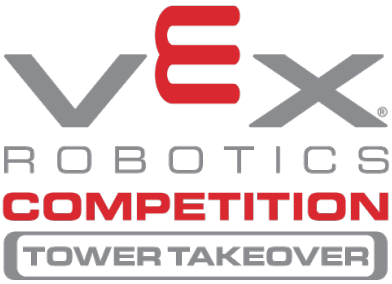
Q&A

VRC 2019-2020: Tower Takeover

Tagged: Robot Skills Challenge



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 Tower Takeover 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 Tower Takeover rules questions.

- **For event, registration, or other competition support questions, please contact your REC Foundation Regional Support 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.**

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Further Clarification of Alliance Station in Skills Challenge

Robot Skills Challenge

I see www.robotevents.com/VRC/2019-2020/QA/408 where it was ruled that "Drive Team Members may utilize either Alliance Station during a Robot Skills Match, regardless of which side their Robot starts on."

It is very clear that Drive Team Members may place their robot on the blue side and stand in the red drivers station (and vice versa).

My question is can Drive Teams utilize **both** Alliance drivers stations during a Robot Skills Match? Ex. Can they have two Drive Team Members in the red alliance station and one Drive Team Member in the blue alliance station? Or should all Drive Team Members pick one of the alliance stations to stand?

> **Answered by Game Design Committee**
>
> > Can they have two Drive Team Members in the red alliance station and one Drive Team Member in the blue alliance station?
>
> This would be fine, provided that G8 is kept in mind.
>
> > <G8> Controllers must stay connected to the field towers. Prior to the beginning of each Match, Drive Team Members must plug their VEXnet Joystick or V5 Controller into the VEXnet Field Controller's Cat-5 cable via their controller's competition port. This cable must remain plugged in for the duration of the Match, and may not be removed until the "all-clear" has been given for Drive Team Members to retrieve their Robots.

Skills - Field Set up

Robot Skills Challenge

Since all cubes count the same for scoring purposes, does the skills field need to be set up with cube colors in the "correct" location?

> **Answered by Game Design Committee**
>
> Per the Skills Challenge Appendix:
>
> > The playing field will be set up exactly the same as a normal VEX Robotics Competition Tower Takeover Match.
>
> Therefore, yes, the playing field should be set up with Cubes in their "correct" locations for all Skills Matches.

Skills standings

Robot Skills Challenge

how does the ranking work for teams with the same score? what are the tie breaker protocol?

> **Answered by Game Design Committee**

how does the ranking work for teams with the same score? what are the tie breaker protocol?

Robot Skills Challenge tiebreakers within a given event are explained in the VRC Tower Takeover Robot Skills Challenge Appendix, under the section titled "Robot Skills Challenge Ranking".

• In the case where two Teams are tied for the highest score, the tie will be broken by looking at both Teams' next highest Programming Skills Matches score. If the Teams remain tied, the tie will be broken by looking at both Teams' next highest Driving Skills Matches score. This process will repeat until the tie is broken.

• If the tie cannot be broken (i.e. both Teams have the exact same scores for each Programming Skills Matches and Driving Skills Matches), then the following ordered criteria will be used to determine which Team had the "best" Programming Skills Matches.

1. Number of Placed Cubes.
2. Number of Scored Cubes.

• If the tie still cannot be broken, the same process in the step above will be applied to the Teams' best Driving Skills Match.

• If the tie still isn't broken, events may choose to allow Teams to have one more deciding Driving Skills Matches, or declare both Teams the Robot Skills Challenge Winner.

Clarification of Alliance Station in Skills Challenge

Robot Skills Challenge

According to RSC1, robots may start on either side of the field as long as the robot meets the criteria for Starting Position. <RSC1> In Robot Skills Matches, all Goal Zones and Alliance Towers considered to be the same color for the purposes of any Alliance-specific rules or definitions. a. Robots may start on either side of the field, as long as they fulfill the constraints set forth in <SG1> and <G7> for the chosen Alliance's side. However there is no mention about which side the drive team must stand. In the past, if the robot starts on the red side, the drive team stands on the red side and vice versa for blue. Could you please clarify if the drive team must stand in the alliance station that matches the side the robot starts or if the drive team can start on the opposite side from where the robot starts if they so choose. In other words, robot placed on red side but drivers stand in Blue Alliance Station. Thank you.

Answered by Game Design Committee

Drive Team Members may utilize either Alliance Station during a Robot Skills Match, regardless of which side their Robot starts on.

VEX U Robot skills preload(s)

Robot Skills Challenge

Preloads are not addressed in the VEX U appendix. The following definition of Preload and rule <RSC3> seem to be in contradiction.

Preload – The Cube, one (1) per Robot, that must be placed on the field such it satisfies the conditions in <SG1> prior to the start of the Match.

<RSC3> Prior to the start of Robot Skills Matches, the Robot must use its one (1) Cube available as a Preload, per <SG1>. The other three (3) Preloads, and the two purple Match Loads, are not used in a

> Robot Skills Match.

<RSC3> references three cubes, instead of 2, and that it refers to "the" robot, as opposed to "each" robot. The definition of Preload is that there is one per robot.

So, for VEX U skills matches, does each robot get a Preload?

(While I'm here, can you add the robot skills rules and vex u rules to the tags? Thanks!)

> **Answered by Game Design Committee**
>
> Thank you for bringing this to our attention, and for your well-formatted question with quotes from the relevant portions of the game manual.
>
> Prior to the start of a VEX U Robot Skills Match, each Robot must use its one (1) Cube available as a Preload. The other two (2) Preloads, and the two purple Match Loads, are not used in a VEX U Robot Skills Match.
>
> This will be clarified in the August Game Manual update.

Skills deadlines

Robot Skills Challenge

on RobotEvents it indicates that season global skills will be closed March 12, 2020:

> 2020-03-12: Season Standings Finalized

Yet, in the VRC Qualifying Criteria it indicates that last Championship events will be no later than March 15, 2020:

> All Championship events within the US must be held no later than March 15, 2020. All Championship events outside of the US must be held no later than March 8, 2020.

Does this mean that skills results at a Championship event held March 13, 14, or 15 will not be considered as part of the season results for multi-qualification for spots to Worlds?

> **Answered by Game Design Committee**
>
> Thank you for bringing this to our attention. This has been fixed, and the new deadlines listed on RobotEvents.com are:
>
> - 2020-03-02: Qualification for Regional/State Championship
> - 2020-03-16: Season Standings Finalized
>
> As a reminder, per the Q&A Usage Guidelines, non-rule-specific questions such as this can always be directed to GDC@vex.com, support@robotevents.com, or your REC Foundation Regional Support Manager.

Robot skills left over preloads

Robot Skills Challenge

<RSC2> Prior to the start of each Robot Skills Match, the Robot must use its one (1) Ball available as a Preload. A Ball is considered to be legally preloaded if it is touching the Robot, and is fully within the field perimeter.

What do you do with the other three preloads in a robot skills match?

> **Answered by Game Design Committee**

> In a Robot Skills Match, the Preloads that would have been available for the other 3 robots are not used - that is, there is only one Preload Ball available for the one Robot on the field to use.

Programming Skills: Ending Early

G2 Robot Skills Challenge

The rules state:

> **Programming Skills Match** – A Programming Skills Match consists of a sixty (60) second Autonomous Period. There is no Driver Controlled Period. Teams can elect to end their run early, however this will count as an official run.

A team asked if they were to program their robot to drive over the platforms if they can then request to end the match while they are top. This appears to be allowed by the rules, however isn't really programming. So G2 may apply here:

> **G2** Use common sense. When reading and applying the various rules in this document, please remember that common sense always applies in the VEX Robotics Competition.

Can teams stop early as a strategic advantage (to stay on a platform, avoid descoring a flag, avoid to touch a cap, etc.)? Or should the robot run to completion, and then, only if their completion is shorter than the 60 seconds (most are), they are allowed to end early?

Thanks.

> **Answered by Game Design Committee**
>
> The verbiage, *"Teams can elect to end their run early*", is intended to give Teams and event staff an option to end a run if a Robot's autonomous routine does not take the full 60 seconds. Usually, this occurs once the Robot has stopped moving.
>
> It is not intended to provide an option for teams to strategically stop the Match and/or disable their Robot while it is still moving. Such a stop would be considered a human input, and would violate the spirit of the Programming Skills Challenge.
>
> Appendix B defines a Programming Skills Match as follows:
>
> > Programming Skills Match – A Programming Skills Match consists of a sixty (60) second Autonomous Period. There is no Driver Controlled Period.
>
> Appendix B also includes the following line:
>
> > Please note that all rules from “The Game” section of the manual apply to the Robot Skills Challenge, unless otherwise specified.
>
> With this in mind, G9 reads as follows:
>
> > <G9> Autonomous means “no humans”. During the Autonomous Period, Drive Team Members are not permitted to interact with the Robot in any way, directly or indirectly. This could include, but is not limited to:
> >
> > • Activating any controls on their VEXnet Joysticks or V5 Controllers.
> >
> > • Unplugging or disconnecting from the field in any way.
> >
> > • Triggering sensors (including the Vision Sensor) in any way, even without touching them.

> Just as unplugging from the field would be considered a human interaction per G7, ending a Programming Skills Match early with the intention of stopping a Robot on the Center Platform using the field control's "disable" command would be considered a human interaction.