***FIRST* Team Outreach Documentation**

**Abstract**

*FIRST* Team Outreach is a team’s way of collaborating with others to build stronger connections in the community and have all teams perform at their maximum potential by sharing resources and knowledge. This is to reinforce *FIRST’s* brand of gracious professionalism and teamwork. Any team can practice *FIRST* team outreach, and impact a range of teams from local *FRC* teams to members in the community, based on their own resources. Outreach gives teams the opportunity to become more connected, and eventually create a the *FIRST*’s vision of a always gracious and friendly environment. *FIRST* team outreach is a vital part of Skunk Works, and our team outreach is split into three main events: Resource Sharing, Workshops, and Team Mentoring.

**Background**

Since 1989, when *FIRST* was founded, outreach between teams to help build and support their mission has always been encouraged. They strive to see their vision to “inspire young people's interest and participation in science and technology”. The values of *FIRST* are Gracious Professionalism and Coopertition. These terms encompass the ideal embodiment for teams, which is treating others with respect and kindness in the face of fierce competition. *FIRST* desires a environment where competing teams can also cooperate and learn from one another. During competitions, teams are expected and judged on how well they model these values. Today, teams strive to manifest Gracious Professionalism and Coopertition to create the exemplary environment during competitions and between local teams.

**Resource Sharing**

*FIRST* teams work hard to gain sponsors and opportunities and this allows teams to have enough resources to share throughout the *FIRST* community to raise up all the teams. Resources not only include tangible tools and technology, but also knowledge and expertise. *FIRST* also has websites like The Blue Alliance and Chief Delphi to share ideas and team stats. There are also statewide communication to share information, like the *FIRSTWA* facebook page and website. Sharing resources enables teams to build stronger bonds that will eventually create a closer environment during build and competition season.

**Practice Field**

Skunk Works has a practice field of the current game that we invite local *FIRST* teams to during build and competition seasons. Each year, we construct a practice field that is to scale and free of charge for teams to use. The field helps other teams get better and be at the top of their game. The opportunity to invite over teams to practice would ensure better communication and familiarity throughout the *FIRSTWA* community.

**Shop**

During build season, we invite teams to come in to use our tools which they might not have. For example, we invite teams to come in and cut pieces with our water jet. We have worked very hard for these resources and we enjoy sharing it. Teams are able to benefit and use equipment they might not otherwise have access to. This helps us become more connected with other teams.

**Workshops**

Workshops are held to share information to build on developing robot and outreach ideas. Teams desire to collaborate with other teams to share and gain knowledge, and this is most easily done with a workshop. Workshops are where teams can share their expertise with other teams. Workshops provide an convenient to share knowledge throughout the *FIRST* community.

**Sessions**

We hold a variety of different sessions including Winning on the Field, shop tour, safety, and sustainability workshops. These workshops include either hands-on projects, tour, or a panel of experienced *FIRST* teams members. The workshops try to accommodate what other teams want to know and offer information on how to successfully implement these topics onto their team. These workshops are held to help other teams be more successful during the season. Our annual workshop event, which is comprised of multiple workshops is posted on the *FIRSTWA* calendar. The presenters include team members, mentors, and parents to give a broad perspective of information and ideas on running a team.

**Team Mentoring**

Mentors make a significant contribution to helping *FIRST* teams succeed. Many teams have mentors who are industry professionals that range from specializing in the business to shop side of robotics. *FIRST* defines a mentor as a person of any age who brings expertise and opportunity for team members to directly learn from experiences. Using the knowledge offered to teams by their mentors, it is shared with other teams. Team mentoring also include advising teams in other robotics branches, such as *FTC*.

**Mentoring Other Teams**

Over the years, we have been mainly networking and offering knowledge to help other *FIRST* teams. We mentor teams by inviting them to come to our meeting to see how we are ran and during the pre, build, and competition seasons. We also are invited to attend other teams meeting to see how they run their team, and hopefully use their structure methods to strengthen our own. Also Skunk Works has helped introduce local high schools to *FIRST* and encouraged the formation of other *FRC* teams. This collaborative effort from our team to another encompasses Gracious Professionalism and Coopertition.

**Mentoring JV Team**

Our team used to accept freshmen as first year team members. The first year team members would come with little experience, and they would spend their year watching the veteran members work, mainly trying to catch up with the others. Now, we have a Junior Varsity *FTC* team, and the freshmen get a more effective, hands-on experience, helping them become more useful members. Also, having another team in a different league opens our *FRC* team to more networking opportunities in the other *FIRST* leagues.

**Conclusion**

*FIRST* Team Outreach is essential to commence the mission and value of *FIRST*. Not only does this support the mission of *FIRST*, but also this has brought together many partnerships and friendships. The ever prevalent goal is for all teams to epitomize Gracious Professionalism and Coopertition. This ensures a more interconnected and positive environment for current and future generations of the teams. The implementation of *FIRST* Team Outreach in any team can be accomplished with their own knowledge and expertise.

**Appendix 1 - Workshop Schedule**

<https://drive.google.com/file/d/0B3-BN6Kf1vuJdUxNZXVvcmViWU0/view?usp=sharing>

**Appendix 2 - Workshop Powerpoints**

Business and Community Outreach: <https://drive.google.com/file/d/0B3-BN6Kf1vuJY3V0dXd0dFo2dXM/view?usp=sharing>

**Appendix 3 - Contact information**

Skunk Works Robotics is a part of Raisbeck Aviation High School, located on the grounds of the Museum of Flight at Boeing Field in Seattle WA. If you have questions please email our coach.