

Team Update 21

GENERAL


Last One: Team Update 21 is the final Team Update of the 2023 CHARGED UP presented by Haas season.

Recording of Discussions: Laws regarding recording of conversations vary state-to-state and country-to-country, and, in some cases, recording without consent may be criminal. Introducing the idea of recording a conversation with an implied reason of proving someone’s error can escalate a discussion and is likely to increase its adversarial nature. Sometimes it’s appropriate; often it’s neither appropriate nor constructive. Please do not record *FIRST* event staff, or anyone at an event, without the person’s consent and please do not challenge the decision to decline consent to be recorded.

GAME MANUAL

SECTION 5.7.1.1 DRIVER STATION LED STRINGS

Table 5-2 GRID light states ([field tour video](#))

Light String State	Criteria	Example
5 center nodes yellow	Set of ALLIANCE GRIDS are complete	

Section 6.4.1 GRID Scoring

Table 6-1 GAME PIECE Scoring Criteria

ROW	GAME PIECE	Scoring Criteria
Bottom	CONE or CUBE	Fully contained in GRIDS and touching FIELD carpet, and/or BARRIER in only 1 HYBRID NODE, and/or GAME PIECES touching FIELD carpet and/or BARRIER in only 1 HYBRID NODE and fully contained in GRIDS.
Middle or Top	CONE	The top of the CONE NODE is contained within the volume defined by the conical surface of the CONE

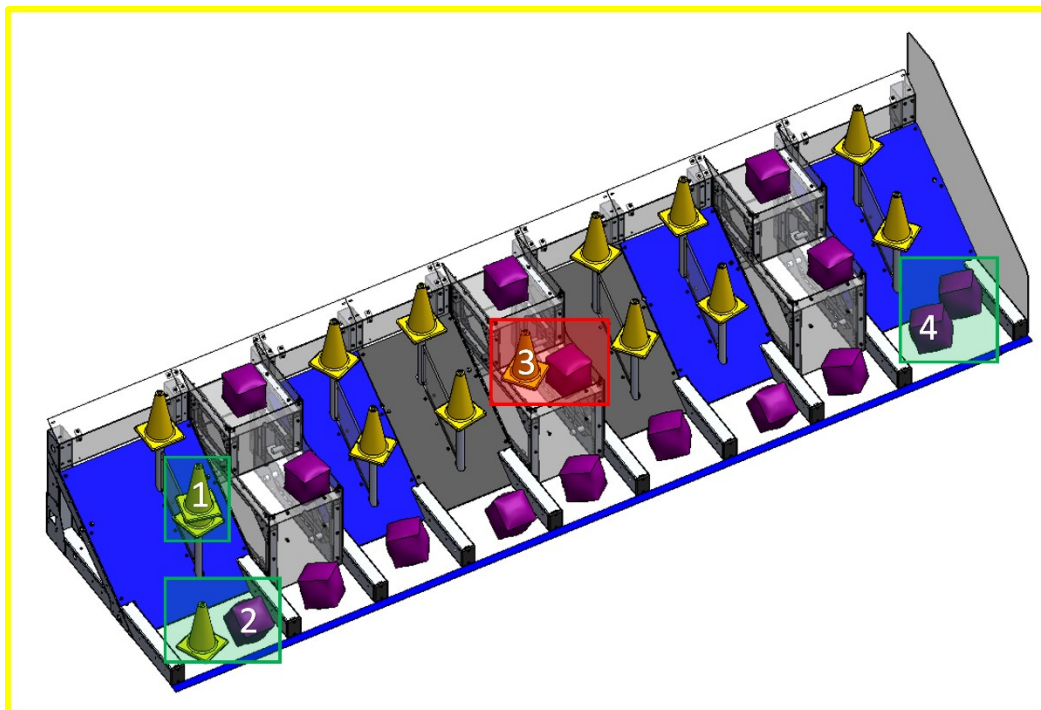
Middle or Top	CUBE	partially or completely (regardless of inflation state) supported by a CUBE NODE and/or by a CUBE at least partially supported by a CUBE NODE.
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If all ALLIANCE'S NODES are populated with a scored GAME PIECE, i.e. the set of GRIDS is complete, NODES may become SUPERCHARGED. A NODE is SUPERCHARGED if it contains more than 1 scored GAME PIECE, as defined in Table 6-1. A GAME PIECE may only SUPERCHARGE 1 NODE.

On an incomplete set of GRIDS, only 1 GAME PIECE is counted per NODE. On a complete set of GRIDS, additional GAME PIECES are only used to SUPERCHARGE NODES (i.e. they do not earn ROW-specific points or contribute to LINKS). For example, NODES 1, 2, and 4 in Figure 6-3 are SUPERCHARGED, NODE 3 is not SUPERCHARGED because a CONE cannot score on a CUBE NODE, and the ALLIANCE earned 9 SUPERCHARGED NODE points.

Figure 6-3 SUPERCHARGED NODE examples



Section 6.4.3 Point Values

Table 6-2 CHARGED UP points

Award	Awarded for...	AUTO	TELEOP	Qual.	Playoff
SUPERCHARGED NODE	each SUPERCHARGED NODE in a completed set of ALLIANCE GRIDS		3		
SUSTAINABILITY BONUS	At least 56 LINKS scored.			1 Ranking Point	
COOPERTITION BONUS	At least 3 GAME PIECES scored on each ALLIANCE'S CO-OP GRID	The SUSTAINABILITY BONUS threshold is reduced to 45 LINKS for both ALLIANCES			

Section 8.2 REFEREE Interaction

H201 *Egregious or exceptional violations.

The intent of this rule is to provide the Head REFEREES the flexibility necessary to keep the event running smoothly, as well as keep the safety of all the participants as the highest priority. There are certain behaviors that automatically result in a YELLOW or RED CARD because this behavior puts the *FIRST* community at risk. Those behaviors include, but are not limited to the list below:

- a. inappropriate behavior as outlined in the blue box of [H101](#),
- b. jumping over the guardrail,
- c. behaviors listed in the blue box in [H103](#),
- d. PINNING in excess of 15 seconds,
- e. exploiting the 3-second window after a MATCH described in [Section 6.4 Scoring](#) to avoid rule violations (e.g. triggering an over-extension that enables GRID points or using a ROBOT'S residual energy to impact an opponent ROBOT on their CHARGE STATION),
- f. moving a scored GAME PIECE from an opponent's complete set of GRIDS.

The Head REFEREE may assign a YELLOW or RED CARD for a single instance of a rule violation such as the examples given in items a-e above, or for multiple instances of any single rule violation. Teams should be aware that any rule in this manual could escalate to a YELLOW or RED CARD. The Head REFEREE has final authority on all rules and violations at an event.

H202 *1 STUDENT, 1 Head REFEREE. A team may only address the Head REFEREE with 1 STUDENT. The STUDENT may not be accompanied by more than 1 silent observer.

Please see [Section 11.2 Head REFEREE and FTA Interaction](#) for more information about process and expectations. Note that some events may restrict ARENA access to members of the DRIVE TEAM.

If a Head REFEREE (or any other Event staff) feels they are being recorded without their consent, they may choose to stop participating in the conversation.