February 24, 2006

TEAM UPDATE #12

GENERAL NOTICES

No changes

Documents and Updates

No changes.

Question & Answer System

No changes.

Section 0 - Introduction

No changes.

Section 1 - Communication

No changes.

Section 2 – Team Organization

No changes.

Section 3 - The Arena

No changes.

Section 4 - The Game

The following Rules have been modified in Section 4 –The Game. The changes are shown in bold type in each Rule. The changes add clarification to the existing rules.

<S01> If at any time a ROBOT's operation or design is deemed unsafe by the head referee, it will receive a 10-point penalty and be disabled for the remainder of the match. If the safety violation is due to the ROBOT design, the head referee has the option to not allow the ROBOT back onto the field unless the design has been corrected. An example of unsafe operation is repeatedly throwing balls off the field at audience members, media personnel, judges, referees, etc. An example of an unsafe design is a SHOOTING MECHANISM that has a large mass that is stopped abruptly at the end of travel and is at risk of breaking off the ROBOT and becoming a projectile. **Another example of an unsafe robot design is a bright targeting light or laser pointer that could interfere with driver's ability to control their robot.**

<G09> ROBOTs on ALLIANCE PLATFORMs - ROBOTs score points if they are entirely on an ALLIANCE PLATFORM **when they come to rest** at the end of the match. ALLIANCEs receive points for ROBOTs belonging to either ALLIANCE that are on the ALLIANCE PLATFORM closest to the ALLIANCE's DRIVER station. If any part of the ROBOT is touching the carpet, the ROBOT is not considered on the platform. If a ROBOT is entirely on an ALLIANCE PLATFORM and is touching another ROBOT that is not entirely on the

ALLIANCE PLATFORM, it still is considered on the platform. One ROBOT on a platform or ramp is worth 5 points, two ROBOTs are worth 10 points, 3 or more ROBOTs are worth 25 points.

<G20> Field Damage - The head referee may disable a ROBOT that has damaged the playing field, carpet, goals, etc. if the head referee feels that further damage is likely to occur. The head referee may require corrective action, such as eliminating a sharp edge, **and re-inspection**, before the ROBOT will be allowed to compete in subsequent matches.

<G22> Intentional ROBOT - ROBOT Interaction - Strategies aimed solely at the destruction, damage, tipping over, or entanglement of ROBOTs are not in the spirit of the FIRST Robotics Competition and are not allowed. However, AIM HIGH is a highly interactive game, and some appropriate contact is allowed subject to the following guidelines:

- Rule <R35> in Section 5.3.4 establishes ROBOT BUMPER ZONEs. Any contact within this zone is generally acceptable, with the exception of high speed long distance ramming. If two ROBOTs choose not to use bumpers, and they contact such that simultaneous contact occurs both in and out of the BUMPER ZONE, then this contact is considered within the BUMPER ZONE.
- Contact outside of the BUMPER ZONE is generally not acceptable, and the offending ROBOT will be assessed a 5-point penalty, and may be disqualified from the match if the offense is particularly egregious or if it results in substantial damage to another ROBOT. Incidental contact will not be penalized. Contact outside the BUMPER ZONE that is a result of tipping caused by contact within the BUMPER ZONE will be considered incidental contact.
- If a ROBOT extends outside of its 28 inch by 38 inch starting footprint, it is responsible for the extension's contact with other ROBOTs and must not use the extension to contact other ROBOTs outside of the BUMPER ZONE. Likewise, other ROBOTs will not be responsible for contact with the extension outside of the BUMPER ZONE. Again, incidental contact will not be penalized.
- **Extension to extension contact between 2 robots with appendages outside the 28-inch by 38-inch starting envelope will generally not be penalized.**
- **Contact with a tilted robot such that the contact is outside the bumper zone will generally be considered incidental contact.**

In all cases involving robot-to-robot contact, the Head Referee may assess a 5-point penalty and the robot may be disqualified, subject to these guidelines.

<G26> ROBOT Off Sides - During the SECOND and THIRD PERIODs, the ALLIANCE on defense **can have at most 2 ROBOTs on their defensive half of the field. A full complement ALLIANCE of 3 ROBOTs** must keep at least one ROBOT (their BACKBOT) on the half of the field farthest from their DRIVER's station. There will be a 5 second grace period at the start of the SECOND and THIRD PERIOD to allow an ALLIANCE to get their BACKBOT "ON SIDES", however, the BACKBOT must be moving toward the mid-field line at the start of the period. The mid-field line is included in **both** the defensive **and offensive** half of the field. Multiple ALLIANCE robots are permitted in the farthest half of the field. ROBOTs of the same ALLIANCE may dynamically change the designation of the BACKBOT during the defensive period as long as there is at least one BACKBOT during the entire period. Violations of this rule will result in a 5-point penalty against the offending ALLIANCE for the initial violation. An additional 5-point penalty will be assessed for every 5 seconds beyond the grace period that a BACKBOT is not "ON SIDES". A BACKBOT that is prevented by an offensive ROBOT from crossing the field centerline **or is pushed off sides**

will not be penalized.

<G33> HUMAN PLAYER Shooting Zone - The HUMAN PLAYER must remain behind the STARTING LINE and within the ALLIANCE ZONE when they are entering a ball onto the field. Each violation will result in a 5-point penalty. **Human players may jump to enter a ball onto the field. However, if their momentum carries them across the starting line, even after they release the ball, a penalty will be assessed. Extreme jumping, sitting or standing on the shoulders of another human player, or any behavior that is potentially hazardous to the team members or field personnel, or damaging to the robots, will be considered a violation of Rule <S01>.**

Section 5. The Robot (includes the Kit of Parts)

No changes.

Section 6 – Robot Transportation

No changes.

Section 7 – At the Events

No changes

Section 8 – The Tournament

No changes.

Section 9 – The Awards

No changes.

Section 10 – Get Published

No changes.

2006 *FIRST* Guidelines, Tips & Good Practices

No changes

E-Mail Blasts Sent Since Last Update

February 23, 2006

Please read the important messaging below from Autodesk:

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Autodesk is still programming the online voting website; its a very complex project but the anticipated completion date is Tuesday, February 28. Emails will be sent out to the teacher contact with the URL and a unique log-in for each team, as soon as the site is ready.

Message to teams attending the Week One regional events: We apologize that your team will only have 1-2 days to cast your votes; however the options were to move the animation due dates up by two weeks or cancel the regional peer judging aspect of the competition.

<u>What you should be doing now</u>:

- Go to Autodesk Streamline
- Review all animations for the regional(s) your team was registered to attend as of January 17; Autodesk was able to update a few of the changes made after that date but not all of them due to time constraints.
- The animation team should review the animations and decide on scores for each animation. (Note: you cannot vote for your own animation.)
- Animations should be judged using the criteria found in the Autodesk Visualization Award criteria. The three areas are:
    - Concept (maximum score: 35 points)
    - Creativity (maximum score: 35 points)
    - Technical (maximum score: 30 points)
    - Details on these categories can also be found on Autodesk Streamline under the Awards section.
- Please remember your gracious professionalism; score fairly!

When the emails go out next week, your team will receive the URL of the voting website and a unique log-in just for your team. You may access the voting website as many times as you like; however, once you enter your scores and hit submit you will not be allowed back into the site. Your vote will be considered final.

Regional Event Update:

Autodesk is producing DVD's of the animations submitted via Streamline. Due to time constraints each regional event will only have a DVD containing animations submitted for that regional event. They will be shown in the Autodesk booth along with both Inventor and Visualization submissions from 2005. All 2006 animations will be shown in the Autodesk booth at the Championship Event.

Important Note: If possible please bring your animation on a DVD to your regional event. *FIRST* would like to show the winning animation during the awards ceremony. Please turn in your DVD to *FIRST* personnel to Pit Admin. Please make sure your DVD is clearly labeled with your team number!

Thank you to all the teams that submitted an entry this year; please remember that the professional judges will be reviewing all entries this year so there are more ways to win than last year!

Any questions can be sent to Kelly Stanphill at Autodesk via email: Kelly.stanphill@autodesk.com. Please include your team number in the subject line.

Autodesk

Question & Answer Items of Note

No changes