Team Update 20

**MANUAL**

**SECTION 5.3**

Except for the SANDSTORM bonuses, scores are based on the state of the FIELD when the ARENA timer displays zero (0), or, if not all elements have come to rest or the ROBOT changes state after being DISABLED at the end of the MATCH, five (5) seconds after the ARENA timer displays zero (0). However, if GAME PIECES are in motion when the ARENA timer displays zero (0), GAME PIECE scores are assessed once they come to rest. Additionally, if a ROBOT is in motion when the ARENA timer displays zero (0) or moves immediately after becoming DISABLED, its score is evaluated five (5) seconds after the ARENA timer displays zero (0).

**SECTION 5.5**

A DRIVE TEAM is a set of up to five (5) people from the same FIRST Robotics Competition team responsible for team performance for a specific MATCH. There are four (4) specific roles on a DRIVE TEAM which ALLIANCES can use to assist ROBOTS with DESTINATION: DEEP SPACE.

The intent of the definition of DRIVE TEAM and DRIVE TEAM related rules is that, barring extenuating circumstances, the DRIVE TEAM consists of people who arrived at the event affiliated with that team and are responsible for their team’s and ROBOT’S performance at the event (this means a person may be affiliated with more than one (1) team). The intent is not to allow teams to “adopt” members of other teams for strategic advantage for the loaning team, borrowing team, and/or their ALLIANCE (e.g. an Alliance Captain believes one of their DRIVERS has more experience than a DRIVER on their 1st pick, and the teams agree the 1st pick team will “adopt” that DRIVER and make them a member of their DRIVER TEAM for Playoffs).

The definition isn’t stricter for two main reasons. First, to avoid additional bureaucratic burden on teams and event volunteers (e.g. requiring that teams submit official rosters that queuing must check before allowing a DRIVE TEAM in to the ARENA). Second, to provide space for exceptional circumstances that give teams the opportunity to display Gracious Professionalism (e.g. a bus is delayed, a COACH has no DRIVERS, and their pit neighbors agree to help by loaning student DRIVERS as temporary members of the team until their bus arrives).

**SECTION 8.2.5**

**G20. Stay out of other ROBOTS.** Initiating deliberate or damaging contact with an opponent ROBOT on or inside the vertical extension of its FRAME PERIMETER, including transitively through a GAME PIECE, is not allowed.

Violation: TECH FOUL and YELLOW CARD.

High speed accidental collisions may occur during the MATCH and are expected. Generally, ROBOTS extend elements outside of the FRAME PERIMETER at their own risk.

A ROBOT with an element outside its FRAME PERIMETER may be penalized under G20 if it appears they are using that element to purposefully contact another ROBOT inside its FRAME PERIMETER.

The “deliberate or damaging” clause in G20 refers specifically to whether the actual contact within/on an opponent's FRAME PERIMETER is deliberate or damaging, not with any actions/game play/intentions leading up to that contact.

Generally, if, in the judgement of the REFEREE, contact on/within a ROBOT’S FRAME PERIMETER is neither deliberate nor damaging, G20 is not violated. Examples include:

- a ROBOT hits an opponent to move it away from its ROCKET and tilts in a way that part of it swings, accidentally in the REFEREE’S judgement, in to an opponent’s FRAME PERIMETER and makes contact but causes no damage.
a ROBOT tries to push an opponent by hitting them on their BUMPER, but because of the impact, accidently (in the REFEREE’S judgement) rolls on top of them such that their wheels are in contact with elements inside the opponent’s FRAME PERIMETER but causes no damage.

An example of a violation of G20 is if a ROBOT reaches inside an opponent’s FRAME PERIMETER and uses their arm to hit the opponent’s gripper to make the opponent drop their GAME PIECE.

SECTION 10.4

R20. Teams must stay “hands-off” their bagged ROBOT elements during the following time periods:

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G. Teams attending 2-day events may access their ROBOTS using the ROBOT Access Period.

Teams attending 2-day events will not have as much time to work on their ROBOTS at events as teams attending traditional 3-day Regional events. Due to this, teams are granted an additional “ROBOT Access Period” to un-bag their ROBOT between the “Stop Build Day” and their 2-day district events. 2-day events for the 2019 season include District Qualifier events for the following areas/events:

- FIRST Chesapeake District (DC, MD, VA)
- FIRST Israel District (IS)
- FIRST in Michigan District (MI)
- FIRST Mid-Atlantic District (DE, NJ, Eastern PA)
- FIRST North Carolina District (NC)
- FIRST in Texas (TX, NM)
- Indiana FIRST District (IN)
- NE FIRST District (CT, MA, ME, NH, RI, VT)
- Ontario District (ON)
- Pacific Northwest (AK, OR, WA)
- Peachtree District (GA)
- FIRST North Carolina State Championship
- Indiana State Championship

SECTION 12.2.1

All YELLOW CARDS are cleared in FMS at the conclusion of Practice, Qualification, Sub-Division Playoff, and Division Playoff MATCHES. The Head REFEREE may opt to perpetuate a YELLOW CARD earned during Practice MATCHES through to Qualification MATCHES for particularly egregious behavior.