

## Intent of Botball Coalition - Founding a Student Driven Advisory and Representation Association for Botball Teams and their Members

Daniel Swoboda, Ethan Wong, Maxwell McDonnell, Ben Liao, Jaehei (Jennifer) Kim, Jennifer Albert, Oscar Bjorkman, Cheyenne Dalton, Grant Eckstein, Rachel Graham, Christoph Heiss, Daniel Honies, Josh Horowitz, Andrea Huang, Wesley Hwa, Tanishk Jain, Pranav Jayachand, Ryan Kelly, Nico Kratky, Christoph Käferle, Jason Lee, Nico Leidenfrost, Abdul Lele, Connor Madden, David Mao, Drew McCluskey, Nathanael Nisbett, Ayaka Orikasa, Aaron Pierce, Markus Pinter, Ben Rao, John Robinson, Zachary Sasser, Sebastian Schaffler, Jon Scott, Tijmen Sep, Nick Spens, Gene Stejskal, Josh Stenis, Andrew Sun, Meg Thung, Ellie Thurston, Reza Torbati, Philip Trauner, Florian Ungersböck, Philip Vukovic, Charlie Wan, Andy Wang, Raphael Weinfurter, Nathan Wesson, Lennit Williams, Richard Xiao, Roy Xing, Miguel Yamada-Sapient, Tommy Yang, Justin Yu, Justin S. Yu, Christine Zeh, Sascha Zemann, Andrew Zhang, Shengran Zhou, Noah Zinn

Intent of Botball Coalition - Rolla Regional Robotics, Winchester High School Robotics Team, Norman Advanced Robotics, items (HTL Wiener Neustadt), robot0nfire (HTL Wiener Neustadt), Hillsdale High School Robotics, Los Altos Community Teams

### **Intent of Botball Coalition - Founding a Student Driven Advisory and Representation Association for Botball Teams and their Members**

**Abstract** — *This publication has been written to formally introduce the IBC (Intent of Botball Coalition) — a newly formed student driven coalition to represent student interests within Botball. The IBC also aims to provide student-to-student advice on technical or game related issues as well as being an organized framework for international team cooperation.*

*In order to respond to KIPR, the coalition was formed by several international Botball teams as there were no proper pre-existing means of communication through which Botball teams could represent themselves as a bloc to KIPR. It is our hope that, with such an organization, the overall Botball experience can be improved.*

**1. Introduction** — Botball is a versatile competition that thrives upon students from all across the world designing, constructing and programming advanced robots to accomplish different tasks on a yearly changing game-board.

While many of the teams are already connected, there is currently no organization that helps bring teams together across the world to work and discusses together on issues that these teams face. These include discussions about the game design, rule changes, scoring confusions or even simple construction and programming problems.

Currently, the teams that participate in Botball have no representative body to bring up their questions and concerns to the Botball organizers. This inevitably leads to many teams

having to directly contact KIPR about the same issues. Although directly contacting KIPR is effective in many instances, having a large organization to represent the several teams could be beneficial in many situations.

The need for such an entity was made clear to the founding teams following the rule changes that were made on May 15, 2017. In response to the GCER rule changes, the Winchester High School Robotics Team (17-0371) began to write a letter to KIPR to address the team's concerns regarding the rule changes. In the following days, they decided that it would be more effective to have other teams review the letter and sign it. Following their agreement to sign the letter, Norman Advanced Robotics (17-0113) formed a Discord server (Discord is a voice and text communication platform). Soon afterwards, this group of teams decided that it would be beneficial for them all if they were to maintain their communication even after sending the letter. As a result, the IBC was formed.



**Figure 1.** Logo of the Intent of Botball Coalition (The colors of the outer ring represent the colors of the IBC's founding teams).

**2. Goals of the Coalition** — The core objective of the IBC is to form an organization where students from all participating Botball teams can come together with KIPR to help improve the overall Botball experience. Such cooperation can exist in regards to logistics and distribution, volunteering, surveys, input from the IBC on the current game design or opinions of the effects of rule changes. It also fosters a tight-knit community in which students from experienced teams can provide assistance to newer teams. Furthermore, the IBC could provide input to the game organizers to improve the overall quality of the competition by reviewing new technologies and collecting feedback from teams about their experience.

IBC is designed to represent the interests of students in member and nonmember teams alike, similar to a student council within a school. As a result, the coalition is able to help mediate conflicts between member teams, or between individual members of the coalition. Furthermore, as a body of representation for Botball teams, the IBC can put forward proposals and wishes from students within Botball to the Botball organizers with the knowledge that multiple teams have agreed and are interested in these specific concerns or questions. This organization is also created to help improve the quality of competitions and the quality of the game in general for all teams. The IBC aims to provide the game coordinators with questions that Botball teams encounter during the season regarding the controllers, game board, robots, and parts to ensure high game quality.

Lastly, the coalition aims to create a platform where member teams and alumni can discuss the future of Botball. This would also allow member teams to take advantage of previous Botball alumni knowledge. In addition, newer teams would have a resource besides the current teams that they could contact if they wanted to know more about the Botball tournament and organization in general.

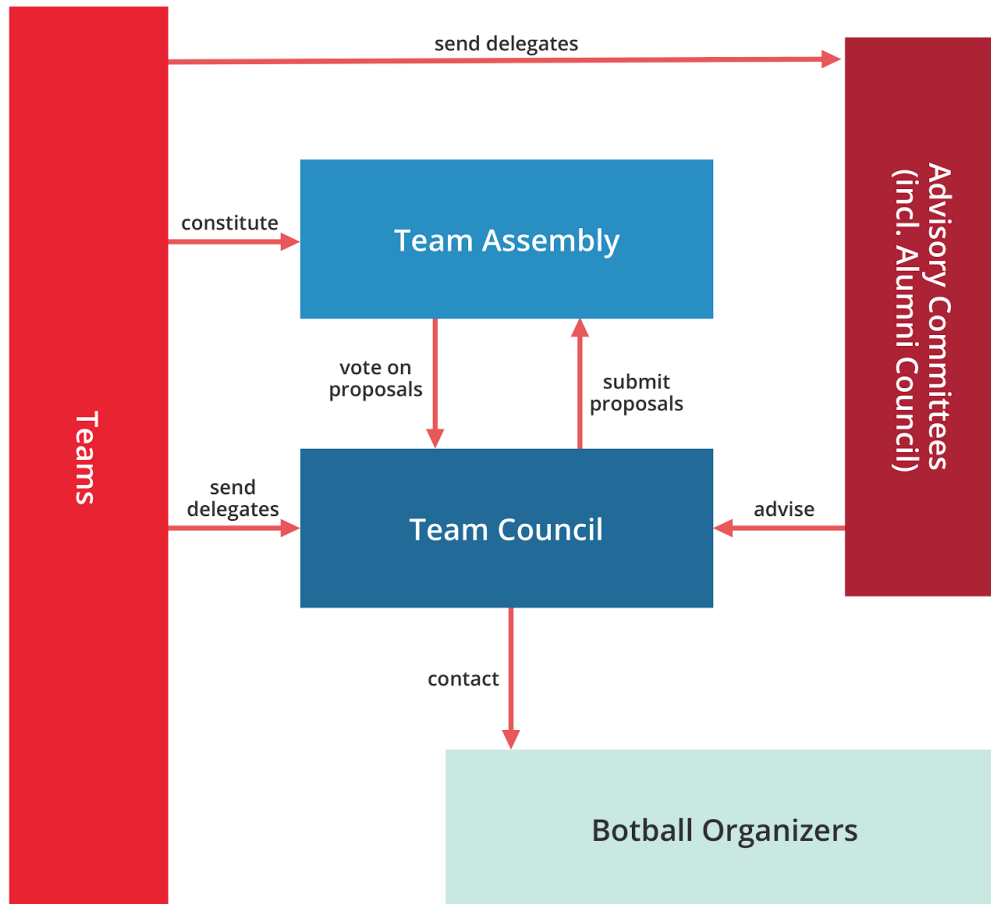
**3. Organization of the IBC** — Given the nature of the IBC, a base-democratic structure was the clear choice to organize the coalition with.

In order to sustain structure and decisiveness in a growing coalition, a draft charter has been proposed and is currently under review by all member teams. It defines central roles and bodies within the IBC (depicted in Fig. 2). The structure outlined here is a reflection of the most recent version of the IBC structure as defined in its charter.

The two authoritative bodies within the IBC are the Team Council and the Team Assembly, the former consisting of two delegates per team and the latter consisting of all individual team members.

The Team Council's purpose is to make new proposals for planned actions and to set the objectives of the coalition on a regular basis. Proposals are voted upon by the Team Assembly. The council is assisted by volunteering members in committees (Alumni, Technical, and Game Design) that focus on specific subtasks.

The Team Assembly consists of all team members, the body decides how the team should vote on a specific action. Each team has the right to a single vote in order to accommodate teams of all sizes.



**Figure 2.** Organigram of the IBC's bodies and committees.

**4. The Effects of the IBC** — Despite its short existence, the IBC has already had positive effects on the member teams. The IBC has been successful in bonding teams that previously had little or no contact with one another through their mutual participation within Botball. These students — who have all been aiming for the top in the most recent years — use the platform created through the IBC to work together on common goals and it has helped foster mutual discussions about the future of robotics and Botball. The coalition has strengthened the bonds and the friendships while also greatly improving the environment of Botball as a community of teams all focused on performing at the highest level while also helping to improve the competition for all.

Furthermore, IBC managed to shift the focus for members from just working within the rules of the Botball competition to actively discussing the rules as well as the game design and trying to improve on it. The IBC has also encouraged and fostered discussions about Botball and about educational robotics between members of different teams, allowing students to compare and discuss various forms of programming and robot construction which helps foster new ideas for robots. It also introduces the teams to differences in viewpoint within the game, allowing for

discussions about scoring potentials of different robots, different robot combinations and the purpose and construction of disruptor robots.

**5. Conclusion** — The authors of this paper feel that there is a need for an organization to represent the opinions and the ideas of all Botball teams. Such an organization will create a broad network of teams making it easier to communicate with other teams and their members. The IBC is an organization which all Botball teams that intend to improve the overall experience of the competition. It will provide a community for Botballers, in which they can work together to improve and refine this educational experience.

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