



Team Update 21

General Notes

- **Last One:** *Team Update 21* is the last scheduled Team Update for the 2017 season.
- **No changes:** There will be no changes to the pressure threshold or the number of prepopulated GEARS for the *FIRST* Championship.
- **Q&A:** The official Q&A will close to new questions at noon (Eastern time) this Thursday, April 13, 2017.
- **Event Rules:** The [Rules & Expectations for FIRST Robotics Competition Events](#) page has been updated with the following updates.
 - **E14-1** Teams may only practice with their robot in their pits or in designated practice areas that are open to all teams at events. Teams may not set up their own practice equipment outside their pits. When practicing in their pit space, safety must remain the top priority for teams. If Event Management determines an in-pit practice setup is unsafe, or interferes with activity in adjacent pits or pit aisles, the team will be required to discontinue the activity.
 - **E14-2** Teams may not expand their pit activities to empty pit spaces.
 - **E14-3** Teams may not swap pit spaces with other teams without Event Management approval.

Section 3.6 STEAM TANK

Three windows in the STEAM TANK contain Philips Color Kinetics LED Light Strips used to indicate the amount of steam pressure generated by the BOILER and transmitted to the AIRSHIP. Each window displays the same information. ~~Each row of two (2) LEDs changes, from off to on in white, then from on in white to on in the ALLIANCE color, for each ten (10) kPa of pressure generated.~~ For every five (5) kPa of pressure generated, a row of LEDs illuminates in the ALLIANCE'S color. For example, if an ALLIANCE generates ten (10) kPa of pressure, the bottom row is white. If the Red ALLIANCE has generated forty (40) ~~20 (twenty)~~ kPa, the bottom eight (8) rows of LEDs are red. If the Blue ALLIANCE generates ten (10) ~~thirty (30)~~ kPa, the bottom two (2) rows are row is blue and the second row is white.

Section 10.11.3 *FIRST* Championship Playoffs

~~In the case where Championship Scores of two or more alliances are equal, the tie is broken using the criteria in Table 10-6.~~



Table 0-1: Einstein Tournament Ranking Criteria

| Order Sort | Criteria |
|-----------------|---|
| 1 st | Championship Score |
| 2 nd | Cumulative sum of MATCH points |
| 3 rd | Cumulative sum of ROTOR and pressure bonuses |
| 4 th | Cumulative sum of AUTO points |
| 5 th | Cumulative ROTOR engagement score (AUTO and TELEOP) |
| 6 th | Cumulative TOUCHPAD score |
| 7 th | <ul style="list-style-type: none"> • If tie affects which ALLIANCES advance to Playoffs, a tiebreaker MATCH is played between the affected ALLIANCES. • If tie is between ALLIANCES advancing to Playoffs, FMS randomly seeds tied ALLIANCES to determine ALLIANCE color. |

Section 10.11.4 *FIRST* Championship TIMEOUTS

Einstein timeouts are being removed because there will be at least six minutes of downtime (often more) between any two sets of Einstein matches.

There are no TIMEOUTS for teams in the Einstein tournament.

~~For the Einstein Tournament, each ALLIANCE will be issued one TIMEOUT coupon for use as described in [Section 10.9 TIMEOUTS and BACKUP TEAMS](#).~~

~~**T17.** If an Einstein ALLIANCE wishes to call a TIMEOUT, the ALLIANCE CAPTAIN must submit their TIMEOUT coupon to the Head REFEREE (or their designee) within two (2) minutes of the ARENA reset signal from the previous MATCH. If there is no preceding MATCH, the TIMEOUT coupon must be submitted no later than two (2) minutes before the scheduled MATCH time. The TIMEOUT will begin two (2) minutes after the ARENA reset signal (i.e. at the end of the TEAM TIMEOUT Coupon Window depicted in Figure 10-4. Deleted.~~

Section 11 Glossary

| Term | Definition |
|------|---|
| PORT | a 13 in. (~33 cm) wide by 19½ in. (~50 cm) hole next to each LIFT cut in each of the three walls facing the ALLIANCE WALL |