

Q1 chute door

Q: Is "chute door" a valid question to ask on the REBUILT Q&A?

A: No, chute door. Per section 1.9 of the Game Manual some questions, such as those that are overly broad, vague, or include no rule references or are nonsense will not be answered.

(Asked by **99999** answered Jan 14th 26)

Q2 Must non-padded elements in the large bumper gap be alliance colored?

Q: For R401's single larger gap, can a robot design have additional elements outside the perimeter for any other purpose (R402.B), must that [non-padded] additional element be alliance colored (R411, R402.C)? Assume that the tubes define the robot perimeter and the bot as depicted is in the starting config.

A: Per !R404, "padding must extend 2.0in (5.08cm) beyond any hard parts of the BUMPER". A vertical cross section of BUMPER which does not have any padding would not meet this criteria.

(Asked by **11483** answered Jan 14th 26)

Q3 Bumper Vertical Expansion?

Q: R409 states that "BUMPERS may not contain any moving elements (beyond compression and flex of BUMPER materials)." Are hard parts that incorporate springs or other energy storage through elastic deformation attached to BUMPERS permitted?

A: Please see [Team Update 02]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate02.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **694** answered Jan 16th 26)

Q4 Bumpers: Maximum Radius or Chamfer for Top Outer Edge of Bumper Foam?

Q: 'Over-the-bumper' intakes often involve rolling a game piece over the top outer edge of the bumper foam. Is there a maximum radius for this edge? Is there a maximum 45 degree chamfer size for this edge? Illustrations in the Bumper Rules show both chamfers and radii (large and small), but don't define limits for them. 'Wedges' aren't legal, but when is a chamfer big enough to become a wedge?

A: There are no specific definitions of what may constitute a "wedge" or "excessively rounded profile" per !R407. !R407 restricts the behavior of bumpers when interacting with other BUMPERS. Generally, it can be assumed that the radius of ~2.5in diameter pool noodles is acceptable as this padding material is permitted per !R402-A-i. Radii/chamfers in excess of this are likely to invite increased scrutiny under !R407, with the final call to be made by the LRI at the event.

(Asked by **2342** answered Jan 14th 26)

Q6 Can team members affect the # of FUEL starting in the Neutral Zone?

Q: Can team members affect the number of FUEL staged in the NEUTRAL ZONE at the start of the match, within the stated +/- variation of 24, by either adding or removing FUEL prior to the start of the match, such that it stays within the tolerance? (e.g. all robots start at capacity, during the 6.3.4.1 process, removing FUEL so the starting total is 340 instead of 360, or adding FUEL so the starting total is 380 instead of 360) If not by directly handling FUEL, what about asking field resetters?

A: No, the NEUTRAL ZONE is staged by the FIELD crew and as described in the Blue Box in Section 6.3.4 *SCORING ELEMENTS*, "FIELD STAFF may not be able to perfectly count all FUEL put into the NEUTRAL ZONE". The stated tolerance is to account for packing variance when visually checking that the footprint of the FUEL is within an expected range on the bounding box described in Section 6.3.4.1 *NEUTRAL ZONE FUEL ARRANGEMENT*.

(Asked by **6352** answered Jan 14th 26)

Q7 Is an out of tolerance Neutral Zone Fuel count a Field Fault?

Q: Is a match starting with a number of FUEL staged in the NEUTRAL ZONE outside of the allowable +/- 24 variation considered a FIELD FAULT?

A: As described in the Blue Box in Section 6.3.4 *Scoring Elements*, "FIELD STAFF may not be able to perfectly count all FUEL put into the NEUTRAL ZONE.". The tolerance provided is to cover expected variance in the exact number of FUEL that fit in the provided footprint based on differences in packing. As there is no way to know the exact number of FUEL that were present at the start of a MATCH without reviewing photographic or video evidence, which will not be reviewed per Section 6.7 *Head REFEREE and FTA Interaction*, matches starting with the incorrect number of FUEL would not be an ARENA FAULT. Per Section 6.8 *Other Logistics*, "DRIVE TEAMS should alert the FIELD STAFF to any missing or damaged SCORING ELEMENTS prior to the start of the MATCH."

(Asked by **6352** answered Jan 14th 26)

Q8 When are the Corral and Chute considered to both be full?

Q: How will teams be notified that the referees consider both the CORRAL and CHUTE to be "full" and in violation of G427? Will a count of 10 seconds "before the situation becomes CONTINUOUS" be provided by referees before a G427 penalty is issued? In 5.9.2, the CHUTE capacity is given as approx. 25 FUEL, but no such detail is given for the CORRAL.

A: There is no specific count that is considered "full" for either the CORRAL or CHUTE. If a HUMAN PLAYER cannot place a FUEL into the CHUTE or CORRAL and have it stay there on its own, that element is full. Referees will not provide any specific notice to teams that they are in violation of this rule beyond waving the flag to indicate the MINOR FOUL and if violated CONTINUOUSLY a MAJOR FOUL is assessed with the referee waving the flag and signaling with the defined hand motion.

(Asked by **6352** answered Jan 14th 26)

Q9 Alliance Zone

Q: Are blue alliance robots allowed to enter the red alliance zone and contact red alliance robots, prior to the last 30 seconds, without penalty and are red alliance robots allowed to enter the blue alliance zone and contact blue alliance robots, prior to the last 30 seconds, without penalty?

A: This answer has been updated 3/31 after Team Update 19. In AUTO, !G403 states that a ROBOT whose BUMPERS are fully across the CENTER LINE may not contact an opponent ROBOT. In TELEOP, prior to the last 30 seconds, there are no rules that limit where a ROBOT may be on the FIELD. In the last 30 seconds of TELEOP, !G420 states that a ROBOT may not contact, directly or transitively through a SCORING ELEMENT, an opponent ROBOT in contact with an opponent TOWER. Teams should also be aware that, !G416, !G417, and !G418 apply during the entire MATCH, no matter where the ROBOTS are located on the field.

(Asked by **5676** answered Jan 14th 26)

Q10 ROBOT STARTING LINE defintion

Q: In the glossary and section 5.3, ROBOT STARTING LINE is defined as "an ALLIANCE colored line that spans the width of the FIELD at the edge of an ALLIANCE'S BASE in front of two BARRIERS and an ALLIANCE HUB". However, there appears to be nothing in the manual defining BASE (aside from the unrelated TOWER BASE) or BARRIER. Are these old names for the BUMPS and ALLIANCE ZONE?

A: Please see [Team Update 02]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate02.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **857** answered Jan 16th 26)

Q11 R401 blue box

Q: The R401 blue box says "An arc is considered to have infinite corners and therefore may not have a gap larger than 1.25in". Mentioning the gap like this seems like a non-sequitur, since the rule says that at least 5in of bumper needs to be each side of a corner, so an arc can't have any gap at all. I would have expected the blue box to read something like "An arc is considered to have infinite corners and therefore must be entirely protected by BUMPER".

A: 1/15/26 Answer adjusted to point to correct section of the Game Manual As a friendly reminder, the Q&A is not a place for overly broad, vague, and/or questions that include no rule references. Please consult Section 1.9 and, if needed, resubmit a different question.

(Asked by **857** answered Jan 14th 26)

Q12 Team sign display for highly scoring matches

Q: The ALLIANCE AREA side of the Team sign displays the amount of fuel scored (in quals) or the alliance scores (in playoffs). Looking at the space available on the display, what happens if an alliance scores more than 999 fuel / 999 points? (might be an audacious number, but if anyone manages the SUPERCHARGED RP they will already be over 1/3 of the way to 1000). And fouls could drive a match score quite high.

A: The ALLIANCE AREA side of the team signs has been designed to accurately display Ranking Point progress for up to 9,999 FUEL scored. During playoffs, when the display switches to showing the MATCH score, it can continue to accurately represent scores of up to 9,999 points for both alliances simultaneously.

(Asked by **857** answered Jan 14th 26)

Q13 Can ferrules be used to combine multiple wires into one?

Q: Per R618, only one wire shall be connected to each terminal on the PD. If two or more wires are crimped into a ferrule, are they considered one wire for the purposes of this rule? If not, is the REV POE Injector Cable (REV-11-1210) permitted to connect directly to the PD, as it is constructed this way.

A: !R623 requires "the entire electrical pathway is via appropriately gauged/rated elements" which includes using any terminals or connectors according to manufacturer instructions/specifications. If the manufacturer of a ferrule terminal specifies it for use with multiple wires (such as "twin" or "double wire" ferrules) this would be permitted per !R618, if the ferrule is only intended for a single wire, using it to combine wires would violate !R623.

(Asked by **695** answered Jan 20th 26)

Q14 Q3 follow-on

Q: As a follow-on to Q3 (after re-reading its title and realizing I interpreted the rest of the question differently), R409 says that "BUMPERs may not contain any moving elements (beyond compression and flex of BUMPER materials)". Is it allowed for the fastening system to contain spring-loaded elements that only move when pressed (to release the bumpers)?

A: Please see [Team Update 02]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate02.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **857** answered Jan 16th 26)

Q15 Does a chamfer or radius on a bumper have to be symmetrical?

Q: Can a bumper have a chamfer on the top and not on the bottom edges.

A: There are no rules which require BUMPER padding to be symmetrical.

(Asked by **117** answered Jan 14th 26)

Q16 R107 Clarification

Q: If a ROBOT has a FUEL storage mechanism in the shape of an open box, and while the ROBOT's mechanisms themselves are completely confined within the 30 in limit, the FUEL inside the ROBOT controlled by the ROBOT exceeds the 30 in limit, is that in violation of R107? Likewise, if this mechanism is covered by a flexible net and that net flexes upwards above the 30 in limit with the FUEL, is that a R107 violation? Would the net count as the ROBOT?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, FUEL controlled by a ROBOT is not part of the ROBOT and therefore not subject to !R107 or other ROBOT rules. Any ROBOT mechanism which exceeds the 30.0in (76.2cm) limit would be a violation of !R107.

(Asked by **7466** answered Jan 14th 26)

Q17 Clarification on R106 and Bumpers

Q: R106 says "ROBOTS may not extend beyond their ROBOT PERIMETER in more than one direction (i.e. over more than 1 side of the ROBOT) at a time." ROBOTS are defined in the glossary and Section 8 as "A ROBOT ... includes ... –power, communications, control, BUMPERS, ..." Meanwhile, the BUMPER rules require that bumpers are outside of the frame perimeter on all sides. This seems to be a contradiction that prevents any legal robot designs. Is this the correct interpretation of these rules?

A: Please see [Team Update 03]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **3476** answered Jan 22nd 26)

Q18 R106 does a corner of a turret extending past the perimeter count as inconsequential

Q: According to R106 does a corner of a turret extending past the perimeter count as inconsequential assuming that it is momentary?

A: 3/2/26 This answer has been updated to reflect Team Update 13 & 14. This question was asked prior to Team Update 13. We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, any part of the ROBOT that deliberately leaves the ROBOT PERIMETER would be considered a strategic benefit. Additionally see !G413 and changes made in Team Update 13 & 14.

(Asked by **6749** answered Jan 15th 26)

Q19 Can a robot shoot fuels while being outside the Alliance Zone?

Q: G407 says a robot cannot shoot fuels at the hub outside The Alliance zone, but can a robot in the Neutral Zone shoot fuels into the Alliance Zone (not at their hub) during gameplay? Is shooting while being outside The Alliance Zone legal?

A: There is only 1 rule that limits where teams can shoot from on the FIELD - !G407. !G407 states that a ROBOT may not score into the HUB outside of the ALLIANCE Zone. This means that teams may launch FUEL elsewhere on the FIELD as long as the FUEL are not scored.

(Asked by **10502** answered Jan 15th 26)

Q20 Multiple BUMPER Profiles Around ROBOT PERIMETER

Q: Assuming that everywhere BUMPERS are located around the ROBOT PERIMETER, their vertical cross-section: a.) follows the requirements in R402 for padding and backing, b.) stays within the allowed thickness per R403, c.) entirely fills the BUMPER ZONE per R405, and d.) does not act as a wedge per R407, may the cross-section differ from point to point—by varying in height or by having different profiles (square, radiused, chamfered, etc.) around the ROBOT PERIMETER?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, there are no rules preventing a team from having different profiles as long as all other BUMPER rules are followed.

(Asked by **1648** answered Jan 15th 26)

Q21 Human Players at Outpost

Q: What is the maximum number of human players allowed at the outpost during the game?

A: There is no defined limit for the number of HUMAN PLAYERS allowed in the OUTPOST AREA but the physical space may limit how many people can be there at one time. Section 6.2 defines the maximum number of HUMAN PLAYERS or DRIVERS any DRIVE TEAM may have.

(Asked by **2458** answered Jan 15th 26)

Q22 Bumpers above the 2nd rung

Q: 6.5.2 says "For LEVEL 3 – a ROBOT must be positioned such that its BUMPERS are completely above the MID RUNG" Would a robot attached to the level 1 rung and flipped upside down such that its bumpers are above the MID rung be a legal LEVEL 3 climb?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Please see [Team Update 02] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate02.pdf). Generally, there are no requirements for which RUNG a ROBOT must be in contact with for any level of scoring. Only that a ROBOT must be contacting a RUNG or UPRIGHT.

(Asked by **4150** answered Jan 16th 26)

Q23 ROBOT earning L1 TOWER points during AUTO

Q: In section 6.5.2 it is stated that "A ROBOT may only earn TOWER points for LEVEL 1 during AUTO." We interpreted that in two ways: 1. In auto, a robot may only earn points for level 1, regardless of what level it climbs to. 2. Level 1 points may only be earned during auto, and not during any other period of the match. Could you clarify which scenarios, or both, are true?

A: In addition to the scoring criteria in Section 6.5.2, table 6-4 describes how many TOWER points can be earned in both AUTO and TELEOP, and Section 6.5 describes when assessments for scores takes place. To further clarify, AUTO TOWER points are only awarded for LEVEL 1 regardless of whether a ROBOT also meets the criteria for LEVEL 2 or LEVEL 3 during assessment. TOWER points are able to be earned for LEVEL 1 in both AUTO and TELEOP.

(Asked by **1250** answered Jan 16th 26)

Q24 Support for hanging robot

Q: Section 6.5.2 describes the criteria for L1 hang as: no longer be touching the CARPET or TOWER BASE; and a ROBOT must be contacting the RUNGS or UPRIGHTS and may additionally only contact the following elements: the TOWER WALL, support structure, FUEL, and/or another ROBOT. There is no mention of what is supporting the robot weight. If a robot is off the ground, in contact with the upright; but the robot weight is principally supported by fuel stuck under the robot, is that an L1 climb?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, if a REFEREE infers that a team deliberately used a FUEL to elevate their ROBOT, it would be a violation of !G404. If the REFEREE infers it was not deliberate, there would be no violation.

(Asked by **281** answered Jan 16th 26)

Q25 Custom electronic related to CAN bus.

Q: 1. Is team created CAN device allowed as custom electronics? 2. Can team created CAN device (team fabricated PCB) include built in CMOS coin cell battery? 3. If question to 2 is NO because team fabricated PCB is not considered COTS, can COTS RTC module (which require coin cell battery) be used with with team fabricated PCB? 4. Can team created CAN device talks to motor controller (roboRIO heartbeat not altered) directly? 5. Q4 but talk to PCM/PH. 6. Can COTS CAN sensor be modified (ie, CANCoder)

A: As a friendly reminder, the Q&A is not a place for overly broad, vague, and/or questions that include no rule references. Please consult [Section 1.9] (<https://firstfrc.blob.core.windows.net/frc2026/Manual/2026GameManual.pdf>) for guidance on asking questions. 1. There are no rules that prohibit this. 2. No, !R602 only permits "batteries used to power CMOS/RTC features may be used to power COTS computing devices and any peripheral COTS input or output devices connected to the COTS computing device". 3. Yes, a COTS RTC module may be considered a "computing device" 4. Yes, please see the Blue Boxes below !R701 and !R714. 5. Yes, while !R715 does not have the same Blue Box as !R714, the same idea would apply. 6. There are no rules that explicitly prohibit the modification of devices which would be classified as CUSTOM CIRCUITS.

(Asked by **5516** answered Jan 19th 26)

Q26 Inactive HUB holding FUEL

Q: In the additional field interactions video around 1:55, both HUBs are shown as releasing large amounts of stored FUEL after activating. Is this solely demonstration or will HUBs hold FUEL from releasing while inactive, or at any point during a MATCH?

A: Pre-loading the HUBs with FUEL was done to make the video demonstration feasible. The HUBs will process FUEL throughout the entire MATCH regardless of whether they are active or inactive.

(Asked by **11096** answered Jan 16th 26)

Q27 R402 BUMPER additions and climb scoring. What parts of the BUMPERS must be above the RUNG?

Q: R402 part B allows for "Additional elements" for a few listed reasons, "or for any other purpose." When scoring climb do these additions (such as mounting brackets, sponsor panels, handles, etc.) also have to be above the RUNGS for L2 or L3 points? Or only the padded parts showing ALLIANCE color? If it is all parts, then it seems REFEREEs would need to know each team's unique BUMPER layout in case there are parts not obviously part of the BUMPERS that need to be above the RUNGS for climb points.

A: Please see [Team Update 03] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **2412** answered Jan 20th 26)

Q28 Is custom slip ring allowed?

Q: Are we allowed to build our own slip ring that is appropriately rated for a servo motor, or does it have to be a COTS part?

A: No, !R623 only allows "COTS slip rings".

(Asked by **2984** answered Jan 19th 26)

Q29 Clarification on Updated Impact Award Definitions

Q: Currently the impact definitions only covers FIRST events. Our team does what would classify as host events but they are not official FIRST events. Examples are various camps, coach trainings, showcases and demos. How would should we state our involvement in our submission?

A: Please see [Team Update 02]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate02.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **10101** answered Jan 16th 26)

Q30 Auton Climb Scoring Timing

Q: According to section C of 6.5, "assessment of AUTO TOWER points is made after the ARENA timer displays 0:00 following AUTO." Does this mean that 1) the robot still needs to be climbed above the carpet at the end of AUTO, when the points will be assessed (meaning determined), or 2) the robot can climb at any point during AUTO and will still receive points if it is touching the carpet at the end of AUTO, but the points will only be assessed (meaning added to the score) when AUTO ends?

A: The ROBOT must meet the conditions outlined in section 6.5.2 when the assessment is made in order to earn AUTO TOWER points. A ROBOT that was qualified for a LEVEL 1 climb in AUTO but is not at the time of assessment will not earn AUTO TOWER points.

(Asked by **3206** answered Jan 16th 26)

Q31 G413: Does a damaged mechanism penalize a climb?

Q: In G413 it says "A ROBOT may not extend beyond any of the horizontal or vertical expansion limits described in R105, R106, and R107. If the over-expansion is due to damage and not used for strategic benefit, it is an exception to this rule, and no penalty is imposed." If a robot has a damaged mechanism stuck in an extended position in one direction, does extending a climber in another direction count as over-expansion and incur a penalty, even if the damaged mechanism is no longer used?

A: This answer has changed 1/30/26. Please see [Team Update 06]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate06.pdf) to see revised language for !G413. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **226** answered Jan 23rd 26)

Q32 G408 Game Piece Violations

Q: Are G408 penalties per fuel or per instance? It seems likely that in this game, multiple scoring elements could land on/in a robot at the same time.

A: Per section 6.6, all violations are assigned for each instance of a rule violation unless otherwise noted. G408 is assessed each instance a team violates the rule not for each SCORING ELEMENT. Teams should also be careful to not be perceived to be violating this strategically with some examples being noted in the Blue Box.

(Asked by **9710** answered Jan 20th 26)

Q33 FUEL scored in AUTO counting towards ranking criterion after AUTO?

Q: Hi HQ, we understand that the HUB continues scoring for 3 seconds after AUTO. Our interpretation of this is that these aforementioned 3 seconds are in the time after AUTO and before TELEOP begins. Are these FUEL scored during the 3 seconds after AUTO still considered "scored during AUTO", such that they contribute to the "Average FUEL scored in AUTO" and "ALLIANCE AUTO FUEL points" in tables 10-1 and 10-3 respectively?

A: Yes. Per section 6.5 Scoring, assessment of FUEL scored in the HUB continues for up to 3 seconds after the ARENA timer displays 0:00 following AUTO. FUEL that is scored during these 3 seconds following AUTO are considered scored in AUTO and contribute toward ranking criteria and tiebreaker criteria.

(Asked by **5347** answered Jan 16th 26)

Q34 G420 Tower Off the Ground Protection

Q: For robots that climb and get "off the ground" before the final 30 seconds of the match, do they get the tower protection stated in G420. For example, a red robot is off the ground with 40 seconds left in the match and a blue robot contacts the red robot that is off the ground when the game timer has more than 30 seconds. Does the red robot get awarded Level 3 Tower Points?

A: !G420 does not apply until the last 30 seconds of the MATCH. Any contact described in !G420 that happens prior to the last 30 seconds of the MATCH is not a violation. Note that egregious actions towards ROBOTS off the ground prior to the last 30 seconds of the MATCH may be considered violations of !G211.

(Asked by **5126** answered Jan 16th 26)

Q35 Bumper cover definition

Q: According to R402C, bumper covers are defined as cloth that covers all outward facing to prevent padding from being exposed. Does cloth that doesn't directly cover padding fall under this definition such that it would be considered a "cover" (i.e. bumper covers allowing a team to cover their blue bumper cloth with red cloth for a red alliance match or an additional flap of cloth that does not back padding whatsoever)?

A: BUMPER cover, per !R402-C is cloth that is covering padding, even if it does not contact the padding directly (e.g. additional layers at folds or for alliance color display). Cloth not backed by padding at all would not be part of the cover (e.g. could not be used for the numbers per !R412).

(Asked by **9636** answered Jan 19th 26)

Q36 Distance from Outpost Area to Hub

Q: What is the approximate distance from a human player throwing fuel in the Outpost Area to the Hub?

A: As a friendly reminder, the purpose of this Q&A is to answer questions regarding the [Game Manual] (<https://firstfrc.blob.core.windows.net/frc2026/Manual/2026GameManual.pdf>), [Awards] (<https://www.firstinspires.org/resources/library/frc/awards>), and/or [official Field drawings] (<https://www.firstinspires.org/resources/library/frc/playing-field>).. Any measurements or materials information beyond what's already provided in [official Field Drawings] (<https://www.firstinspires.org/resources/library/frc/playing-field>) and other tools available on the [Playing Field page] (<https://www.firstinspires.org/resources/library/frc/playing-field>) must be derived by the team.

(Asked by **4652** answered Jan 16th 26)

Q37 Does an inactive HUB count towards energized/supercharged?

Q: Does scoring in an inactive HUB count towards the Energized and/or Supercharged RP? In 6.5.1 the rulebook states: "A FUEL is scored in the HUB once it passes through the top opening of the HUB and through the sensor array", in 6.5.3: "The amount of FUEL scored in the HUB is at or above threshold." In both of these scenarios, whether or not the HUB is activated is not mentioned.

A: Please see [Team Update 01] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate01.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **8840** answered Jan 16th 26)

Q38 Does G414 penalize incidental full support of robots?

Q: Does G414 prevent a robot that was fully supported by another alliance robot at any point during the match, even if the support was away from the Tower and obviously not attempting to score points, from being eligible to score Tower points? (For example, landing entirely on top of a low alliance robot while crossing a Bump from the Alliance Zone into the Neutral Zone)

A: No, !G414 requires ROBOTS to be attempting to be climbing their ALLIANCES TOWER in order for the violation to apply.

(Asked by **6352** answered Jan 20th 26)

Q39 Deflecting opponents balls mid air

Q: I was wondering if its allowed to shoot a fuel to deflect an opponents fuel mid air so it doesn't score. This implies that the fuel once contacted doesn't go outside the field or hitting any robot. Thank you

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Deliberately deflecting FUEL that is trying to be scored into the HUB with other launched FUEL would be a violation of !G404 as it is viewed as amplifying the challenge. A team that is trying to move FUEL out of the opposing ALLIANCE ZONE into their ALLIANCE ZONE and a couple FUEL accidentally hit an opposing ALLIANCE'S, would likely not be considered deliberate and thus not a violation of !G404.

(Asked by **4959** answered Jan 20th 26)

Q40 G416.B and Bumper Gaps

Q: In a situation where a ROBOT has initiated contact, would contact between this ROBOT'S BUMPERS or COMPONENTS inside the ROBOT'S FRAME PERIMETER and COMPONENTS inside an opening of an opponent's BUMPERS or in the space above the BUMPER opening be an exception to this rule?

A: Please see [Team Update 03]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Jan 20th 26)

Q41 G427 FUEL Storage

Q: Regarding "Off-FIELD FUEL may only be stored in the CHUTE and the CORRAL", would a human player holding a FUEL and waiting for their alliance's active period to throw it towards the HUB be considered storing this FUEL in a non-allowed location and violating this rule? In this situation, neither the CHUTE nor the CORRAL are necessarily full.

A: This answer has been updated 2/27 after Team Update 14. Please see [Team Update 14]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate14.pdf). If that doesn't answer your question, please rephrase and resubmit..

(Asked by **324** answered Jan 20th 26)

Q42 R106 Near Full Width Mechanisms and Flexing

Q: If a robot has a mechanism that is close to the full width of the side it is extending from, and this mechanism momentarily flexes to be outside of the projection of this side. Would this be considered inconsequential?

A: This answer has been updated 2/27 after Team Update 14. Please see [Team Update 14]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate14.pdf). If that doesn't answer your question, please rephrase and resubmit..

(Asked by **324** answered Jan 20th 26)

Q43 Playoff Performance Points what is included?

Q: Hi FIRST, we were wondering if the first and second tie-breaking criteria in table 11-2 (mentioning Playoff Performance) include the points earned by the champions and finalists in District Championships with multiple divisions described in section 11.4? Additionally, in a multi-division District Championship, do teams still earn DE points within their division described in table 11-4, in addition to the points described in section 11.4?

A: Yes, the Total Playoff Performance Points includes all events and the Best Playoff Points at a single event includes the highest from both Qualifying events, their DCMP, and their DCMP Division (if applicable). If a District has multiple district championships teams do earn the Double Elimination Points as described in Table 11-4 in addition to the points described in section 11.4.

(Asked by **5347** answered Jan 20th 26)

Q44 Maximum Playoff Points

Q: Hi FIRST, in section 11.1.3 it says, "The maximum number of Playoff Performance Points a team can earn is 30 (20 DE points + 10 Finals Points)." Our interpretation is that this maximum only describes DE points earned at a specific event and not a total of DE points over multiple events. Is this interpretation correct?

A: Yes.

(Asked by **5347** answered Jan 20th 26)

Q45 Impact "mentoring" vs "assisting" definition

Q: In the released impact definitions, "mentoring" a team is defined as having "consistent communication." However, we help teams throughout build season and at competitions on a less consistent, but still impactful, basis. More info in the definitions mentions that a "less consistent basis" would be considered "assisting" a team even though the term "assisting" is not defined. Can you please clarify the difference between the two and provide a more concrete definition of consistency?

A: Assisting is not a defined term and is used in the blue box to provide an example but teams may use other terms. As noted in the Blue Box, "Mentoring a team is a consistent and ongoing relationship. To be considered a Mentoring team, you must be providing regular help to the Mentee team during the season within their schedule. We understand that all teams may not meet as regularly as once a week, however this is a general standard. For some teams communication may be more infrequent and still considered consistent. We encourage teams to use their best discretion when evaluating these edge cases."

(Asked by **5414** answered Jan 20th 26)

Q46 Is there recourse for a tall ROBOT forced into the TRENCH?

Q: If a ROBOT that is taller than the TRENCH is pushed into the TRENCH by another ROBOT (bumper-to-bumper contact only), has the pushing ROBOT violated any rules? Is the contact alone a violation, does it depend on intent (as determined by referee), or is it a violation only if the ROBOT contacting the TRENCH sustains damage? G416 appears to apply in the event of damage, but G415 does not appear to apply, as the contact outside of the BUMPER zone is only with the TRENCH, not the other ROBOT.

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, a ROBOT that pushes an opponent ROBOT up against the TRENCH via bumper-to-bumper contact is not a violation. However, teams should be aware of !G411, !G415, !G416, and !G418. If an opposing ALLIANCE forces a team to violate a rule, it would likely be a violation of !G210.

(Asked by **695** answered Jan 20th 26)

Q47 Blocking Battery Vent

Q: R601g is a new clause this year which says "Battery vents must not be obstructed." This seems to conflict with rule R606 which requires batteries to not dislodge if the robot is placed in any orientation. In particular, would a Velcro strap, wrapped around the battery such that it is placed between the terminals, and perpendicular to the line formed by the terminals, be in violation of R601g?

A: No, !R601-g prevents obstruction of battery vents as a permanent part of a battery assembly. Objects that are placed near or over a battery vent temporarily (e.g., a strap to hold a battery in place during a match) would not be considered a violation of this rule.

(Asked by **3419** answered Jan 22nd 26)

Q48 Human player in Autonomous

Q: Can the human player release fuel or shot during autonomous?

A: There are no rules preventing introduction of FUEL onto the FIELD during AUTO as long as introduction is done via the methods described in !G425.

(Asked by **5760** answered Jan 21st 26)

Q49 R203 Blue Box item K, "lead, whether encapsulated or not" and leaded (or unknown) solder

Q: R203 Blue Box K is a potential compliance concern for teams using electronic assemblies. Older/reused custom circuits may have been assembled or repaired using lead-based solder; teams/RIs may not be able to readily determine whether solder used in such assemblies is lead-free. Prohibiting lead as ballast is clear. Does the prohibition on lead apply to trace amounts of lead contained in solder used for electronic assembly, or can the ordinary use of solder be allowed as an explicit exception?

A: Lead solder contained in electronic assemblies is indistinguishable from lead-free solder for ROBOT Inspection purposes and would not be considered hazardous per R203-K. Raw lead solder should not be brought to or used at events.

(Asked by **11483** answered Jan 22nd 26)

Q50 Additional Clarification for Autonomous Hang Scoring

Q: 6.5 Scoring States: C. assessment of AUTO TOWER points is made after the ARENA timer displays 0:00 following AUTO. It also states that: TOWER points are evaluated and scored by human volunteers. Teams are encouraged to make sure that it is obvious and unambiguous that the criteria are met. How long will a robot have to hang after the end of auto to be properly evaluated? Doesn't this mean the robot is hanging in teleop time not in Auto time?

A: The ROBOT must meet the criteria at the moment of assessment which is after the ARENA timer displays 0:00. As noted in *Section 6.4*, "there is a 3-second delay between AUTO and TELEOP for scoring purposes." Generally, assessment is made instantly at the moment described. However evaluation is made by human volunteers, and so it is recommended that teams design their ROBOT in a way that it is obvious and unambiguous that criteria has been met. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE.

(Asked by **6743** answered Jan 21st 26)

Q51 Minor Protusions in only one direction?

Q: In R101. minor protrusions are not considered to be part of the ROBOT PERIMETER. R106 indicates that Robots may not extend beyond their frame perimeter in more than one direction. Does this mean that minor protrusions must extend in only one direction and a minor protrusion would disallow extension in any other direction than that of the minor protrusion?

A: Please see [Team Update 03]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **3928** answered Jan 21st 26)

Q52 Recording robot matches

Q: E117 appears to be about recording interactions between people, though it never defines "interactions" and the headline is simply "Do not record anyone at the event without their consent". A common practice at events is to record robot matches for later review by the team. Such recording will almost certainly capture some people in the background, and it is impractical to get their consent. Is it permissible to record robot matches if the video incidentally also records people near the field?

A: Yes, people being recorded incidentally in the background (such as when recording your team at the venue, recording your robot or matches on the field, etc.) or in large groups (e.g. a "crowd shot") are not considered recording "interactions" and would be permitted.

(Asked by **9496** answered Jan 21st 26)

Q53 Motor and Power Limitations

Q: In the rules it states that you can have only 1 Main Power Distribution Hub(PDH). But we don't see anywhere a limitation on Mini Power Modules(MPM). We also don't see a limit on total motors allowed to be used besides drive motors. So our question is if we took a MPM and linked it to a single output on the PDH with a 40A breaker and then installed more motors on the MPM with fuses equaling the 40A breaker or less is this allowed? Example 40A from PDH to MPM -> Attach 4 motors to MPM at 10A each

A: No, !R625 states CUSTOM CIRCUITS (such as the MPM) "shall not directly alter the power pathways between the ROBOT battery, **PD**, **motor controllers**, relays (per R504-B), **motors and actuators** (per R501)" (emphasis added).

(Asked by **8808** answered Jan 22nd 26)

Q54 Components “On” projection of ROBOT PERIMETER

Q: If a robot has a component (such as the side of a hopper wall) that is designed to be as close as possible to the vertical projection of the ROBOT PERIMETER without extending outside of it, and an opponent contacts this with an extension outside of their ROBOT PERIMETER, would this be considered contact “inside” of the ROBOT PERIMETER or is there any situation where this would be considered “on” the ROBOT PERIMETER?

A: Yes, this would be contact "inside the vertical projection of the opponent's ROBOT PERIMETER".

(Asked by **324** answered Jan 21st 26)

Q55 G415 contact with actual ROBOT PERIMETER

Q: Would a robot that initiates contact using an extension with the outward facing surfaces of the physical components that make up an opponent's ROBOT PERIMETER (i.e. the exposed frame rail within a bumper gap) be in violation of G415? The rule only specifically refers to contact “inside” the (vertical projection of the) ROBOT PERIMETER.

A: Please see [Team Update 03]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Jan 22nd 26)

Q56 Legality of Vertical Bumper Backing Extension

Q: Our team is designing a vertical passive hard extension attached to the BUMPER backing that is constantly outside the ROBOT PERIMETER. This extension may touch FUEL in ROBOT PERIMETER preventing it from falling out of it. 1. Would this extension be classified as a MECHANISM (S.8.1 - an assembly providing functionality, such as SCORING ELEMENT manipulation)? 2. If classified as a MECHANISM, would this breach Rule R102, which states that no part of the ROBOT may extend outside the ROBOT PERIMETER?

A: There are no restrictions on the functional purpose of BUMPER backing, however note that per !R409 "BUMPERS may not contain any elements which move during the MATCH". BUMPERS are an explicit exception to !R102. As a reminder, !R404 dictates a 1.25in limit for hard parts of a BUMPER, ROBOTS which have flexible elements close to this limit may invite additional scrutiny during inspection to ensure they comply with this limit throughout the MATCH.

(Asked by **1690** answered Jan 22nd 26)

Q57 Downward extension while climbing?

Q: While climbing, not touching the floor (R108), not "navigating the FIELD normally" (R405), and while maintaining a total height of under 30 inches (R107), is it permitted to extend downward, such that R405 *would* be violated if the robot *were* touching the floor?

A: Yes, !R405 does not apply while the ROBOT is not "navigating the FIELD normally" such as if it is suspended from the TOWER.

(Asked by **100** answered Jan 23rd 26)

Q58 Can solder be used to combine multiple wires into one?

Q: Similar to Q13, Can solder be used to combine multiple wires into one conductor? Per R618, only one wire shall be connected to each terminal on the PD. If two or more wires are twisted and tinned with solder, are they considered one wire for the purposes of this rule? Specifically, can the splice itself (solder and wire) be inserted into a terminal?

A: No, soldering 2 wires together does not make them a single wire for the purposed of !R618.

(Asked by **695** answered Jan 22nd 26)

Q59 Power Regulating devices are not available for sale.

Q: There are no devices on the approved list that are available (discontinued) or suitable for regulating power on electrical solenoid actuators. See rule 501 and 504. Please advise on a suitable, available replacement.

A: The purpose of this Q&A is to answer questions regarding the rules of REBUILT. For technical assistance,

please visit the [FIRST Forums](<https://forums.firstinspires.org/forum/general-discussions/first-programs/first-robotics-competition>). Per !R505 electric solenoid actuators may be controlled by motor controllers, relays, or pneumatic controllers.

(Asked by **2199** answered Jan 22nd 26)

Q60 roboRIO Power Options

Q: In rule R615, it is specified that the roboRIO power input must be connected directly to a non-switched output terminal of a PD. What exactly does PD stand for? Does it refer to specific power distribution devices such as the PDP or PDH, or is it more general power distribution solutions, for example REV's Mini Power Module?

A: PD refers specifically to the devices listed in !R609-D

(Asked by **1410** answered Jan 21st 26)

Q61 Legality of Bumper Features Above 7 Inches Under R407 and R408C

Q: R407 bans wedge-like BUMPERS. R402 and R405 define a continuous bumper zone from 0–7 in. off the floor. If a bumper includes tapered or stepped padding per R408C, but those features sit above 7 in. and outside any legal opposing bumper zone, are they allowed? Would this configuration comply with R407 and pass inspection?

A: For clarity, R407-C defines a feature that may invite additional scrutiny for acting as a wedge, it does not entirely prohibit tapers, steps, or similar features such as radii or chamfers, including in the BUMPER ZONE. As !R407 prohibits "act as wedges when interacting with other BUMPERS", locating these types of features outside the BUMPER ZONE does not render them completely immune from !R407, but does decrease the likelihood the BUMPER will act as a wedge.

(Asked by **4607** answered Jan 22nd 26)

Q62 Hub DMX Light Bars

Q: What is the brand, model, and quantity of the DMX light bars used in the hub?

A: Brand: OPPSK Model: 60W RGB DJ Light Bar - 40" 224LED Pixel Lights Quantity: 4 per Hub Additionally, this information has been added as part of the [Field Manual] (<https://firstfrc.blob.core.windows.net/frc2026/FieldAssets/field-manual.pdf>).

(Asked by **2481** answered Jan 29th 26)

Q63 R602 USB-PD Port Output Voltage

Q: R602 states that permitted USB battery packs may have "12V/5A max output using USB-PD per port." Can the USB-PD port have other output voltages listed if the device/cable it is connected to only negotiates a maximum of 12V/5A? From our research there is no USB-PD power source that has a single fixed 12V output voltage. Instead, they advertise and negotiate multiple voltage/current profiles (5V, 9V, 12V, 15V, 20V) depending on the connected device.

A: Yes, a device that is limited to 5A at 5V or 12V **as used on the ROBOT** meets !R602, but the burden of proof is on the team to show how the battery complies with the rules when used on the robot if higher voltages are indicated on the label.

(Asked by **7166** answered Jan 23rd 26)

Q64 Is extending within the bumper zone to more than 1 side at a time legal (during the game)?

Q: R.401 says robots may not extend beyond their robot perimeter in more than one direction (i.e. over more than 1 side of the robot) at a time Exceptions include: A. BUMPERS Can I on purpose exclude over the bumpers to more than 1 side at a time? Is this what the change in R.401 meant?

A: No, !R106 is the rule which restricts extension in more than one direction, not !R401 and the change to !R106 in [Team Update 03]
(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf) does not allow extensions from within the ROBOT PERIMETER in more than one direction even if those extensions are limited to above the BUMPER. The change clarifies that BUMPERS (and minor protrusions) are items which are known to be outside the ROBOT PERIMETER and do not count towards the single direction extension restriction.

(Asked by **2231** answered Jan 23rd 26)

Q65 Possible State: "ON" Projection of ROBOT PERIMETER

Q: Could a component (other than the physical components themselves that define the ROBOT PERIMETER) ever be considered to be "on" the projection of a ROBOT PERIMETER? This definition would not be "inside" for the purposes of G415/G416, but would also not be considered "outside" for the purposes of being an extension for the various extension rules.

A: No, any contact with elements of an opponent's ROBOT which are defining the ROBOT PERIMETER, or are coplanar with the vertical projection of the ROBOT PERIMETER is considered contact "inside the vertical projection of the opponent's ROBOT PERIMETER" for the purposes of !G415 and !G416.

(Asked by **324** answered Jan 23rd 26)

Q66 Rule E108.F

Q: My question specifically concerns item F: walkie talkies. Would the following categories fall under the prohibition in Rule E108.F: 1. Family Radio Service (FRS) • Uses UHF band max 2W • Does not require an FCC license 2. General Mobile Radio Service (GMRS) • Uses UHF band max 5W • Requires an FCC license 3. Push to Talk over Cellular (PoC) • Uses LTE cellular • Does not require an FCC license • Functionally similar to a cell phone but could resemble a walkie talkie with a short antenna.

A: Anything that resembles a walkie-talkie and/or acts like a walkie-talkie is prohibited by !E108-F. Teams should also be aware of !G302 on what can be used during a MATCH.

(Asked by **3425** answered Jan 23rd 26)

Q67 Is missed or delayed FMS game data an ARENA FAULT?

Q: Section 6.4.1 describes the data relayed to OPERATOR CONSOLES at the start of TELEOP. If this information is not communicated to a ROBOT or is significantly delayed (e.g. due to a failure to establish TCP communications to a ROBOT), would this be considered an ARENA FAULT? Is the result of AUTO communicated to DRIVE TEAM members immediately at the start of TELEOP (i.e. before SHIFT 1) via any method other than direct communication between the FMS, OPERATOR CONSOLES, and ROBOTS?

A: Sorry for the delay! Please see [Team Update 08]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate08.pdf) for added clarification on what does or does not constitute an ARENA FAULT regarding Game Data and the addition of a new light pattern to communicate the result in an alternative way in addition to the Game Data.

(Asked by **6328** answered Feb 6th 26)

Q68 For G302 B. how does it apply to wearables or handheld items

Q: For people who are tall (~78 inches or taller), are hats, head-mounted cameras, decorations, safety glasses, etc., not allowed to be worn if they extend above 78 inches? If a person lifts their hand and has a watch or gloves on, or is holding something like a clipboard or camera, and their hand extends above 78 inches, is that a violation? Thank you for answering all our questions. Have a great day!

A: Please see [Team Update 05]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate05.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **3847** answered Jan 27th 26)

Q69 G422: Coaches troubleshooting on laptop

Q: With regard to G422, may a team's coach or members of other teams touch the operator console (laptop, DS app software, dashboard software, controller cables/cords, ethernet cord, power cord, etc.) to help with troubleshooting or debugging the robot/operator console, but not operate the robot (in no way controlling the robot's actions/motions)? Thank you, HQ staff, we appreciate your efforts!

A: While !G422 only limits DRIVE COACHES to not operating the ROBOT, REFEREES may not be able to distinguish what actions a DRIVE COACH are making with an OPERATOR CONSOLE and are not required to check when making a !G422 violation call.

(Asked by **3847** answered Jan 30th 26)

Q70 R710-E roboRIO Standard Wire Connections

Q: Would soldering wires directly to the Digital I/O pins of the roboRIO be considered a standard connection point and method?

A: The Digital I/O pins of the roboRIO are "standard connection points" per !R710-E. !R710 does not regulate the method of connecting to the "standard connection points".

(Asked by **324** answered Jan 26th 26)

Q71 Climbing from inside the tower

Q: Is it legal to initiate climb from inside the tower?

A: Yes.

(Asked by **5468** answered Jan 26th 26)

Q72 Human Player Scoring during teleop

Q: Can the human player in the outpost score fuel throughout the match or only during autonomous?

A: There are no rules preventing introduction of FUEL onto the FIELD during TELEOP as long as introduction is done via the methods described in !G425.

(Asked by **5468** answered Jan 26th 26)

Q73 Autonomous Fuel go towards Energize and Supercharged

Q: Do the fuel scored during autonomous count towards the energized and Supercharged rank points?

A: Yes.

(Asked by **5468** answered Jan 26th 26)

Q74 Portion of bumper without foam?

Q: Is it legal to have a section of bumper that does not have foam but still has the bumper backer as long as it meets the other requirements of being at least 5 inches from the corner?

A: Please see the answer to !Q2. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **5468** answered Jan 27th 26)

Q75 Number of COTS Linear Actuators per Motor Controller

Q: R505 specifies that legal linear actuators may be powered from a motor controller output and that the breaker may be up to 20A. However, it does not state whether multiple linear actuators may be connected to a single controller, while other motor types are explicitly allowed to be paired on one controller. Can the GDC clarify whether more than one linear actuator may be connected to a single motor controller output, provided the total amp draw does not exceed 20 amps

A: Each "Other Brushed Motor" or "Linear Actuator" must be controlled by its own power regulating device.

(Asked by **2582** answered Jan 26th 26)

Q76 G427 - acceptable HUMAN PLAYER handling of FUEL

Q: G427 excludes "HUMAN PLAYERS making a good-faith effort to immediately move or enter additional FUEL". **A:** Does this exclusion apply to a HUMAN PLAYER attempting to quickly hand FUEL to another HUMAN PLAYER who will then throw it into the FIELD? **B:** Does this exclusion apply to multiple HUMAN PLAYERS repeatedly handing FUEL to each other with no immediate intent to throw the FUEL into the field,

since the FUEL is being moved? (Q41 only covers a single HUMAN PLAYER holding fuel without moving it.)

A: This answer has been updated 2/27 after Team Update 14. Please see [Team Update 14] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate14.pdf). If that doesn't answer your question, please rephrase and resubmit..

(Asked by **2724** answered Jan 26th 26)

Q77 G425 questions on throwing

Q: G425.C states FUEL may be "thrown from the OUTPOST AREA". Does this mean that the FUEL must be completely inside the OUTPOST AREA immediately after the FUEL is released by the HUMAN PLAYER? Or does this mean that the HUMAN PLAYER must be completely (or partially?) inside the OUTPOST AREA while throwing the FUEL? Or is there a different interpretation of "thrown from" that should be used here?

A: This answer has been updated 2/27 to reflect !G425 as of Team Update 13. The HUMAN PLAYER must be completely or partially inside the OUTPOST AREA. Additionally, the HUMAN PLAYER must throw over the ALLIANCE WALL. However teams should be aware of !G101, !G421, !G423, and !G424 when entering FUEL onto the FIELD.

(Asked by **2724** answered Jan 27th 26)

Q78 Is a gap in the bumpers without a frame cut-out allowed?

Q: Rule R401 says that bumpers are allowed to have a single gap larger than 1.25 inches as long as 5 inches of robot perimeter is protected on each side of each corner. Is it allowable to have this type of gap in the bumpers even if there is not a cut-out in the physical metal frame? (not a U-chassis)

A: Yes.

(Asked by **6201** answered Jan 27th 26)

Q79 BUMPERS must be supported

Q: In previous years there has been a rule outlining that bumpers must be supported by the structure/ frame and defined what would be considered supported. This year under R402 is states "BUMPEPRS must attach to the ROBOT PERIMETER with a rigid fastening system to form a tight, robust connection to the main structure/ frame". We are looking for clarification on if small gaps in between the robot frame perimeter and the bumper backing would be allowed under this years rules.

A: As a friendly reminder, past season game manuals have no standing on the current season's rules. There are no explicit requirements regarding the support of BUMPERS beyond the quote you have posted "BUMPERS must attach to the ROBOT PERIMETER with a rigid fastening system to form a tight, robust connection to the main structure/frame". Note that many BUMPER measurements such as the the maximum BUMPER dimension limit in !R403 and the "hard parts" measurement in !R404 are measured from the ROBOT PERIMETER.

(Asked by **10101** answered Jan 27th 26)

Q80 Receiving a Team via T605 that Declined an Invitation Despite T606

Q: T606 makes it clear that a team that declined an invitation may not receive a subsequent invitation from another team. The headline also states that a declining team cannot be picked. T605 states that if all remaining teams in a round have received T605 violations, then if they subsequently fail to make a pick, they will "receive the next highest-ranked unselected team". Because that is neither a pick nor an invitation, does it matter if that team had previously declined an invitation?

A: Yes, once a team declines, they may not join any other ALLIANCE unless they are an ALLIANCE Lead.

(Asked by **9496** answered Jan 26th 26)

Q81 Bumper padding on Hard part

Q: If the bumper backer extended substantially higher than the bumper zone for any other purpose (per R402) since there is no maximum height limit per R402, would the backer as a hard part need to be covered with padding to the extent of its height per R404 (Padding must extend at least 2.0in (5.08cm) beyond any hard parts of the BUMPER.)? Figure 8-5 suggests that the backer can extend higher than the padding which seems to be inconsistent with R404.

A: There is no requirement that every part of a BUMPER backer be covered with padding. As shown in the examples below !R402-B, it is acceptable for backing to extend above or below the padding. The measurement indicated in !R404 is a horizontal measurement that indicates the proper way to measure if the required thickness of BUMPER padding had been utilized in the construction of the BUMPER. !R405 and !R402-A are the rules that indicate the required vertical coverage of BUMPER padding.

(Asked by **3928** answered Jan 27th 26)

Q82 DRIVER/HUMAN PLAYER assignment during match

Q: 6.2 states "each team is allotted up to 3 STUDENTS who may be assigned as DRIVERS or HUMAN PLAYERS". Can these assignments change during the match? If so, are these assignments controlled by the TEAM or based on what the STUDENT is doing at a given moment? This would be relevant since some rules only reference DRIVERS (e.g. G421.B, R904.B) and some rules only reference HUMAN PLAYERS (e.g. G402, G421.E, G427), suggesting that it matters whether a STUDENT is a HUMAN PLAYER or DRIVER.

A: There are no rules strictly prohibiting a STUDENT from fulfilling the role of DRIVER and HUMAN PLAYER in the same match. Per Section 6.3.1, DRIVERS and HUMAN PLAYERS are identified using the same "Drive Team" buttons. Teams should note that !G401 requires that DRIVE TEAM members remain in their staged areas for the duration of AUTO.

(Asked by **2724** answered Jan 26th 26)

Q83 R101 - Is a the end of a rotating bolt considered a non-articulated structural element?

Q: Is a rotating end screw at the ROBOT PERIMETER considered an articulating structural element of the ROBOT? Further, although rotating, is this considered a minor protrusion and therefore compliant with R101?

A: Answer updated 1/26: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally elements that are small enough to be a "minor protrusion" per !R101, regardless of whether they move or not, may be excluded from determining the ROBOT PERIMETER.

(Asked by **8793** answered Jan 26th 26)

Q84 Can a gap in a bumper include structural support flush with the robot's metal frame?

Q: Assume a bumper is legal per all rules in the FRC2026 game manual and has a 6" gap in the center of one side. If a thin (0.125") aluminum plate was added across the gap, flush with the metal chassis and connected to the wood backing of the bumper segments on either side of the gap (to strengthen the bumper frame) would the bumper still be legal? See rules R401 and R402. If this is legal, it might also answer Q78.

A: No, per R404, "padding must extend 2.0in (5.08cm) beyond any hard parts of the BUMPER". A vertical cross section of BUMPER which does not have any padding would not meet this criteria.

(Asked by **488** answered Jan 27th 26)

Q85 G413 Multiple Violations

Q: If a robot is deemed to be in violation of G413 and meets the criteria for the MAJOR FOUL, would a MAJOR FOUL be assessed for each instance of strategic benefit (for example, using the extension to pick up a FUEL that would not have been possible without this extension) or would it be assessed for each instance of over extension (for example, each time the extension leaves the inside of the ROBOT PERIMETER after having been retracted to no longer be in violation of G413)?

A: Please see [Team Update 06]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate06.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Jan 30th 26)

Q86 G413 Due to Damage Penalized by G416

Q: If a ROBOT is overextended and in possible violation of G413 due only to damage caused by an opponent that is penalized under G416, does that change any of the evaluation of G413? For example, a ROBOT is damaged by an opponent (in a way that the opponent has violated G416) and now has a mechanism outside of their ROBOT PERIMETER that was not designed to ever extend. If the damaged ROBOT now extends a mechanism (that was designed to extend) over a different side, would they be breaking G413?

A: Please see [Team Update 06]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate06.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Jan 30th 26)

Q87 RoboRIO and VH109 spliced power?

Q: We are having some trouble being limited by the number of PDP 2.0 ports, and are wondering about based on R618, if it would be allowed to splice roboRIO and VH109 radio power together into one PDP port based on R618 Would splicing still count as direct and protected, and if no

A: No, this would not be a "direct" connection as required by !R615 and !R617.

(Asked by **5000** answered Jan 29th 26)

Q88 Do the small BUMPER gaps still apply to G415/G416?

Q: Hi FIRST, We understand that the ROBOT may have one gap in the BUMPERS that is larger than 1.25 inches, and we understand that per rules G415 and G416 the aforementioned gap is not protected by G415 or non-deliberate G416. We were wondering if gaps that are less than 1.25 inches are protected by G415 and non-deliberate G416 the same way the large gap is. Do these small gaps apply any differently to the large gap in regards to the exceptions listed in G415 and G416?

A: No, the clauses regarding "opening in BUMPERS" in !G415 and !G416 apply to all openings in the BUMPERS regardless of size.

(Asked by **5347** answered Jan 29th 26)

Q89 Frame Perimeter Extension Rule in Multiple Directions due to Damage

Q: If a robot is designed to extend and retract 2 different mechanisms in 2 different directions (robot limits its mechanisms to extend one at a time per R106), if one of the mechanisms incurs damage and unable to retract back into the frame perimeter, is the second mechanism allowed to be deployed (for example intake vs climber)? G413 seems to infer that damage is an exception to the over-extension rules, but it's unclear if this rule can apply to multiple extensions. What is the penalty if used?

A: Please see [Team Update 06]
(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate06.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **7042** answered Jan 30th 26)

Q90 TRENCH height error

Q: the manual says the TRENCH height is 40.25in but when we looked on the Team Test Elements we saw that the height was around 23in.

A: Per Section 5.6, the height of the TRENCH is 40.25in. This is the total height of the assembly, as measured to the top of the AprilTag. Per the same section, the height underneath the TRENCH arm is 22.25in.

(Asked by **5928** answered Jan 29th 26)

Q91 HUMAN PLAYER Assistance

Q: G425-C permits FUEL to be "thrown from the OUTPOST AREA." For the purposes of this rule, does "thrown" refer only to the release location (OUTPOST AREA) and initial trajectory, or does it also constrain the method by which the HUMAN PLAYER imparts velocity to the FUEL? Must the energy imparted to the FUEL come from the chemical energy stored within a HUMAN PLAYER?

A: Throwing is limited to HUMAN PLAYERS using their arms and hands. Using additional tools or machines to assist in throwing, that are not considered reasonable accommodations, would not be considered a valid way to introduce FUEL to the FIELD.

(Asked by **7127** answered Jan 30th 26)

Q92 Height of the wire conduit through trench on scoring side

Q: What is the height of the wire conduit that is running through the trench on the scoring table side? The dimensions on the field drawing note the trench height to be 22.25+/- 0.25". Does this mean that the wire conduit is 0.25" tall? Will the beam over the trench be raised by the thickness of the conduit or is this side shorter out side of the indicated tolerance?

A: There is no wire conduit under any TRENCH. All cables for the HUB run through beam of the TRENCH on the scoring table side. The height of both the far and scoring table side TRENCHES are the same.

(Asked by **7153** answered Jan 29th 26)

Q93 R404 Bumper hard part limit at corners of ROBOT PERIMETER

Q: Per R404: "Hard parts of BUMPERS must not extend more than 1.25in (3.17cm) out from the ROBOT PERIMETER." At a corner of the ROBOT PERIMETER, is the 1.25" limit in R404 swept as an arc from the corner point (with radius 1.25"), or to a theoretical intersection point of two lines that are each 1.25" from their respective sides of the ROBOT PERIMETER?

A: The padding & hard parts measurements should be made perpendicular to the ROBOT PERIMETER edges (or an imagined extension of them into the corner) such that a legal BUMPER can be extended into the corner without requiring parts be radiused. Please be aware of the exception of the minimum padding described in !R406 which should be measured radially from the corner as shown in Figure 8-10.

(Asked by **451** answered Jan 29th 26)

Q94 Strategic extension outside the frame perimeter penalty

Q: G413 states that, for an over-expansion outside of the frame perimeter, the penalty is "MINOR FOUL, or MAJOR FOUL if the over-expansion is used for strategic benefit..." However, in G211, part J in the blue box lists "intentionally exceeding the expansion limits for strategic benefit (i.e. climb the TOWER, block part of the FIELD, etc.)." What is the difference between strategic over-expansion that receives a major foul and strategic over-expansion that receives a yellow card?

A: Please see [Team Update 06]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate06.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **175** answered Jan 30th 26)

Q95 R106 momentary extension in corners

Q: R106 prohibits extension into corner regions ("may not reach outside the projection"), and this prohibition is not moderated by the exception R106.C, right? So corner regions are completely off-limits no matter the duration or consequentiality?

A: Excursion beyond the projection of the ROBOT PERIMETER side would be considered "extensions in

multiple directions" and would be permitted per !R106-C if it is "MOMENTARY and inconsequential".

(Asked by **100** answered Feb 2nd 26)

Q96 Can multi-wire ferrules be used to directly connect RoboRIO and VH109 to a single PD port?

Q: A follow up to Q87 and Q13. If a pair of "multi-wire ferrules" (one for positive wires and one for negative wires) are inserted directly into a single PDP port and used per the manufacturer's specification to directly power both the RoboRIO and VH109 radio, would that be ruled legal? As per R615 and R617 there is a requirement for direct connection, but no requirement for exclusive connection. The answer of Q13 has ruled the proper use of multi-wire ferrules legal.

A: Please see [Team Update 07]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate07.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **2910** answered Feb 3rd 26)

Q97 Fabric Spray

Q: Can you put a finish on the bumper fabric before installing it? Like a fabric spray?

A: Provided that the coating does not violate !R205, there are no rules which prohibit this.

(Asked by **8255** answered Jan 30th 26)

Q98 Can a robot score fuel into hub while climbing tower G407

Q: Since rule G407 allows a robot to score into the hub if it is "partially or fully within their Alliance Zone" and the Alliance zone extends infinitely high above the carpet, does this imply that a robot does not necessarily need to be in contact with the field carpet in order to score, such as when it is climbing the Tower?

A: Yes.

(Asked by **3577** answered Jan 30th 26)

Q99 Impact Award Documentation Form Clarification

Q: For the Impact Award Documentation Form, should all supporting documentation be included in the shared URL folder along with the form, or is the shared folder intended to be used for only the form with the supporting documentation being turned in during the interview?

A: The *FIRST* Impact Award Documentation Form should include the documentation attached and labeled as indicated in the instructions. Only a single file (including the summary form and all documentation) should be included in the link.

(Asked by **467** answered Jan 30th 26)

Q100 Electromagnetic Grippers/Grabber

Q: Would an electromagnet be allowed to attach the bot to the metal post for the climb. The electromagnetic mechanism would be used as a gripper/grabber mechanism for a mechanical lift system.

A: Electromagnets are a permissible ROBOT element provided all applicable ROBOT rules are followed, including but not limited to !R501 and !R505. Teams should also be aware of which FIELD elements they can interact with as noted in !G412 and what qualifies for TOWER points as defined in *Section 6.5.2*.

(Asked by **4085** answered Jan 30th 26)

Q101 Separate Bumper Cover Sections Near Corners

Q: Regarding a seam created by separate bumper segments with different covers, would a seam similar to the example in Figure 8-10 titled "Separate segments with overlapping padding in corner" be allowed if it was still parallel to the example shown, but shifted into the 5" area that does not allow a bumper gap per R401? All other requirements of bumpers around corners would be met, and there would not be a gap between padding other than what is created by the two layers of cover material.

A: Per !R401, gaps of less than 1.25in (3.17cm) between adjacent segments are permitted as long as all corners are filled per !R406. The !R401 restrictions on the location of a gap larger than 1.25in (3.17cm) only applies to gaps larger than 1.25in (3.17cm).

(Asked by **324** answered Feb 2nd 26)

Q102 G412 - interacting with the TOWER support structure

Q: G412 prohibits grabbing, grasping, attaching to, becoming entangled with, and suspending from all field elements except the RUNGS & UPRIGHTS. 6.5.2 allows for a robot's valid climb while in contact with the support structure, while G412 restricts certain interactions with the support structure. Is G412 intended to exclude most purposeful climbing interactions with the support structure and the scoring criteria intended to respect G412 limits or should G412 also exclude the support structure?

A: Per !G412, a ROBOT may not grab, grasp, attach to, become entangled with, or suspend from FIELD elements except for the RUNGS & UPRIGHTS. *Section 6.5.2* allows for contact with other items on the TOWER but !G412 still applies.

(Asked by **11483** answered Feb 2nd 26)

Q103 What is considered structural in the robot perimeter definition?

Q: R101 defines the robot perimeter. It talks about non-articulated, structural elements of the robot. If we mount rigidly a polycarbonate wall to a section of the exterior part of the chassis (following the limitations of the perimeter) would that be considered a structural element of the robot?

A: There is no specific definition of "structural" or restrictions on what materials comprise the ROBOT PERIMETER. Generally ROBOT elements which are fairly rigid and generally do not move significantly during MATCH play may be considered part of the ROBOT PERIMETER and elements which are very flexible and move significantly during MATCH play (whether intentionally or not) would not be permitted as part of the ROBOT PERIMETER.

(Asked by **5422** answered Feb 2nd 26)

Q104 Bumper Gaps Smaller than 1.25" within 5" of Corners

Q: Are bumper gaps smaller than 1.25" wide allowed within 5" of a corner?

A: Please see !Q101. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Feb 2nd 26)

Q105 Bumper Gap larger than 1.25"

Q: Rule R401 says "A single gap larger than 1.25in (3.17cm) is permitted, as long as at least 5.0in (12.7cm) of ROBOT PERIMETER on each side of each corner is protected by BUMPER." Our question is whether a bumper gap of 4" on one side is permitted where the frame is continuous through that span as long as at least 5" is covered from each corner? So, the frame would be exposed in that 4".

A: Please see !Q78. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **2472** answered Feb 2nd 26)

Q106 Can you use a centrifugal impeller to drive air to manipulate fuel

Q: The rules section 8.5 state that fans are limited to 120mm, 10w, 12v. Would a centrifugal impeller used to manipulate fuel be covered in these limitations, or would it be allowed?

A: *Section 8.5* limits fans that have their own built in motor. As long as an allowed motor listed in !R501 is used, there are no rules explicitly restricting the use of airflow to control FUEL.

(Asked by **1700** answered Feb 2nd 26)

Q107 Clarifying Auto interference in G211.H

Q: Within G211.H, how is interfering defined in this case? 1) Could a team be ruled as interfering if they were to disrupt the placement of pre-staged FUEL, including FUEL within the opponent's DEPOT or the FUEL on the opponent's side of the CENTER LINE? 2) Could a team be ruled as interfering if they were to disrupt FUEL moved by an opponent from the CENTER LINE to the opponent's ALLIANCE ZONE? 3) Is contact with an opponent robot required in order to be seen as interference?

A: This question was asked prior to [Team Update 07] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate07.pdf) which updated wording for the !G211-H example. We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, !G403 limits interactions during AUTO and contacting an opponent ROBOT across the CENTER LINE results in a MAJOR FOUL. If a team is ****intentionally****, as perceived by the REFEREE, programming their AUTO to go across the CENTER LINE and contacting an opponent ROBOT in order to interfere with the opponent ROBOT(s) AUTO, they may receive a !G211 violation in addition. Generally, if a ROBOT disrupts FUEL across the CENTER LINE during AUTO without contacting an opponent ROBOT this would not meet the criteria for !G211-H even if the opponent ROBOT intended to interact with the disrupted FUEL.

(Asked by **1241** answered Feb 4th 26)

Q108 Bumper Gap

Q: Is a plastic plate attached to the box tube of the frame in the space of a bumper gap allowed provided the plate does not cause the frame perimeter to exceed the total allowed. We understand plates attached to the box tube that are covered by bumpers are allowed again provided frame perimeter does not exceed limit.

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, the ROBOT Rules do not require specific materials be used in the construction of the ROBOT. !R401 does not require that any gaps in the BUMPERS have a corresponding gap in the ROBOT elements along the ROBOT PERIMETER. Regardless of what elements the team may or may not consider the "robot frame" the ROBOT PERIMETER is evaluated as described in !R101 and is then used to evaluate other rules which refer to this ROBOT PERIMETER such as !R102, !R104, !R105, etc.

(Asked by **8114** answered Feb 2nd 26)

Q109 Team Load-In Clarification

Q: E402 states "Only 6 team members (one of which must be an adult) may be in the pit area during any Load-in Period prior to pits opening." Can you clarify the definition of "Team Member". Is this role restricted to just students or does it include mentors and other administrative personnel on the team.

A: Team Member refers to any member of the team including students, Mentors, Lead Coaches, etc.

(Asked by **2445** answered Feb 3rd 26)

Q110 Does the 1/4" limit on "Minor protrusions" refer to height from the perimeter or width

Q: Specifically, does a washer and a bolt together (the total height of which is less than 1/4") meet the definition of a minor protrusion if the washer is greater than 1/4" in diameter?

A: The 0.25in dimension on "minor protrusions" in !R101 refers to the distance out from the ROBOT PERIMETER. There is no specific measurement for the other dimensions of a minor protrusion, though as noted in the Blue Box below !R102 the exception is intended for protrusions which "are both minor in extension from the ROBOT PERIMETER and cross-sectional area.". Generally a small washer may be considered part of a minor protrusion, while a very large fender washer, gusset plate, or similar may not be.

(Asked by **117** answered Feb 4th 26)

Q111 R405 2026 Inspection Check list Height

Q: 2026 Inspection Checklist under BUMPERS Height - Must entirely fill the space between 2.75in (6.98cm) and 5.5in (13.98cm) from the floor Game manual R405 entirely filling the BUMPER ZONE, a space between 2.5in (6.35cm) and 5.75in (14.61cm) from the floor Confirming Game Manual is correct?

A: The values provided in !R405 and the Inspection Checklist are both correct. The value in the Game Manual is provided before allowing for any tolerance, while the value provided in the Inspection Checklist accounts for the tolerance added to the dimensions at inspection. Per the introduction to Section 8.4, "All dimensions specified in this section are nominal and will be measured during inspection with a tolerance of 0.25in (0.63cm) unless otherwise specified." Per the BUMPERS section of the Inspection Checklist, "Rules in this section have the

0.25in (0.63cm) tolerance applied. ROBOTS must meet the dimensions in this checklist for compliance." As a reminder, as additionally noted in Section 8.4 "Teams are encouraged to design to the nominal dimension and reserve the tolerance for unexpected deviation such as manufacturing error or tolerance stack-up."

(Asked by **3669** answered Feb 5th 26)

Q112 Do mirror-like reflective surfaces inherently violate R203 by existing on a robot?

Q: If a robot has a highly reflective, decorative, outward-facing surface made from a safe material (mirror window film on polycarb, polished aluminum, space blanket etc.) will the robot automatically be assumed to violate R203 (e.g "C" as the bot may incidentally reflect the image of an AprilTag during a match), or will robot inspectors consider each case individually? If the robot passes inspection but other teams complain of interference, is re-inspection and requiring the item's removal likely?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, a mirrored surface large enough to pose a high likelihood of reflecting a full clear image of April Tags, gamepieces, etc. would likely be considered a violation of !R203 even if the team has other intent for the element such as decoration. Small mirrored surfaces unlikely to reflect full or clear images would not likely be considered "intended to jam or interfere".

(Asked by **6352** answered Feb 5th 26)

Q113 Bumper fabric

Q: Is it legal to use silicon covered ripstop for the bumpers? And is it legal to have a different fabric on one edge of the bumpers vs the other three?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. There are no rules that state the exact material that must be used for a BUMPER cover, or that the BUMPER cover be the same on all edges of a BUMPER. Per !R402-C, the cover must be cloth which, per !R411, is colored to reflect ALLIANCE color. Additionally any coating must not violate !R205.

(Asked by **5468** answered Feb 5th 26)

Q114 Fuel stiffness variety

Q: We received multiple boxes of fuel for testing and noticed that in the original kickoff box, the fuel were significantly more firm than the ones we received later. My question is, are you aware of the variety, and if so will that variety be present at competition fields? If one of these is a problematic batch, which one?

A: Please see [Team Update 03]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **4682** answered Feb 5th 26)

Q115 Servos and Fans in R504

Q: R504 contains the phrase "With the exception of servos, fans, or motors integral to the sensors of COTS computing devices...".. Does the clause "integral to the sensors of COTS computing devices" apply only to "motors" or does it apply to "servos" and "fans" as well? In other words, is a servo/fan that is NOT integral to the sensor of a COTS computing device an exception to this rule, and therefore does not require being controlled by a power regulating device?

A: The "integral to" clause is intended as a modifier to only the "motors" item of the list. Servos and COTS fans do not need to be controlled by a power regulating device specified in !R504. However, please note that servos must be connected to one of the devices listed in !R506.

(Asked by **3419** answered Feb 5th 26)

Q116 Fixed Mechanism in Bumper Gap

Q: If I were to have a permanently mounted mechanism affixed to the outer side of the robot chassis that stuck out ~2.5, however, the mechanism is considered a part of the frame perimeter with R104, would this violate a couple of rules? 1. being an extension past the frame perimeter, and 2. The method of measuring the robot perimeter is using a string would the corner of the mechanism be considered a corner in reference to R401. This mechanism is not the full width of the bot and is ~10in across.

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. However, there is no requirement as to what shape a ROBOT PERIMETER may be. If a mechanism is fixed to the frame such that it defines part of the ROBOT PERIMETER it is not an extension and is subject to all rules regarding the ROBOT PERIMETER and BUMPERS. A square ROBOT with an additional mechanism defining the ROBOT PERIMETER would have a ROBOT PERIMETER that is an irregular polygon. A corner of the ROBOT PERIMETER, even if it is greater than or less than 90 degrees, is still a corner and must comply with !R401.

(Asked by **2168** answered Feb 9th 26)

Q117 Bumpers: Shape and Wedging

Q: R407 states that BUMPERS shouldn't be wedges when interacting with other BUMPERS. However, if a team were to design their BUMPERS to interact with the FIELD in such a way that the BUMPER functions as a wedge reacting to a FIELD ELEMENT, would this be considered legal? For example, a BUMPER in compliance with all BUMPER rules, with a single gap that from a front view presents a wedge that may react ONLY against a FIELD ELEMENT and wouldn't wedge against other BUMPERS.

A: !R407 does not prohibit a BUMPER which acts as a wedge when interacting with a FIELD ELEMENT as long as it does not act as a wedge when interacting with other BUMPERS. Note that per !R402-A, any vertical cross section of BUMPER should have 2.25in (nominal) of padding.

(Asked by **6702** answered Feb 6th 26)

Q118 Q114 follow up

Q: Thank you for your answer to my question in Q114. What is the range of the compression variance? We are seeing dramatic differences in response to different fuel compressions.

A: There is no published specification for FUEL compression. As noted in [Team Update 03] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate03.pdf) "Teams should expect to encounter FUEL...[with] varying compression rates and design accordingly".

(Asked by **4682** answered Feb 9th 26)

Q119 Launching FUEL into the HUB exit from the NEUTRAL ZONE

Q: If a ROBOT launches a fuel into the HUB's exit, would this violate G407, which prohibits a ROBOT outside its ALLIANCE ZONE launching FUEL into its HUB? What if the FUEL is launched with enough force to fly out of the HUB through the opening and land inside the ALLIANCE ZONE? Additionally, in this case, being that it has passed through both the top opening and sensor array of the HUB, would said FUEL be scored?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, launching FUEL into the HUB exit from the NEUTRAL ZONE would be a violation of !G211-G and would quickly escalate to a RED CARD. Additionally !G407, and !G404 would also be violated.

(Asked by **639** answered Feb 10th 26)

Q120 G419 Field Zones D/E

Q: For two robots "preventing access to a field zone" (blue box D. And E.), does the zone have to be the same in each case for it to be a violation? For example, if two robots are blocking opponent's path across both of the BUMPS, would it matter if one opponent robot is trying to get into their ALLIANCE ZONE, and the other is trying to get into the NEUTRAL ZONE? Or does the zone in question need to be the same in both cases?

A: Please see [Team Update 09]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate09.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **324** answered Feb 10th 26)

Q121 Location of main breaker covered by Fuel during match

Q: If the location of the main breaker is located on the robot such that it is possibly covered by Fuel during the match, does this violate R612? It is not covered by any panel, or mounted on, underneath or immediately adjacent to any moving components.

A: Yes, a main breaker that is expected to be obscured by FUEL, as opposed to a one-off unexpected occurrence, is not considered "quickly and safely accessible from the exterior of the ROBOT." and is a violation of !R612.

(Asked by **68** answered Feb 9th 26)

Q122 R106 extension for an octogonal robot

Q: Taking the case of a robot with a regular octagonal frame, 13" on each of 8 sides, what is the shape of the resulting extension as limited by R106 & R105? Depending on the reading of "over more than 1 side of the ROBOT", the legal extension area in plan view could be a rectangle with the 13" side times the 12" R105 extension limit or could be a right isosceles triangle with base of 13" and the equal sides formed by the extension of the adjacent sides with the triangle height being $13 \cdot \sin(45 \text{ deg})$

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, as described in !R106, and

illustrated in the !R106 Blue Box the extension must not reach outside the projection of the side it extends out of. The projection is made with lines perpendicular to the side the extension is in and not with lines parallel to adjacent sides (although in the case of a rectangle both are true). In the case of an octagon, the resulting shape where an extension could reside is a rectangle.

(Asked by **11483** answered Feb 9th 26)

Q123 Impact Documents submission format

Q: My team is trying to submit the Impact Award Documentation Form on the STIMS portal from GoogleDrive url ("The only way to submit a documentation form is through this portal as part of your submission"). GoogleDrive only generates a docs.*.... link (not a drive.*.... link) and the STIMS program will not accept it. Any suggestions?

A: Google Drive links can be created by placing the file within a folder and then sharing that folder. This approach also allows the team to make updates to the documentation form if needed prior to events. As noted in the submission and on the webpage, "Teams are encouraged to have the file finalized a week before each event to allow judges time to review prior to the event. Any edits that teams make to the file after that may not be reviewed by the judges." Be sure to also make the link viewable by anyone with the link.

(Asked by **6865** answered Feb 9th 26)

Q124 Impact Award Documentation Form Submission Clarifications

Q: Information seems to be inconsistent across the FIA Resources page (www.firstinspires.org/resources/library/frc/fia-resources), Submitted Awards #FIA page (www.firstinspires.org/resources/library/frc/submitted-awards#fia) and the submission page on the dashboard. Is the documentation form only accepted online this season, and not during the interview? The submitted award page still states that it is accepted along with documentation in the interview section.

A: Apologies for the error on the webpages. Please see [Team Update 09] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate09.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **3132** answered Feb 10th 26)

Q125 Clarification on Q99

Q: Q99 states: Only a single file (including the summary form and all documentation) should be included in the link. 1. Must all supporting documentation be submitted via the online submission? 2. Can documentation still be provided during the interview? Or must it all be submitted online?

A: Yes all documentation must be submitted via the online submission. As a friendly reminder, the link must not change but teams can continue to edit the content within the link up to 1 week before the event.

(Asked by **3132** answered Feb 9th 26)

Q126 Q91 Can human player wear gloves to increase fuel grip?

Q: According to G302, the drive team can bring items that are worn and items such as stools for an accommodations. Q91 states: "Throwing is limited to HUMAN PLAYERS using their arms and hands. Using

additional tools or machines to assist in throwing, that are not considered reasonable accommodations, would not be considered a valid way to introduce FUEL to the FIELD." Our question is whether a human player may wear gloves to provide better grip on the FUEL. This could be considered an accommodation

A: Yes, gloves would be permitted as an item that is "worn" and is not what was intended by "additional tools or machines".

(Asked by **365** answered Feb 9th 26)

Q127 Are teams allowed to adhere materials to drivers station?

Q: R904 says that the Operator Console may not attach to the FIELD, except with the provided loop tape or by clamping to the Driver's Station support shelf. The Glossary defines the FIELD as bounded by the inward-facing surface of the Alliance wall. Our question is: Are we permitted to attach something to the driver's side of the Alliance wall that is connected to the Operator Console and does not damage the wall (like with a suction cup)?

A: Please see [Team Update 09]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate09.pdf) which corrects !R904 to reference the ARENA instead of the FIELD.

(Asked by **365** answered Feb 10th 26)

Q129 Clarification on Q125

Q: The Interview Process section of the FIA page (<https://www.firstinspires.org/resources/library/frc/submitted-awards#fia>) states that teams may choose to present binders in the interview. Must that documentation be provided online alongside the Impact Documentation Form (Q125 states "all documentation), or may it still be presented in person?

A: The [*FIRST* Impact Award Documentation Form]

(<https://www.firstinspires.org/hubfs/web/program/frc/awards/fia-documentation-form.pdf>) asks for teams to label each piece of documentation with a "documentation ID" and attach it to the form as part of the submission. If something is in their Documentation form, it should be included. As noted on the webpage and in !Q123, teams may provide a link in the submission and continue to update the material up to 1 week before each event. As noted in the interview section on the [submitted awards webpage]

(<https://www.firstinspires.org/resources/library/frc/submitted-awards#fia>), teams are able to bring additional materials no larger than one 2" 3-ring binder (or equivalent volume if spiral wound) to review but judges may not have time to review all material that is provided to them, but these materials do help them verify any additional questions they have.

(Asked by **3132** answered Feb 10th 26)

Q130 R405 interactions with climbing the TOWER

Q: When climbing the tower, bumpers must exit the area 2.5"-5.75" above the carpet. Is the BUMPER ZONE interpreted as the absolute distance from the carpet, and therefore bumpers leaving the zone while climbing the TOWER is an exception to "navigating the FIELD normally", or should it be interpreted as a Virtual Floor as in some past seasons and would still apply as if the ROBOT were placed on the floor in it's climbed configuration. Hypothetical example: Climber goes under robot while elevated

A: Please see the answer to !Q57. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **7480** answered Feb 11th 26)

Q132 Bumper Coating

Q: Is it possible to put a coating on the cloth of the bumper as long as it doesn't violate R205? We are considering a rubbery clear spray coating.

A: Please see !Q97. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **5434** answered Feb 11th 26)

Q133 Frame Perimeter Extension Resulting From Contact

Q: Is it a foul if a robot (A) gets bumped by an opposing alliance's robot (B), and , as a result of that, part of robot A extends out of the frame perimeter in more than one direction? Assume that robot B did not collide with robot A with the intention of forcing robot A to foul, and that robot A is not visible damaged from the encounter. Relevant rules: G413, R106

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, a ROBOT extending beyond their ROBOT PERIMETER in more than one direction at a time are at risk of being in violation of !G413 due to breaking the expansion limit listed in !R106. If there is visible damage causing the expansion, the exception listed in !G413-B would apply. If the extension(s) are perceived to be MOMENTARY and inconsequential, the exception listed in !R106-C would apply. If the expansion was the result of "a strategy not consistent with standard gameplay and clearly aimed at forcing the opponent ALLIANCE to violate a rule" !G210 would apply. Otherwise, !G413 applies for for extending beyond the expansion limits listed in !R106 regardless of the circumstances that lead to the excess extensions.

(Asked by **6418** answered Feb 11th 26)

Q134 Impact Video Submission

Q: Can we submit the impact video as a video inside of a google drive folder? We would like to continue to edit the video following submission, but do not want to risk the link of the actual video changing. We were hoping to use a folder so the link submitted (the folder link) will not change whatsoever, only the content of the folder will change.

A: Yes, as noted on the [Submitted Awards webpage] (<https://www.firstinspires.org/resources/library/frc/submitted-awards#fia>) under the *FIRST* Impact Award Video section, "Teams cannot edit the URL after it has been submitted but may continue to update the video file as long as the URL does not change."

(Asked by **6479** answered Feb 12th 26)

Q135 G407 Game Piece Violations

Q: Regarding the answer to Q32, what would be considered the "instance" for G407 violations, if it is not "each SCORING ELEMENT launched into their HUB"?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the

REFEREES at your event, with the final call made by the Head REFEREE. Generally, an instance is considered for each time a ROBOT is launching FUEL from their ROBOT. A ROBOT that stops launching to adjust or to pick up additional FUEL and begins launching again would be considered a separate instance. Generally, any action which attempts to exploit the definition of an instance of any rule in order to gain benefit will likely be a violation of !G211 and would quickly escalate to a RED CARD.

(Asked by **324** answered Feb 17th 26)

Q136 No bumper backing on corners

Q: R406 says that bumper padding must fill all the corners, however this rule never mentions backing, 9097 is doing 4 separate bumpers on each side, and our current design has padding in the corners, but not backing. Is this allowed?

A: There is no requirement that BUMPER backing extend beyond the edges of the ROBOT PERIMETER into the corner as long as the corner is padded appropriately per !R406. In other words, backing that resembles the "Separate mitered segments" example in Figure 8-10 would be permitted provided the padding looks like one of the examples marked "OK".

(Asked by **9097** answered Feb 13th 26)

Q137 Volunteer Training Materials vs Game Manual

Q: Would publicly available volunteer training materials be considered to supersede the text within the game manual? Section 1.9 states that Q&A answers do not supersede the manual, and that REFEREES and INSPECTORS are the ultimate authority on rules. Does this mean that if there is a inconsistency present, that the information in the training materials can be used as a more definitive source during discussions between teams and volunteers.

A: Volunteer trainings do not supersede the text within the game manual. If an inconsistency is found we encourage teams and volunteers to reach out so a correction can be made. Please send any issues you may find to frcteamadvocate@firstinspires.org.

(Asked by **324** answered Feb 16th 26)

Q138 Use of PWM Y-Cables for Dual-Servo Control from a Single PWM Port

Q: Does the use of a PWM Y-cable to control two (2) servos from a single PWM port on the roboRIO or a secondary CAN-based servo controller (REV Servo Hub) violate any electrical rules regarding actuator control? Specifically, if two servos are intended to perform an identical, synchronized motion (such as a dual-sided intake or a symmetric latch).

A: Connecting multiple servos to a single port on a device permitted for servo control per !R506 complies with the requirements of that rule and is permitted provided all other applicable rules are followed such as servo specifications, wire gauge and color, etc.

(Asked by **2337** answered Feb 16th 26)

Q139 Spliced Sensor Wires

Q: R618 states that only one wire may be connected to each PDH terminal. Are we permitted to run a single pair of wires from a PDH port, and then splice that pair after it leaves the PDH in order to power four low-current sensors (e.g., four CANcoders on a swerve drive)?

A: Yes, As described in the Blue Box below !R618 a wire can be spliced for multi-point distribution of power.

(Asked by **2352** answered Feb 17th 26)

Q140 Bumpers: Gaps between segments vs. Notch out of existing bumper.

Q: R 401 states that gaps between "adjacent segments" are ok ($<1.25"$). What if we do not want a gap in the bumper but just a notch less than 1.25" but only on the top half of the bumper. It wouldn't be between two segments but on a single bumper.

A: To comply with !R402, all vertical cross sections of the BUMPER (other than the corners or fabric wrapped around the end of the segment) must contain all the elements outlined in !R402.

(Asked by **8193** answered Feb 17th 26)

Q141 How do we comply with R406 with a 60 degree corner?

Q: We are building separate bumpers using pool noodles that meet at a 60 degree corner. Is it compliant with R406 to create the bumper profiles with one going past the corner as described in the "Separate segments with overlapped padding in the corner" example image in figure 8-10, but still have a mitered shorter segment in order to fill the small 30 degree gap between the side of one pool noodle and the end of the other?

A: Yes, using the "seperate segments with overlapped padding in the corner" is permitted for corners other than 90 degrees. When applied to non-square corners that example is likely to result in both pieces of padding having one or more angled cuts or miters. To match the example, the padding in one segment should extend beyond the corner to the maximum extent possible which still achieves the desired overall bumper profile.

(Asked by **435** answered Feb 17th 26)

Q142 Battery terminal

Q: R601. "Nut and bolt style" refers to any style battery terminal where the connector is secured to the battery using a threaded fastener. Here in Brazil we use this battery (link below) where the connector uses a threaded fastener. Is allowed in the competition? https://www.braspower.com.br/bateria-selada-12v-18ah-getpower-vrla-agm?srsId=AfmBOop5NqsTiEt04wiRos_0g0W8shPvrYTcUhDsRe7QrU8aEE1OvWtU

A: We cannot comment on specific part/design legality. Per the Blue Box below !R601, ""Nut and bolt style" refers to any style battery terminal where the connector is secured to the battery using a threaded fastener." This includes batteries which contain an integrated threaded receiver or "nut".

(Asked by **7563** answered Feb 17th 26)

Q143 Is there an error in the Field Manual setup instructions for the welded field?

Q: The official Field Dimension Drawing shows the width of the Welded field to be 317.69" which is 26' 5 3/4". In section 3.2.2.2 of the Field Manual step-by-step guidance on building the field, it shows the width of the Welded field to be 26' 6 3/4", a difference of 1 inch (related measurements are then also impacted). Is this an error in the Field Manual document? Note the AndyMark field dimensions in the Field Manual match the Field Dimension Drawing and are not in question.

A: These dimensions are not in conflict. Section 3.2.2.2 of the Field Manual instructs users how to measure out the location for the guardrail. For both field perimeters, this is a measurement that references the interior edge of the bottom aluminum angle extrusion of the guardrail. On the AndyMark perimeter, this aluminum extrusion is the innermost portion of a completed guardrail assembly. Thus, the measurement provided in the Field Manual and the measurement provided in the Field Dimension Drawings match. On the welded perimeter, additional polycarbonate is added. This polycarbonate is also spaced off of the aluminum extrusion by a hook and loop fastener connection. The measurement provided in the Field Dimensions Drawings is to the interior surface of this polycarbonate. Thus, the measurement provided in the Field Manual and the measurement provided in the Field Dimensions Drawings do not and should not match.

(Asked by **2338** answered Feb 17th 26)

Q144 Can a team consist of 3 Human Players and 0 Drivers?

Q: Per Table 6-1, DRIVERS and HUMAN PLAYERS wear identical buttons. G422 permits either role to operate the ROBOT. Section 6.3.1-C allows "any number" of HUMAN PLAYERS in the OUTPOST. Can a team stage ALL 3 students in the OUTPOST for AUTO, leaving 0 in the DRIVER STATION? If yes, can they move to the DRIVER STATION during TELEOP to drive? Does G422 confirm a student staged as a "HUMAN PLAYER" can legally operate the CONSOLE?

A: Yes, there are no rules that that require a team to have a DRIVER for any portion of a MATCH. There is also no limit to the number of HUMAN PLAYERS that may be staged in the OUTPOST AREA provided each team aligns with the 3 person limit of people with the DRIVE TEAM buttons. Yes, there are no rules strictly prohibiting a STUDENT from fulfilling the role of DRIVER and HUMAN PLAYER in the same match. !G401 requires that DRIVE TEAM members remain in their staged areas for the duration of AUTO.

(Asked by **8595** answered Feb 19th 26)

Q145 Bumpers color consistency

Q: Hi FIRST, we read in the BUMPER Guide that some variance in bumper colors is allowed, although we assumed this meant between different ROBOTS at competition. Are there any rules against using two slightly different shades of blue fabric on the same BUMPER, as long as the BUMPER is still clearly blue?

A: !R411 only requires that "Each ROBOT must be able to display red or blue BUMPER covers to reflect their ALLIANCE color, as assigned in the MATCH schedule". There is no requirement that all parts of an individual ROBOT'S BUMPERS be an identical shade.

(Asked by **5347** answered Feb 19th 26)

Q146 Team Attribute Award Definitions

Q: Are there standardized definitions used for Team Attribute awards, like there are for the FIRST Impact Award? Should we use the same terms?

A: No, there are not standardized term for other awards.

(Asked by **4590** answered Feb 19th 26)

Q147 G407 language clarification

Q: We were wondering about the interpretation of rule G407. When the manual says, "A ROBOT may not launch a SCORING ELEMENT into their HUB" under the zone requirements, does "into, their HUB" apply only when the FUEL in question enters the top of the HUB and passes through the scoring array? Would launching FUEL that flies into the side wall of the HUB without going through the hexagonal opening be considered a violation? Would FUEL that enters the opening, but then bounces out be a violation?

A: The intended definition of "into" is similar to Oxford Learner's Dictionary definition 1: "to a position in or inside something". Any FUEL moving from outside the HUB to inside the HUB, regardless of whether it bounces out or passes through the sensors would be a violation of !G407.

(Asked by **5347** answered Feb 23rd 26)

Q148 When is a robot "crossing" the CENTER LINE

Q: G403 explicitly defines it's criteria for awarding a major foul as having a ROBOT's BUMPERS "completely across" the CENTER LINE and contacting an opponent ROBOT. G211-H uses the language "crossing" rather than "completely across". Is this meant to imply that a ROBOT whose BUMPERS are "partially across" the CENTER LINE contacting an opponent ROBOT would be in violation.

A: No, the "crossing" in !G211-H refers to the same BUMPERS completely across criteria as !G403.

(Asked by **1771** answered Feb 23rd 26)

Q149 Partial gap in bumper

Q: Can the one opening allowed in a bumper be a small section above the frame, not exposing the frame or backer, basically making a 3" wide 2" deep "U" above the frame through the bumper? If the opening only allows the total height of the bumper and all layers of foam, backer, and fabric, then this type of opening would not be allowed by the ruling.

A: As updated in Team Update 11, !R402 requires that "any vertical cross section of the BUMPER must include parts A, B, and C". A BUMPER section which has a notch such that the backing or padding in that section is less than the required minimum would not meet this criteria.

(Asked by **3277** answered Feb 23rd 26)

Q150 Battery Orientation

Q: Can the battery be oriented such that the terminals are oriented facing the bottom base of the robot (floor)?

A: There are no rules which restrict battery orientation within the ROBOT.

(Asked by **87** answered Feb 23rd 26)

Q151 CORRAL Definition as a FUEL Storage Location

Q: In the Glossary, the CORRAL is defined as "area on the floor in which FUEL can be stored". Does this mean that FUEL would not be counted as stored in the CORRAL if it is not on the floor? Or does the CORRAL extend upwards, either to some limit or infinitely?

A: Any FUEL that remains within the polycarbonate walls of the CORRAL or their projection upwards, and is supported by: - the walls, - the floor contained by the walls, - and/or other FUEL may be considered "stored in the CORRAL".

(Asked by **324** answered Feb 26th 26)

Q152 Can a gap in a bumper include structural support flush with the robot's chassis frame?

Q: In answer to Question 84, you said BUMPER padding must extend 2.0in (5.08cm) beyond any hard parts of the BUMPER. Assuming a bumper has a gap in the center of one side and is legal per all rules. If a 1" box tube is added in the gap outside the chassis box tube, flush with the robot chassis and not connected with the bumper backing, assuming the frame perimeter is legal, would the bumper still be legal?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, the ROBOT PERIMETER is evaluated with the ROBOT (excluding BUMPERS) per !R101. An element that is attached to the ROBOT chassis and not the BUMPERS would be subject to evaluation as part of the ROBOT PERIMETER. A square ROBOT with an additional mechanism defining the ROBOT PERIMETER would have a ROBOT PERIMETER that is an irregular polygon. A corner of the ROBOT PERIMETER, even if it is greater than or less than 90 degrees, is still a corner and must comply with !R401.

(Asked by **9609** answered Feb 28th 26)

Q153 Determining if Fuel is thrown "over" the Alliance Wall for G425

Q: For the purpose of evaluating whether FUEL has been entered onto the field by being "thrown over the ALLIANCE WALL from the OUTPOST AREA" per G425, does being "thrown over" only imply a minimum height the FUEL must reach before entering the field (e.g. 78.5"), or is it required that the vertical projection of the FUEL intersect with the vertical projection of the field elements that define the ALLIANCE WALL at some point during the time of flight?

A: FUEL must physically pass above the ALLIANCE WALL, not just above the height of the top of the ALLIANCE WALL.

(Asked by **6352** answered Feb 28th 26)

Q154 Theremin as a robot controller

Q: As per the blue box in R905, would a theremin be considered a motion sensing device or wireless communication?

A: A theremin or similar capacitive sensors would be considered a motion sensing device as described in the Blue Box and would not violate !R905.

(Asked by **1388** answered Feb 28th 26)

Q155 Bumper flex outside of the bumper zone

Q: Given the note about G413 and expansion due to the weight of fuel, does G413 apply to bumper backing or attachment material? This material may extend above the bumper zone, and be constructed of lightweight materials such that the weight of fuel pressing against it causes it to flex outwards. Is there an associated game penalty if that material then flexes past the limits provided by R404?

A: Please see [Team Update 14]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate01.pdf). The ROBOT rules referenced by !G413 do not include the BUMPERS so !G413 does not apply to BUMPERS. ROBOTS which exceed the limit specified in !R404 will be referred to the LRI and may require modification before participating in future MATCHES.

(Asked by **2177** answered Mar 2nd 26)

Q156 R409 vs G413 - Flexing of Hopper due to Fuel

Q: With TU13 defining deflection of a hopper as "used for strategic benefit" (G413 blue box G.), would this mean that a part acting as a hopper that is classified as bumper backing would be required to have no flex when loaded with fuel due to this being "used for strategic benefit" and therefore a violation of R409? Or is there a difference between "consequential" (R409) and "used for strategic benefit" (G413)?

A: Please see [Team Update 14]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate14.pdf). Flex of BUMPER backing caused by FUEL would not be considered a violation of !R409, though flex beyond the 1.5in limit (with tolerance included) specified in !R404 is not permitted.

(Asked by **324** answered Mar 2nd 26)

Q158 Options for Powering a VH-109 Radio

Q: May a VH-109 radio be powered using the 12V/2A port on a VRM? This would be for an electrical system using a CTRE PDP 1.0. Like some others have commented, we are out of available ports on our PDP and looking to see if this is a permitted way to power the VH-109 radio. It's not crystal clear to me via rules R616-617.

A: No, per !R616-A the radio must be powered using PoE injection connected "directly to a PD" or via the 12V terminals "directly...from a PD." The VH-109 may be connected to the VRM/PCM terminals of the PDP 1.0 but not via a VRM.

(Asked by **3408** answered Mar 2nd 26)

Q159 Are Cameras a Legal Bumper Backing Material

Q: R402-B permits the inclusion of "additional elements [...] for any other purpose" as part of the Backing material for the bumper. Bumper backing material is permitted outside of the frame perimeter. Is it permissible to mount a camera system on the bumpers, such that it is integrated with other backing materials, and positioning the camera outside of the frame perimeter but within the 1.25" limitation as stipulated by R404?

A: No. Per !R409, BUMPERS may not contain any electrical elements.

(Asked by **1712** answered Feb 28th 26)

Q161 Clarification of HOSTED impact definition

Q: Team A and Team B realise that they can team up to take advantage of one another's mutual strengths and share the execution of an event 50/50. Can either team claim HOSTED?

A: No. The [*FIRST* Impact Award Definition](<https://www.firstinspires.org/hubfs/web/program/frc/awards/fia-definitions.pdf>) of "Hosted" requires a team to meet all of the requirements.

(Asked by **3132** answered Mar 3rd 26)

Q162 Bumper number stroke thickness

Q: In update 07, the bumper section of the inspection sheet has "... font 3.5in (8.9cm) tall x 0.25in (0.64cm) stroke ...". Section R412 has "... numerals at least 3.75in (9.53cm) high, at least 0.5in (1.27cm) in stroke width". Which version should be followed?

A: As noted in Section 8.4 *BUMPER Rules*: "All dimensions specified in this section are nominal and will be measured during inspection with a tolerance of 0.25in (0.63cm) unless otherwise specified. This means that maximums specified have a tolerance of +0.25in (0.63cm) and minimums specified have a tolerance of -0.25in (0.63cm)." And as noted on the Inspection Checklist: "Rules in this section have the 0.25in (0.63cm) tolerance applied. ROBOTS must meet the dimensions in this checklist for compliance."

(Asked by **1922** answered Mar 2nd 26)

Q163 Bumper Gaps

Q: Per R401, can we have a single gap in the bumper >1.25 without a corresponding gap in the robot frame?

A: Please see the answer to !Q78. If that doesn't answer your question, please rephrase and resubmit.

(Asked by **2186** answered Mar 2nd 26)

Q164 Is throwing FUEL over the arm of the CHUTE DOOR legal per G425.C?

Q: The manual defines the CHUTE DOOR as part of the OUTPOST, which is part of the ALLIANCE WALL. Per Q153, FUEL must physically pass above the ALLIANCE WALL to satisfy G425.C. Does FUEL thrown over the arm of the CHUTE DOOR satisfy this requirement?

A: No. Per [Team Update 15] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate15.pdf), the FUEL must be thrown over the top of the ALLIANCE WALL. FUEL thrown over the arm of the CHUTE DOOR is not thrown over the top of the ALLIANCE WALL.

(Asked by **4201** answered Mar 3rd 26)

Q165 Usage of 16h5 Apriltags on robot

Q: Our team was wondering if 16h5 Apriltags count as "closely mimicking field Apriltags" (G302, R203). To a human, 16h5 Apriltags look similar at first (but can be told apart fairly easily), but to a computer vision program are completely different from the 36h11 Apriltags utilized on the field. One interpretation of the rule specifies "to a reasonably astute observer," (E102) but it is not clear whether a reasonably astute would be able to tell the difference between a 36h11 and a 16h5 Apriltag.

A: In order to be considered mimicry an image would need to be reasonably likely to be falsely detected as a FIELD target. AprilTags of other families, or other tag systems, are unlikely to be falsely detected as a target. An AprilTag identical to a FIELD target, but at a different size would be considered mimicry.

(Asked by **3070** answered Mar 3rd 26)

Q166 Clarification of Extension Rule for Acute Angle Robot Perimeter

Q: R106 Horizontal Extension does not provide a clear example in the blue box regarding a robot with an acute angle on the robot perimeter. Consider a trapezoidal shaped robot, with extensions on the side that has an acute angle at each end. Is an extension allowed along the projection of each side of the perimeter, such that the overall width between the ends of the extensions can be further apart from each other, than the side that they are extending from?

A: No, the "projection of that side of the ROBOT PERIMETER." is a rectangle projected perpendicularly outward from the ROBOT PERIMETER side regardless of the angle of ROBOT PERIMETER corners.

(Asked by **1726** answered Mar 5th 26)

Q168 Removing fuel from robot after match

Q: Our robot uses a conveyor system which means fuel may be inaccessible for direct removal at the end of the match. Can students bring a wrench or drill onto the field at the end of the match to eject fuel from the robot before removing the robot from the field?

A: There is no specific rule disallowing the use of a tool to assist with removing fuel post-MATCH. Teams should be aware that !G501 states that DRIVE TEAM members may not cause significant delays post-MATCH. Teams should work with the FIELD STAFF at their event to figure out how to expedite the process. Depending on the event, the team may be asked to remove the ROBOT from the FIELD first and then remove FUEL before they leave the ARENA area.

(Asked by **1212** answered Mar 10th 26)

Q169 Angling bumpers upward in the middle

Q: Is it legal to angle the bumpers upward in the middle, for going over the bump. The bumpers would still be 2.5" off the ground and keep 5" off thickness but we want to cut a triangle out of the backing and foam from the bottom middle of the sides of our bumpers and move it to the top.

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. There are no rules that require the BUMPER be completely horizontal, a BUMPER may contain sections that change in height off the carpet along their length as long as !R405 is satisfied at all points. !R402 requires that BUMPERS (with the exception of padding and cover extending into corners and cover wrapping around the end of segments) must consist of vertical cross section that meet the requirements listed parts A (Padding), B (Backing), and C (Cover). If the BUMPER no longer meets the requirements of !R402 at any vertical cross section across the length of the BUMPER, this

would not be considered a legal bumper.

(Asked by **5193** answered Mar 10th 26)

Q170 Preventing traversal on both sides of FIELD (G419)

Q: Do both ROBOTS need to be occupying the same area of the FIELD for G419 to apply? For example, if one ROBOT prevents a ROBOT of the opposing ALLIANCE from traversing between the ALLIANCE ZONE and NEUTRAL ZONE by blocking both the BUMP and the TRENCH on the OUTPOST side of the FIELD, and another ROBOT does the same for the BUMP and the TRENCH on the DEPOT side of FIELD, does that violate G419 if the blocked ROBOT repeatedly attempts traversing and is blocked in all attempts by the pair of ROBOTS?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. !G419 requires that 2 or more ROBOTS, as perceived by a REFEREE to not isolate any major element of MATCH play. The two ROBOTS are not required to be in the same area of the FIELD to be in violation of this rule.

(Asked by **9496** answered Mar 10th 26)

Q171 Neutral Zone Fuel Arrangement Tolerance

Q: What should be the expected tolerance of the NEUTRAL ZONE FUEL arrangement specified in Section 6.3.4.1? It has been observed that the arrangement has been different between events, perhaps due to differences in fuel pen placement or other FIELD reset procedure. This sometimes results in an arrangement that is wider and shallower than appears in official REBUILT illustrations. What tolerance should be expected, and can a DRIVE TEAM ask for a FUEL arrangement to be corrected to meet expectations?

A: The size and placement guides for the bounding box is measured and marked as described in *Section 6.3.4.1*. There is no specific tolerance on the placement of the bounding box on the measured guides and variations in placement will result in variances in the overall size of the arrangement. As described, the expected result is a roughly equal split of FUEL on both sides of the CENTER LINE with the dispersal between the scoring table side and non-scoring table side of the field varying from MATCH to MATCH. As noted in the blue box, The placement of FUEL in the NEUTRAL ZONE is not intended to be in a perfect grid. Teams should expect variances in the placement of FUEL in the NEUTRAL ZONE at the start of the MATCH.

(Asked by **9496** answered Mar 12th 26)

Q172 Can bumpers exceed 4.0in from frame perimeter when measured diagonally from corner

Q: R403 states that bumpers must not extend more than 4.0in from the robot perimeter. Does this apply diagonally at the corners of the robot perimeter or is this only measured perpendicular to robot face

A: The intent is that this measurement be made perpendicular to each face of the ROBOT PERIMETER such that legal BUMPERS 4in. from the ROBOT PERIMETER can meet in a square 90 degree corner and remain legal.

(Asked by **1771** answered Mar 10th 26)

Q173 What level of missing information is considered a field fault?

Q: Is the loss of venue video feed and accompanied live score information considered an ARENA FAULT? Is the loss of the driver station timer and score display during the match considered an ARENA FAULT? Is the loss of both venue video feed and driver station displays considered an ARENA FAULT? If match timer and scoring information is not available during the match, will a match be replayed?

A: Failure of either the audience display or team signs and timers would be considered an ARENA FAULT. An ARENA FAULT alone is not sufficient to cause a replay, it also requires that the Head Referee determines that the ARENA FAULT "affects the outcome of the MATCH" and any team on the affected ALLIANCE desires a replay. Typically, failure of the audience display would not be considered to affect the outcome of the match (as illustrated by example C in Section 10.2) as there is no guarantee that the audience display is equally accessible to both alliances and information from that display is replicated on the back of each team's team sign. Failure of the team sign is more likely to be determined to affect the outcome, but it depends on the entirety of circumstances of the MATCH and the failure.

(Asked by **1771** answered Mar 11th 26)

Q175 RSL requirements to participate in match

Q: Is a working Robot Signal Light (RSL) required for a team to participate in a match? Is the RSL a required safety device for a robot for a robot to be match ready and not violate G303? After inspection if a team removes or breaks an RSL it does not currently seem that it violates any rules unless G303 applies as a safety risk. R709 states that the RSL is a diagnostic device and never mentions it being for safety.

A: !G303-C covers not just modifications intentionally made by the team but also any modifications that occur as the result of MATCH play that render the ROBOT no longer in compliance with the ROBOT Rules.

(Asked by **1629** answered Mar 10th 26)

Q176 Human Player in the Outpost area

Q: Is the Human Player required to stay in the OUTPOST area for the duration of the match or would they be able to travel between their driver station and the OUTPOST after auto? Would that violate G421?

A: Per !G401, "In AUTO, each DRIVE TEAM member must remain in their staged areas". After AUTO, HUMAN PLAYERS may move anywhere within the ALLIANCE AREA.

(Asked by **2521** answered Mar 10th 26)

Q177 G415 Requirements

Q: If a ROBOT is stationary, attempting to launch FUEL into the HUB, and has an intake extended beyond its PERIMETER, can that ROBOT meet the requirements of G415? The text in the blue box appears to state that G415 only applies when the ROBOT is moving, and more specifically moving towards an opponent ROBOT, and therefore G415 should not be applicable when contact is made if the ROBOT with the extension is stationary.

A: This answer has been updated 3/31 after Team Update 19. Please see [Team Update 19] (https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate19.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **9496** answered Mar 11th 26)

Q178 Clarification of initiation of contact between robots

Q: Rules G415 and G416 reference a robot “initiating” contact with an opponent robot. How is initiation assessed when robots are already translating? If Robot A is translating in a constant direction and does not change its heading or velocity toward Robot B, and Robot B enters Robot A’s path of travel such that contact occurs, which robot is considered to have initiated the contact? Does the definition of initiating contact depend on which robot directed its motion toward the other robot?

A: Please see [Team Update 16]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate16.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by 1771 answered Mar 11th 26)

Q179 Entrapment of a ROBOT in the TRENCH

Q: If one alliance's robot is in the trench and is blocked on each side by an opposing alliances robot, is this a violation of G419?

A: No. !G419 does not apply because although one ROBOT is blocked other ROBOTS on the opposing alliance have access to the rest of the field and other TRENCH.

(Asked by 5687 answered Mar 17th 26)

Q180 Follow up to Q169

Q: Does foam that has been cut from one section and reattached to another without any open spacing satisfy the solid foam padding requirement of R402?

A: Yes, "solid foam" may be made up of multiple individual layers or pieces of solid foam adhered together provided no significant voids are created.

(Asked by 5193 answered Mar 10th 26)

Q181 Apriltag Mimicry - Followup to Q165

Q: The AprilTag system officially supports custom layouts. One such layout could be identical to a FIELD AprilTag, except with one or a few square(s) flipped. This would not be part of 36h11, but some (not all) computer vision programs would identify it as a field tag. Are custom tag layouts legal? If they are not 6x6? Are arrangements of multiple smaller tags (e.g., 16h5) that may appear similar to a 36h11 tag legal? Is there a certain Hamming distance that no longer "mimicks" the FIELD AprilTags?

A: No, there is no exact criteria for assessing whether an AprilTag like element on a ROBOT will "interfere with the operation of other ROBOTS.". The totality of circumstances including the similarity to FIELD tags, size of the tag, and likelihood of other robots seeing it based on positioning on the ROBOT would be used to assess the likelihood of interreference with other ROBOTS.

(Asked by 3476 answered Mar 12th 26)

Q182 G415 & G416 Initiating Contact

Q: Rules G415 and G416 reference a robot “initiating contact” with an opponent robot. How will responsibility be determined when there is a collision between two opponent robots?

A: This answer has been updated (again) 4/1 after Team Update 19. We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, here are a few examples of how this would likely be called: 1. Red 1 is driving around their ALLIANCE ZONE with an extension out picking up FUEL and accidentally runs into Blue 1 and there is damage inside Blue 1's ROBOT PERIMETER. As this occurred inside the RED ALLIANCE ZONE, and the actions were not determined to be intentional or reckless, no violation is assigned. 2. Red 1 is driving around in their own ALLIANCE ZONE and REPEATEDLY rams a stationary Blue 1 with their extension causing damage inside Blue 1's ROBOT PERIMETER. Although this is in the red ALLIANCE ZONE, the REFEREE infers that the damage is intentional/reckless and a !G416 is called on red. 3. Both Red 1 and Blue 1 are driving around and picking up FUEL in the NEUTRAL ZONE and both ROBOTS have an extension out and drive into one another and no damage occurred. It appears to the REFEREE that both ROBOTS initiated contact but no damage, so no call. 4. Both Red 1 and Blue 1 are driving around and picking up FUEL in the NEUTRAL ZONE and both ROBOTS have an extension out and drive into one another and there is damage inside Red 1's ROBOT PERIMETER. It appears to the REFEREE that both ROBOTS initiated contact but damage occurred inside the ROBOT PERIMETER, so a !G415 is called on Blue. 5. Both Red 1 and Blue 1 are driving around and picking up FUEL in the NEUTRAL ZONE and both ROBOTS have an extension out and drive into one another and Blue 1's extension is damaged. As the damage is outside the ROBOT PERIMETER, there is no call. 6. Red 1 is driving around and picking up FUEL in their ALLIANCE ZONE with an extension out. Blue 1 is trying to play defense and moves into their path at the last second and Red 1's extension causes damage inside Blue 1's ROBOT PERIMETER. As this occurred inside the RED ALLIANCE ZONE and the REFEREE did not believe that Red 1 was acting recklessly, no violation is assigned. 7. Red 1 is travelling slowly and picking up FUEL in the NEUTRAL ZONE with an extension out. Blue 1 races towards Red 1 such that Red 1's extension contacts inside Blue 1's ROBOT PERIMETER causing damage. There is no call as Blue 1 initiated the contact because Blue 1 was travelling much faster.

(Asked by 99999 answered Mar 11th 26)

Q183 G415/G416 applicability to AUTO

Q: The G415 and G416 blue boxes say to "initiate contact" requires "reasonable possibility to have avoided the contact". Since ROBOTS run autonomously during AUTO, does a ROBOT have any reasonable possibility to avoid initiating contact during AUTO if it follows a pre-programmed path and contacts another ROBOT inside their ROBOT PERIMETER? Would this judgement call depend on both ROBOTS' positions, or only the direction of travel and relative speeds of both ROBOTS?

A: Please see [Team Update 17]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate17.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by 2724 answered Mar 18th 26)

Q184 G210 and G403 in AUTO

Q: If a ROBOT in AUTO is almost completely across the CENTER LINE, and then an opponent ROBOT pushes it such that the first ROBOT would violate G403, would this generally be considered an "act with limited or no opportunity for the team being acted on to avoid the penalty" per the G210 blue box and cause a G210 violation? Or would it generally be determined that the first team could have avoided the penalty by staying mostly on their side of the CENTER LINE, causing a G403 violation?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the

REFEREES at your event, with the final call made by the Head REFEREE. !G210 requires there to be a strategy not consistent with standard gameplay and it clearly be aimed at forcing the opponent ALLIANCE to violate a rule for there to be a violation. Actions in AUTO that are not clearly intentional as perceived by the REFEREES would not be called for !G210.

(Asked by 2724 answered Mar 12th 26)

Q185 Intentionally building non-robust robots.

Q: If a team intentionally builds their robot in a way that contact inside their frame perimeter is more likely to cause damage or cause them to become inoperable, does G210 or G211 apply? This could be done by putting thin tape, tissue paper around the perimeter, or by stretching CAN wires taut just inside the entire ROBOT PERIMETER, right where any contact would cause a wire to break G416 blue box says “teams should design their ROBOTS to be robust,” but this doesn’t seem to be enforced anywhere

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. There are no rules specifically dictating precisely how robust a ROBOT must be. Generally, REFEREES are not expected to judge the robustness of a ROBOT build. !G210 does not apply to ROBOTS and teams doing things that are consistent with standard gameplay. !G211 does not apply to teams that are operating in standard ways, and not putting the integrity of the game or community at risk. !G416 can apply to damage regardless of the quality of ROBOT build, because it is not reasonable or feasible for all volunteers to assess the quality of ROBOT construction. However, a team intentionally constructing their ROBOT in an attempt to draw or escalate the violations of !G415 and !G416 may invite additional scrutiny. A team adding ROBOT features strictly for the purpose of generating opponent rule violations is not consistent with standard gameplay and may invite considerations of !G210. A team intentionally making their ROBOT less robust in an attempt to generate additional foul violations is not in the spirit of *FIRST* and puts the integrity of the game at risk, and therefore may invite considerations of !G211.

(Asked by 3847 answered Mar 12th 26)

Q186 Damage to Robots and Damage to the Field and Damage to Scoring Elements

Q: G406, G411, and G416 all penalize robots that cause damage. But damage seems to be defined differently for all three. What qualifies as damage to a robot? Breaking a ziptie, has historically not been flagged the same when referencing the field. Such as the zip ties around the hub breaking regularly, but no fouls are called for robots launching balls too hard at the hub. Does cosmetic damage violate rules such as scratching paint off the tower (G411) or an opponent robot (G416)?

A: This answer has been updated 3/31 after Team Update 19. As FIELD elements are expected to be contacted by ROBOTS and SCORING ELEMENTS, there is some level of expected wear and tear. With regards to !G406 and !G411, Head REFEREES are encouraged to consult with other FIELD STAFF such as the FTA and Field Supervisor to help determine what is damage and what is expected wear and tear. Unlike FIELD Elements, ROBOT elements inside the ROBOT PERIMETER are expected to be somewhat immune to contact from opponent ROBOTS. Any visible damage to a ROBOT such as a ROBOT element falling off, bending, cracking, or breaking may be considered damage and subject to !G415 or !G416 if caused by prohibited contact.

(Asked by 3847 answered Mar 12th 26)

Q188 Simultaneous back up coupon usage

Q: In the event that to a Reasonably Astute Observer that two alliances both wanted to call for a backup after their first playoff match (or any situation where multiple teams approached near simultaneously), how is it determined which alliance gets the first back up?

A: If it cannot be determined which ALLIANCE is first to submit a BACKUP TEAM coupon, a coin flip or other random method should be used to determine which ALLIANCE submits first.

(Asked by **5414** answered Mar 12th 26)

Q189 G102 Violations

Q: G102 covers both stepping over the guardrail and entering when the field lights aren't green. Is it correct that a team who receives a G102 Verbal Warning for stepping over the guardrail would then receive a Yellow Card if they later entered the field when the lights were purple?

A: Yes, the VERBAL WARNING is for any violation of the rule. Any subsequent violations of !G102 during the event would result in a YELLOW CARD.

(Asked by **99999** answered Mar 12th 26)

Q190 G419 and OUTPOST

Q: Is the OUTPOST considered a major element of MATCH play for G419 violations?

A: Yes, however for !G419 to be called it requires 2 or more ROBOTS that appear to a REFEREE to be working together to close off the OUTPOST

(Asked by **324** answered Mar 16th 26)

Q193 Extension at the end of the game

Q: If a robot climbs during the endgame and extends outside the frame perimeter in one direction. After the round ends, can a robot extend a second direction once power is off?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, if it appears to a REFEREE that the violation occurs in order to exploit the rules, !G211 would likely be called. If the REFEREE believes that this is not for strategic benefit, no violation.

(Asked by **2186** answered Mar 18th 26)

Q194 Match start requirements for ROBOT under adjustable trench

Q: Prior to the start of the match, a ROBOT is under a hinged TRENCH such that FIELD STAFF are able to insert the pin to secure the TRENCH in place, but the TRENCH is resting on the ROBOT, not resting on the bottom hard stops of the TRENCH. Is this ROBOT posing "a hazard to FIELD elements" per G303.A or "attached to, entangled with, or suspended from any FIELD element" per G303.G?

A: There are no rules directly prohibiting a ROBOT from starting underneath a hinged TRENCH, provided the TRENCH is able to get into its valid MATCH start configuration. The ROBOT could be considered attached to or entangled with the TRENCH per !G303-G if the ROBOT appears to be grasping multiple surfaces of the

TRENCH or caught or stuck within it. This is unlikely to be the case for a ROBOT that is capable of leaving the TRENCH quickly at the start of the MATCH. TEAMS looking to start the MATCH in this way should work with FIELD STAFF to determine the best way to quickly get the ROBOT and FIELD ready to start the MATCH. Additionally, FIELD STAFF may require the TEAM to play a role in applying the TRENCH arm load to the ROBOT. This may include putting the TRENCH arm down and requiring the team to push the ROBOT in place underneath the arm, or requiring the team to assist in pivoting the arm down on top of the ROBOT.

(Asked by **2724** answered Mar 18th 26)

Q195 REFEREE perception of deliberate intent

Q: A. The manual uses the phrases "deliberately", "intentionally", and "clearly aimed at" in different rules. Do these all mean the same thing? B. Does the word "deliberately" in G417 apply to the entire rule? If so, would G416 apply for entanglement not perceived to be deliberate? C. Does G210 apply when there is no opportunity for an opponent to avoid a penalty (e.g. G420 on DISABLED ROBOT pushed far into TOWER while other team scoring) but the team is not deliberately forcing a penalty?

A: A. No, while these phrases are similar, they must be read in the context of each rule. B. Yes, for !G417 deliberately applies to the entire rule and would not apply for entanglement not perceived by the REFEREE to be deliberate. C. We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. !G210 requires a strategy clearly aimed at forcing the opponent ALLIANCE to violate a rule, as perceived by the REFEREE, for a violation. As described in the !G210 Blue Box, the rule would not apply for strategies consistent with normal gameplay.

(Asked by **2724** answered Mar 17th 26)

Q196 G415/G416 "Relative Speeds"

Q: Regarding the "relative speeds" factor of assigning responsibility, is higher relative speed meant to increase or decrease the general responsibility of a robot? Would a robot moving faster be less responsible because they have less ability to avoid a potential contact, or are they more responsible due to their greater contribution to the likelihood of contact?

A: The relative speed of both ROBOTS is one of the factors used to make a judgement call on whether a ROBOT has initiated contact. The judgement call of ROBOT responsibility is made by the REFEREE by observing the full context of the situation.

(Asked by **324** answered Mar 17th 26)

Q197 Clarification of pinning on bump (G418)

Q: If a team traverses the bump in a way where they land on top of a robot on the other side of the bump that is fully in contact with the floor, and both robots are unable to move, is this considered a mutual pin and therefore does not start the pin count? If it is considered a pin, which robot is considered to be pinning the other?

A: This answer has been updated 3/31 after Team Update 19. We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, this would not be pinning. However, !G415 could be invoked if damage occurs (regardless of whether the action was deliberate as it occurs inside their ROBOT PERIMETER). If the REFEREE believes the action was deliberate, then !G417 could be called for entanglement.

(Asked by **6665** answered Mar 25th 26)

Q198 MATCH timing

Q: A. During breaks between Playoff MATCHES, does the break timer hitting 00:00 indicate that the expected MATCH start time has passed? B. Section 10.6.2 and the G301 blue box both mention "the end of the previous MATCH". What moment in time is this considered to be? Is it when the match timer is 0, when the HUB lights are purple, when the HUB lights are green, when scores are posted, or something else?

A: As noted in *Section 10.6.2 Playoff MATCH Bracket*, Breaks begin after the FIELD has been cleared from the previous MATCH. This means that the timer is started after all ROBOTS have been removed from the FIELD. Once the timer hits 00:00, the expected MATCH start time has passed.

(Asked by **2724** answered Mar 24th 26)

Q199 Non-standard bumpers within bumper gaps

Q: Is it permitted to include a section of otherwise standard bumper within a R401 compliant bumper gap at a non standard height (IE not compliant with R405) for the purpose of protecting the robot and field from each other within the gap while allowing fuel to go under it, or is a bumper gap "all or nothing"?

A: Per !R405, "all BUMPERS must have..." meaning that no perpendicular vertical cross section should exist which does not comply with the requirements of !R405.

(Asked by **3146** answered Mar 24th 26)

Q200 Simultaneous G102 Violations

Q: If multiple members of team 9999 violate G102 simultaneously by entering the field while the lights are purple, how is the penalty assessed? Are the violations stacked individually, where one member receives a verbal warning while others receive yellow cards, potentially resulting in a red card? Or is it treated as a single team violation where all members are given a verbal warning/single yellow card?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, a YELLOW or RED CARD is not given until the team has received a VERBAL WARNING for that specific rule violation. Violations of !G102 are stacked individually after the VERBAL WARNING has been issued. There are some egregious examples that lead to a YELLOW or RED CARD immediately as noted in !G211.

(Asked by **1714** answered Mar 25th 26)

Q201 De-energizing Pits

Q: Are there any general requirements for the pits to be "de-energized" over night? We are aware that power may not be supplied in the hours when the pit area is closed. However, is there any FIRST-imposed requirement that pits be disconnected from the (potential) power supply during those hours?

A: No, there is no global requirement that pits be unplugged overnight. However, per Section 14 "Rules around safety and security within this section are minimum requirements, and Program Delivery Partners are able to implement increased restrictions due to local or venue requirements (e.g. requiring badging for all attendees,

reserving seating for accessibility, etc.). Partners should communicate additional local requirements early enough to allow teams to plan."

(Asked by **9496** answered Mar 25th 26)

Q202 G211.J and R106

Q: Is the situation described by G211.J, "intentionally exceeding the expansion limits [to] climb the TOWER" meant to apply to a robot that has an extension out of a second side while using an extension to climb the tower, even if the second extension is unrelated to their ability to climb the tower? Or is this example meant to prevent a team from, for example, illegally extending to be tall enough to make climbing easier.

A: !G211-J's example of "intentionally exceeding the expansion limits for strategic benefit" when applied to climbing the TOWER could apply to scenarios including, but not limited to: - Intentionally exceeding the height limit in order to grab a normally inaccessible RUNG - Intentionally extending beyond the 12in limit specified in !R105 to reach the TOWER - Intentionally extending out two directions of the ROBOT at once in violation of !R106 in order to balance the ROBOT when climbing or execute a maneuver that would not be possible without the additional extension. This should not apply to unintentional over-expansion which would be assessed a violation of !G413 as normal.

(Asked by **324** answered Mar 26th 26)

Q203 May bumper numbers be angled slightly upwards as read across the bumper, which is level?

Q: May bumper numbers be angled slightly upwards as read across the bumper, which is level? All requirements for numbers are met.

A: There are no rules that require numbers required per !R412 to be positioned completely horizontal, provided "an observer walking around the perimeter of the ROBOT can unambiguously tell the team's number from most points of view, from as far as approximately 720.0in (18.29m)."

(Asked by **4585** answered Mar 30th 26)

Q204 Double Elimination points for teams that do not participate in a bye-MATCH at small event?

Q: For events with fewer than eight ALLIANCES, section 10.6.6 states "An ALLIANCE assigned a bye-MATCH is invited, though not required, to practice together in a null MATCH (i.e. it has no bearing on the Playoff tournament) during the designated time in the Playoff schedule." However, the equation in section 11.1.3 shows that teams do not earn double elimination points unless the team participates. Does this mean that not showing up to a bye-MATCH has bearing on the number of DE points earned?

A: No, the teams "participating" in a MATCH are determined by the LINEUP submitted for that MATCH.

(Asked by **1164** answered Apr 1st 26)

Q205 Is FUEL hitting E-Stop an ARENA FAULT

Q: We have seen several instances where FUEL hits an E-Stop button, disabling a ROBOT. Is this considered an ARENA FAULT? Does it matter if the cause is known? For example, if the cause is known to be FUEL propelled by an opposing ROBOT, alliance ROBOT, or alliance HUMAN PLAYER, does that impact the determination of an ARENA FAULT? (It is presumed that if an ARENA FAULT, it may justify a replay, as disabling a ROBOT can definitely impact a match)

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, FUEL triggering an E-Stop or A-Stop unintentionally, regardless of the origin of the FUEL, is considered an ARENA FAULT. If however, a REFEREE saw a HUMAN PLAYER spike a FUEL at an E-Stop, this would not be considered an ARENA FAULT. As a reminder, all 3 conditions must be met to call for a MATCH Replay: - In the Head REFEREEs judgement, an ARENA FAULT occurred - The ARENA FAULT affected the outcome of the MATCH - Any team on the affected ALLIANCE desires a replay

(Asked by **9496** answered Apr 1st 26)

Q206 R703-B RIO port with RPM

Q: Per rule R703-B, would a REV Radio Power Module which is not connected to power be considered a "passive PoE injector cable or adapter ... or an Ethernet cable with the appropriate wires removed" when used to connect a roboRIO to the RIO port of a VH-109 v1.0 radio?

A: Yes, a REV Radio Power Module may be considered a "passive PoE injector...adapter" per !R703-B if no power is applied to the power input terminals.

(Asked by **2724** answered Apr 1st 26)

Q207 G418 Pins on Bump

Q: Assume a ROBOT can traverse the BUMP normally without issue. The ROBOT goes over the bump and is stopped by a defender, but cannot reverse back over the BUMP because of robot characteristics (wheel traction) and cannot advance into the neutral/alliance zone due to the defending ROBOT. Would this constitute "preventing the movement of an opponent ROBOT", and be a PIN from the language in G418?

A: No, while in practice the ROBOT may be "prevented from moving" due to lack of traction on the BUMP, there is no practical way for the REFEREE to perceive that the ROBOT cannot move sideways or back up the BUMP, so from the REFEREEs perspective the ROBOT is not "preventing the movement of the opponent ROBOT".

(Asked by **1306** answered Apr 7th 26)

Q208 TU19 and the definition of REPEATEDLY

Q: TU19 introduces a blue box clarification for two items "a REFEREE is likely to infer are intentional and would be a violation if they caused damage" REPEATEDLY smashing into an opponent ROBOT intake. REPEATEDLY hitting another ROBOT with their extension. REPEATED has a definition in the Game Manual, "describes actions that happen more than once within a MATCH". Is hitting another robot twice in a match with an extension likely intentional and subject to G416 penalties?

A: !G416 requires that a REFEREE infers that it was intentional and/or reckless ***and*** that damage/functional impairment has occurred to an opponent ROBOT. Additionally, the blue box examples A & B are written to help show the action seems intentional with both the use of the defined term REPEATED and the action verbs

smashing and hitting. Note that Examples H & I showcase a team that is not at fault for a violation as they do not appear to be reckless or intentional.

(Asked by **11483** answered Apr 3rd 26)

Q209 TU G416 "REPEATEDLY"

Q: For the examples of G416 violations that include REPEATEDLY, is it required that there is damage for an instance to count towards REPEATED, or would instances that do not cause damage still count towards establishing "intent" and/or "recklessness"?

A: Damage does not have to occur each time for an instance to count towards REPEATED. ROBOTS that are doing actions REPEATEDLY may be viewed as intentional and/or reckless. !G416 is only called if damage/functional impairment occurs for actions that are deemed intentional and/or reckless.

(Asked by **324** answered Apr 3rd 26)

Q210 G415/G416 "Unable to drive" <20 Seconds Remaining

Q: Should a RED CARD be assigned if a G415/G416 violation occurs within the last 20 seconds of a match if the damaged robot is unable to drive for the remainder of the match, or would this never escalate from a YELLOW CARD?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, the penalty for unable to drive is based on not being able to drive for approximately 20 seconds due to the incident. As such, in most instances, the penalty for a violation of !G416 where the ROBOT is unable to drive in the last 20 seconds would be a MAJOR FOUL + YELLOW CARD. However, !G211 may be assessed if the Head REFEREE believes the incident is egregious.

(Asked by **324** answered Apr 7th 26)

Q212 Bumper Numbers under 3 Sides After Damage

Q: A team's bumpers meet the criteria of R412 during inspection and pre-match. However, during the course of the match, damage occurs to a team's numbers altering the team number they appear as on one side of the bot. e.g. "1234" appears as "12_4". The team now only has the complete team number on two sides of the robot. Does this damage constitute a violate of R409d and require disablement by field staff?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. If a REFEREE believes a ROBOT'S "team number or ALLIANCE color are indeterminate" due to damage, the ROBOT should be DISABLED per !G409-D.

(Asked by **111** answered Apr 3rd 26)

Q213 G419 -- "working together"

Q: G419 Requires "2 or more ROBOTS that appear to a REFEREE to be working together may not isolate or close off any major element of MATCH play." if Red Robots A and B both enter the Blue alliance zone and Red A loses coms while blocking one bump, can Red B who still has coms take advantage of the inoperable robot

and blockade both blue bumps? Could Robot B still "work together" with a currently non functional Robot A regardless of A's intent if the alliance is blockading.

A: A ROBOT that has died or is stuck on a BUMP is not considered to be working together with another team which is required to violate G419. If a dead ROBOT is pushed in front of a BUMP and then another ROBOT from the same ALLIANCE tries blocking the other BUMP, that could be considered as a violation of G419.

(Asked by **7415** answered Apr 3rd 26)

Q214 G416 REPEATED Only After Damage

Q: If the contact that causes damage is the first instance within a match, and all subsequent contacts do not cause damage, would this still be considered REPEATED and be a violation?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. !G416 does not require an action to be REPEATED before a violation is called. The use of REPEATED in the blue box exist for the purposes of defining actions that likely would be seen as "intentional" or "reckless" by a REFEREE. For !G416 to be called, the full context of the situation will be evaluated by the REFEREE who will make a judgement based decision on whether the action was intentional or reckless. In addition to being intentional or reckless, damage or functional impairment must occur for the !G416 violation to apply.

(Asked by **324** answered Apr 9th 26)

Q215 Clarification on R611

Q: Just seeking clarification on R611, is it correct that any resistance value > 120 Ohms between either the (+) or (-) post within the APP connector that is attached to the PD and any point on the ROBOT is classified as electrically isolated?

A: No. The rule text "the ROBOT frame must not be used to carry electrical current." indicates that any intentional current carrying by the ROBOT frame, regardless of resistance measurement is prohibited. The Blue Box indicates the practical value that will be considered isolated to account for unintentional conductive paths via elements such as brushed motor dust.

(Asked by **3928** answered Apr 7th 26)

Q216 Intentional Current Carrying by the ROBOT frame

Q: This is follow-up question to Q215: Is discharging static charge from the robot frame to the PD considered intentional current carrying by the ROBOT frame?

A: Yes, any efforts to intentionally discharge static into the ROBOT electrical system is a violation of !R611 as that would constitute "wiring and electrical devices" that would not be "electrically isolated from the ROBOT frame". The ROBOT frame may carry current from ESD regardless of any intent by the team and efforts to discharge this current in a specified manner other than the ROBOT electrical system, such as to the floor, are not considered a violation of !R611.

(Asked by **3928** answered Apr 9th 26)

Q217 Clarification of R707/R707.C

Q: R704 and R706 seem to imply "During a Match" but are not stated (but may follow from R702) and R706 read literally without an implied "During a Match" would prohibit using Ethernet or USB cables in a Pit, which clearly isn't the intent. Similarly, is R707 limited to "During a Match"? Aside from restrictions regarding wifi at an event (E301), are there any restrictions to wireless communications off the field?

A: Yes, !R707 is intended to apply only during a MATCH. Note however, that you may be required to prove at Inspection that any wireless communication is disabled during the MATCH and this may be verified by INSPECTORS at any time per the text in Section 9: "INSPECTORS may re-inspect ROBOTS at any time to ensure compliance with the rules."

(Asked by **9577** answered Apr 14th 26)

Q219 What defines where a PIN is initiated?

Q: G418 states that one criteria for a PIN count ending is either robot moving 72.0 inches from where the PIN initiated for more than 3 seconds. "Where the PIN initiated" could be interpreted several ways: the exact point on the FIELD where the ROBOTS touched, the outline of the BUMPERS (and extensions, if relevant) of the PINNED ROBOT, the outline of the BUMPERS of the PINNING ROBOT (and extensions, if relevant), or both outlines. There are meaningful differences between these. Which is correct?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, "where the PIN initiated" refers to the position of each ROBOT when the PIN initiated. "Moved 72.0in" would be assessed approximately based on the ROBOT center. Keep in mind this is being assessed by human REFEREES in real time and all measurements will be approximated. Teams should watch for REFEREE hand signals to assess whether a PIN count has been paused or ended.

(Asked by **2191** answered Apr 14th 26)

Q220 Does "preventing the movement" in the definition of G418 apply if no move is attempted?

Q: G418 defines PINING as "A ROBOT is PINNING if it is preventing the movement of an opponent ROBOT by contact, either direct or transitive (such as against a FIELD element." If Robot A makes contact with Robot B which is immobile, and if Robot B remains immobile for more than three seconds after Robot A stops making contact with Robot B, was Robot A preventing the movement of Robot B?

A: Given that the wheels of most ROBOTS are not visible, it is often not possible to tell if a ROBOT is attempting to move, REFEREES will make their best judgement as to whether a ROBOT is "preventing the movement of an opponent". !G418 FOULS are not retroactively removed based on whether a ROBOT moves after the PIN has ended.

(Asked by **2495** answered Apr 14th 26)

Q221 Should intent be considered when assessing if a robot is preventing movement?

Q: This is a follow up to question Q220, relating to G418. The answer to question Q220 states that REFEREES will make their best judgement as to whether a ROBOT is "preventing the movement of an opponent". While G418 does not mention intent as a consideration, some teams have reported being told in their driver's meeting that pinning needs to be intentional. Is intent indeed a factor that should be considered when Referees assess if a

Robot is preventing movement?

A: No, intent is not a consideration for !G418

(Asked by **2495** answered Apr 20th 26)

Q222 How to interpret "A team's desired direction of travel is not a consideration"?

Q: This is yet another follow-up question to Q220. G418 states that "A team's desired direction of travel is not a consideration when determining if a ROBOT is PINNED." The meaning of this statement is debated. Some interpret it as meaning that pinning may occur regardless of which direction of travel the pinned robot might have desired, while others interpret it as meaning that a robot is not pinned if it could escape, even if it requires it to travel in an undesirable direction. Which is it?

A: The intended meaning of "a team's direction of travel is not a consideration..." is that pinning may occur regardless of which direction of travel the PINNED ROBOT may have desired. However, both statements are true and if in the assessment of the REFEREE if a ROBOT has a pathway that it can escape a PINNING call will not be started since movement of that ROBOT has not been prevented.

(Asked by **2495** answered Apr 20th 26)

Q223 Which Field Type Is Used At Championships?

Q: Section 5.2 describes two field types - Welded and AndyMark. It states which field type will be used by each District and each Regional area, but it does not state which field type will be used at the Championships. Can you let us know which field type is used?

A: Please see [Team Update 22]

(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate22.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **3419** answered Apr 22nd 26)

Q224 Total weight of identical spare mechanisms and parts

Q: What is the total weight limit of spare identical mechanisms? What is the total weight limit of spare identical custom parts? For example, if my team brings a fully assembled spare turret that's identical to the one turret that's on our robot and together they weigh more than 150 lbs, does that violate I103 or does I103 not apply to identical spares?

A: There is not a weight limit for spare mechanisms. The weight limit for !I103 includes alternate configurations the team wants to utilize without getting reinspected. As a friendly reminder, !E118 prevents teams from bringing more than 1 ROBOT to the event.

(Asked by **9032** answered Apr 20th 26)

Q225 When is FMV determined?

Q: As it relates to R301, when is Fair Market Value determined? At the time of acquisition by the team, at the time of competition, or some other time? R301 often uses the present tense and refers to "throughout the build

and competition season", but does not expect price monitoring. If during the season the FMV for a component originally below \$600 later exceeds \$600, can it still be used by a team that purchased it prior? Can it be purchased by a team at a higher price due to the earlier FMV?

A: There is no particular specified time for the determination of FMV. As noted in the Blue Box "This price must be generally available to all FIRST Robotics Competition teams throughout the build and competition season (i.e. short-term sale prices or coupons do not reflect FMV)". As long as a prior price is not the result of a short-term sale, it would be valid evidence of FMV even if the price has since increased.

(Asked by **9496** answered Apr 22nd 26)

Q226 R621 Definition of "Motor Controller"

Q: Is an approved motor controller (permitted by R504) that is not connected to a motor, but used solely for its sensor input features, still considered a "Motor Controller" for the purpose of R621 (Table 8-3) or is would it be considered a "CUSTOM CIRCUIT"?

A: A motor controller not connected to an actuator may be considered a CUSTOM CIRCUIT and follow all wiring rules accordingly.

(Asked by **1058** answered Apr 22nd 26)

Q227 G416: Defending on the Bump

Q: Assume a ROBOT is playing DEFENSE on an opponent ROBOT. If the defender pushes the opponent ROBOT such that they are stuck on the BUMP and cannot drive without being knocked off, would this count as a "functional impairment of an opponent robot" per the language in G416, and what penalty would be issued? Additionally, would the same penalty be applied on the defender's BUMP, as opposed to the other ALLIANCE's?

A: We cannot comment absolutely on hypothetical scenarios. The ultimate decision would be determined by the REFEREES at your event, with the final call made by the Head REFEREE. Generally, a ROBOT is not considered functionally impaired if they are stuck on the BUMP.

(Asked by **1306** answered Apr 22nd 26)

Q228 G301 Verbal Warning/Major Foul Communication to Playoff Alliance

Q: How are the Verbal Warning and/or Major Foul supposed to be communicated to a playoff alliance by the Head Referee? Should an alliance expect to know before the match starts that they will be given the major foul for a G301 violation at the start of the match? Who should the Head Referee be speaking to when giving the verbal warning or issuing the major foul? How and when should an alliance be able to ask about which verbal warnings were given to them in the past?

A: Per the !G301 violation text "VERBAL WARNING/MAJOR FOUL having been issued to all 3 teams", the HEAD REFEREE should be communicating a VERBAL WARNING or MAJOR FOUL for !G301 directly with each of the three teams on the ALLIANCE indicated on the LINEUP for the MATCH in question. There is no specific requirement as to who on each team the HEAD REFEREE must communicate with. Per Section 6.7.1 "If a DRIVE TEAM has a question about a MATCH, the FIELD, etc., they may send up to 2 DRIVE TEAM members to their corresponding Question Box", any member of the ALLIANCE may do this at any time, however as noted in the following section: "Depending on timing, the Head REFEREE or FTA may postpone

any requested discussion until the end of the subsequent MATCH."

(Asked by **3847** answered Apr 22nd 26)

Q229 10.6.5 Pit Crews and Duties

Q: Reask from 2024 Q&A: Field staff members are still confused about what the pit crew can do and where they can be located. Prior to the start of a match, are these additional pit crew members allowed to assist with transporting the robot to the field, repairing the robot on the field, transporting and configuring the driver station, and/or ensuring the robot is connected correctly to the field? During the match, should these pit crew members be treated like additional technicians?

A: Per *Section 10.6.5*, pit crew members are to "help with needed ROBOT repairs/maintenance." Pit crew members may accompany the DRIVE TEAM to the queue and are expected to help DRIVE TEAM members to service the ROBOT as needed (safely). Per *Section 6.3 Setup*, staging of the ROBOT and OPERATOR CONSOLE should still be done by the DRIVE TEAM. There is no specific designation for where an event may allow pit crew to observe a match. Events can choose where the pit crew members are able to be during MATCHES but typically they are expected to stay with the TECHNICIAN or ROBOT cart. If an event designates a specific restricted area for this purpose within the ARENA then !G207 would apply to individuals within that area.

(Asked by **3847** answered Apr 22nd 26)

Q230 G413 and nets

Q: For teams that are using nets to hold in balls, if these nets repeatedly and in multiple matches expand more than 1.5" past the frame while they have another extension or past the 12 in extension limit, should these robots be likely to need corrective action to play future matches?

A: We cannot rule absolutely on hypothetical ROBOT designs, and the final decision as to legality of a particular ROBOT lies with the Lead ROBOT Inspector (LRI) at each event. Generally, a ROBOT that is in violation of !G413 due to ROBOT design, they will require corrective action (such as removing the offending MECHANISM, and/or reinspection) before the ROBOT will be allowed to compete in subsequent MATCHES.

(Asked by **3847** answered Apr 22nd 26)

Q231 How can we expect a referee to determine "in order to interfere" in G211-H?

Q: The G211-H "in order to interfere" criteria seems impossible to discern and enforce. This is not addressed in Q107. It would seem that any other plausible game-related purpose could justify a robot crossing the line at any time and contact would at most be a MAJOR FOUL. Can you clarify how it might be determined that a robot acted in order to interfere?

A: Please see [Team Update 22]
(https://firstfrc.blob.core.windows.net/frc2026/Manual/TeamUpdates/REBUILT_TeamUpdate22.pdf). If that doesn't answer your question, please rephrase and resubmit.

(Asked by **4967** answered Apr 22nd 26)