Team Update 16

General

Control System: NI FRC Game Tools are updated. Last week's release contains version 23.1 of the Driver Station application which corrects an issue with detecting USB devices at application launch. Per the edit to R901 below, this update is required for competition. The update also contains roboRIO image version 2023_v3.2 which contains Network Tables stability fixes for LabVIEW teams; C++\Java teams do not need to update to the new image (though there is no harm in doing so).

An update to C++\Java WPILib (2023.4.2) has been released. All teams are encouraged to update to at least version 2023.4.1 prior to competition as this version contains stability fixes for Network Tables that may impact dashboard performance at events.

Official FIELD Drawings: GE-23300, Rev B, is updated to reflect a change to the orientations of the 4 *Charge Station Pivot Hinge Assemblies* (from the same to alternating).

Inspection Checklist: The Robot Inspection Checklist Rev 3 is posted and reflects the change to R901 depicted below.

Section 7.2 ROBOT to ROBOT Interaction

G209   During the ENDGAME, don't touch ROBOTS touching their CHARGE STATION. During the ENDGAME, a ROBOT may not contact, either directly or transitively through a GAME PIECE, an opponent ROBOT contacting its CHARGE STATION or supported by a partner contacting its CHARGE STATION, regardless of who initiates contact. A ROBOT in contact with its CHARGE STATION and partially in its opponent's LOADING ZONE is not protected by this rule.

Violation: The contacted opponent ROBOT, and any ROBOTS contacting their CHARGE STATION when the violation occurred, and any partners it's supporting, will be considered DOCKED and ~~ENGAGED~~ all DOCKED ROBOTS at the end of the MATCH are considered ENGAGED.

Section 7.3 FIELD Interaction

G304   Don't mess with the opponent's CHARGE STATION. ROBOTS, either directly or transitively through a GAME PIECE, may not cause or prevent the movement of the opponent CHARGE STATION. The following are exceptions to this rule:

   A.   movement, or prevention of movement, of an opponent CHARGE STATION because of a MOMENTARY ROBOT action resulting in minimal CHARGE STATION movement
   B.   a ROBOT forced to contact an opponent's CHARGE STATION because of contact by an opponent ROBOT, either directly or transitively through a GAME PIECE or other ROBOT (e.g. a ROBOT wedged underneath the CHARGE STATION by the opposing ALLIANCE either intentionally or accidentally).

Violation: FOUL per instance. During the ENDGAME, any ROBOTS contacting their CHARGE STATION when the violation occurred, and any partners it's supporting, will be considered DOCKED and ~~ENGAGED~~ <mark>all DOCKED ROBOTS at the end of the MATCH are considered ENGAGED</mark>.

Section 8.3 Before/After the MATCH

A reminder about H301: DRIVE TEAMS are expected to be MATCH ready or making a good faith effort to be MATCH ready at the end of the Playoff break (i.e. when the timers in stations 2 reach 0). Walking safely with the ROBOT to the FIELD is an example of making a good faith effort to be MATCH ready. Continuing to work on repairs or modifications to the ROBOT is not considered making a good faith effort to be MATCH ready.

Section 9.9 OPERATOR CONSOLE

R901 **R901 *Use the specified Driver Station Software.** The Driver Station Software provided by National Instruments ([install instructions found here](#)) is the only application permitted to specify and communicate the operating mode (i.e. AUTO/TELEOP) and operating state (Enable/Disable) to the ROBOT. The Driver Station Software must be version ~~22.0~~ <mark>23.1</mark> or newer.

Section 11.7.2 Playoff MATCH Bracket

As shown in Figure 11-3 and Table 11-3, Playoff MATCHES consist of 6 rounds with breaks between rounds and between the Finals MATCHES. Breaks begin after the FIELD has been cleared from the previous MATCH. The Blue and Red Gap columns indicate the approximate time between each ALLIANCE'S MATCHES. The expected start time of the <mark>scheduled</mark> MATCH is the time indicated on the MATCH schedule or 15 minutes from the end of either ALLIANCE'S previous MATCH, whichever is later.

<mark>If a Playoff MATCH needs to be replayed as described in [Section 11.3 MATCH Replays](#), teams are notified of when the replay will occur. A minimum 10-minute delay is provided for teams to reset their ROBOTS prior to the replay unless all teams are ready sooner. The affected MATCH must be replayed before the next round begins.</mark>

Section 11.7.2.2 Playoff Finals

If a Finals MATCH ends in a tie score, the tie is not broken using the criteria in Table 11-4, the MATCH remains a tie. In the case where an ALLIANCE hasn't won 2 MATCHES after 3 MATCHES have been played (because of tied MATCHES), the Playoffs proceed with up to 3 additional Finals MATCHES, called Overtime MATCHES, until an ALLIANCE has won 2 Finals MATCHES. In the case where the Overtime MATCH scores for both ALLIANCES are equal, the win for that Overtime MATCH is awarded based on the criteria listed in Table 11-4.

~~If a Playoff MATCH needs to be replayed as described in~~ [Section 11.3 MATCH Replays](#)~~, teams are notified of when the replay will occur. A minimum 10-minute delay is provided for teams to reset their robots prior to the replay unless all teams are ready sooner. The affected MATCH must be replayed before the next round begins.~~