorter).

Points (7) are per Bar. They need to be in the Bin, but the Bin isn't worth points.

>>>**OR**<<<

**Requirement:** One of YOUR Bins is on YOUR Field, with one or more of YOUR matching Bars in it, but it's NOT on YOUR West Transfer nor completely in YOUR West Transfer area.

Method Constraint: The Bar or Bars got into the Bin by way of YOUR Sorter (or hand-unclogging of the Sorter).

Points (6) are per Bar. They need to be in their Bin, but the Bin is not worth points.

#### **12 - WEST TRANSFER AREA DEFINED "Areas" Clarification** (10-12-15)

The West Transfer Area is the mirror image of the East Transfer Area.

#### **13 - PERSON MUST BE PRESENT M05 Ruling** (10-12-15)

If you wish to hand-unclog the Sorter, a Person must be in the Sorter area AT THE TIME.

#### **14 - TRANSPORT 110 M03 Frequently Asked** (10-12-15)

The Transport Mission max score is indeed 110. This is the meaning you were supposed to take from "score one or both." Think it through, and use high caution when throwing around the word "impossible" - especially in *FIRST* LEGO League.

## **29 October 2015**

Update 9 from October 15 has been rewritten. Please reread.

