Q&A

VRC 2022-2023: Spin Up

Tagged: RSC1

Welcome to the official VEX Robotics Competition Question & Answer system, where all registered teams have the opportunity to ask for official rules interpretations and clarifications. This Q&A system is the only source for official VRC Spin Up rules clarifications, and the clarifications made here from the Game Design Committee (GDC) are considered as official and binding as the written Game Manual itself.

Please review the Q&A Usage Guidelines before posting. This system is only intended for specific VRC Spin Up rules questions.

- For event, registration, or other competition support questions, please contact your REC Foundation Manager.
- For VEX technical support, contact support@vex.com or sales@vex.com.
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact GDC@vex.com.

Look at the data and listen to your customers before it's too late to fix the 'Magic Hands' Ruling which had allowed Strategic moving of 'Controlled' Game Elements in Skills Matches

25-Feb-2020
RSC1

Unfortunately there has been a substantial increase in the Programming Skills scores following the adoption 2/12/20 of 'Magic Hands' Q&A Ruling which allowed Strategic moving of 'Controlled' Game Elements in the Q&A (#518 https://www.robotevents.com/VIQC/2019-2020/QA/518).

- The 'Magic Hands' Q&A Ruling makes it easier for teams to score 60 points or more in Programming Skills by Strategically moving game elements 7 feet across the game board by hand.

This substantial increase in the Programming Skills scores has been realized in Indiana Middle School (MS) Division and more broadly in the USA Middle School (MS) Divisions: -- In Indiana there has been a ~50% increase in Indiana MS teams scoring 60 points or more in Programming Skills in the recent 10 days (was 31 & now 46 teams scored >60 between 2/13 & 2/23) -- Across the USA there has been a ~30% increase of USA MS teams scoring 60 points or more in Programming Skills in the past 10 days (was 164 & now 211 teams >60 Programming between 2/13 & 2/23).

- I'm hopeful that some of this growth in programming scores was through programming effort. However, the data do not support this interpretation as there is much smaller increase in Driver Skills Scores and locally Teamwork Finals top scores actually dipped in Final 10 days indicating limited growth in other areas of the game.

The data supporting these interpretations of IN MS and USA MS Skills Scores can be found at https://docs.google.com/spreadsheets/d/1xxw68aoWwuyqePnvqPxZzygwocodKhWhADuPFZd6Le4/edit?usp=sharing I did not have the foresight to look at the potential impact of 'Magic Hands' Q&A on other active regions and other age groups (Elementary?) . *Therefore I'd ask Game Design Committee to review your data to determine which regions and age groups are most impacted by the rule change (uncharacteristic increase in Programming Scores >60)?*

The data, cited above, indicate that this 'Magic Hands' Q&A ruling changed IN MS VEX IQ Skills Ranking System and penalized teams who competed prior to the 2/12 change. Thus it also changed the VEX IQ Qualifying Criteria [embed link] from Two ways for teams to qualify" to now '3 ways to qualify'

1. Qualifying Award or

2. Skills After 2/13 (Majority of Skill Qualifiers in IN MS VEX IQ)
3. Skills before 2/13 (<5% of All Teams registered IN MS VEX IQ) The Skills qualification system was design to select the top performers to compete at State and World as opposed to preferencing the most recent performers.

To ensure fair and equitable treatment of all teams, I would like to propose each region and age group to review their data and come up with an equitable plan.

I have been in contact with local REC and State Championship organizers proposing an expansion of IN MS VEX IQ Division to accommodate more Skill qualifiers for over a month, originally due to strong growth of interest in MS VEX IQ and more recently due to impact of the Magic Hands' Q&A.

I remain optimistic that they will accept my current proposal to expand the # of Indiana MS VEX IQ teams from current 110 to 116 to include 6 more teams. The number 116 was chosen as it represents equal number top Skills Scores who competed both before and after 2/13 (also clean cut off at Total Skills Score 124 or more). Previously I had proposed an increase to 135 teams, (35% increase) to match the number of World Qualifying Spots, but I now recognize time is now more limited and a smaller increase may be an appropriate compromise under this difficult timeline.

Lastly I encourage all involved to consider this problem and proposed solutions, as it may be in the best interest of our organizations and our youth to maintain equitable regulations so that all students have a fair chance.

Sincerely, Kevin Sheehan

> **Answered by committee**
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> Thank you for taking the time to write out this feedback; we will be sure to take it into consideration for future seasons.
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> In order to keep the Q&A system as organized as possible for all viewers, we do need to remind users of the Q&A Usage Guidelines. For general feedback, further discussion of a previous ruling, or other messages that are absent of a specific question, please feel free to contact the GDC directly via GDC@vex.com.

Actions after Skills Stop Time Signal

6-Jun-2023
RSC1

> At events which do not have a V5 Robot Brain or the TM Mobile App available for Robot Skills Challenge field control, Drive Team Members and field staff must agree prior to the Match on the signal that will be used to end the Match early. • As noted in the definition of Skills Stop Time, the moment when the Match ends early is defined as the moment when the Robot is "disabled" by the field control system. • The agreed-upon signal must be both verbal and visual, such as Drive Team Members crossing their arms in an "X" or placing their V5 Controller(s) on the ground. • The signal must be given by a Drive Team Member who is standing in the Alliance Station. • It is recommended that Drive Team Members also provide verbal notice that they are approaching their Skills Stop Time, such as by counting out "3-2-1-stop."

Are actions that take place in the short time period between the agreed-upon signal and the field being disabled subject to Minor and/or Major Violations if rules are broken?

> **Answered by committee**
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> It is impossible to provide a blanket answer beyond what is written in the Game Manual that encompasses all possible hypothetical events. If you have a more specific question, please feel free to rephrase and resubmit.

Robot Skills Clarifications

5-Jan-2023

SC2 RSC1 RSC2 RSC3 RSC4 RSC5 RSC6

<RSC7>Here are a couple of questions regarding running teams during a skills match. As per the update on November 1, teams are supposed to be disqualified for coming into contact with anything outside of the field during endgame.

1. How do we mark team as *disqualified* during a skills match? As of December, Tournament Manager does not include an option to disqualify a team during a skills match. The definition of disqualification says that “A Team that receives a Disqualification in a Driving Skills Match or Programming Skills Match receives a score of zero (0) for that Robot Skills Match” Do I simply modify their score to be zero on everything?

2. Also, does the definition of breaking the field perimeter include the top of the field walls, or only the outside? (Would a team be in violation of S2 if a part of their robot is touching the top of the field wall, but not the outside perimeter?)

3. How strict are we supposed to be regarding the expansion rule before endgame (e.g., 18” exactly or 18” +/- 1”)? Many teams may have intake rollers that break 18” during operation. There were also some teams with string that would sway outside of the 18” during driving. (One team also had a piece of metal partially detach and stick outside of 18”). Should we keep a sizing tool at the skills field to show teams what part of their robot would violate the 18” rule during operation?

4. Being able to eyeball the size of a robot on the field is slightly subjective and might cause problems with newer volunteers. What is the best method for teaching them how to spot a violation?

5. Finally, how do we resolve a dispute of a robot going oversize and entering endgame early? Depending on how strict we are supposed to be with the expansion limit, this will be a point of conflict. As per the manual, “The Head Referee has final authority regarding all Robot rules”. Is this only for the designated Head Referee for the event, or does this include everyone that has been certified as a Head Referee by REC?

Answered by committee

Thank you for your questions.

1. How do we mark team as *disqualified* during a skills match?

The Scorekeeper should record a score of 0 for the Skills Match.

2. Also, does the definition of breaking the field perimeter include the top of the field walls, or only the outside? (Would a team be in violation of S2 if a part of their robot is touching the top of the field wall, but not the outside perimeter?)

Rule <S2> specifies that a Robot that comes in contact with the outside face of the Field Perimeter is in Violation of the rule. It does not address or include the top edge of the Field Perimeter.

3. How strict are we supposed to be regarding the expansion rule before endgame (e.g., 18” exactly or 18” +/- 1”)?

Any horizontal expansion beyond 18"x18" prior to the Endgame is a Violation of rule <SG4>, including swaying or dragging strings, flexible intakes that cause the Robot to expand beyond 18" while intaking a Disc, and partially detached Robot components that protrude or drag beyond the 18" size limit. When determining the correct penalty, the Head Referee must consider the clauses and Violation Notes of <SG4> as well as any steps the Team takes to remedy the Violation. Having a sizing tool available to the Head Referee at the Field is always a good idea.

4. Being able to eyeball the size of a robot on the field is slightly subjective and might cause problems with newer volunteers. What is the best method for teaching them how to spot a violation?

If your Head Referee and Scorekeeper Referees are available to help with Robot Inspection, it can provide hands-on experience and understanding of Robot sizing.

5. As per the manual, “The Head Referee has final authority regarding all Robot rules”. Is this only for the designated Head Referee for the event, or does this include everyone that has been certified as a Head Referee by REC?

The Head Referee for the event (or, in the case of an event with multiple Head Referees, the Division or the Match) is the one person with final authority regarding all Robot rules and Match play. Other Referees may provide information about what they saw during a Match, and may advise the Head Referee as requested, but all rulings are based on the judgment of the Head Referee and must be made by the Head Referee.