Team Update 20

General

CORAL Scoring in AUTO

A blog post was posted last week as a response to an error in the CORAL RP calculation. The issues have been fixed and additionally Section 6.5.1 has been adjusted to clarify how scoring works for the AUTO RP calculation.

Game Manual

6.5.1 SCORING ELEMENT Scoring Criteria

If a CORAL scored in AUTO gets removed from a BRANCH during TELEOP, the AUTO points are removed but the CORAL will still count towards the AUTO RP. If a CORAL is scored in that location again, the AUTO points associated with the original scored CORAL is restored. CORAL scored in the trough is not tracked by specific location, if a CORAL is removed from the trough after AUTO, the points removed will correspond to the lowest scoring CORAL (i.e. TELEOP CORAL removed first); if CORAL is re-scored in the trough, points will be re-added in the reverse order (i.e. AUTO CORAL re-added first).

9 Inspection & Eligibility

This section describes the rules governing MATCH participation. A team has participated in a MATCH if any member of their DRIVE TEAM is in the ALLIANCE AREA or PROCESSOR AREA, with or without the ROBOT on the FIELD, at the start of the MATCH.

11.3 District Championships with Multiple Divisions

The process employs a "brute force iterative randomizer" and is executed as follows:

1. The district team list is sorted in order of cumulative district points earned as described in section 11.1 District Events.
2. The list is divided into quartiles based on rank (e.g. the first quartile has the top 25% ranked teams). If the total number of teams is not evenly divisible by 4 times the number of divisions, additional teams are distributed to quartiles 4, then 2, then 3.
3. Division assignments are randomly generated using equal contributions from each quartile.
4. 3 criteria are calculated for each division:
   a. average strength: the arithmetic mean of the district point values of teams in a division
   b. distribution of strength: the Signal to Noise Ratio (SNR) of the district point values of teams in a division. SNR is calculated as follows:

$$SNR = 10\left(\log_{10}\frac{\bar{x}^2}{\sigma^2}\right)$$

   $\bar{x}$ = arithmetic mean of the district points in a division

   σ = standard deviation of the district points in a division

   c. distribution of strength for "top" teams: The SNR of the district point values of teams in the first quartile of a division