INTO THE DEEPER

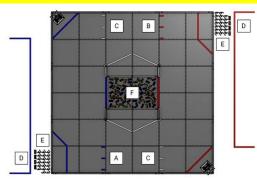


2024-25 OFF-SEASON EVENT GAME DESCRIPTION

Brought to you by your friends at:



**** PLAYING FIELD - PREMATCH SETUP ****



100 SAMPLES

(25 Red, 25 Blue, 50 Neutral)

& **40** CLIPS

are staged as follows:

A & C: BLUE ALLIANCE PRE-SET SAMPLES

- ightarrow 3 Blue Samples are placed on each of the 3 Blue Spike Marks
- ightarrow 3 Neutral Samples are placed on each of the 3 White Spike Marks
- → Upon arriving at the Field, Teams may adjust and/or switch locations of the Blue and Neutral Samples on their 6 Spike Marks as desired (ex. Blue Samples may move to White Lines).

B & C: RED ALLIANCE PRE-SET SAMPLES

- ightarrow **3** Red Samples are placed on each of the 3 Red Spike Marks
- \rightarrow 3 Neutral Samples are placed on each of the 3 White Spike Marks
- → Upon arriving at the Field, Teams may adjust and/or switch locations of the Red and Neutral Samples on their 6 Spike Marks as desired (ex. Red Samples may move to White Lines).
- D & E: HUMAN PLAYER STARTING SUPPLY & PRE-LOAD SUPPLY
 - \rightarrow 3 Alliance-specific Samples \rightarrow 3 Neutral Samples \rightarrow 20 Clips
 - \rightarrow Samples and Clips not pre-loaded remain outside of the Field.

F: SUBMERSIBLE SAMPLES (RANDOMLY DISPERSED)

(*note: random means random; the samples will be dumped inside and scattered to avoid large piles, but no additional shifting will be done.)

- → **19** Red Samples
- → 19 Blue Samples
- → 38 Neutral Samples
- → 3* non-scoring objects/conditions selected at Random prior to each Match
 *there are 9 different objects & 1 condition that may be used; they will be revealed at the competition; Each Team will have an opportunity to see and inspect each object.

*(not pictured): ALGAE BONUS SUPPLY

 \rightarrow Tennis balls used for the Algae Bonus are kept by Field Personnel separate from the Field.

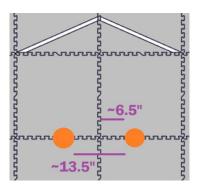
 \rightarrow These will be supplied by field personnel at the conclusion of AUTO, as applicable.

**** PLAYING FIELD CHANGES *****

For **INTO THE DEEPER**, there are a few changes to the Playing Field.

~~~ DUNES ~~~

Inside of the Submersible on the floor are two **DUNES**, fixed in position along the horizontal center seam of the Playing Field, so that there is one on either Alliance's side of the Submersible. An image of one along with their approximate positions on the Field are pictured below:

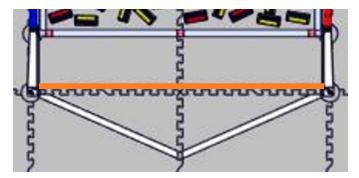




- \rightarrow Each **DUNE** has an approximate 7.5" diameter.
- \rightarrow Each **DUNE** is approximately 2.25" in height, at its highest point in the middle.
- \rightarrow The **DUNES** are made of polyethylene, so they are relatively flexible.
- \rightarrow All measurements are approximate and subject to shifting and deformation.

---- ASCENT ZONE BOUNDARY

The outer boundary of the Ascent Zones has been moved and is no longer angled to a point.



- \rightarrow The previous Ascent Zone line is shown here in white.
- \rightarrow The NEW Ascent Zone line is shown in orange (the real one in person will still be white).
- \rightarrow It will be lined up along the tile seam, approximately 6.5" from the edge of the Submersible.

***** SCORING *****

AUTONOMOUS PERIOD:

AUTO Robot Scoring Achievements are scored <u>at the moment the period ends</u>, when the :30 match timer ends. Scoring Elements not at rest will be scored when they come to rest.

Elements scored in AUTO are eligible to count again at the end of the Match if they are still in that position when the Match ends.

- → PARKING: Each Robot parked In (or partially In) one of the following corresponding Alliance's Zones will earn 3 points: OBSERVATION ZONE, NET ZONE, or ASCENT ZONE.
- \rightarrow **SAMPLES:** Each Sample scored into the following areas will earn the following point values;

NET ZONE = 2 points	LOW BASKET = 6 points	HIGH BASKET = 10 points
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→ **SPECIMENS:** Each Specimen (Alliance or Neutral) scored in the following areas will earn the following point values:

ALLIANCE on LOW CHAMBER = 12 points	ALLIANCE on HIGH CHAMBER = 20 points
NEUTRAL on LOW CHAMBER = 6 points	NEUTRAL on HIGH CHAMBER = 10 points

→ ASCENT LEVEL 1: Each Robot that achieves a Level 1 Ascent will earn 5 points. (note: Robots that achieve a Level 1 Ascent are not eligible to also earn Parking points.)

TELEOP PERIOD:

TELEOP Robot Scoring Achievements are scored <u>at the moment the Match ends</u>, when the clock reaches 0:00. Scoring Elements in motion will be scored when they come to rest.

- → **PARKING:** Each Robot parked In (or at least partially In) one of the following corresponding Alliance's Zones will earn ³ points: OBSERVATION ZONE, NET ZONE, or ASCENT ZONE.
- \rightarrow **SAMPLES:** Each Sample scored in the following areas will earn the following point values:

NET ZONE = 2 points	LOW BASKET = 4 points	HIGH BASKET = 8 points
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→ **SPECIMENS:** Each Specimen (Alliance or Neutral) scored in the following areas will earn the following point values:

ALLIANCE on LOW CHAMBER = 12 points	ALLIANCE on HIGH CHAMBER = 20 points	
NEUTRAL on LOW CHAMBER = 6 points	NEUTRAL on HIGH CHAMBER = 10 points	

→ **ASCENT:** Each Robot that achieves the following Ascent Levels on their corresponding Alliance Rungs at the end of the Match will earn the following points:

LEVEL 1 = Robot in contact with the Low Rung	5 points
LEVEL 2 = Robot off the ground, Supported by Low Rung only	15 points
LEVEL 3 = Robot off the ground, Supported by High Rung	30 points
LEVEL 4 = (previously known as Level 3, same requirements)	40 points

BONUS SCORING ACHIEVEMENTS:

In addition to the Scoring Achievement listed above, the following Scoring Bonuses are available;

- → "CATCH OF THE DAY": The Alliance with the higher number of Samples scored in their Net Zone at the end of the Match will receive an additional 20 points. (if equal, then no bonus)
- → "REEF BONUS": Alliances will earn an additional bonus for forming an "artificial reef." There are two Artificial Reefs available: on the Submersible and in the Basket corner. For each Reef Bonus successfully completed, the Alliance will earn 20 points.
 - → **SUBMERSIBLE:** To earn the Submersible Reef Bonus, the Alliance must have at least five Specimens scored on both the High and Low Chambers.
 - → **BASKET CORNER:** To earn the Basket Reef Bonus, the Alliance must have at least four Specimens scored in the High Basket, Low Basket, and the Net Zone.
 - → The Reef Bonuses are counted at the end of the Match based on the collective actions of the Alliance Teams throughout the AUTO and TELEOP periods.
- → "ALGAE BONUS": As a tribute to our friends in FRC, for each Specimen an Alliance scores in AUTO, they will receive <u>up to three</u> ALGAE (a tennis ball). During the last 30 seconds of the Match, the Alliance's Human Player may attempt to launch their ALGAE into one of their Alliance's Baskets.

*The ALGAE can only be launched by a Human Player that is standing <u>completely inside</u> of the marked section of the Alliance Box. This Section only limits where this Achievement can be performed; it does not affect the Human Player's ability to perform other game activities.

*Launched ALGAE must be released by the Human Player prior to the end of the buzzer to count.

*Launched ALGAE that miss the Baskets and roll across the field into the Opposing Alliance's Observation Zone may be picked up by the Opposing Human Player and used for their own ALGAE scoring attempt(s). (note: although each alliance may only earn up to three ALGAE, they may launch as many as they are able to obtain during the match)

ALGAE scored into the Low Basket earn 50 points for the corresponding Alliance.

ALGAE scored into the High Basket earn **60** points for the corresponding Alliance.

*note: Launching the ALGAE is an exception to the 'No Yeeting' rule.

- → TIE BREAKER: For INTO THE DEEPER, there are no ties in Qualification Matches. If, at the conclusion of the Match, the score for both Alliances is a tie, then the two Human Players will be summoned to the front of the field by the Head Referee to compete in Rock-Paper-Scissors. The winning Human Player (Rock>Scissors, Paper>Rock, Scissors>Paper) will earn 2 additional points for their Alliance to break the tie and win the Match.
 - → Each attempt will follow a "3-2-1-GO" counted off by the Head Referee. On "GO" each Human Player will present their hand gesture for Paper, Rock, or Scissors.
 - \rightarrow If the gesture is not clearly recognized by the Head Referee, the opposing Alliance will be declared the winner.
 - \rightarrow In the event of a draw, there will be another attempt following the same procedure.
 - → In the event of three consecutive draws, a coin will be flipped. The younger of the two Human Players will select Heads or Tails prior to the coin flip. The Head Referee will flip the coin, which will be allowed to hit the ground and come to rest. The Alliance assigned to the side of the coin that is face up will be declared the winner of the Tie Breaker.

SCORING BREAKDOWN DIAGRAM

SCORING		AUTO	TELEOP
ACHIEVEMENT		Points	Points
PARK	Observation Zone, Net Zone, or Ascent Zone	3	3
SAMPLE	Net Zone	2	2
	Low Basket	6	4
JAINIFLE	High Basket	10	8
	*Removed from Field by Opp. Robot	6	4
	Low Chamber (Alliance Specimen)	12	12
SPECIMEN	Low Chamber (Neutral Specimen)	6	6
SPECIMIEN	High Chamber (Alliance Specimen)	20	20
	High Chamber (Neutral Specimen)	10	10
	Level 1	5	5
ASCENT	Level 2		15
	Level 3		30
	Level 4		40
BONUS	"Catch of the Day"		20
	"Basket Reef Bonus"		20
	"Submersible Reef Bonus"		20
	"Algae Bonus" \rightarrow Low Basket		50
	"Algae Bonus" \rightarrow High Basket		60
	Tie Breaker (*if necessary)		2

**** GAME RULE/FOUL CHANGES *****

For **INTO THE DEEPER**, the following Game Rule changes will be in effect. Any rules not mentioned in this section should be considered to be the same as from INTO THE DEEP.

G405 MOVEMENT BETWEEN AUTO AND TELEOP:

Powered Robot movement between AUTO and TELEOP will be handled as follows:

- → First instance = **MINOR FOUL**
- → Second instance = 2 MINOR FOULS
- → Third instance = **3 MINOR FOULS** (and so on in that manner)
- → DRIVE TRAIN MOVEMENT MORE THAN 1" will result in an additional MAJOR FOUL.
- \rightarrow NOTE: This rule does NOT escalate to Yellow Cards UNLESS it is violated intentionally.

G408 REMOVING ELEMENTS FROM THE FIELD:

- → Elements removed from the Field during normal scoring activity (collecting, attempting to move into scoring position, etc.) is not a Foul.
- \rightarrow Elements are <u>NOT</u> returned to the Field because...
- → EACH ELEMENT REMOVED FROM THE FIELD WILL BE COUNTED AS SCORED IN THE LOW BASKET FOR THE OPPOSING ALLIANCE FOR THE PERIOD THAT IT OCCURRED. (note: if the incident occurs in AUTO, the "scored Sample" will count again at the end of the Match) (note: these do not count towards the Reef Bonus)

G410 CONTROL/POSSESSION LIMIT:

Robots are permitted to possess/control 1 Scoring Element (Sample or Specimen) at a time.

- → Violations result in an immediate **MINOR FOUL** per excess Element.
- \rightarrow There will be an additional **MINOR FOUL** for every 5 seconds the violation continues.
- → Each Element scored while in possession of excess Elements results in another MINOR FOUL (For example, if a Robot possesses three Samples and scores all three, then they receive two FOULS for controlling the extra two and then another two FOULS for scoring the excess Samples. The 3rd Sample is not penalized because Robots can control one.)
- \rightarrow A **YELLOW CARD** will be issued for Robots that control 10 or more Elements at a time.
- → Removal of one's own Alliance's Samples from the Submersible will NOT be penalized for Control/Possession purposes. (However, they will be penalized if they are propelled)
- \rightarrow The non-scoring elements in the Submersible do not count towards the **G410** limit.

G411 CONTROL/POSSESS OPPOSING ALLIANCE ELEMENTS:

Robots are not permitted to control/possess opposing Alliance Elements.

- \rightarrow Violations result in an immediate **MINOR FOUL** per opposing Alliance Element.
- \rightarrow There will be an additional **MINOR FOUL** for every 5 seconds the violation continues.
- → Incidental removal of opposing Alliance Elements from the Submersible during an attempt to collect/remove one's own Samples will <u>not</u> be penalized for G411. (However, if they are propelled outside, then they will be subject to Fouls for Launching)

G430 REACHING INSIDE OF ROBOT TO REMOVE ELEMENT:

In simple terms: Don't do it.

Violation will result in a **TRIPLE MAJOR FOUL** & **RED CARD**, and the Robot will be Disabled.

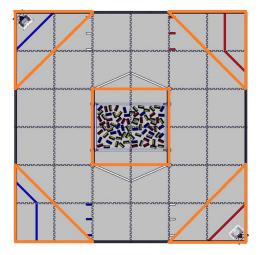
G404 AUTO INTERFERENCE:

This rule will remain mostly the same, with the following exceptions:

- → Scoring Elements moved to the opposing side of the field will be penalized ONLY if they come into contact with an opposing Alliance Robot.
- → The middle tile seam that divides the field applies through the Submersible ONLY for instances of Robot-to-Robot contact. Moving Elements within the Submersible will not be penalized UNLESS they <u>directly</u> interfere with an <u>active</u> intake attempt by an opposing Robot on the opposing side of the line dividing the field.

G418 ROBOT EXTENSION LIMIT:

- → Robot Extension will no longer be a part of Robot Inspection. Instead, it will be based on the Robot's size and location on the Playing Field during gameplay.
- → There are 5 Zones on the Field (pictured below in orange). The open areas between the Zones just open areas. They are NOT considered another Zone.



- → ROBOTS CANNOT BE IN MORE THAN ONE OF THESE ZONES AT ANY GIVEN TIME.
- → ROBOTS IN VIOLATION WILL RECEIVE AN IMMEDIATE **MINOR FOUL**.
- → IF A ROBOT SCORES POINTS WHILE BEING INSIDE MORE THAN ONE ZONE WILL RECEIVE A MAJOR FOUL FOR EACH ELEMENT SCORED.
- → EACH VIOLATION A TEAM GETS IS 1 STRIKE. IF A TEAM GETS 3 STRIKES DURING THE COMPETITION, THEY GET A YELLOW CARD. (note: Strikes carry over into Playoff Matches)

G424 BLOCKING ACCESS/CHAMBER INTERFERENCE:

PART 1: Robots may not block ALL access to any areas from the opposing Alliance.

- → Once a Referee indicates that a Robot is in violation, they will receive a 3-second grace period to immediately make a clear path for the opposing Robot.
- → Robots that fail to move out of a violating position will receive an immediate MINOR FOUL and an additional MINOR FOUL for every 5 seconds that the violation continues.
- \rightarrow The 3-second grace period is <u>NOT</u> permission to intentionally block for up to 3 seconds.
- → If a Referee determines that a Team is intentionally remaining in violation past the initial indication, then they will add an additional automatic MAJOR FOUL while continuing the grace period count (continued violation will quickly escalate to a YELLOW CARD).
- \rightarrow Robots that possess a Specimen have priority to their Chambers' side of the Submersible.

PART 2: INTERFERING WITH OPPOSING ROBOTS ATTEMPTING TO SCORE SPECIMENS IS LIMITED TO <u>SINGLE INSTANCE</u> OF BUMPING/PUSHING <u>PER</u> <u>SCORING ATTEMPT</u>.

- → Defensive contact/bumping from the side or behind against an opposing Alliance Robot that is attempting to score a possessed Specimen is permitted, but only a single instance per scoring attempt.
- → A "single scoring attempt" begins when a Robot has a possessed Specimen and is within 6" of their Chambers. The attempt is not over until that Specimen is scored OR the Robot loses possession of it and moves away to retrieve a different one.

G427 ASCENT ZONE INTERFERENCE:

Contact with an opposing Robot in their Ascent Zone in the last :30 will be handled as follows:

- → Contact outside of the Submersible = **MINOR FOUL**
- → Contact within the Submersible that is <u>INCIDENTAL</u> (no intent to make contact, both Robots are performing specific scoring-related actions) = **NO FOUL**
- → Contact outside of the Submersible when the opposing Robot has begun their Ascent (i.e. they are in contact with the Low Rung or have lifted off the floor) = MAJOR FOUL
- → Contact that directly interferes with the opposing Ascent (in the opinion of the Referees)
 = MAJOR FOUL & <u>BOTH</u> OPPOSING ROBOTS ARE AWARDED A LEVEL 4 ASCENT

G210 FORCED RULE VIOLATIONS:

- → Robots cannot be forced into Fouls by an opposing Alliance Robot. Rule violations that occur as a direct result of an opposing Alliance Robot action <u>will not be penalized</u>.
- → If, in the Referee's opinion, a Team is intentionally attempting to force an opposing Robot into a Foul, then THEY WILL RECEIVE THE FOUL THAT THEY WERE TRYING TO FORCE.

G415 ROBOT SIGNS FALLING OFF:

Robot Signs MUST remain attached to the Robot through the entire Match.

If a Robot loses its Sign during a Match, they will receive a warning for each of the first two occurrences. The third occurrence will result in a **MINOR FOUL**.

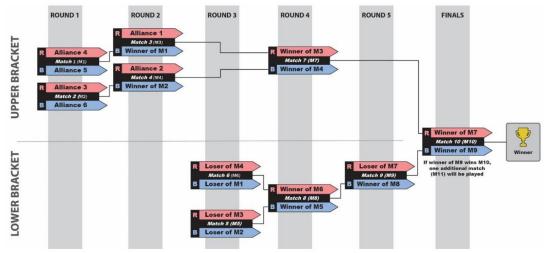
PA-I INADVERTENT & INCONSEQUENTIAL: (event-specific rule)

Rule violations that are determined by the Referees to be BOTH Inadvertent and Inconsequential will not be penalized, at the discretion of the Referees.

- → **INADVERTENT** means that the violation was not a planned or clearly foreseeable/avoidable result of the Robot's actions.
- → **INCONSEQUENTIAL** means that the violation does not result in any advantage to themselves, disadvantage to the opposing Alliance, or change in an element's accessibility.

***** PLAYOFFS *****

To determine the **INTO THE DEEPER** champion, we will use the 6-Alliance Bracket provided in the Competition Manual (shown below), following the Double Elimination Tournament structure.



At the conclusion of Qualification Matches, the Teams will be ranked based on Table 13-1 in the Competition Manual (shown below), with the top 6 Teams being named Alliance Captains.

Order Sort	Criteria
1 st	RANKING SCORE (RS)
2 nd	Average ALLIANCE AUTO Points
3 rd	Average TELEOP ALLIANCE ASCENT Points
4 th	Highest MATCH Score (including FOULS)
5 th	Random sort by the FIRST event management software

*IMPORTANT NOTE: Due to the limitations of the scoring system (specifically our inability to manipulate it), the Ranking determinations will be based on the scores entered through the scoring tablets. Teams should bear in mind that, although it may not seem entirely fair, we are unable to do much about this. Besides, this is all just for fun anyway.

*** FOR THE PLAYOFFS, WE WILL BE USING 3-TEAM ALLIANCES ***

Each Alliance Captain will have the opportunity to select two other Teams to join their Alliance. The rules for selecting/accepting/declining will follow the standard one used during the season. (only the first two Robots will appear on the screen, but trust me, all three are there)

The order of Alliance selection will be:

ROUND 1 (first pick): Alliance 1 – Alliance 2 – Alliance 3 – Alliance 4 – Alliance 5 – Alliance 6 ROUND 2 (second pick): Alliance 6 – Alliance 5 – Alliance 4 – Alliance 3 – Alliance 2 – Alliance 1

- → Each Robot of the Alliance is required to play at least one Match during the Playoffs. To ensure complicity, the Robot that does not play in the Alliance's first match is required to participate in their second match. After that, any combination of Robots may be used.
- \rightarrow Drive Teams for each Match may include members from any of the Alliance's teams.

**** "JUDGED AWARDS" ****

For **INTO THE DEEPER**, there are no Judging sessions or interviews.

However, there are still judged awards.

In addition to the Competition Awards: \rightarrow Winning Alliance \rightarrow Finalist Alliance \rightarrow Highest Overall Score

A single Judge Panel will base their determinations on observations throughout the competition and based on some (or all) of the other submittable materials (see below).

$\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \oplus BEST TEAM CHEER \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$

Given to the Team with the best TEAM CHEER during their Pre-Match Introduction.

Judges will make their determinations based on factors such as enthusiasm, originality, team coordination, and catchiness.

*For this award, the Judging Panel will use a point system, with each recording their individual scores of 1 to 10 for each performance. At the end of Qualification Matches, the scores will be totaled up and the winners will be determined by the highest score.

**<u>To be considered for Judging, Teams must abide by the following guidelines</u>:

- \rightarrow Team cheers should emphasize their team's name and/or number
- ightarrow Team cheers cannot cause a delay to the match

Given to the Team with the best Flag Waving display during Pre-Match Introduction.

Teams may choose to use one of their Drive Team members to wave the Flag for their Team OR use an additional off-field Team Member to wave their Flag on their behalf.

*For this award, the Judging panel will use a point system, with each recording their individual scores of 1 to 10 for each performance. At the end of Qualification Matches, the scores will be totaled up and the winners will be determined by the highest score.

**<u>To be considered for Judging, Flag Wavers must abide by the following guidelines</u>:

- \rightarrow Flag waving must be performed in the designated spot (it will be marked)
- \rightarrow Flags cannot be thrown into the air The flagpole must remain in their hand(s)
- → Flags and/or flagpoles cannot be unsafe (hit a human, strike the floor hard, etc.)
- \rightarrow Each performance can involve no more than 2 team members.

Given to the Team or Team Member with the Judges feel is dressed the best.

The award may be given to a Team as a unit or to a single member of a Team. Determination for Best Dressed will be based on factors such as Team Theme Uniformity, overall style, sense of humor, lack of Crocs, and personal preferences.

*For this award, the Judging panel will use whatever system they deem appropriate. It's completely in their hands. I can't stress this enough. It's entirely in their hands.

This award will be awarded to the Team whose Robot stands out and hits the specially-assigned judging group with the ol' razzle dazzle the hardest.

Determination for this award will be based purely on the judgement of the panel. It may be based on an unconventional part of the Robot. It may be the shiniest Robot. It may be that it reminds them of their dog. It might be the cutest Robot. It's up to them.

The Judges will be hanging out around the queuing tables and practice field throughout the day to make their observations and decisions.

(note: use of glitter results in IMMEDIATE disqualification for this award)

$\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow RANDOM AWARD \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$

We all know that every Team here deserves an Award for something. We've seen your hard work in action and we've seen the heart and soul and dedication that our Teams bring and put on display throughout the season.

However, we simply do not have the time to go through each Team and list off all of the amazing things you've accomplished and all of the ways that you've made your mentors, your families, and all of us volunteers unbelievably proud.

So, rather than buy trophies for every Team here, we're going to take a slightly different approach: WE ARE GOING TO CHOOSE A TEAM AT RANDOM.

It's literally random. We're picking a name out of a fishbowl. At random.

Since everyone deserves to get an award, then we know that any Team that gets selected for this award deserves it. We can't miss.

(however, if the Team selected has already won an award, then we will skip them)

There will be a 2^{ND} and 3^{RD} Place Winner selected, and then 1 Winner.

AND LAST, BUT NOT LEAST ...

Teams will have the option to submit a photo of their Robot prior to the Competition based on a selected theme (listed below). The Judges (along with other Volunteers) will determine their favorite ones during the competition and announce the <u>3 Finalists</u> and <u>1 Winner</u> at the awards ceremony.

THE THEME:

"WHAT OUR ROBOT DOES WHEN IT'S NOT COMPETING"

People often feel sad at the conclusion of the Robot Season. "Studies" show that 97% of this sadness is due to the feeling that the Robot no longer serves a purpose, that it has nothing to do, and that it will just sit around bored.

Well, we know that's not true! And we want you to prove it! We want your photos of your Robot doing non-competition and non-outreach activities. (one submission per Team)

Some suggestions;

What are its hobbies? What does it do for fun? Does it help out around the house? How does it relax after a long day of competing?

GET CREATIVE! HAVE SOME FUN WITH IT!

PHOTOS MUST BE AUTHENTIC! NO PHOTOSHOP!
