Judging Process Guide

Revision History	
Revision	**Description**
25-26.1	Initial 2025-26 Season Release
25-26.2	Added guidance for judging Sibling Teams. Added instruction for nominee ranking. Fixed in-document links. Fixed links to Section 6 rules. "Judging Summary Sheet" and "Structured Interview Feedback Form" Added "Useful Supporting Materials" section. Added "Judging Topics for Emphasis" to outline seasonal changes.

Overview

Purpose of this Document

The document aims to outline the judging process used at *FIRST* Tech Challenge events, identify best practices to streamline this processm and provide support for common issues that may arise at events. The target audience for this document is Judge Advisors (JAs) but Judges, Judge Advisor Assistants (JAAs), and teams may read this guide to learn more about the judging process.

Although no two events are the identical, by using the process in this document, teams are given a fun and consistent experience regardless of which event they attend.

Prior to the event, the Judge Advisor and Judges should read their respective volunteer manuals and complete the associated certification courses. This document will cover the overall judging and awards process for *FIRST* Tech Challenge events but does not replace the training provided in the volunteer manuals.

Judging Formats

The judging process in *FIRST* Tech Challenge has activities spread across the Before the Event, At the Event, and After the Event sections of this document.

Judging normally takes place in one of three formats:

- Traditional – All judging takes place at the event, in-person.
- Remote – All judging takes place online, either through the FTC Scoring website or through an external video platform.
- Hybrid - A combination of traditional and remote judging (for example: Structured Interviews may take place online, but Pit Interviews and final award deliberations take place in-person)

This document will focus on the traditional format (single division event) but will provide best practices for the other formats, where applicable. Judge Advisors participating in remote or hybrid judging should consult the FTC Scoring – Judge Advisor and Judge Guide for more information.

Key Principles in Judging

The Judge Advisor Manual highlights the philosophy of judging. Here are some additional key principles that should be followed when judging at events:

- Celebrate as many teams as possible for the work they have done.
- Every team should leave the event feeling heard and valued by the judging process.
- We want volunteers to feel valued and appreciated, but we are not going to make it about them; it's about the teams!
- No interview is done, or decision is made, by a single Judge.
    - **A Judge must never interview a team on their own; work in pairs or as a larger group!**
    - Judges need to work well with others to make award decisions under strict deadlines, which can be tough! Judges look for teams who are strong candidates for each award.

Working with a Range of Judging Perspectives

At events, Judge Advisors facilitate discussions among volunteers with diverse expertise, experiences, and perspectives. A judging panel could easily be influenced by the perspective of a single Judge, but Judge Advisors should encourage all Judges to speak and have their voice heard during discussions.

Judge Advisors should also be mindful when Judges favor a team simply because they followed a specific process that the Judges prefer, especially if this leads to the assumption that such teams should automatically be ranked high for an award. This same principle applies to situations where Judges feel a team should be excluded from award consideration because the team did not meet certain expectations held by a Judge.

For example, while a Judge may want to celebrate teams who apply best practices seen in a professional career setting, teams can also be rewarded for out-of-the-box thinking. Different teams may approach challenges in unique ways, and the judging process should remain open to diverse approaches. In both cases, individual preferences or personal familiarity with specific approaches should not outweigh the criteria established for the awards. Individual perspectives alone should not automatically remove a team from consideration for an award. It's important for the judging panel to discuss and weigh all viewpoints before making a final decision.

Evaluating Teams Based on the Award Criteria

During the judging process, Judges will interview teams from different backgrounds. *FIRST* welcomes all teams, and the goal of judging is to listen to the stories from the teams and celebrate teams who have worked hard throughout the season! Judges should keep an open mind during the judging process, understanding that teams are being evaluated based on how they meet the award criteria in Section 6: Awards (A) of the Competition Manual. If a team is a strong contender for the award, and meets the criteria, the Judges should work with the Judge Advisor to determine if they should be considered for the award, given the number of teams who may be strong contenders for an award.

While teams can be considered for awards, based on the information presented at the event, there are things that should not be considered when they are a potential nominee, winner, or finalist for an award. If Judges observe or are made aware of team conduct that may be cause for concern, they must refrain from removing the team from award consideration (or disqualifying them) and should instead speak to the Judge Advisor.

If the Judge Advisor determines that a Judge is not focusing solely on the award criteria, the following actions are recommended:

- Take a break.
- Speak privately with the Judge to understand their comments.
- Ensure bias or conflicts of interest are not factors in the Judge's comments.
- The Judge Advisor should consult the `On-Call Support Numbers` for assistance.

Judges **must not** consider items like religion, politics, gender, disabilities, self-expression (i.e., attire), or how the students are doing in school in the judging process. These topics have no bearing on any *FIRST* award criteria.

> *FIRST* explicitly accepts and embraces differences in team members. The organization is committed to making its programs welcoming and accessible to all participants. It is important that all Judges are committed to making all team members feel welcome today.

Hard Luck Stories

Awards should not be given based on a hard luck situation. For every hard luck story uncovered by the Judges, there are many more that are not uncovered. All awards should be granted based on something positive and uplifting. Rather than rewarding a team for the hardships they had; reward them for their perseverance, determination, or unique problem-solving skills. The goal is to present each award winner to the audience as exhibiting role-model *FIRST* behavior, rather than presenting them as a victim of circumstance.

Judging Expectations for Coaches and Mentors

FIRST Tech Challenge teams use industry tools to build and program their robots. Coaches and mentors are encouraged to work side-by-side with the students, and Judges will often see adults and students working together to design, fabricate, assemble, and program the robots. The level of involvement of mentors on a team will vary from team-by-team and often year-by-year. Coach or mentor involvement, by itself, should never be considered a reason to exclude a team from award consideration or to rank them lower on a list of nominees. This partnership between teams and mentors is expected and celebrated in *FIRST* Tech Challenge.

Judges should understand that coaches and mentors can assist a team by working on the robot (or code), but students are ultimately responsible for the answers they give to the Judges. In general, the judging process wants to reward teams, notably the students, who meet the award criteria and are able to explain the process or answer behind their robot, outreach, brainstorming process, and so on.

If a Judge encounters a team with a coach or mentor who speaks or interacts with a team during an interview (who is not a translator or interpreter), Judges may politely remind the individual that they

would like to hear from the students. After this reminder is given, if a Judge has a concern about a coach or mentor who continues to interact with the Judges and/or the team, and is not following directions, the Judge should silently make a note of this and speak to the Judge Advisor after the interview has concluded.

Judging Teams with Close Affiliations (Sibling Teams)

This section defines multiple teams associated with one organization as Sibling Teams. We know that many teams (whether from the same organization or not) will work very closely with each other when not at an event. This section helps provide guidance about Sibling Teams but may not address every situation that may be present when judging teams at an event.

The guidelines are purposefully left a little vague on what constitutes an organization as we know that some teams operate out of schools, others out of 4-H Clubs, and some are completely independent. For example, a school district may have multiple high schools that each have a team. Though the teams use the district's tax information as their organization, the teams operate independently. These teams would not be considered "Sibling" teams. There is no one size fits all, and this is guidance. We wanted to address the scenario when a team decides to add another team to their organization and work together throughout the year, either building the same robot or different robots. The main goal of this is to provide guidelines for teams in response to questions from the community about what is/is not allowed.

FIRST inspires young people to become STEM leaders. As such, we understand that some organizations have created additional teams in order to help give more experience to their students. It is up to each organization to decide what works best for them when considering creating additional team(s). These guidelines have been created to help ensure a team is recognized for their individual accomplishments even if they are affiliated with other teams.

Sibling Teams are considered separately for all awards, and Judges will use the information provided to them by each team individually to assess the team against the award criteria. Each team should be prepared to cover all relevant information with the Judges.

Teams have the opportunity to collaborate with one another on a number of items that are judged at a *FIRST* Tech Challenge event. Although this approach is welcome, it can provide a challenge when judging Sibling Teams. When judging Sibling Teams, for example, it is possible to find that multiple teams have a similar design for their robot or claim the same outreach activities.

The simplest way to address Sibling Teams is to judge each team on their own, and to ask clarifying questions that may help identify how one team may stand out amongst other Sibling Teams. Although this is not a complete list, here are a few questions to ask throughout the judging process:

- "How did you decide who did what?"
  - o "Were there any specific roles or tasks that each team member took ownership of?"
  - o This may apply to coordinating outreach activities or coming up with a robot design used by Sibling Teams.
- "Who contacted _____ to coordinate your outreach activity?"
- "How did you ensure the outreach activity, or robot design, aligned with your team plan?"

Judges should also review the Judging Question Bank and speak with the Judge Advisor to work through the process to determine the strengths of each Sibling Team.

Understanding Differences

Each student is special and unique, with different strengths, challenges, social skills, and learning abilities. Some differences may be misinterpreted. Please be mindful that your first perception may be

off. For example, a student who is quiet or has limited social skills may have extensive knowledge to share. You may also notice cultural differences. Remember that some cultures expect eye contact, while others may find eye contact to be disrespectful. Always be positive, flexible, and patient.

A few differences that you may encounter include students with limited social skills, who have difficulty expressing thoughts verbally, who shout out blunt or inappropriate comments, or may distance themselves physically from the team. Some of these challenges may be neurological in nature. Differences between a student who is not able to do something as compared to a refusal to do something can show up in a way that is not familiar to you. A student may have an intense interest in a specific topic or area. For example, they may not be able to see the big robot picture, but may have extensive knowledge about programming, or the mechanical build. As a Judge, you will need to adjust your expectations. Many students with high abilities may take longer to process and answer questions; many may get left behind compared with a student who reacts more quickly.

When evaluating teams who seem "too rehearsed," think about how an adult might prepare for a big presentation at work. Some team members may memorize facts and examples. Since teams work for weeks or months to get ready for tournaments, the teams often practice until it is perfect. Seeming rehearsed is not necessarily a sign of an over-involved adult. If you are not sure of the team's true understanding, ask follow-up questions for an explanation of their thought processes or go into more detail.

Neurodivergence Awareness

As a *FIRST* Tech Challenge volunteer, you should be aware that neurodivergent youth often take part in *FIRST* programs. Autism spectrum disorders are considered neurodivergent and relate to communication, social interaction, and restrictive or repetitive behaviors and interests.

Some examples of neurodivergence include:

- Difficulty understanding language gestures or social cues.
- Difficulty engaging in back-and-forth conversations or interactions.
- Intense interest in unusual topics or objects, an intense concentration on favorite activities.
- Good rote learning and long-term memory skills, a desire to adhere to the rules.
- Ability to understand and retain concrete concepts and patterns, often with strong interest or ability in math and technology.
- Difficulty managing transitions, changes in routine, stress, and frustration.

More intense neurodivergence may include no speech or limited to no eye contact. As a volunteer, be prepared to include students that require accommodation, including those who are on the autism spectrum. You may find you need to use direct concrete phrases and break down questions or instructions into fewer steps. Give the student extra time to respond and be aware that students that have some neurodivergence sometimes have outbursts or unexplained behavior, which could be directed at judges or even teammates.

Before the Event

Coordinating with the Event Director

An important volunteer that the Judge Advisor will work with is the Event Director (ED). The Event Director is responsible for the quality and consistency of the *FIRST* Tech Challenge event. This person may be the Program Delivery Partner, or a volunteer either from the area or one associated directly with the venue host.

JAs will need to communicate with the Event Director prior to an event to discuss several topics. It is a good idea to schedule a call or meeting as soon as the volunteer is recruited, assigned, or aware that they will be the Judge Advisor for a specific event.

We would recommend this conversation is held at least 4 to 5 days ahead of the event to ensure that the JA can adequately prepare. While pre-planning is important, for most events, it is not recommended to contact the ED more than 4 weeks ahead of the event since this is likely too far ahead, and the Event Director may not have all the answers yet. An exception to this rule can be made for larger events (like Super Qualifying Tournaments or Regional Championships), which require more planning and multiple meetings between all the key volunteers (Judge Advisor, Lead Robot Inspector, *FIRST* Technical Advisor, and others).

The overall day will be more successful and positive for everyone – Judges and Teams – if the Judge Advisor is well prepared.

Determine Event Logistics

Although each event comes with its own set of challenges, there are specific items that should be considered when planning for a *FIRST* Tech Challenge event with judging:

- Items to be included in the Public Schedule:

  - How many teams will be attending and when are the teams expected to arrive?
  - When are the volunteers expected to arrive?
  - When are the Structured Interviews and how long will it take to interview all teams?
  - When are the opening and closing ceremonies? The opening ceremonies may depend on the timing of the Structured Interviews.

> The process used to determine the Public Schedule involves many key volunteers including the Judge Advisor, Lead Robot Inspector, FIRST Technical Advisor, and others.
>
> The Public Schedule may also be set by the Program Delivery Partner and/or the Event Director, and the Judge Advisor and others may not be able to alter it.

- Judging process items to be considered before the event:

  - Have any teams opted out of the judging process? They should not be scheduled for a Structured Interview and are not eligible for awards.

- Are there any teams that need specific accommodation (including `Teams with Translators or Interpreters`) and which rooms can support them?
- When are award decisions and scripts due?
- Given the event size, determine which of the discretionary awards will be allocated (per Table 6-1 in Section 6: Awards (A) in the Competition Manual)?
- Who will be providing each of the `Supplies Needed for Judging`?
- Who will assemble the judging packets?

- Venue-specific items to be considered:

  - Where will judging decisions take place?
    - Which rooms will be used for the Structured Interviews and the deliberations?
    - How many rooms are available?
    - Are these spaces quiet and allow the Judges and teams to have privacy?
    - How far away are these rooms from the pits and competition field(s)?
    - What equipment is already in the deliberation room (projectors, whiteboards, etc.)?
  - When will the venue be available to set up the judging spaces?

- Structured Interview items to be considered:

  - How will teams be queued for the Structured Interviews?
    - Which volunteer oversees this (the Lead Queuer, a Judge Queuer, etc.)?
    - How early should teams be queued for their interview?
    - Where should teams be queued for their interview? Consider the following:
      - The location should allow for plenty of space where teams who are leaving the interview room can return to their pit.
      - Teams should be queued in a place where noise and discussions cannot be heard in the judging rooms.

Judge Advisors should also work with their Event Director to determine who will complete any of the additional tasks listed in the next few sections. It is possible that these items may be done jointly between the ED, JA, or other volunteers.

Recruiting Judges

Depending on the region, the Event Director or the Event Volunteer Coordinator may be responsible for recruiting and managing the volunteers who sign up to be Judges, while in other regions, this falls to the Judge Advisor. When recruiting volunteers to serve as a Judge, it is important to understand and minimize conflicts of interest, balance the number of new and veteran Judges, and balance the number of Judges focusing on Team Attribute (TA) awards and Machine, Creativity, and Innovation (MCI) awards. The Volunteer Coordinator Manual is a good place to learn more about ways to recruit volunteers.

It is best practice to recruit a minimum of 2 judges for every 6 teams attending the event with all events needing a minimum of at least 6 judges. Additionally, the recommendation is to recruit 1 or 2 extra volunteers that can step into the Judge role for every 4 to 6 Judges to handle last-minute changes due to illness or other unforeseen issues. The Event Director, Volunteer Coordinator, or regional partner may have further advice depending on the region's pool of Judges. The result is that the Judge Advisor may need to be flexible in managing last-minute judging changes.

If the Judge Advisor gets to the event and learns that they will not have sufficient Judges to fill each of the Structured Interview panels with at least 2 judges, there are a couple of options that can be considered:

- Work with the Event Director and/or Volunteer Coordinator to determine if there are other volunteers that would be able to step into the Judging role.
- After consulting with the Event Director, update the Structured Interview schedule based on the number of interview panels that have at least 2 Judges, and work with other key volunteers ensure that this information is communicated to all teams and all relevant volunteers.
- If needed, the Judge Advisor and Event Director can also use the `On-Call Support Numbers` for additional advice based on the specifics of the event.

Supplies Needed for Judging

The table below includes a list of common supplies that may be needed during the judging process. This is not an exhaustive list but is intended to be a starting point as EDs and/or JAs assemble all the materials for an event.

Table 1: Supplies for Judging

Item	Quantity
Pens	One per Judge plus extras
Clipboards	One per Judge
Lined paper for Judges notes	Several pages per Judge
Projector (and the cables to connect to it)	One per deliberation room
Computer	One per deliberation room
Printer and Supplies (including spare ink/toner and the cables to connect to it)	One per deliberation room
Extension cords and power strips	One or more per deliberation room
Flip Chart/whiteboard, markers/eraser	Several per deliberation room
Paperclips/binder clips/staplers	Several per deliberation room
Safety glasses/side shields	One pair per Judge
Snacks, gum, and mints	If not provided by venue (check with Event Director about allergies)
Coffee/water/soda/juice	If not provided by venue (check with Event Director about allergies)
Judging Packets (refer to the table below)	One packet per Judge, JA, and JAA

Depending on the event, the Event Director, Judge Advisor, or Judge Advisor Assistant may be responsible for assembling the judging packets using the materials listed in the table below. The Judge Advisor or Judge Advisor Assistant should verify the contents of the judging packets prior to the start of the Structured Interviews.

Table 2: Judging Packet Contents

Item	Quantity
Structured Interview schedule, sorted by panel	One copy per judging panel, one copy per queuer, plus extras
Section 6: Awards (A) of the Competition Manual	One copy per judging panel
Outreach Terms and Definitions	One copy per judging panel
Judging Summary Sheet	One copy per Judge, per team, plus extras
Structured Interview Feedback Form	One copy per team, plus extras
Public Schedule	One copy per Judge
Judging Question Bank with the required questions highlighted or marked	One copy per judging panel
Conflict of Interest form and description	Several on hand
Competition Match schedule – may not be available until all teams have checked in	One per Judge
Pit Map – if available	One copy per Judge
Nomination Sheets	Optional - One per judging panel
Waterfall Chart	Optional - One per award panel (after Structured Interviews)
Award Ranking Sheet	Optional - One per award panel (after Structured Interviews)

For remote or hybrid events, the Judge Advisor should be prepared to provide links to any of the documents above if they are not printed out and physically provided to the Judges.

> For items marked as "Optional", Judge Advisors should refer to the Useful Supporting Materials section of this guide for more details on how to use these forms and best practices.
>
> Judges are not required to use these optional forms, but they may find them useful during the judging process.

Creating a Structured Interview Schedule

The Event Director, with input from the Judge Advisor and Lead Robot Inspector, is often responsible for building the detailed Structured Interview and inspection schedules.

At a traditional event, Structured Interviews, and robot inspections happen at the same time, and it is important to leave teams enough time to prepare for their scheduled appointments, and to make sure that teams are not double booked.

> All teams must be given the same amount of time for their Structured Interview!
>
> An exception can be made for `Teams with Translators or Interpreters`, which may be granted a few additional minutes for their Structured Interview.

At a remote or hybrid event, judging is held independently of the competition component.

Judge Advisors should review the list of available Judges, number of teams at the event, and number of judging panels available to help create their Structured Interview schedule.

Below are some tips that should be considered when building the Structured Interview schedule:

- Each panel must have at least two Judges but should not have more than three.
- Prepare the schedule prior to deciding who is on each panel.
  - A205 in Section 6: Awards (A) states that each team must be scheduled for the same amount of time with the Judges. The rule requires each team to be scheduled for at least 10 minutes with the Judges, but 15 minutes is recommended. Additional time is typically added for large regional events such as a Super Qualifying Tournament or Regional Championship.
  - The team may use the first 5 minutes of the interview to make their presentation if they have one, without any interruptions.
  - Each panel must have at least 10 minutes between Structured Interviews to complete the Structured Interview Feedback Form, review the Portfolio, if provided, compile their notes, and complete the Judging Summary Sheet. The Structured Interview Feedback Form is **not** used by Judges during the deliberation process.
  - At a traditional event, the required minimum timing is 10 minutes for the interview and 10 minutes between interviews, although the event schedule, the number of teams, and the number of judging panels may dictate a longer amount of time for either activity.
  - For remote and hybrid events, it is even more important to allow extra time for the interview and the time between interviews. For that reason, each panel requires at least 30 minutes to complete the judging process from start to finish (15 minutes for the Structured Interview and 15 minutes to complete the paperwork).

- Teams participating in judging should be distributed as evenly as possible across all panels.
  - Each panel should see at least four teams.
  - For traditional events, panels must not see more than eight teams.
  - For remote and hybrid events, do not schedule more than five teams per panel.
  - Consider any teams that need accommodation when populating the schedule.

- If the schedule permits, it is best practice to include a break or two for the Judges. The recommendation is a break after every 4 to 6 Structured Interviews.
- If possible, schedule `Teams with Translators or Interpreters` near a break or at the end of the interview schedule to allow extra time for discussion.
- Depending on the time of year, if weather conditions are variable or unpredictable for the teams attending, it is helpful to pre-schedule some open (or blank) Structured Interview slots at the end for teams that may show up late and can fill these spots without affecting the overall schedule.

- Assign Judges to panels on the day of the event by <u>Managing Conflicts of Interest</u> and reviewing each Judge's area of expertise.

Below is an example of a Structured Interview schedule that may be used at an event with 10 minutes for the interview and 10 minutes to complete paperwork and review the team's Portfolio:

	Panel 1 Room 1605	Panel 2 Room 1602	Panel 3 Room 1401	Panel 4 Room 1402	Panel 5 Room 1403
08:30 AM −	22077 Marcus Minions	8204 Blue Machine	—	27534 RoboChargers - Yellow	25783 Tech Titans
08:50 AM −	13542 RoboChargers - Blue	21171 ITKAN Robotics - M12	27532 RoboChargers - Orange	23344 Technical Turbulence	27536 RoboChargers - Gold
09:10 AM −	26300 Anomaly	27533 RoboChargers - Purple	20482 Wylie E. Robote	12430 Dub East	26693 Triad Robotics
09:30 AM −	23434 Cristo Rey Dallas Robotics	7172 Technical Difficulties	18871 RoboChargers - Green	18227 Area 52	19991 Chuckleheads
09:50 AM −	26542 Apex Genesis	13537 RoboChargers - Red	19564 ITKAN Robotics - MAS	19990 Marcus de-TECH-tives	13552 RoboChargers - Pink
10:10 AM −	27531 RoboChargers - Cyan	24563 Flower Mound Firewall	26722 Tech Support	27535 RoboChargers - Silver	20483 Wall East

Figure 1: Example of a Structured Interview Schedule

Communicating with the Judges

Judge Advisors should ask the Event Director or the Event Volunteer Coordinator for a list of Judges assigned to the event and how to contact them.

Judge Advisors should coordinate with the Event Director and the Volunteer Coordinator to gather information about the Judges to assist in assigning them to panels, and to communicate important information to the Judges in advance of the event. In some instances, the Judge Advisor will communicate directly with the Judges via email, and in other cases, the Event Director or Volunteer Coordinator will be responsible for that communication. Check with the Event Director to determine how communication with Judge volunteers will work.

> When sending emails Judge Advisors must use the Blind Carbon Copy (BCC) option for Judges, JAAs, the Event Director, and Volunteer Coordinator. A Mail Merge tool can also be used to send separate emails to each person.
>
> It is a violation of the *FIRST* privacy policy related to Personally Identifiable Information (PII) to directly email (TO or CC) or text more than one volunteer Judge without their direct explicit permission that their information can be shared.

A high-level list of details that should be communicated is included below:

- Thank the Judges for volunteering!
- Ensure the Judges complete the required training outlined in the Judge Manual including having passed the required Judge certification test.
- Ask about team-related conflicts of interest.
- Ask about any technical expertise the Judges have.
- Ask if the Judges require any specific accommodation.
- Ask if the Judges have specific award preferences (Team Attribute, Think, or Machine, Creativity, and Innovation).
- Confirm Judges understand the time commitment.
- Provide the Judges with an event schedule which includes the time to arrive / check-in and expected ending time.
- Provide the JA's day-of-event contact information.
- Advise the Judges if there are any scheduled meetings ahead of the event, if applicable.

Judge Advisors may offer additional training as well as The Judge Orientation Meeting before the event. This will help to clear up any questions the Judges might have, instill confidence in new Judges, and help Judge Advisors ensure that the Judges have completed the training provided by *FIRST*. The Judge Advisor can choose to provide this training in any way that is convenient for them.

Preparing for the Judge Orientation Meeting

On the day of the event, prior to the Structured Interview, Judge Advisors will complete many of the activities listed in the When Judges Arrive section of this document. One of the tasks will be to give the Judge Advisor Presentation, which includes several key details and reminders about the judging process at the event. If the Judge Advisor has gone over this material with the Judges before the event, they should still do a quick recap of any material that had questions to ensure understanding.

The slide deck is meant to be a starting point for Judge Advisors who can add additional material to the presentation that is relevant to the event and/or to the Judges.

Selecting Questions for the Structured Interview

A Judge Advisor will need to select two questions from the Judging Question Bank which will be the first questions asked to all teams during the question-and-answer portion of their interview.

- One question must focus on the Team Attribute category.
- One question must focus on the Machine, Creativity, and Innovation category.

When selecting questions with multiple parts, Judge Advisors should be mindful of the question-and-answer time allocated during a Structured Interview. Asking questions that include multiple follow-up questions can take valuable time away from the Judges, especially when time is limited. For the Structured Interview, it's acceptable for the judging panel to ask the primary question and, if time allows, ask the follow-up questions. Once selected, these questions should be included in the presentation given by the Judge Advisor.

Asking these two questions ensures consistency across all the Structured Interviews and can be valuable during the initial nomination process and final deliberations.

After a judging panel asks these two questions, Judge Advisors should remind Judges they may ask their own questions or use the Judging Question Bank to learn more about a team.

> Judge Advisors should remind Judges that they **must not** ask teams about religion, politics, gender, disabilities, self-expression (i.e., attire), or how the students are doing in school. These topics have no bearing on any *FIRST* award criteria.

Managing Expectations with Portfolios Submitted Before Structured Interviews

Depending on the type of event (traditional, remote, or hybrid), it is possible to receive Portfolios from teams prior to the Structured Interview. The rules governing when Portfolios are due may vary from region to region, but the default is to instruct teams to submit it during their Structured Interview. Please see Section 6: Awards (A) of the Competition Manual for more details.

Although the Structured Interview timeline may be challenging, Judge Advisors should not allow Judges to preview or pre-read Portfolios before meeting with the teams. Some of the reasons why Judge Advisors should discourage this practice include, but are not limited to:

- Judge panels should not be assigned until all conflicts of interest and each Judge's area of expertise are identified. It is possible that a Judge may be previewing Portfolios for teams they may not see during the Structured Interviews.
- Judges should not be conducting their own outside research or fact-checking on the team. Only information presented by the team at the event should be considered for awards. A team may discuss their journey throughout the season, which may include their growth from a past season and how it affects their current season.
- A team may submit a newer version of a Portfolio after a Judge reviews the current copy.
- Judges tend to form opinions about a team's capability after reviewing their Portfolio that causes them to pre-judge the team. This is not fair to the team.
- Judges that review portfolios ahead of the Structured Interview also believe that they can ask more directed questions during the Structured Interview time. Given that only a few awards require a Portfolio, these types of questions would be better asked during Pit Interviews.

Judges should also be informed about the details outlined in the Other Considerations for Portfolios section of this document.

Judging Topics for Emphasis

FIRST Tech Challenge has moved to a points-based advancement model. Each Judged Award has a point value, rather than an advancement rank. For more information about points based advancement, please visit Section 4 of the Competition Manual.

Award Changes

- The **Motivate** Award has been retired and replaced with two new awards.
  - The **Reach** Award celebrates efforts to introduce new people to *FIRST*.
  - The **Sustain** Award celebrates the long-term success of a team.
- The **Judges' Choice** Award recipient receives advancement points.
- Please review Section 6 of the Competition Manual for criteria on every award.

Structured Interview

- The Formal Interview is now referred to as the Structured Interview. The format of the interview has not changed.
- Rule A210 – No photos or audio/video recordings are permitted in the Structured Interview. This applies to both teams and volunteers.

The Portfolio

- Competition Manual Rule A201-E. The Portfolio can include content from January 1, 2025, to the present.
- Competition Manual Section 6.1.4 – Outreach and Impact by numbers
  - Added guidance to state that "sustained outreach to be of a higher quality than occasional or one-off outreach.
  - Evaluate teams against the award criteria using terms in the Outreach Terms and Definitions Document.

Final Deliberations and Awards

- The advancement model has been updated under Section 4 of the Competition Manual.
  - There is no longer an order of advancement using awards.
  - After awarding all Inspire positions, Judge Advisors will facilitate discussions to award all the 1st place slots for other awards, including the Judges Choice Award. After all the 1st place slots are awarded, the Judge Advisor facilitates the 2nd place slots for awards as needed and then moves to the 3rd place slots as needed. The Judges Choice Award does not have finalists.
  - If a team is ranked in the highest position for two awards, the Judges will need to decide which award the team should receive.
- Competition Manual rule A214 – Teams are only eligible to win 1st place Inspire Award at one Qualifying or League Tournament.
  - This does not apply to Super Qualifying Tournaments or Regional Championship Tournaments.
  - Teams who earned the 1st place Inspire Award at a previous Qualifying Tournament but did not advance to the next level event may be considered for 2nd or 3rd place Inspire at their next event.
- Competition Manual rule A215 – Teams can only be named as a winner of finalist for **one** judged award.
  - This is the same guidance provided in previous seasons, but because awards now earn point values, there is a corresponding rule in the Competition Manual.
- All Inspire Award recipients will need a script. All Inspire Award recipients will receive a trophy.

At the Event

Before Judges Arrive

Meeting with the Event Director and Key Volunteers

Before the interviews start, the Judge Advisor should meet with the Event Director to discuss any last-minute logistical updates. This meeting will usually include other key volunteers, including the Lead Robot Inspector, *FIRST* Technical Advisor, Lead Queuer, and others.

While every event is unique, Judge Advisors should review the list of items seen in the Determine Event Logistics section of this document and confirm the details have not changed.

A common list of judging-specific topics that should be discussed include, but are not limited to:

- Confirm the list of teams.
    - Have any teams dropped out of the event?
    - Have any teams opted out of the judging process? They will not be eligible for awards!
    - Are there any teams that may not be considered for the Inspire Award?
- Confirm the event schedule and note any changes to the following items:
    - The opening ceremonies
    - The start of qualification matches
    - Any breaks scheduled in between matches
    - The timing of the playoff matches
- Confirm the queuing path from the team's pit area to the Structured Interview rooms. The Judge Advisor should walk the queuing path to confirm that it is accessible to the teams attending the event.
- Confirm which teams are not eligible for awards per the Competition Manual?
    - A213 - Inspire Award 1st, 2nd, 3rd: Which teams are outside of their home region, per Section 4: Advancement?
    - A214 - Inspire Award 1st only: Is there any teams where it is their second event (QT or LT) of the season, and they have already won the Inspire Award, per Section 6: Awards (A)?
- Confirm which awards are being offered.
    - Is a Judges' Choice Award being offered?
    - Are there event or region-specific awards being offered that are not listed in Section 6: Awards (A)?
- Confirm how the JA should submit award decisions and scripts?
    - Is FTC Scoring being utilized and has the Scorekeeper been made aware of this?
    - If FTC Scoring is not being used at the event or is unavailable to the Judge Advisor, who will receive the scripts and Award Record Sheet?
- How and when will Portfolios and structured interview feedback forms be returned to the teams (Pit Admin, a table next to the field(s), etc.)?
- Confirm where Judges will be, and how they will participate, in the opening ceremonies and when handing out awards.
- Confirm how key volunteers can contact the Judge Advisor at the event.
- Confirm how to contact the Event Director if needed during the event, such as needing to adjust the award decision deadline due to unavoidable or unforeseen issues.
    - It is best practice for the Judge Advisor to check in with the Event Director as the day progresses to provide update(s) if the judging is or is not on schedule.
    - If judging is not on schedule, it is important to give the Event Director as much advance warning as possible so that key event volunteers can work together to determine how to mitigate this.

At the conclusion of the meeting before judging begins, confirm the final Structured Interview schedule is provided to the Lead Queuer, Pit Admin, the Lead Robot Inspector, Field Supervisor, Lead Queuer, and Event Director.

Preparing the Interview Rooms

The Judge Advisor should visit the rooms where the Structured Interviews will be held. Be sure that the rooms are marked with a sign that includes the same reference (number or letter or name) as used in the schedule. Ensure that the rooms are large enough to fit up to fifteen students, each has a table and at least two chairs for the Judges (add more chairs if the panels are larger), and teams are not easily able to look-in to the rooms when another team is interviewing (this may be mitigated by queuing teams in a specific place).

If more than 1 interview will be taking place in a single room, ensure some type of barrier between team interview spaces is available such as pipe and drape to help minimize sound and visual distractions.

Preparing the Judges Deliberation Room

The Judge Advisor should check the deliberation room to make sure there are enough chairs for all the Judges, and enough tables to accommodate all the chairs. The tables may be set up in a "U" formation or in a configuration to allow Judges to sit in small groups. Additional tables may be added to the deliberation room to hold Portfolios, if submitted, and other important paperwork, if applicable.

When Judges Arrive

The Judge Advisor should put at least two large flip charts on the wall or utilize a whiteboard and ensure the room has whiteboard or flip chart markers. On the flip charts or whiteboard, create a table with five columns.

As Judges enter the room, ask them to put their name in column A, the teams they are affiliated with in column B, and mark either the MCI (column C) or TA (column D) column. Panels, seen in column E, are assigned by the Judge Advisor. Structured Interview panels are assigned after conflicts are known. Award panels are assigned after the first round of deliberations are completed.

Table 3: Example of a Judge List

Name	Team Affiliations	MCI	TA	Interview Panel
Frank Smith	323, 14056	X		
Julia Roberge		X		
Jose Alvarez	5893, 12384		X	
Anna Jackson	8933, 862		X	

This table serves as a reminder to all the Judges in the room of where conflicts exist, and which skills each Judge has experience in.

After this activity is done, the Judge Advisor will have a conversation with the Judges using the sections shown below.

The Judge Orientation Meeting

An Orientation meeting is held before any judging takes place and includes the Judge Advisor Presentation that has been tailored for the event. This gives the Judge Advisor the chance to discuss the day's flow and layout of the venue, answer the Judge's questions, and share some best practices.

The Judge Advisor will be Managing Conflicts of Interest by asking Judges some questions about their knowledge or relation they may have with a team at the event and request that the Judges

add the affiliated teams to the flip chart or whiteboard set up for that information. Conflicts of interest can cause teams to feel the process is not fair, and we strive to avoid any perception of unfairness at *FIRST* Tech Challenge events.

Once conflicts of interest are discussed, the Judge Advisor should cover the following topics:

- Thank the Judges for volunteering their time and expertise.
- Go over the schedule for the day.
- Outline the expectations for the Judges.
- Give a brief overview of the awards and award criteria.
- Outline the judging process for the day.
- Give basic guidelines for interviews.
- Give the Judges the two required baseline interview questions for the Structured Interviews. Remind the Judges that these questions must be the first two asked during the Q&A section.
- Remind Judges that as a part of their role, they should work to put the students at ease. Teams could be extremely nervous about their interview!
- Review the `Judging Packet Contents` with the Judges and distribute the packets.
- Leave time for questions and time for Judges to move to their assigned interview room.

Other Important Pre-Interview Topics

Before giving their orientation meeting, Judge Advisors should review this section as the topics covered in this section are additional topics that may come up at this event.

Teams and Their Eligibility for Awards

The orientation meeting is a good time to inform Judges that no team should be disqualified from award consideration due to an individual's behavior (for example: students, coaches, mentors, or parents) without first contacting the Judge Advisor. If there is team behavior that should be addressed, the Judge Advisor should follow the steps outlined in the `Team Interaction and Support` section of this resource.

Judge Advisors should remind Judges that teams who have not built a robot or have a robot that has not passed its inspection are still allowed to participate in judging and are eligible for award consideration.

> If a team has opted out of judging, or is no longer attending the event, the Judge Advisor should inform the Judges about these changes.
>
> A team who does not attend their Structured Interview is not eligible for awards per Section 6: Awards (A) of the Competition Manual. Extenuating circumstances, which cause a team to miss their Structured Interview, should be addressed by the Judge Advisor and the Event Director. Depending on the situation, the team may be able to be rescheduled for another interview timeslot (assuming it does not impact the current schedule). If there are questions about handling this situation, please call the `On-Call Support Numbers`.

Other Considerations for Portfolios

Judges who receive a Portfolio without a team number on the cover page should instruct the team to add the information on the front of the document. This enables Judges to help associate a Portfolio with a specific team. It is okay for a Judge to add the team number if the team cannot do so.

If Judges have questions or concerns about language or content they have found in the Portfolio, they should speak with the Judge Advisor. In this situation, the Judge Advisor must contact the On-Call Support Numbers to get further guidance. Judges must not disqualify a Portfolio or a team from judging consideration without discussing the matter with the Judge Advisor. If Judges have questions or concerns about language or content they have found in the Portfolio, they should speak with the Judge Advisor. In this situation, the Judge Advisor must contact the On-Call Support Numbers to get further guidance.

Judge Advisors must never disqualify a team from consideration without calling *FIRST* event support. No event official has the authority to disqualify a team from judging consideration without a consultation with the *FIRST* on-call staff.

For awards that do not require a Portfolio, the Portfolio carries equal weight to what the team has discussed, described, or displayed in their interviews.

During the Structured Interview, Judges should focus their attention on engaging with the team, listening to their presentation, if they have one, and participating in the Q&A session. A Portfolio, if submitted, should be reviewed **after** the Structured Interview has concluded, and the team has left the room. The Structured Interview schedule will have time set aside between interviews to review the Portfolio and complete all of the necessary paperwork.

Information Judges Should and Should Not Consider

In the Portfolio, Judges should be reminded not to consider any information found on the cover page of a Portfolio or after the first 15 pages of content. In addition to information outside of the 15 pages of content, Judges should not follow links, which includes links or QR codes, provided in a Portfolio. Please refer to Section 6: Awards (A) of the Competition Manual for a full description of what is allowed and not allowed in a team's Portfolio.

Judges can consider content that meets the criteria outlined in Section 6: Awards (A), and information that a team shares with them during their interview processes. This could include stories from previous seasons that a team shares to illustrate their growth.

If a Judge has knowledge about a team from previous events or previous seasons that is outside of what a team has shared during the event, the information is not relevant to the judging process and should not be a part of the judging discussion.

The only document that is allowed to be considered during a Structured Interview is the Portfolio, if one is submitted. Additional handouts, pamphlets, or packets provided by teams should not be considered during this phase of judging and should not be kept with the Judges when a team leaves the room.

It is recommended that events should request and accept exactly 1 Portfolio from a team and not additional copies.

Providing Feedback to Teams

Each team will receive feedback from the Judges. After the team exits the interview room, Judges will complete a Structure Interview Feedback Form. One form is filled out per team, but all Judges in a panel should work together to fill out the form.

When filling out the Structured Interview Feedback Form, Judges must only consider content provided during the Structured Interview. Feedback provided pertains only to the first impression teams give to the judging panels in their interview.

The Judge Advisor should inform judging panels to complete the feedback form immediately following their Structured Interview with the team. No written feedback will be provided outside of the criteria listed on the form. While the feedback form is an important document used in the judging process, it should **not** be used as the basis to determine winners or finalists for any awards since the form is only used to gauge a judging panel's first impression of the team.

Judge Advisors should collect all the forms at the conclusion of the Structured Interviews. It is important that a Judge Advisor reviews the Feedback Forms for completeness and ensures no written feedback is provided. If written feedback was provided, the Judge Advisor should provide the judging panel with a new form to be filled out.

Artificial Intelligence in *FIRST* Tech Challenge

Teams are permitted and encouraged to use Artificial Intelligence (AI) to assist in the creation of their Portfolio and robot code. A team who uses all the tools available to them can be an important aspect to discovery and innovation and is a valuable part of the learning and growth process for teams. *FIRST* views AI resources as tools available to students in the same way that CAD programs, programming languages, and 3D printers are tools available for their use. Teams using AI to assist with code or content generation are expected to provide proper credit and attribution, and respect intellectual property rights and licenses. Proper credit could look like this: "Portfolio Content created, or code enhanced by Team 1000 and ChatGPT."

A team should never be disqualified for failing to properly credit AI-generated content provided to the Judges. While AI is a powerful tool that teams may opt to use, teams are ultimately responsible for the content they provide to the Judges. A Judge may ask clarifying questions about content provided in the interviews and in the Portfolio but should not consider the use (or lack) if AI as the single determining factor during the nomination or deliberation process.

No Photos or Recording During Structured Interviews

Per Section 6: Awards (A) of the Competition Manual, audio or video recording is not allowed during the Structured Interviews. Judges should not take photos during these interviews regardless of what would be in the photo (a picture of just the robot or the team).

Silent Observers

Each team is allowed **one** adult silent observer who is allowed to attend the Structured Interview. The purpose of the adult silent observer is to provide silent confidence to the team presenting in an unknown environment with new people. Judge Advisors should advise Judges that this individual should always stay in direct line of sight of them – in front of the Judges and not behind the Judges. Before formally starting the interview, it is recommended that Judges remind the team and silent observer that Judges want to hear from the students, and the silent observer is present to listen in on

the interview and can give feedback to the team once they leave the judging room. If the silent observer speaks or gives signals to the team (verbal or non-verbal), Judges should politely remind the adult about their role in the room.

If a Judge has a concern about the silent observer who is not following directions, the Judge should silently make a note of this and speak to the Judge Advisor after the Structured Interviews have concluded. A team should not be automatically disqualified if a silent observer communicates with the team.

Teams with Translators or Interpreters

Like silent observers, a team is allowed one additional person in the room who may serve as a translator or interpreter. The Event Director should be aware of teams who need to utilize one of these individuals and the Judge Advisor should know the teams needing this accommodation prior to the interviews.

This means a team may have **one** silent observer in the room and **one** translator or interpreter (as needed). The translator or interpreter does not need to be an adult but does have limits on how they can contribute to the Structured Interview.

- A translator or interpreter may:
    - Speak in-between questions or comments made by either the Judges or the team.
    - Ask for clarifications on a specific question to better articulate them to the students.

- A translator or interpreter may not:
    - Add additional comments that have not been provided by the team.
    - Coach the students on the next topic or information that should be provided.

If a Judge has a concern about the translator or interpreter and their interactions in the interview room, they should silently make a note of this and speak to the Judge Advisor after the Structured Interviews have concluded.

Judge Advisors should notify a judging panel who has a team that will be using a translator, interpreter or needs other accommodations. In these situations, the interview schedule should already account for the accommodation required.

Create Structured Interview Panels

The Judge Advisor then assigns Judges to Structured Interview panels, making sure that Judges who are affiliated with teams are not assigned to a panel scheduled to interview those teams, matching experienced Judges with newer Judges, and technical Judges with non-technical Judges.

Once the number of awards has been confirmed with the Event Director (see Section 6: Awards (A) of the Competition Manual for more details) and any conflicts of interest disclosed, the Judge Advisor should assign pairs or trios of Judges to interview teams.

When making assignments for the team interviews, keep in mind each Judge's skill set and interests.

Try to create interview panels in a way that balances different skill sets and personality types, creating a broad scope of perspectives among each interview panel. Doing this will create a balance of objectivity when each team is interviewed.

Pairing Technical and Non-Technical Judges during the Structured Interviews

Some of the awards are more technical, while other awards are less technical. Pairing a non-technical Judge with one who is technical (or vice versa) can expose each volunteer to learn a new skill. Make sure all the Judges feel comfortable with these assignments before solidifying the assignment. Regardless of their area of expertise (technical or non-technical), Judges should actively participate in all discussions during the Structured Interview and nomination process.

In general, Judges with a technical background should be assigned to handle the MCI awards – Innovate, Design, and Control while Judges who may not have a technical background should be assigned to handle the TA awards – Connect, Reach, and Sustain.

For Think and Judges' Choice Award coverage, both technical and non-technical Judges bring valuable insight and can contribute to these award nominations.

Pairing Experienced and Inexperienced Judges

Many events pair experienced Judges with non-experienced Judges. This training or apprentice system allows a new Judge to learn the process with someone who has Judged at other events. Similarly, a new Judge may offer a fresh perspective to a Judge who has volunteered for multiple events.

Alumni and Special Considerations for Judges

FIRST strongly encourages alumni to volunteer as they have valuable skills, and unique insights, however, it can be difficult, especially for volunteers who recently participated as a team member. It is common for a new alum to personalize their experience and compare the teams at this specific event to what they remember about their team or other teams.

Judges should preferably be at least 21 years old and have not participated as a student team member for at least three years. Volunteers over 18 years old and post-high school may request to be assigned to a Judge role, and the request will be reviewed for consideration by the Volunteer Coordinator, Event Director, or the Program Delivery Partner.

Managing Personality Types

Within the pool of Judges, there will be many different personality types. One Judge may be more apt to voice their thoughts and opinions, while another Judge may not be so forthcoming with feedback. Try to find ways to match each Judge pair in a way that they complement one another. A Judge who tends to follow the award criteria exactly may be best paired with a Judge who has more subjective views and might see something great about a team that otherwise may not have been noticed.

Supporting Structured Interviews

While the Judges are responsible for interviewing teams in the Structured Interviews, it is important that the Judge Advisor remains available to help Judges with any questions they may have about the process or content they observed during the interviews.

The Judge Advisor should inform Judges how they can reach out and ask for help. A JA can provide support to the Judges using many approaches including routine visits with all the interview panels, where Judge Advisors check on the panels in between interviews, or by identifying a volunteer who may

be present near the interview rooms that can contact the Judge Advisor. This volunteer may be a Judge Advisor Assistant, Queuer, or other trusted volunteer.

After Structured Interviews

Create Initial Nominations (Shortlists)

After all the Structured Interviews are complete, Judges will return to the Judges room and will have a shortlist of the top teams that they have interviewed and would like to nominate for each award. Remember, Judges may only nominate a team for an award if they meet all "Required" criteria listed in Section 6: Awards (A) of the Competition Manual.

Generally, each panel will be asked to provide up to a certain number of nominations for each award, as determined by the Judge Advisor – most often this is a panel's top 2 teams for each award. The shortlists will be turned in to the JA or JAA and recorded either on a board or on a computer. The JA should also note which panel nominated a team for an award.

For very small or very large events, the Judge Advisor may ask the panels to nominate 3 top teams or 1 top team for each award, respectfully. The number of teams depends on the number of interview panels and the number of teams each panel interviews.

In some cases, Judges will have a hard time picking just their top contenders. In those cases, after talking with the Judge panel, the Judge Advisor may allow the Judges to add another team to their shortlist. Note that this will have an impact on the time needed for Pit Interviews and needs to be carefully considered, and it is important that not all panels add extra teams to their shortlist.

It is okay and acceptable for a Judge panel to select one or more Judges' Choice Award nominees at this point. It is important to note WHY the team is being nominated so that information doesn't get lost or forgotten during the day.

The following tables show an example of how the ranking and deliberation process could be done with made-up data. Each team is denoted with a letter instead of a team number. Assume this is an event with 30 teams with 5 judging panels and each panel was instructed to nominate up to 2 teams per award.

It is acceptable for a Judge panel to only select 1 team. Unless there are special circumstances (such as a very small event, a very early-season event, or similar), each panel should select at least 1 team for each award and should try to select as many teams as possible.

In this example, only the top 10 teams that received at least 1 nomination will be shown. These 10 teams will be labeled with teams A - J.

The shortlist could look like this:

		Think Award	Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award
Panel 1	1st Choice	A	A	A	A	A	A	A
	2nd Choice	B	B	B	B	B	B	B
Panel 2	1st Choice	D	D	C	C	C	C	C
	2nd Choice	C*		D	D		D	
Panel 3	1st Choice	E	F	F	E	E	E	
	2nd Choice				F	F	F	
Panel 4	1st Choice	G	G	G	G	G	G	G
	2nd Choice			H				H
Panel 5	1st Choice	I	I	J	I	J	J	I
	2nd Choice	J	J					J

Figure 2: Nomination (Shortlist) Example – C* team for Think will be explained in the section below.

> The information shown above may only be discussed between the Judges, Judge Advisor Assistant, and the Judge Advisor. *FIRST* does not allow the information about team nominations or any of the deliberations to be shared with other volunteers or members of any team (students, parents, mentors, etc.).

Each panel of Judges nominated 1 or 2 teams for each award based solely on the Structured Interview and, if submitted, the Portfolio reviewed for Think Award consideration.

> During this phase of the judging process, it is acceptable and likely for a Judge panel to nominate the same team for multiple awards. If a team is a strong contender, they should be listed as a nominee for that award.
>
> It is important that Judges do not intentionally remove a team from award consideration at this stage to "balance" out which teams are nominated. Some judges – particularly rookies – may not understand that this may mean that the team is not considered a strong Inspire candidate or

After Judges have made their initial nominations, the Judge Advisor reviews the list and identifies teams with a Portfolio who have also been nominated for at least one Team Attribute (TA) award, and at least one Machine Creativity and Innovation (MCI) award. These teams are added to the Think column as well.

In the example above (Figure 2), Team C submitted a Portfolio, so the team would be added to the Think Award column because they were nominated for at least one award in both TA and MCI

categories – the C* is one way to denote that this team was added to the Think Nomination list. In our example above, Team H did not submit a Portfolio and would not be added to the Think Nomination list.

Be careful about Judges that want to add "one more" team to their nomination lists – this can easily cause the nomination lists to be too long for the scheduled time for Pit Interviews and all panels may then want to add their next strongest teams. The Judge Advisor should use their best judgement and follow the guidance provided in Determining the Depth of Nominee Shortlists after discussing with the judging panel for any additions beyond the set number of nominations (which is typically 2 nominations per panel per award unless the event is very small and/or there are less than 4 judging panels).

In the provided example, there are currently eight teams that could be Inspire candidates based on being nominated for at least one award in each of the Think, TA, and MCI categories at this stage of judging.

It is best practice to have a minimum of 3 to 5 additional Inspire candidate teams for the total number of Inspire awards being awarded (Winner, 2nd place, 3rd place). Depending on the event, this means that a Judge Advisor should strive for the following:

- If the event hands out Inspire Winner: 3 to 5 Inspire candidate teams.
- If the event hands out Inspire Winner and 2nd Place: 5 to 7 Inspire candidate teams.
- If the event hands out Inspire Winner, 2nd and 3rd Place: 6 to 8 Inspire candidate teams.

In the provided example, having eight teams would likely be enough to select all 3 Inspire awards – Winner, 2nd, 3rd.

The Inspire Award

During the initial nomination process, teams should **NOT** be nominated directly for the Inspire Award. If a team is a strong contender for multiple awards, they should be nominated for those specific awards. A separate process will take place later to determine candidates for the Inspire Award

Attend the Opening Ceremonies

Depending on the event, the opening ceremonies may take place between the conclusion of the Structured Interviews and the beginning of the Pit Interviews. Judge Advisors should discuss the logistics around Judges attending the opening ceremonies in the Meeting with the Event Director and Key Volunteers. Judges are encouraged to attend ceremonies to welcome teams and be recognized alongside other volunteers!

If the Judges are unable to attend the opening ceremonies, the Judge Advisor should inform the Event Director as soon as possible so they can relay that information to the Emcee.

Pit Interviews and Specialized Award Panels

Create Specialized Award Panels

Once the Structured Interviews have been completed, and initial nominations have taken place, it is time to reorganize the Judges into award panels. Each specialized award panel will be responsible for deciding on the winner and finalist (if applicable) for the award they have been assigned to.

The Judge Advisor should already have a good idea of each Judge's skills, interests, and conflicts of interest. The Judge Advisor should match the Judges to the specific award that fits their skills and interests. Judge Advisors should not place Judges on a panel solely because a Judge has a strong wish to be a part of that award panel. A technical Judge should be paired with an MCI award such as the Control Award, while a non-technical Judge may feel more comfortable assigned to one of the TA awards. It is possible that a Judge panel may be assigned to review the nominations for multiple awards.

Whenever possible, Judges who have conflicts of interest with teams at the event should be assigned to the Judges' Choice Award panel, if the award is available. These Judges will interview the teams who have not been nominated for awards in the pits to learn more about their accomplishments in consideration for a Judges' Choice Award.

In instances where it is not possible to remove Judges with conflicts of interest from the Pit Interview or deliberation process, the Judge Advisor must be diligent and watch for several items that could impact this phase of judging. Judge Advisors should watch for and manage bias, the perception that Judges are advocating for or against teams in award categories, or other concerns about the fairness and integrity of the judging process. Judge Advisors are encouraged to use the `On-Call Support Numbers` if they have any concerns about conflicts or the integrity of the process.

Determining the Depth of Nominee Shortlists

Each award panel will rank the teams and depending on how many awards will be given out, the ranking can be between the top five teams to the top eight teams. It is ok for there to be ties at this point. In general, small events might find it hard to rank more than 5 or 6 teams, and large events with 2nd and 3rd place finalists will likely need to rank the top 8 or possibly more teams. If the number of unique nominated teams is low across the spectrum of awards, Judge Advisors may need to rank the entire short list and may need to add additional teams to the shortlist. This can be done by asking the structured interview panels to nominate an additional team for each award.

After Assigning Award Panels

After award panels are established, there are a few activities that Judges may perform to create their award rankings. Depending on the award, a Judge may perform only one activity or may use any combination of the following activities listed in future sections: `Reviewing Portfolios`, `Conducting Pit Interviews`, and/or `Observing Matches`.

As a Judge Advisor, it is important to remind all award panels when they need to have their final ranking decisions and report back to the Judges room.

If an award panel is using Pit Interviews to assist in the decision-making process, a Judge Advisor should provide each panel with a pit map, if available, and a match schedule. The pit map will help Judges locate teams, and the match schedule will help Judges understand when a team may be queuing for a match, competing in a match, or may be available for an interview in the pits.

Prior to the start of Pit Interviews or observing a match, the Judge Advisor should remind Judges of the following items:

- Like the Structured Interviews, Judges should be told how they can contact the JA, if needed.
- **Time is limited**! Judges should consider the layout of the venue, and how long they plan to spend time interviewing a team. Although it is easy to say that each Pit Interview may only last a

few minutes, time spent finding the team or walking between different areas (the competition field and the pits) can quickly add time to the process.

- Judges should **never** directly reveal which panel they are with when interviewing teams. When asking questions to teams, it is OK to ask questions that are geared towards a specific award but avoid phrases like "Hi, we're with the _____ panel! Can you tell us about _____?"

- Judges should never interfere with the match schedule or a team's ability to participate in a match! If a team is scheduled to queue for a match, Judges should allow the team to queue for the match and reschedule the interview for a later time.

- If a Judge believes a team, not nominated for an award, should be considered for that award, they should have a conversation with the Judge Advisor.

- Be mindful of what judging-sensitive information may be available to teams, either through written notes or verbal conversations between Judges! To prevent the inadvertent disclosure of deliberation information, the following practices should be followed:

  - Judges should conceal any written notes with a cover page (for example, a blank piece of paper) to prevent anyone from reading notes over the Judge's back or reading upside down (when face-to-face with teams).

  - Judges should be careful when talking to other Judges. During Pit Interviews and observing matches, it may be necessary to hold an informal discussion about a specific team, or how one team compares to another team. If these conversations need to take place, Judges should find a place that is away from the teams, coaches, mentors, parents, and other event volunteers to prevent anyone from overhearing these discussions.

After Judges are given their award panel assignments, the role of the Judge Advisor may vary from event-to-event. Judge Advisors may be in the deliberation room, checking in with award panels for their progress with the Pit Interviews, and obtaining Feedback from Other Volunteers.

Since the Judge Advisor may leave the deliberation room, remember to never leave the deliberation room unattended and have a method to conceal any deliberation notes that may be displayed on flip charts, a whiteboard, or projector. This may be as simple as putting an empty flip chart over nominations written on a wall or locking the computer. Having a method to obscure the deliberation notes will help avoid the possibility of someone who is not a Judge walking into the room and having a line of sight to sensitive information.

Reviewing Portfolios

The Portfolio is only required for the Control Award, the Think Award, and the Inspire Award; however, all panels can review the Portfolios of any team that is on their award nomination list. A Portfolio is optional for all other awards. Judges may find it beneficial to review the Portfolios to form a list of questions, but the priority should be conducting Pit Interviews, with the exception being the Think Award panel.

The Think Award Judges review the Portfolios of each team on their list and compare its contents to the criteria for the award. Although much of the work done by the Think Award Judges is in the deliberation room, they may need to interview teams in their pit to evaluate the encouraged criteria, if needed, to help them better understand the Portfolio content.

Judge Advisors should be careful with Judges assigned to the Think Award panel who may attempt to add criteria not found in Section 6: Awards (A) of the Competition Manual. The primary reference for the Think Award is the Portfolio – additional information gained from Pit Interviews can help Judges

who are finding it hard to rank the Portfolios, but it is important that the Portfolio content should be given the most weight.

Conducting Pit Interviews

Pit Interviews are an important component of judging in *FIRST* Tech Challenge. The interviews are conducted as an informal question and answer session with the team and allow Judges to gain valuable insights about a team that may not have been present in the Structured Interview or in the Portfolio if one was submitted. Pit Interviews also allow Judges to ask questions to explore details that make a team a nominee for one or more awards.

> The Judge Advisor should make a sincere effort to ensure that every team has the opportunity to participate in a Pit Interview, regardless of the number of nominations that they have received and regardless of their participation in a Structured Interview.

It is best practice for the Judge Advisor to talk with the coach of any team that opted out of the Structured Interview to determine if a Pit Interview by a panel of judges would be of interest and beneficial to the team. After that conversation, if the Judge Advisor thinks this would be a positive experience for the team, the Judge Advisor should determine which award panel should conduct the pit interview.

As a Judge Advisor, it is important to make a list of the teams that are not nominated for any award as a result of the Structured Interviews. The Judge Advisor will create this list by reviewing the list of teams at the event and the nominations and determine which teams have not been nominated for any award. Judge Advisors should pay attention to teams who have been only nominated for the Think Award, as Judges in that award panel are not likely to have time to visit those teams for a Pit Interview. To ensure each team can be visited at least once in the pits, the Judge Advisor should add a few teams from the list of teams that have not been nominated to one or more award panels to ensure a Pit Interview is conducted with all teams.

Judge Advisors should remind Judges that it is important that they visit every team on their list and recognize and celebrate the work the team has done. Team interactions with Judges are a valuable part of the *FIRST* experience!

During the Pit Interviews, a judging award panel may come back into the room having visited a team not on their nomination list but, who in their opinion, should have been nominated for that award. The Judge Advisor should check with the Judges that did the Structured Interview for that team to get some clarity on why they were not nominated. Perhaps the Structured Interview judges missed some important aspect that was addressed or added during the Pit Interview. It is okay and acceptable to add teams like this to the nomination list but be careful. The Judge Advisor should also confirm if there were other award nominations that the team should have received but were missed inadvertently.

Observing Matches

While there are no Judges assigned solely to observe matches, in addition to Pit Interviews, an award panel may choose to observe matches to understand the design, control, or innovative solutions teams have described in the Structured Interview and/or Portfolio. Judges should never consider the match

result (points earned or win/loss outcome) when evaluating the robot's performance. A robot's ranking at the event is never used when evaluating a team for any award!

The match schedule will help Judges understand where and when teams are playing their matches. When observing matches, Judges should be aware of where they are standing. Referees need to be focused on the field, and Audio/Visual volunteers who have cameras need to be focused on streaming and projected images. Please do not stand in their way. If possible, ask the *FIRST* Technical Advisor or Head Referee for guidance on where the Judges can stand to observe matches.

Feedback from Other Volunteers

As the Judge Advisor, it is important to regularly check in with other key volunteers about interactions they may have had with teams throughout the day. Often volunteers such as Head Referees, Pit Administrators, or Queuers may have feedback about a team – good or bad – that they would like to share. Sometimes these volunteers cannot leave their respective areas of the competition, so it is best to try to visit as many of these volunteers as possible. These visits should not be limited to the end of the day. If a volunteer has concerns about a team, the Judge Advisor should make sure that the information being relayed is first-hand information, rather than rumor.

JAs should ask broad questions such as "Have you met any teams that you would like to share information about with me?" Keeping questions open-ended ensures the feedback is not driven in any way. The field personnel can respond to any team they would really like the Judge Advisor to know about.

Talk with the Event Director or Volunteer Coordinator if any of the field personnel have conflicts of interest with teams competing at the event. Knowing this ahead of time will help the Judge Advisor keep the feedback in context when speaking with an event volunteer who may have a team competing at the event. If the Judge Advisor is not sure about an event volunteer's Conflicts of Interest, it is acceptable to ask the Event Director or Volunteer Coordinator during the day.

Occasionally team volunteers will try to influence Judges and Judge Advisors – it is important to ensure that information that is particularly good or bad about a team is confirmed by more than one volunteer if possible.

If there is team behavior that should be addressed, please follow the steps outlined in the Team Interaction and Support section of this resource.

Final Deliberations and Allocating Awards

After the Portfolio reviews, Pit Interviews, and match observations are complete, the Judge Advisor serves a key role in the judging process as a facilitator of the final deliberations and awards allocation process. This section will outline the process and important principles that should be followed to ensure that as many teams as possible are recognized for their hard work.

While the Key Principles in Judging are used throughout the entire judging process, these principles are very important when the final deliberations begin.

Create Final Nominations and Ranks for Each Award

Judges, working in a panel with other Judges, will have a shortlist of teams that they have done a deeper evaluation for each of the awards, except for Inspire. Each award panel will rank the teams and depending on how many awards will be given out, the ranking can be between the top five teams to the

top eight teams. It is ok for there to be ties at this point. In general, small events might find it hard to rank more than 5 or 6 teams, and large events with 2nd and 3rd place finalists will likely need to rank the top 8 or possibly more teams.

The end goal of the final deliberation process is to have an equitable distribution of award winners and finalists with no team being mentioned more than once for all judged awards during the award ceremony. A team may be mentioned as a finalist or winner for **one** judged team award and receive a competition award (for example, Winning Alliance Captain).

In the example being used, we will only be assigning winners with no second or third Choice Award finalists. The same methodology is used at events where finalists are determined.

It is okay for an award panel to have ties in their ranked list at this point if they are struggling between 2 teams.

It is a best practice to not have ties for 1st but that can also be managed in the process. Additionally, with a review from the Judge Advisor, an award panel may include a team that was not nominated during the Structured Interviews. The Judge Advisor should confirm that the team was not mistakenly left off other nomination award lists as well before going into the Inspire award deliberations.

The Judges' Choice Award is not included at this time. If the Judge Advisor does set up a dedicated Judges' Choice Award panel, the panel can rank their nominations as well but just be clear with the panel that Judges' Choice nominations or ranks do not influence or contribute to the Inspire Award.

Here are the example Ranks for our top teams:

Award Category / Rank	Think Award	Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award
		Team Attribute			**MCI**		
1st	G	A	A	B	B	F	A
2nd	A	G	F	A & D	E	B & D	B
3rd	B	B	B		C		G
4th	D	F	G	C & E	G	A	C
5th	J	D	H		A	E	I
6th	C	J	D	F	J	G	H

Figure 3: Ranked Shortlists Example

The information shown above may only be discussed between the Judges, Judge Advisor Assistant, and the Judge Advisor. *FIRST* does not allow the information about team ranks or any of the deliberations to be shared with other volunteers or members of any team (students, parents, mentors, etc.).

Judge Advisors may also lead Judges through the nomination process for additional awards not shown above, such as the Compass Award and region-specific awards if those awards are offered at the event. The topics discussed in the next few sections will focus on the team judged awards outlined in Section 6: Awards (A) but many of the principles can be applied to other awards.

Recognition Principles in Judging

At this part of the process, the ranked shortlists have been formed, and the next phase will be the award deliberations. During this phase of the judging process, the Judge Advisor will facilitate a discussion with the Judges. This process will not be used for individual awards, such as Dean's List and the Compass Award. If the Judge Advisor has questions about this, or has difficulty identifying unique teams, they must contact the `On-Call Support Numbers` for guidance.

> The number of Awards given at each event is scaled for the number of teams checked in to the event. Please see Section 6: Awards (A) of the Competition Manual for more information.

As a group, the focus should be on celebrating exceptional work and celebrating as many teams and students as possible.

Selecting the Inspire Award Candidates

The Inspire Award candidates are selected from the list of teams, based on the award categories they appear in, and the number of times they appear in the initial nominations for the other (non-Inspire) awards.

All the Inspire candidates must appear at least once in each of the following lists:

- The Think Award
- At least one Machine, Creativity, and Innovation (MCI) award
- At least one Team Attributes (TA) award

This principle is essential, given that Inspire Award candidates are recognized as strong, well-rounded teams across all award categories! The Judge Advisor will form the initial Inspire Award candidate list based on these requirements.

> Teams who are not competing in their home region, which is described in Section 4: Advancement of the Competition Manual, are not eligible to be considered for the Inspire Award.
>
> The Judge Advisor should work with the Event Director to identify these teams prior to final deliberations.

From the initial Inspire Award nominations, record which teams show up in more than one award category and which categories. Teams should show up for the Think Award, MCI category, and TA category as this demonstrates a well-balanced team for the Inspire Award.

The Judge Advisor should then sort the ranked lists by team and count the number of times that the team has been ranked for each award - their RANK COUNT. See Figure 4 for what this would look like.

In the example above, there are six teams (A, B, C, D, G, and J) that are candidates for Inspire due to being highly ranked in at least 1 award in each of the three categories.

TEAMS	Think Award	Team Attribute			MCI			RANK COUNT
		Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award	# Awards a team is ranked in
A	2	1	1	2	5	4	1	7
B	3	3	3	1	1	2	2	7
C	6		-	4	3	-	4	4
D	4	5	6	2		2		5
E	-			4	2	5		3
F		4	2	6	-	1		4
G	1	2	4	-	4	6	3	6
H			5				6	2
I	-	-		-			5	1
J	5	6	-		6	-	-	3

Figure 4: Example of Ranked Shortlists with a Rank Count

The numbers under each Award Category are the ranked placement for each team for that award. The "-" means that the team was nominated but unranked. An empty cell means that the team was not nominated for that award.

Next, the Judge Advisor should then determine the comparative strength of the teams. This strength or "RANK SCORE" is the sum of the highest rank in a category for each of the 3 categories. The RANK SCORE allows the Judges to compare the teams with each other in a consistent way – each team gets 3 numbers – their highest rank in Think, in the TA category and the MCI category.

Figure 5 is what the example would look like to add both RANK COUNT and RANK SCORE columns:

TEAMS	Think Award	Team Attribute			MCI			RANK COUNT	RANK SCORE	
		Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award	# Awards a team is ranked in	Sum of highest rank per category for 3 categories	
A	2	1	1	2	5	4	1	7	4	2 + 1 + 1
B	3	3	3	1	1	2	2	7	5	3 + 1 + 1
C	6		-	4	3	-	4	4	13	6 + 4 + 3
D	4	5	6	2		2		5	8	4 + 2 + 2
E	-			4	2	5		3		
F		4	2	6	-	1		4		
G	1	2	4	-	4	6	3	6	7	1 + 2 + 3
H			5				6	2		
I	-	-		-			5	1		
J	5	6	-		6	-	-	3	17	5 + 6 + 6

Figure 5: Example of Ranked Shortlists with a RANK COUNT and RANK SCORE

In the case of RANK SCORE, a lower number is better with 3 being the absolute best possible RANK SCORE – receiving rank of 1 in at least 1 award in each of the 3 categories.

As an example of how RANK COUNT and RANK SCORE are calculated, look at Team A.

Team A is ranked in all award categories, so they have a RANK COUNT of 7.

To calculate the RANK SCORE of 4, add the rank in Think (2) to the highest rank in any of the TA awards (1) plus the highest rank in any of the MCI categories (1).

As shown in Figure 5, the last column "RANK COUNT" is a count of the number of times that the team was ranked for an award and is a measure of "well roundedness." A higher RANK COUNT is better with 7 being the highest possible number. Recall that the Judges' Choice Award is not a factor in the Inspire Award deliberation and should not be considered during this phase.

Of the six Inspire candidate teams (A, B, C, D, G, and J) as shown above in Figure 5, two teams stand out across both data points – teams A and B. Both teams have a perfect RANK COUNT (7) and a nearly identical RANK SCORE (4 vs 5).

> Inspire Award teams are overall strong teams that are ranked across as many awards as possible, and then the highest overall highly ranked within each category.
>
> The RANK COUNT AND RANK SCORE of a team are simply data points to facilitate the discussion. The deliberation process should **not** solely use these data points as the final decision for the Inspire Award, instead the data can help guide the discussion when comparing teams and serves to visually separate stronger versus weaker teams.

Allocating the Inspire Award

Once the judging panels have their top teams ranked for all non-Inspire awards as in Figure 5, the Judge Advisor will use this information to facilitate the discussion with the Judges to determine the Inspire Award. Recall that the Judges' Choice Award is not part of the Inspire Award discussion.

> Per Section 6: Awards (A) of the Competition Manual, teams are only eligible for the Inspire Award in their home region per A213. Additionally, a team may only win the 1st place Inspire Award at one Qualifying Tournament (QT) or League Tournament (LT) per season per A214.
>
> If a team is competing at another QT or LT, they are eligible to be a finalist (2nd or 3rd place) but may not be named the winner. The team is eligible to win 1st place at their Regional Championship.

The Judge Advisor will confirm with the Event Director which teams cannot be considered for being a Winner and/or Finalist of the Inspire Award. Judge Advisors will then use that information to determine which teams (if any) should be eliminated from certain Inspire Award deliberations.

Using the provided example and after a discussion amongst all judges and facilitated by the Judge Advisor, let's assume that team A is selected to be the Winner of the Inspire Award.

Team A, after being selected as the winner of the Inspire Award, would not be eligible to win any other award. If Inspire finalists (2nd, 3rd), are also being awarded, they should be selected next, and the Judge Advisor would use a similar process to select each in order.

Equitable Distribution of Awards

Teams may only be mentioned one time for all of the team judged awards including the Judges' Choice Award.

In the example given, after the Inspire Award is decided, award conflicts will need to be removed, and decisions made based on the teams remaining in each category.

> Reminder – A215 in Section 6: Awards (A) of the Competition Manual, teams may not receive more than one mention for any team judged award! Team judged award winners or finalists must not be listed as a winner or finalist for any other team award.
>
> The Dean's List and Compass Award are individual awards. Members from a team may receive these awards and still receive a judged team award – winner or finalist.

After all of the Inspire Award places are selected, the Judge Advisor would go through all of the remaining awards ensuring that the highest ranked team is selected as the Winner. The Judge Advisor would need to ensure that each team receives at most 1 award (Winner or Finalist). A team may not win an award and also be mentioned as a Finalist, for example.

The provided example does not include the Judges' Choice Award, but after the Inspire Awards are all determined, the nominated teams for the Judges' Choice Award should also be added as an equal award to all other awards. The Judges' Choice Award does not have 2nd or 3rd places.

Once all winners are selected for all awards including Judges' Choice Award, if Finalists are being awarded, all 2nd place awards would be selected using the same process and then finally, all 3rd place awards.

Some awards are easy – the highest ranked team that has not won any other award – will be given that spot. The Judge Advisor should mark teams that receive an award in a way that works for them to ensure that a team is only selected once. In the example, a team selected for an award has a "W" in the award cell.

In the provided example, after Inspire winner is determined (team A), the Judges would have an easy decision to select team F for Control and team G for Think. However, for team B, there are 2 highest ranked choices – either Sustain or Innovate.

Here is what that would look like:

TEAMS	Think Award	Team Attribute			MCI			Award
		Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award	
A	2	1	1	2	5	4	1	INSPIRE
B	3	3	3	1	1	2	2	
C	6		-	4	3	-	4	
D	4	5	6	2		2		
E	-			4	2	5		
F		4	2	6	-	1 W		Control
G	1 W	2	4	-	4	6	3	Think
H			5				6	
I	-	-		-			5	
J	5	6	-		6	-	-	
	WINNER SELECTED				WINNER SELECTED			

Figure 6: Example after the Inspire, Control, Think Award Winners Selected

It is important to note that the Judges would have to choose which one award that team B will receive. Team B may not receive both awards.

In the above example, team B could win either the Sustain or Innovate award as team B is the highest ranked available team for both. The Judges, after a discussion, would need to determine which is the better single award for team B. There is no wrong answer, but it is important that the judges make the decision.

In the example, let us assume that the Judges select team B to win the Sustain award. The rest of the awards will then be given to the next highest ranked available team for each award. If there is a tie where multiple teams are the highest ranked available team, this would be resolved through a discussion with the judges related to that specific award.

Note that the original ties in the ranks did not matter in this example.

Here is what our example would look like:

TEAMS	Think Award	Team Attribute			MCI			Award
		Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award	
A	2	1	1	2	5	4	1	INSPIRE
B	3	3	3	1 W	1	2	2	Sustain
C	6		-	4	3	-	4 W	Design
D	4	5 W	6	2		2		Connect
E	-			4	2 W	5		Innovate
F		4	2	6	-	1 W		Control
G	1 W	2	4	-	4	6	3	Think
H			5 W				6	Reach
I	-	-		-			5	
J	5	6	-		6	-	-	
	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	

Figure 7: Example One with All Award Winners Selected - Team B wins Sustain

The final Award results using this example with team A winning Inspire and team B winning Sustain would be:

- Inspire: Team A
- Think: Team G
- Connect: Team J
- Reach: Team D
- Sustain: Team B
- Innovate: Team E
- Control: Team F
- Design: Team C

Based on the Judges discussions, the result could easily vary with team B receiving the Innovate Award instead.

Figure 8 below is what that would look like:

TEAMS	Think Award	Team Attribute			MCI			Award
		Connect Award	Reach Award	Sustain Award	Innovate Award	Control Award	Design Award	
A	2	1	1	2	5	4	1	INSPIRE
B	3	3	3	1	1 W	2	2	Innovate
C	6	-		4	3	-	4 W	Design
D	4	5	6	2 W		2		Sustain
E	-			4	2	5		
F		4	2	6	-	1 W		Control
G	1 W	2	4	-	4	6	3	Think
H			5 W				6	Reach
I	-	-		-			5	
J	5	6 W	-		6	-	-	Connect
	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	WINNER SELECTED	

Figure 8: Example Two with All Award Winners Selected - Team B wins Innovate

The final Award results if team A wins Inspire and team B wins Innovate would be:

- Inspire: Team A
- Think: Team G
- Connect: Team J
- Reach: Team H
- Sustain: Team D
- Innovate: Team B
- Control: Team F
- Design: Team C

Most teams will receive the same awards between the two scenarios except in the second scenario, team D would receive Sustain instead of Reach, team H would now receive Reach (and not any award in the original scenario) and team E would not receive any award (in the original scenario would have received the Innovate Award).

Both results are valid and correct as long as the results are based on discussion amongst the judges using the published award criteria and selection methodology described.

Post-Deliberation Activities

After all the awards have been allocated, there are a few closing actions that need to be completed prior to the conclusion of an event.

Writing Award Scripts

Once award winners have been identified, the Judges are responsible for writing award scripts for all Award Winners and Inspire Finalists. Award scripts are not created for other Award Finalists. There is a common format to the awards scripts that *FIRST* likes to use. A good award script is usually four sentences, with the last sentence announcing the winner. The structure of the sentences is important.

1. Sentence one could apply to many teams but has a subtle hint.
2. Sentence two has a hint that the winning team might understand.
3. Sentence three has a bigger hint, leaving the team somewhat sure who it is, but is not 100% positive.
4. The last sentence is: "And the _____ award goes to…"

Example: Team 3344 is called the Robo-Knights, from Carnation, WA. They are winners of the Design Award. Their team's color is blue, they have a robot with an impressive arm design, and the robot has a shiny blue finish. The award script might say:

"This VALIANT effort required many nights, designing a robot with an impressive array of features. A strong arm and a solid design have their opponents turning BLUE with envy. A SHINING example worthy of a knight at the round table of Camelot, the Design Award goes to team 3344 the Robo-Knights from Carnation, WA."

Although the example above is the common way that scripts are written, Judges should feel encouraged to write scripts using creative formats (for example: poems, haikus, etc.). Judges may work individually or in a group to write the scripts. Judges are encouraged to use Artificial Intelligence (AI) tools to assist in writing their scripts.

Judge Advisors may review the list of Sample Scripts at the end of this guide for more examples.

Here are a few key points that Judges should consider when writing scripts:

- Judges who interviewed the team should write the script. They have the notes and details needed.
- The script should have details as to why the team is winning that specific award.
- Judges may utilize Artificial Intelligence to help write the script.
- Always read them aloud when making final edits. They often read and speak differently.
- Do not reveal the winner in the first sentence. "We think team 1234 deserves the Design Award because…" is a common submission from the Judges. These scripts should be rewritten to reveal the result over time, building it up as the script progresses!
- Make reading the script easy for the Emcee. Someone else will read the script during the award ceremony.
  - Avoid long sentences and long words.
  - Avoid words that can be easily misunderstood, hard to pronounce, or have multiple meanings.

- o Avoid calling out a team for something that they are (such as female) - the emphasis should be on what they did (built a cool and unique robot).
- o Try to focus on the specific Award criteria to make it easier for the audience to understand why the team won that award.
- o When possible, capitalize, bold, or underline words that the emcee should emphasize when reading the script.
- o If needed, scripts can include directions for the emcee:
  - ▪ "[read as a poem]"
  - ▪ "[stretch out the word _____]"
  - ▪ "[make a hand motion]"

Judge Advisors should vet the scripts for inappropriate content before submitting them using the process outlined in the `Record Keeping` section in this document.

> Scripts are only written for the Winners (1st Place) of each judged team award, plus the Winner and Finalists (2nd and 3rd place) for the Inspire Award.

The Judges do not need to write scripts for the additional award finalists.

Record Keeping

When the awards have been decided, a crucial step is for the Judge Advisor to record the winners and finalists for all awards. This information should be captured in the scoring system by the Judge Advisor using the online FTC Scoring system or providing the information to a designated volunteer at the event. The method used to enter the scripts should be coordinated between the Event Director and Judge Advisor in a pre-event meeting.

The details for how to input data to the FTC Scoring System can be found in the FTC Scoring – Judge Advisor and Judge Guide.

The award information will be added to the FTC Scoring system in one of three ways.

- • FTC Scoring Cloud Data Sync – used when the JA has a computer or tablet with internet access and access to the FTC-Live event.
- • FTC Scoring Cloud Award Submission Local Export – used when the JA does not have internet access to the FTC-Live event, but can otherwise connect to the internet.
- • FTC-Live Local Manual Entry – used when the JA does not have access to an internet connection. This data entry is done manually, usually at the Scorekeeper computer. For this method, the Award Record Sheet could be used. The Judge Advisor will usually pass an `Award Record Sheet` to the correct individual entrusted by the Event Director. This is typically the Scorekeeper so the information can be entered into the scoring system. If in doubt, the Scorekeeper can be given the list since they will eventually need it.

> It is highly encouraged for Judge Advisors to use the FTC-Live system at their event to upload their results and scripts. If the venue does not have internet access in the deliberation room, please consider using a hot spot to connect to the system.

Filling in an Awards Record Sheet should be done carefully by the Judge Advisor and then reviewed by the Judge Advisor Assistant, or another trusted individual, to ensure the data is correct. Extra care should be taken to ensure team names and team numbers are correct; it is easy to transpose team numbers, which can cause confusion during the award ceremony!

The contents of the Awards Record Sheet should be treated as a closely held secret until after the award ceremony. Access should only be shared with the Scorekeeper, Judge Advisor Assistant, Event Director, and Emcee.

> Pro-tip: The Judge Advisor or Judge Advisor Assistant should either take a photocopy of the sheet or use a mobile phone to take a picture of the sheet. It is easy to misplace this sheet and trying to reproduce this information later can be difficult.

Returning Documents to Teams

At traditional events, Judge Advisors should collaborate with the Judges to gather all the Structured Interview Feedback Forms and team Portfolios that were submitted and return them to the teams.

If a Portfolio was submitted, the feedback form should be included inside of the Portfolio or loosely attached to the outside of the Portfolio, using a paperclip or other method.

> The Judge Advisor should work with the Judges to ensure no deliberation or other judging notes have been included with the Portfolios and Structured Interview Feedback Form.

Judge Advisors should work with the Event Director to determine when and where documents will be returned to teams.

After a remote event, the Lead Coach/Mentor 1 for the team will receive a Structured Interview Feedback Form completed by the event Judges.

Notes Taken During Judging

Notes that Judges take during interviews and deliberations must be treated as confidential and left with the Judge Advisor at the end of the day.

- Judge Advisors should ensure physical notes (printed or written) are taken out of the judging and deliberation rooms before the rooms are turned over to the Event Director, who may lock or reset the rooms (depending on the venue).
- Notes recorded on an electronic device (files, photos, or screenshots) should be deleted and the Judge Advisor should confirm the files were permanently deleted.

Please refer to the Secure Disposal of Judging Notes section of this document for additional details.

> Under no circumstances are notes to be shared with people who are not a part of the judging pool, either intentionally or by accident.

Handing Out Awards

Once the awards have been decided, and the award scripts have been written, the Judges will typically join the rest of the event volunteers and help hand out the awards. The awards are handed out in between playoff matches and Judge Advisor should work with the Event Director and Emcee to understand how the Judges will participate in this process. The details may be discussed during the Meeting with the Event Director and Key Volunteers.

When it comes time to announce the finalists and winners of each award, the Judges participate as directed. Typically, this is a line in front of the audience for the Judges to applaud and congratulate the award winners.

> If a Judge that is affiliated with a team that will be winning an award and wishes to join the team in high-five lines or other celebrations, they should not participate with the rest of the Judges during any part of the award ceremonies.

After the Event

Secure Disposal of Judging Notes

Once the judging process is complete, and the event has concluded, the Judge Advisor is responsible for ensuring that all Notes taken during the Judging process are securely disposed of. Judge Advisors are not required to shred notes but may simply take the notes they have gathered off-site and then dispose of the documents. Regardless of the method used to get rid of these notes, the important part is that teams and volunteers should not be easily able to locate and read these notes (for example, throwing the notes in the trash at the venue is **NOT** recommended).

Judging Process Feedback

We strive to create support materials that are the best they can be. If you have feedback about this manual, please email customerservice@firstinspires.org or by contacting support. Thank you!

Participate in the Monthly Webinars

We recommend Judge Advisors join in the discussion webinars that are offered during the season. Volunteers may sign up for these discussions using the links found in the Key Role Webinar Schedule.

Useful Links and Information

Team Interaction and Support

When interacting with teams please always consider the team's perspective. The teams have put significant time and effort into preparing for this event and may be feeling very stressed about everything working out as they have planned. **Today is a very big deal for the team and we are here to help!**

While it is our job to help guide the teams to a successful event, it's their responsibility to follow the rules and be on time for judging and matches.

If you feel there is an issue with an individual or several individuals from a team that warrants specific intervention beyond just a kind reminder, please ensure the correct stakeholders for the team are aware. Here is a generally acceptable process when working with a student or team who you need to change their behavior:

The ABCs of Managing Team Behaviors	
Ask for an Adult	Do not directly reprimand a student one-on-one without an adult from their team present. Ask the student to bring an adult who is responsible for the team to meet you, before moving forward with any discussion about the concerns at hand.
Be aware of the Environment	Is the environment conducive for the feedback you are about to give? Is it loud in the area where you are? Are there other teams around that may hear the reprimand? Moving the conversation to a quieter, more private space as needed can be helpful.
(Offer a) Clear Explanation	Explain the concern to the team and offer clear examples of the behavior that is concerning.
Discuss any Questions	Offer the opportunity for students and adults to ask clarifying questions
Explain Next Steps	Outline with the students and adults what the next steps are if the issue is not corrected. Certain behaviors may include the risk of yellow cards

> **Note**: the only person at an event who can give an official warning or issue a yellow/red card is the Head Referee. Please refer these more severe issues to the Head Referee and notify the Program Delivery Partner.

Teams may only be completely disqualified from awards consideration for very rare egregious actions and only with approval from *FIRST* HQ. The Event Director and/or JA should call the On-Call Support Numbers for guidance to discuss the issue.

On-Call Support Numbers

<div style="border:1px solid black; background:#f8d7bf; padding:10px;">

On-Call Support

These numbers are for _volunteer support only_. Teams should not use these numbers to call about rulings or technical assistance.

Administrative, Judge, Referee and Non-Technical Issues:
 (603)206-2412

Scoring System (FTC Live) or other Technical Issues:
 (603)206-2450
Call or use the **built-in chat feature on FTC Live** available for events with internet access

</div>

Pre-Event Support

Mon – Fri 8:30am – 5:00pm Eastern Time (UTC-4 or UTC-5)
Contact Support including live chat or email customerservice@firstinspires.org

Program Resources

 FIRST Tech Challenge Website

 Event Search

 Game and Season Resources

 FIRST Tech Challenge Blog

 Volunteer Resources

 Team Email Blasts

Feedback

We strive to create support materials that are the best they can be. If you have feedback about this manual, please email customerservice@firstinspires.org or by contacting support. Thank you!

Award Record Sheet

Awards should be submitted by the Judge Advisor into FTC Scoring using one of the methods described in the FTC Scoring Judge and Judge Advisor Guide. This sheet is available for emergency use only.

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Event Name	
Date	
Location	
Judge Advisor	

Note: For this section, providing only the Team Number is acceptable.			
	Winner	**2nd Place**	**3rd Place**
Design Award			
Reach Award			
Control Award			
Innovate Award			
Sustain Award			
Connect Award			
Think Award			
Inspire Award			

Judges' Choice Award	Winner:	
Compass Award	Name of Winner:	Team Number:
	Name of Finalist:	Team Number:
	Name of Finalist:	Team Number:
Additional Awards	Name of Award:	Winner:
	Name of Award:	Winner:
	Name of Award:	Winner:

Please visit Section 6: Awards (A) of the Competition Manual for an understanding of the number of awards provided, based on the number of teams competing in the event. The Event Director or Program Delivery Partner will advise you on how many awards are given.

Managing Conflicts of Interest

> **Conflict of Interest** – a conflict between the private interests and the official responsibilities of a person in a position of trust.

All listed volunteer roles will be asked to disclose any potential Conflicts of Interest, and to complete the Conflict of Interest and Disclosure form. During the Judges meeting, Judges will be asked to declare any potential conflicts to the rest of the judging pool. During the Referee meeting, Referees will be asked to declare any potential conflicts to the rest of the referee team. Some scenarios of conflict of interests:

- A coach/mentor volunteers as a Judge or a Referee.
- A parent/relative of a team member volunteers as a Judge or a Referee.
- A recent alum (student or adult) of a team competing at the event volunteers as a Judge or a Referee.
- A sponsor of a team competing at the event volunteers as a Judge or Referee.

Having a Conflict of Interest, or even the perception of a Conflict of Interest can affect a team's experience, even if decisions that were made throughout the day were not biased in any way. The perception of potential favoritism is enough to discourage a team, coach, or mentor, and take away from their overall experience at an event. Knowing what Conflict of Interest is, and how to avoid being in a position that could be a conflict will ensure all teams feel they have been evaluated fairly.

> All volunteers at an event have a fiduciary responsibility to act in the best interest of the event which means to treat all teams fairly and equitably.
>
> Volunteers should use prior FIRST experience to help inform their decisions but should not use prior knowledge or perception of any specific team to inform their decisions either good or bad. Every team, at every event, deserves a fresh blank slate with all volunteers.

A volunteer who does not disclose their conflict of interest can compromise the integrity of *FIRST* Tech Challenge events. In judging, this could cause teams affiliated with the volunteer with a Conflict of Interest to be removed from consideration for awards.

Conflict of Interest, in some cases, can be quite easy to see. In other cases, it may be less obvious, and it may be difficult to decide what constitutes a true Conflict of Interest. In some cases, the bias may be apparent, while other times a Conflict of Interest may be perceived by a team or a coach. It is best to keep the following in mind when volunteering:

- Be open and forthcoming about any conflicts you may have with a team competing at the event.
- If there is a known Conflict of Interest, avoid making decisions about a team that would change the outcome of the day, such as speaking for or against a team in Judge deliberations, or holding some teams to a different refereeing standard than others.
- Remove yourself from any situation that could be perceived as a Conflict of Interest.

Below is one example of a Conflict of Interest. Keep in mind this is an example, and there are many forms of Conflict of Interest, and ways to handle it.

<u>Parent/Relative/Alumni of a Team</u>

If a parent or a relative of a team member, or an alum of a team is volunteering at an event, this volunteer must abstain from making any decisions that could affect the results of the tournament. Whether volunteering as a Judge or as field personnel (referee, field technical assistant, etc.) it is important to have that volunteer remove themselves from making any decisions related to that team.

For example:

- If the volunteer is a Judge, they must recuse themselves from any conversations about that team during deliberations.
- If the volunteer is a referee, they should not be involved in any decisions around penalties, match replays, etc.
- Keep in mind that there are many ways Conflict of Interest can be presented, from parents to sponsors. Make sure to remove any apparent Conflicts of Interest but also keep in mind any perceptions of conflicts.

Sample Scripts

The following are some example scripts that have been vetted and can be used to inspire your script writing. As noted above, AI tools can be a big help in providing inspiration and ideas, but likely Judges and Judge Advisors will still need to shorten and refine them.

Inspire Award Sample Scripts

[a rhyme]

Testing materials and designs, many things to SIMULATE.
New teams and tourniquets, they did CREATE.
We'd hate to leave all the teams in SUSPENSE,
So we'd like to thank this inspiring team for their iterative INTENT...

The INSPIRE Award is presented to:
Team #12791, Iterative Intentions from Flower Mound, Texas

It's hard not to be drawn into *FIRST* by this exuberant team as their connections span everything from local manufacturing companies to other teams around the world.

This team's documentation was meticulous and thorough.

Their innovative and extremely robust construction didn't sweep or grab, rather it plunged the team to the top of the competition.

The INSPIRE Award is presented to:
Team #8496, Heat It Up and Keep It Cool from Newhall, California

---

By creating a vision system that seamlessly integrates hardware and software, this team overcame the challenge of precision versus speed.

Their comprehensive playbook motivates students, coaches, and mentors, creating a pipeline of future engineers throughout Nebraska.

Through their genuine passion and tireless efforts, they've spread the love of *FIRST* across their state, truly inspiring everyone they encounter.

The INSPIRE Award is presented to:
Team #18139, Rebel Robotics from Norfolk, Nebraska

[a poem]

A top notebook for ENGINEERING
Shows a journey through CAD, math and GEARIN'
This team's process and LEARNIN'
came with a great mining cart that left the Think Award judges a CHEERIN'

The THINK Award is presented to:
Team #12791, Iterative Intentions from Flower Mound, Texas

"EXTRA EXTRA, Read all about it..."
Plans, transitions, strategies, successes, lessons learned, mentoring, but most of all growth and sustainability. (Oh and engineering of course)
They always RACE to the finish, but they're NEVER RECKLESS.

The THINK Award is presented to:
Team #5667, Robominers from Park City, Utah

Some notebooks quickly become BRIGHT spots in the Judge's minds, and this is no exception.

This team's notebook does not reflect simply on accomplished daily tasks, but also the lessons learned from their mistakes.

With an elegant notebook, they use TORQUE and INERTIA to FORCE their way to the top.

The THINK Award is presented to:
Team #6929, Data Force from Highlands Ranch, Colorado

Connect Award Sample Scripts

The Connect award normally focuses on reaching out to the STEM community.

In this case the STEM community reached back and asked for help.

Working with their STEM MENTOR during a summer internship, team members tested various legal *FIRST* Tech Challenge motors.

The resulting data was then presented at the Championship conference for teams to use in designing tuned PID algorithms.

The CONNECT Award is presented to:
Team # 417, Space Koalas in Disguise from Woodinville, Washington

---

[a rhyme]

Using multiple channels for collaboration, they allowed many to ADVANCE.

Propelling their country for success was not by CHANCE.

Their mascot is hard to miss as they come THROUGH.
This team is held together by much more than a SCREW.

The CONNECT Award is presented to:
Team #11047, screw it from Taichung, Taiwan

This team saw everything as an opportunity to catch industry's attention.

Their success building relationships including with their local economic resource council proves that unlike their animated namesake, this team has come up with exactly the right tools that work.

The CONNECT Award is presented to:
Team # 8367, ACME Robotics from Grass Valley, California

Reach Award Sample Scripts

Just like their robot, this team's outreach spread far and wide. Their stupendous calendar of events and free GLOBAL summer camps made *FIRST* loud!

Through their new podcast and nonprofit, they created a GATEWAY to spark curiosity in students.

The judges adored their 3-step sustainability plan to scout, shadow and train new recruits so they can ZEALOUSLY INSPIRE POTENTIAL - or ZIP around - in the *FIRST* community!

The REACH Award is presented to:
Team # 16290, Z.I.P Ties from Sanford, Florida

This tried-and-true team is dedicated to spreading the culture of *FIRST* in their rural community.

This needle in a haystack, along with their cowbot, Delilah, impressed the judges with their outreach and interaction within the *FIRST* team community.

The REACH Award is presented to:
Team #18095, Haywired! Robotics from Twin Falls, Idaho

By opening their HUB to new schools and teams, they reduced the intimidation factor to getting started in FIRST. Their business plan brings a NEW HOPE to their team's sustainability.

Traveling from FAR FAR AWAY, they know how to spread STEM across the GALAXY.

The REACH Award is presented to:
Team #17962, Ro2D2, PLOIESTI, PH, Romania

Sustain Award Sample Scripts

[a rhyme]

Hours of planning can't be counted on one SHEET.
An optimistic team, with risks fully mitigated, feeling COMPLETE.
Their shiny next gen leaders have the mentoring LETTERS.
Plenty of analysis backed these GO-GETTERS.

The SUSTAIN Award is presented to:
Team #16158, VC Silver Circuits from Virginia City, Nevada

Some leaders are young, and some are getting OLD
But will always have hearts of GOLD
Their preseason training involved shifting gears
To create a better society for those near and FAR
Proving to all, that they really are the GIFTED STARS.

The SUSTAIN Award is presented to:
Team #8949, The Gifted Gears from Portland, Oregon

A poem brought to you with the help of AI:

A team of visionary leaders, they stand tall and PROUD,
With a mission to spread knowledge far and LOUD.

STEM and *FIRST* are their weapons of CHOICE,
While managing constraints and risks, they give members a clear VOICE.

They train the trainers; their dedication is CLEAR.
As they pave the way, for the future to STEER.

The SUSTAIN Award is presented to:
Team #14473, Future from Fremont, California

Innovate Award Sample Scripts

[a rhyme]

This far-reaching team had to horizontally EXTEND.
Their locking CONTR-OL mechanism we highly RECOMMEND.
A QUAL-IT-Y team needs to ALIGN,
…. to stay on the field and off the SIDELINE.

The INNOVATE Award, sponsored by RTX, is presented to:
Team # 21229, Quality Control from Bellevue, Washington

Innovation is the key to success, and this team surely did impress
with their arm design so new, they proved what they can do.
Extending, flexible intake and a deposit design so great.
The choice was clear with this team being so brilliantly forward.

The INNOVATE Award, sponsored by RTX, is presented to:
Team #14259, TURBΩ V8 from San Ramon, California

This robot is a masterpiece from an alien world.

It sits so pretty like a chameleon and snatches its unsuspecting prey!!

Weird Al should be jealous of this delicate and creative accordion.

The INNOVATE Award, sponsored by RTX, is presented to:
Team # 4042, Nonstandard Deviation from Seattle, Washington

Control Award Sample Scripts

[a poem]

Without a doubt, this team controlled the field with outstanding PRECISION.
They worked together with smarts and VISION.

With a custom strategy at hand and a unique gameplay COMMAND,
this crew conquered the field with a custom coded BRAND.

This teams' bot isn't a carcass or a skull, it's totally WISE;
and they have it seeing from completely brand-new EYES.

The CONTROL Award is presented to:
Team # 9112, Skeleton Crew from Salt Lake City, Utah

This team's mastery of control algorithms and sensor integration is as impressive as their name suggests.
Their robot scored cones with lightning-fast efficiency, leaving competitors in their wake.
With an AutoGlide algorithm that could make a jellyfish envious, this team was simply the KRAKEN of control systems --unrivaled, unstoppable and utterly awe-inspiring.

The CONTROL Award is presented to:
Team # 8680, Kraken-Pinion from Mequon, Wisconsin

[a rhyme]

A state machine kept this robot in CONTROL.
A rotating arm allowed it to find the POLE.
Then the yellow panels with a sight to BEHOLD...

The CONTROL Award is presented to:
Team #14423, RoboCorns from Exton, Pennsylvania

Design Award Sample Scripts

This team impressed the judges with their clean, compact packaging and efficient design.
From brainstorming to iteration their efforts came to fruition on their third iteration.
Their innovative use of carbon fiber, creation of a passive guide for alignment and an arm that pivots through the robot is certainly JUICY.

The DESIGN Award is presented to:
Team # 16236, Juice from Folsom, California

This robot hopped into Houston with symmetrical design dressed in black and BLUE.

The team is a fan of anodizing metal and designing with metric.

Don't be fooled by their charming demeanor, their robot is as fierce as a cornered KANGAROO.

The DESIGN Award is presented to:
Team # 14380, Blue BotBuilders from Northgate, QLD, Australia

Through solid electrical design, CAD, and validation & verification, this team carried their robot into the UNKNOWN universe.

With the help of a mysterious south pole animal, they challenged themselves to hammer out new designs with exceptional results.

They might be invisible to the naked eye, but with their PURPLE powder coat and INFINITE MASS, this team's robot MATTERS.

The DESIGN Award is presented to:
Team # 14374, Dark Matter from St. Tammany Parish, Louisiana

Judges' Choice Award Sample Scripts

[a poem]

Meeting this team is a PLEASURE.
As they transform trash to TREASURE

What a cow destroys is tomorrow's ALLOYS
Their creativity is beyond MEASURE.

The Judges' PLANET FORWARD Award is presented to:
Team #300, Team Foo from Cheyenne, Wyoming

This team showed that necessity truly is the mother of invention.

As winning alliance captain at their state championships in their rookie year, they showed their school they are no chickens when it comes to a challenge.

Soaring to worlds using just spare parts, this team showed that when life gives you a box of spare parts, you build a world class robot.

The Judges' SPARE PARTS Award is presented to:
Team # 22683, JV RoboRedHawks from Hinesburg, Vermont

With incredible non-STEM outreach, this team pours their heart into their community.
You could be DOWN, but they raise you to experience equal opportunity.
They share money from governments and BAZAARS to schools and hospitals, showing their humility.

The Judges' COMMUNITY AT HEART Award is presented to:
Team # 18492, Mukhtar Robotics Team from Tripoli, Libya

Useful Supporting Materials

Overview of the Materials

Throughout the judging process, Judge Advisors may opt to utilize forms or handouts to help Judges organize their thoughts and as a method to keep track of important information, such as nominations and final rankings for each award.

This section of the guide includes a few of the most common forms that may be used at an event. These forms have been created to try to cover a wide number of events, with varying team sizes. Events with less teams may not use all the spaces on a form, while larger events may require more spots than what is available on the forms. Judges are not required to use these forms, but they may find them useful during the judging process.

Prior to using these forms, Judge Advisors should know the number of teams that are scheduled to go through the judging process.

All forms in this section should not be shared with the teams, and Judge Advisors should ensure the Secure Disposal of Judging Notes section of this guide is followed for these documents.

Utilizing the Supporting Materials

Nomination Sheets

Before the Structured Interviews start, Judge Advisors should determine how many teams may be nominated from each panel to be considered a contender for an award.

- When selecting two teams, use the Nomination Sheet - Two Nominees per Panel.
- When selecting three teams, use the Nomination Sheet - Three Nominees per Panel.

At the conclusion of the Structured Interviews, each interview panel fills out one of these forms and hands it to the Judge Advisor for record keeping.

Waterfall Chart

During the Pit Interviews and Portfolio reviews, an award panel may opt to use the Waterfall Chart as a method to keep track of the rankings for a specific award. The waterfall chart works by building a list of teams that grow over time. This chart may be used as a visual aid to the Judges to help them decide where a team belongs on the list of award candidates. The chart may be shorter or longer, depending on the number of award candidates.

When a new team is added to the list (after a Pit Interview or reviewing a Portfolio), Judges decide where a team fits within the current list of teams. An example of how the waterfall chart is used is shown below:

A	B	B	D
	A	A	B
		C	A
			C

Figure 9: Waterfall Chart Example

In the example above, Team A was interviewed first for an award. After that interview was completed, the Judges interviewed Team B, who the Judges felt was not as strong as Team A. After Team C was interviewed, the Judges ranked the team below Team B and Team A. The process continues until all teams are interviewed.

When Judges opt to use this chart, they should be mindful of their time and not spend a lot of time trying to rank teams that are listed in the lower part of the waterfall chart (for example, a team ranked in the lower third of the chart).

Award Ranking Sheet

After the award panels complete their Pit Interviews and Portfolio reviews, the Judge Advisor may opt to utilize the `Award Ranking Sheet` as a clean copy of the list of teams ranked for an award. Depending on the size of the event, the Judge Advisor will instruct the Judges on the number of teams that should be ranked for an award. Larger events may require more teams to be ranked for the awards to help with the Inspire Award deliberations and distributing the remainder of the awards.

Nomination Sheet - Two Nominees per Panel

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Panel:	Judge Names:

<u>**Instructions to Judges:**</u>

- Complete the table with teams who will be nominated as strong contenders for each award.
- Team numbers by themselves are acceptable.
- **Strong teams are likely to be nominated for multiple awards. This is expected.**

Think:		
Connect:		
Reach:		
Sustain:		
Innovate:		
Control:		
Design:		
Judges' Choice:	**Team:** **Reason:**	

List teams who did not attend their interview:	List teams who did not submit a Portfolio:

🔴 **CONFIDENTIAL**: Do Not Share with Teams

Nomination Sheet - Three Nominees per Panel

Panel:	Judge Names:		

Instructions to Judges:

- Complete the table with teams who will be nominated as strong contenders for each award.
- Team numbers by themselves are acceptable.
- **Strong teams are likely to be nominated for multiple awards. This is expected.**
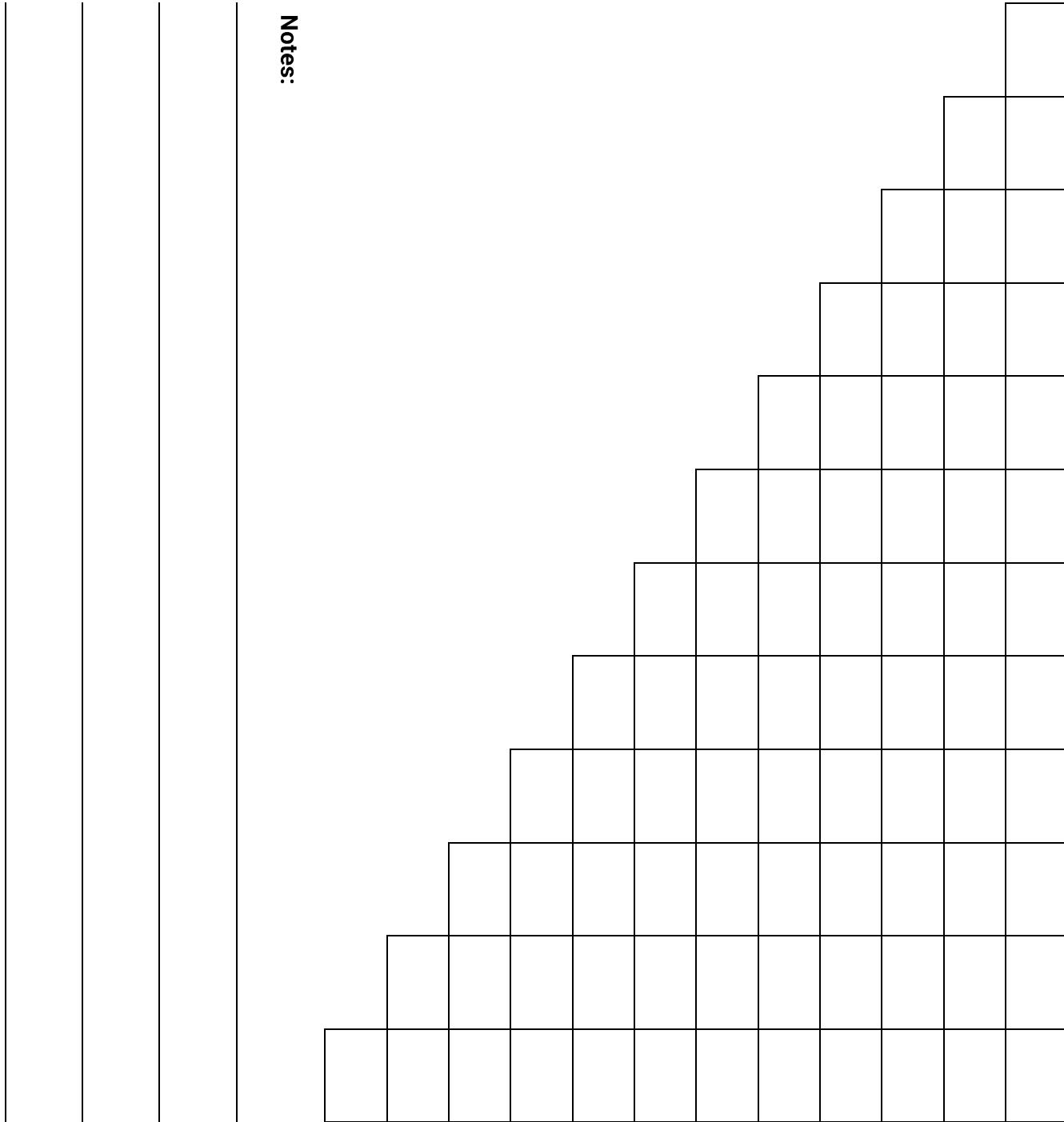
Think:			
Connect:			
Reach:			
Sustain:			
Innovate:			
Control:			
Design:			
Judges' Choice:	**Team:** **Reason:**		

List teams who did not attend their interview:	List teams who did not submit a Portfolio:

Waterfall Chart

🔴 **CONFIDENTIAL**: Do Not Share with Teams

Notes:

🔴 **CONFIDENTIAL**: Do Not Share with Teams

Award Ranking Sheet

🔴 **CONFIDENTIAL**: Do Not Share with Teams

Award Name:	Judge Names:

Instructions to Judges:

- Complete the table with the final rankings for the given award.
- **Please consult with your Judge Advisor for the recommended number of teams to be ranked. (There may be more spots on this sheet than needed!)**
- You may have some ties, if needed.

Order	Team Number
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

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