

Team Update 15

GENERAL

- **Inspection Checklist:** Version 3.0 of the [2019 Inspection Checklist](#) has been posted with edits as follows:
 - The RoboRio image (~~FRC_2019_v12~~ [FRC_roboRIO_2019_v14](#) or later) (per [Team Update 14](#))
 - Arabic Font [Numeral](#)
- **Fair Market Value of pre-2019 FIRST Choice items:** It's come to our attention that there were valuable items available to teams in previous seasons' Kickoff Kits and FIRST Choice whose Fair Market Value exceeds the limit set in R13 (e.g. the [Analog Devices MXP IMU](#)). This was an oversight on our part, and not at all the intent. We're sorry for this unintended consequence and for confusion this may have caused. We'll be reassessing this set of rules after the season with this factor in mind, but meanwhile need to put a fix in place to make sure teams aren't inhibited for the 2019 season; see the edit to R14 below.

Thank you to all donors who make their items available to teams!

- **Control System:** An optional WPILib update 2019.4.1 has been released. This update addresses a SPI bug that inhibited communication with the Analog Devices ADIS16470. A full changelog and download links can be found on the [WPILib Github](#).

MANUAL

SECTION 4.1

Each FIELD for DESTINATION: DEEP SPACE is a 27 ft. (~823 cm) by 54 ft. (~1646 cm) carpeted area bound by and including the inward- and upward-facing surfaces of the guardrails, inward-facing surfaces of the ALLIANCE WALLS (except Chute surfaces).

SECTION 8.2.2

- G4. One GAME PIECE at a time.** ROBOTS may not have extended ~~extended~~ greater-than-momentary or repeated control, i.e. exercise ~~extended~~ greater-than-momentary or repeated influence, of more than one (1) GAME PIECE at a time, either directly or transitively through other objects. A GAME PIECE that is at least partially supported by a ROCKET or CARGO SHIP is not considered controlled by the ROBOT.

Violation: FOUL per additional GAME PIECE. If strategic, YELLOW CARD.

If a GAME PIECE becomes lodged in or on a ROBOT, it is considered controlled by the ROBOT. It is important to design your ROBOT so that it is impossible to inadvertently or unintentionally control more than the allowed maximum.

Example 1: If a ROBOT controls two (2) GAME PIECES and then releases them all in a way that both GAME PIECES are in scoring position, the team is issued a YELLOW CARD.

Example 2: If a CARGO is stuck on a ROBOT and that ROBOT picks up a HATCH PANEL, they are issued a FOUL per G4. If they place that HATCH PANEL and then pick up another HATCH PANEL, they are issued another FOUL. Continuing game play in this manner (i.e. not taking advantage of carrying more than one (1) GAME PIECE) would generally not be considered a strategic violation.

Example 3: A ROBOT controlling one (1) GAME PIECE that briefly contacts several CARGO in close proximity causing them to scatter would generally not be considered in violation of G4.

SECTION 9.2

- H7. GAME PIECES through LOADING STATIONS only.** During the MATCH, team members may only enter GAME PIECES on to the FIELD through their LOADING STATIONS (i.e. fed such that they go in the ALLIANCE STATION side and exit the LOADING STATION HATCH or FIELD side of the chute).

Violation: FOUL per GAME PIECE.



SECTION 10.4

R14. The BOM cost of each non-KOP item must be calculated based on the unit Fair Market Value for the material and/or labor, except for labor provided by team members (including sponsor employees who are members of the team), members of other teams, event provided Machine Shops and shipping.

Any Kickoff Kit or *FIRST* Choice item received by a team in or before the 2018 season that has a FMV over \$500 may be accounted at \$500 on the team's BOM.

SECTION 12.2.1

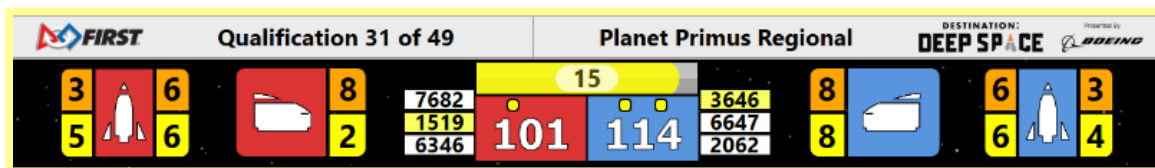


Figure 12-2 Audience Screen Graphic Showing YELLOW CARD Indicators

