

Team Handbook 2017-18



Welcome to *FIRST* Robotics Team 2930, the Sonic Squirrels, from Glacier Peak High School in Snohomish, Washington. Team 2930's sponsors include Microsoft, Boeing, Leidos, FIRST WA, Philips Healthcare, the Office of the Superintendent of Public Instruction (OSPI), Glacier Peak High School ASB, and the Snohomish Education Foundation, Garlic Jim's, Snap Dog Printing.

TEAM MISSION STATEMENT

FIRST Robotics Team 2930 strives to inspire members to become leaders in the fields of science, technology, engineering, mathematics and business, in an enthusiastic and encouraging environment. The team actively reaches out to the community, striving to inspire all youth to develop a passion for STEM, and inspiring people of all ages to become involved in FIRST. As active members of our community, we strive to positively impact society through service to others.

TEAM 2930 GOALS

Fully understand and exemplify the concepts of Gracious Professionalism, Coopertition, and other *FIRST* principles

Foster a zeal for robotics and STEM related activities

Develop teamwork skills and strive to work together as a seamless unit

Build confidence in communications and leadership by engaging with the STEM community and the world of *FIRST* Robotics

Actively encourage and support the growth of the FIRST programs

TEAM HISTORY

FRC Team 2930 was founded in 2008 by Kevin Winter, a teacher at Snohomish High School. Our team followed him to the new Glacier Peak High School, and we competed for the first time in the 2009 season, playing the game 'Lunacy'. Jin Hayashi, another teacher at Glacier Peak, joined in 2010 and became our main faculty advisor for many years to come, replacing Kevin Winter before the 2011 season.

We were known in our first years as "Roboshi", then switched to using the name "Taterbotz". In 2014, we underwent a major rebranding to appeal to a broad demographic and allow us to better accomplish the FIRST mission at our outreach events. Our students decided on the name "Sonic Squirrels", and our redesigned logo represented the team's approachable yet slightly edgy character. We became an outreach-oriented team, and began to compete for the major community involvement awards such as the Imagery Award, Engineering Inspiration Award, and Chairman's Award. During these years our main mentors were Lori and Steve Hittle; since 2016 they have moved on to mentor some of the other teams in the Everett area.

Our sponsorship and mentorship has changed over the years. In our earlier years our largest sponsor was Boeing, as our lead engineering mentor Jeff Austin was a Boeing engineer. We spent most of our years building in generous mentors' garages, including those belonging to Jeff Austin as well as the Hittles. Our 2014 rebranding allowed us to better advertise ourselves to potential mentors and sponsors, and after that season we picked up new mentors from Microsoft and Boeing.

2015 was a breakout year for us, as we were won the Chairman's and Engineering Inspiration awards for the first time during our district events, and qualified for the District Championship and World Championship for the first time. We won the Pacific Northwest District Championship with our alliance partners Team 1983 Skunkworks and Team 955 CV Robotics, and also qualified for the World Championship as a recipient of the Engineering Inspiration Award. We went on to win the Imagery Award in our division at Worlds, competing against 150 teams from around the globe.

2016 was a year of change for us, as we transitioned to meeting and building at Glacier Peak High School. Sean Wilson, a new faculty advisor, offered his classroom as a team meeting space, and Jin Hayashi moved rooms to be next to the school's

machine shop. We now use this machine shop for woodworking and metalworking, with final assembly in Mr. Hayashi's classroom.

Newer faces have entered the picture since then, with Microsoft engineer John Bottenberg stepping into the lead engineering mentor position, Melanie Limtiaco beginning her current role as lead operations mentor, and Sean Wilson transitioning into his role as lead faculty advisor. The 2017 season saw our team win our home event (the Glacier Peak District) for the first time, and we qualified for the World Championship, ending as semifinalists in our division there. The 2018 season will be our team's tenth season. With FIRST continuing to grow as an organization, and with the great support our team gets from the surrounding community, we can expect many more great seasons to come.

INTRODUCTION

Welcome to *FIRST* (For Inspiration and Recognition of Science and Technology), the world's preeminent robotics competition. *FIRST* was started in 1989 by inventor Dean Kamen and MIT professor Woodie Flowers. The *FIRST* mission is to inspire young people to become science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills; that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership. Through *FIRST*, students can learn engineering and business skills while learning and competing intensely, but treating one another with respect and kindness in the process – this is called “Gracious Professionalism.” *FIRST* is a family that forges life-long friendships. *FIRST* is not just about robots; it's about ideas and people, too.

***FIRST* redefines “Winning.”** *FIRST* Teams are rewarded for excellence in design, demonstrated team spirit, gracious professionalism, maturity, and ability to overcome obstacles. Scoring the most points is a secondary goal. “Winning” means learning, being inspired, and building partnerships that last.

FIRST PROGRAMS

FIRST provides programs for grades K-12. Junior *FIRST* LEGO League (Jr.FLL) is for ages 6-9, and grades K-3. On Jr.FLL teams, students build lego models to demonstrate solutions to themed challenges, and present their solutions in Jr.FLL Expos.

FIRST LEGO League (FLL) is for grades 4-8. In FLL, students design and build Lego robots and compete in themed challenges. FLL team members also identify a problem, and create and present a unique solution to themed challenges. In addition, FLL teams compete in teamwork, known in FLL as “Core Values”. Teams compete at local venues, possibly moving on to the state Western or Eastern Washington State Championships, and World Championships in St. Louis, Missouri.

FIRST Tech Challenge (FTC) is for grades 7-12. *FIRST* Tech Challenge teams design and build 18” by 18” robots and compete in two-on-two matches, and document their design processes through the creation of an Engineering Notebook. Teams compete at local venues, possibly moving on to the Super Regional in California, and World Championships in St. Louis, Missouri.

FIRST Robotics Competition (FRC) is for grades 9-12. Teams design and build large robots weighing up to 140 pounds during an intense six-week build season, and compete at local venues, possibly moving on to the PNW Championships, and World Championships in St. Louis, Missouri. Students have the opportunity to learn technical skills; including programming, engineering design, Computer-Aided Design (CAD), electrical engineering, and animatronics. In the FRC program, teams are run like businesses, and students also learn teamwork, project management, entrepreneurial, marketing, and public speaking skills. Because teams promote themselves while recruiting mentors and students and participating in fundraising, students can also learn graphic design, web design, public relations, and social media promotion. FRC teams are mentored by engineers and business professionals. FRC teams welcome interested parent, community, and corporate mentors.

TEAM AWARDS

2011 – Judges Award at Seattle Cascade Regional

2012 – Innovation in Control Award at the Seattle Regional

2013 – Regional Finalist at the Ellensburg Regional

2014 – Imagery Award and Volunteer of the Year – Jin Hayashi at the Glacier Peak District event, Team Spirit and Pit Safety at the Mount Vernon District event

2015 - Chairman's Award, Dean's List – Ian Good and Volunteer of the Year – Lori Hittle at the Glacier Peak District Event, Engineering Inspiration Award and Industrial Safety at the Mount Vernon District event, Industrial Design at the Central Washington District event, PNW District Championship Winner and Engineering Inspiration Award at the PNW District Championships, Tesla/Archimedes Division Imagery Award at the World Championship

2016 – Team Spirit Award at the Glacier Peak District Event and Industrial Safety and Judge's Award at Central Washington District Event

2017 – Climber Award at Peak Performance, Imagery Award at Auburn Mountain View District Event, District Event Winner, Innovation in Control Award sponsored by Rockwell Automation at Glacier Peak District Event, Carver Division 6th Alliance Captains.

TEAM ACTIVITIES

May – June

Recruit new members, recruit mentors, select team officers, generate team goals and business plan, conduct outreach events, do community service, work on pit and spirit, do off-season engineering projects, train for upcoming season, thank our sponsors

June – August

Conduct outreach events, do community service, work on pit and spirit, do off-season engineering projects, train for upcoming season

Recruit mentors

September – December

Recruit new members and mentors, conduct outreach events, mentor FLL, host FIRST competitions, volunteer at FIRST competitions, do community service, work on pit and spirit, conduct safety training, train for upcoming season, work on award applications

Mentor local FLL teams

January – third week in February

Design and build FRC robot

Late February - Late April

Compete in FRC Districts and possibly PNW Championships and World Championships, conduct other activities as time allows

Year-round

Raise funds for team sustainability by getting sponsors and conducting fundraisers

MEMBER INVOLVEMENT

Students on Team 2930 should be actively involved with the team. Students are expected to arrive on time for team meetings and events and remain for the duration of the meeting or event. Team members are required to attend 75% of the general team Monday meeting hours in order to stay on the team, without prior approval/communications with an advisor.

All members must complete basic safety training, *FIRST* training, general robot training, tool and electrical training.

Students on engineering sub-teams must attend at least 50% of the build hours.

All members are required to participate in three (3) outreach events per year, one (1) community service activity per year, and all fundraising activities.

All members will sign-up and volunteer for at least one (1) *FIRST* event per year.

All members are required to participate in at least one (1) summer outreach activity per year.

Grades are important. Completing school work should be prioritized before participating in team work sessions and activities. Team meetings begin at 6:00pm on Monday.

Students are required to check their email and phone messages daily.

Members are required to consistently follow all team and school rules.

Exceptions to the handbook may be considered with the preapproval of the advisor.

MEMBER BEHAVIOR EXPECTATIONS

Team members must wear their team shirts and hats when participating in any team activity or event. Feel free to add other approved spirit gear as long as your team shirt and hat remain visible.

Team members are expected to maintain a cumulative GPA of 2.0.

All students and adults representing Team 2930 should demonstrate a positive attitude at all times.

All members and adults should be respectful toward everyone at all times. Members will demonstrate Gracious Professionalism at all times. *FIRST* FRC Team 2930 believes in the power of Gracious Professionalism. Team 2930 members are willing to help when asked.

All members will show initiative by asking a sub-team leader, mentor or coach for something to do if they find themselves with nothing to do. Showing initiative by finding ways to improve the team is encouraged.

All students and adults will demonstrate appropriate meeting behavior; including, but not limited to: listening while others are talking, not engaging in outside activities, and actively participating in discussions.

Communication written on behalf of the team must be approved by a coach or advisor.

Any commitments made on behalf of the team will be made by a coach or advisor, or pre-approved by a coach or advisor.

Out of courtesy to others, there will be no Public Displays of Affection.

Team 2930 will build and maintain a culture of respect and cooperation amongst all members, mentors, parents and coaches.

Members are expected to follow the Team Safety Rules, school rules, and all *FIRST* safety guidelines, as well as the

directions of the team Safety Captains, advisor, coach, and mentors. If you have questions, ask the advisor, coach, or a mentor.

Students who miss a meeting will review the emailed meeting minutes.

When emails ask for a reply, students will respond within 24 hours.

If removed from the team, students will not be able to be considered for readmission until September 1st of the following season.

EXPECTATIONS AT COMPETITIONS

The team's travel selection process is based on the following criteria: attendance at 75% of the hours of general meetings (exceptions preapproved by teacher advisor on case-by-case basis), attendance at 50% of hours of build sub-team meetings, and contribution to sub-team(s) reported by sub-team lead adult mentors.

The Sonic Squirrels will actively pursue opportunities to help anyone who needs help. No task is too small for Team 2930.

All members will eagerly help any FIRST volunteer.

All team members, mentors, friends and family will acknowledge and understand that they are a reflection of the team, and will demonstrate Gracious Professionalism, encouraging and supporting all teams.

At the competition venue, 100% of the time will be spent on FIRST related activities. Electronic devices may not be used for personal entertainment.

Team 2930 members will be respectful audience members.

All Team 2930 members will be present in uniform for the opening, closing, and award ceremonies.

The team logo must be always clearly visible.

In the stands, Team 2930 will actively participate in scouting, cheering, and dancing.

Students will remain together at the competition and hotel venues and will travel with an adult escort.

Members will honor the team curfew set by their advisor/coach.

All team and school rules apply when traveling to a competition.

Be safe, use common sense. If you have questions, ask an advisor, coach, or mentor. Follow all Team Safety Rules, school rules, and all FIRST safety guidelines, as well as the directions of the team Safety Captains, advisor, coach, and mentors. If you have questions, ask the advisor, coach, or a mentor.

TEAM COMMUNICATION

FRC Team 2930 uses email as its primary form of communication. All members will ensure that their email address and preferred contact phone number are included on the communication list maintained by the team advisor.

Team 2930's web address is sonicsquirrels.com.

The team's public Facebook page is FIRST Team 2930 Sonic Squirrels

The current season's robot rules, administrative rules, and safety rules can be found at <https://www.firstinspires.org/robotics/frc/game-and-season>.

Team 2930 encourages its members to check the Chief Delphi website frequently for useful information, at ChiefDelphi.com.

During Build season to document / keep track of team happenings the site is; <https://trello.com/2930>

VARSIITY LETTER CRITERIA

Attendance – Member has attended at least 80% of total General Meeting hours during the year

Recruiting – Member has participated in new member and/or mentor recruitment

Outreach - Member has attended four (4) team outreach events

Fundraising – Member has participated in all FRC 2930 fundraisers (and FTC or VEX fundraisers if on FTC or VEX team)

Awards – Member has assisted in *FIRST* award applications

Grades – Member has maintained a GPA of 2.5 or better for the current school year

Sub-team Support – Member has contributed to their sub-team in a significant way (requires signoff from non-parent mentor/coach/advisor)

FIRST Events – Member has attended Kickoff and two (2) District competitions

FIRST Mentoring – Member has mentored or trained at least one (1) other FIRST team

FIRST Volunteering – Member has volunteered at a minimum of two (2) FIRST events

Leadership – Member has led team training, team meetings, engineering design reviews, an outreach event, or an inter-team workshop

Community Service – Member has participated in ten (10) hours of pre-approved volunteer activities throughout the season

All members are required to contact at least one (1) prospective sponsor per year.

PARENTAL INVOLVEMENT

Parents/guardians are encouraged to:

Attend parent meetings

Attend mandatory pre-travel meetings

Submit a volunteer application to the school (Required to be around students at builds, events, and meetings)

Participate in one (1) team activity before the competition (fundraiser, community service, outreach, etc.)

Assist with transportation to team events

Attend at least one (1) of the FRC competitions (Peak Performance, Girl's Gen or one of the FRC District competitions)

Provide at least one (1) group meal during build season or at an official team event

Provide current contact information for students and guardians

Check email regularly to stay informed about team activities

MEMBER EXPENSES

Yearly member fee is \$100 and includes two tee-shirts and a team hat for new members. Returning members will receive two (2) new shirts, but no additional hat.

ASB Card required for team membership

Travel fees to competitions, possible for attendance at PNW Championships, World Championships, or a Regional competition for FRC. Travel fees are generally non-refundable.

TEAM UNIFORMS

All team members will wear the team tee-shirt and hat while representing Team 2930 at events the optional Grey Sweatshirt by be worn over the tee-shirt. An exception will be made for events where we are required to wear specific volunteer shirts while doing community service.

By signing this contract, I understand that I must follow the rules directed in this handbook. If I have any future concerns regarding my requirements as a team member, I will refer back to this document.

STUDENT FIRST NAME	STUDENT LAST NAME	PHONE NUMBER
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Email Address (please print clearly to avoid errors)

SIGNATURE	DATE
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By signing this contract, I give my permission for my student to participate on the robotics team and agree to the parent involvement Section of this handbook.

PARENT/GAURDIAN FIRST NAME	PARENT/GAURDIAN LAST NAME	PHONE NUMBER
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PARENT/GAURDIAN FIRST NAME	PARENT/GAURDIAN LAST NAME	PHONE NUMBER
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Email Address (please print clearly to avoid errors)

SIGNATURE	DATE
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