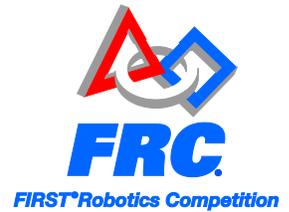# LiveWire Robotics

3456

Pocatello, Idaho

"FIRST things First: Building a Team. Building a Community."

For LiveWire 3456 this isn't just a motto - it's a way of life. We believe our main focus isn't limited to building a robot and competing, we believe that spreading our message and the culture of *FIRST* in the community is key to creating an awareness and appreciation of science and technology.

Since June 2011, the members of LiveWire have given 2376 hours of service in many areas; summer camps, robot demonstrations, and spearheading 2 new FRC teams for the 2012 season. The Pine Ridge Mall has generously donated an available shop for our build site. Since settling in our new home just prior to Kickoff, over 250 people have visited and toured - from parents, to Boy Scouts, to FLL teams, to mall patrons, we've been able to share the culture of FIRST! We've worked tirelessly to reach out and spread inspiration and recognition for science and technology to those around us, not only in Pocatello but to other rural communities as well.

Our favorite outreach activities are robot showcases! In the last two years, we have given 15 showcases to our community, including elementary and high school classrooms, pep rallys, our local mall, service groups, and at the local Portneuf Valley Environmental Fair. LiveWire exhibited our 2011 season robot "Venom" in our local mall on 2 separate occasions. We hosted a robot showcase shortly before our ship date and post-season we claimed 2 vacant stores for over a month, displaying Venom, the minibot, our sister team's robot, and information about *FIRST*. Venom made regular appearances at Century High School's lunch breaks and to nearly all freshman honors students. Venom reappeared the following September at Century, driving down halls and generating interest for *FIRST* Robotics - leading to a record number of team applications from Century High School.

Annually, LiveWire and our sister team, HayWire 1569, conduct a week long summer day camp to introduce students ages 10 to 18 to the world of *FIRST*. Our camp educates students in gracious professionalism, team building, coopertition, and programming. Students of all abilities are able to participate in a series of challenges and competitions using VEX robots. LiveWire took this outreach idea further, creating a unique FLL-style summer camp in Twin Falls, ID. A portion of our team traveled to Twin Falls and hosted a camp for 30 students from ages 7 to 14. This intensive 3 day camp resembled an accelerated version of FLL, beginning with a general introduction into *FIRST,* FLL, and Mindstorm NXT basics. At the start of the second day, students began to construct and program their own Lego robots. The third day concluded with robots competing in our specially created *Rectangle Rumble* challenge. Our Twin Falls camp was quite successful at spreading the message of *FIRST* and lead to the formation of 3 FLL teams and the seeds of 2 new FRC teams, BOTTWire and Team Tesla.

Team 4178, BOTTWire, a rookie team from Declo, ID includes students and parents introduced to *FIRST* via the Twin Falls camp. We've worked closely with BOTTWire since the summer. In November, LiveWire hosted a pep rally at Declo High School to promote *FIRST* and BOTTWire, doubling their membership. Also, thanks to our summer camp, we were able to help with the inception of Team Tesla 4086 of Twin Falls, ID. Mid-way through the build season we became aware of another rural rookie team 4175 from Driggs, ID and began mentoring them as well. We invited these rookie teams to join us for a kickoff day brainstorming session, where we swapped ideas and strategies. Ninety five creative minds came together to try and solve some of the challenges of this year's game! LiveWire is dedicated to new rookie teams in any way possible, just as we were helped in our rookie season. We keep in touch via long distance learning classrooms and weekly teleconferences helping with any problems and answering questions for these isolated teams. Our coaches talk on a weekly basis through phone and e-mail, giving advice and pep talks. We have made ourselves as available to these teams as possible - including

emergency parts delivery! Through these activities LiveWire has found the true meaning of coopertition and gracious professionalism.

As a way to provide additional support for these rookie teams, we are hosting a "Wire Rumble" on our half-court game field, the Saturday before bag and tag. We want to insure these 3 rookie teams have working robots and ample driving practice prior to their competitions. In all, we have invited over 15 teams from southern ID and northern UT to participate. In addition, kids of all ages will participate with remote control VEX robots and a robot themed story time. Pocatello will be "rumbling" at our week zero event!

LiveWire entered the world of print this year with weekly articles written by team members published in the Idaho State Journal. Articles give updates about our team, this year's game, and the progress of our robot while educating the public about *FIRST*. For younger audiences, our team wrote a children's book which we presented to 2 local elementary schools and will share with local public libraries. This book is based on last year's end-game and stars a *FIRST* team's minibot. The minibot thinks he's found his calling on LiveWire but is scared by the daunting task ahead of him. Luckily, the team has a crucial job for him; climb the tower and win the game! So, despite his fear, he tries to climb the tower. One fourth, halfway, three fourths and the minibot is losing faith! But, LiveWire and HayWire work together to get the minibot to the top and WHOOSH! He flies to the top, lighting the tower showing what teamwork and coopertition can accomplish. This story has been a wonderful way to share *FIRST* with young children!

Another way in which LiveWire has aroused interest in *FIRST* occurred before our regional last year. With our sister team, 1569, we painted the school rocks in front of all 3 high schools. Painting rocks is a local tradition embraced by athletic teams and this was a great opportunity to bring awareness to "the varsity sport of the mind"! Our outreach went even farther this summer when a local youth group spent a week at the Madison House in Yakima, WA (the youth extension of the Union Gospel Mission) to work with high-risk inner-city kids in gang neighborhoods.

LiveWire partnered with them, sending 88 team shirts for UGM's clothing room for homeless families. We also assisted in the building of Brooklyn's Playground, a handicapped accessible play area, built by volunteer effort. We took pride in contributing to such a worthwhile project with so many community members, even the Mayor! In December, alongside 1569; we were able to fulfill the wishes of underprivileged children as part of a Secret Santa service project. Team members divided into several groups and each purchased Christmas gifts, making a difference in the lives of disadvantaged children.

In addition to our community service, we've stayed busy with Dean's Homework! LiveWire hosted a 6 hour workshop to help Boy Scouts earn their Robotics Merit Badges. Three separate troops were represented and 12 merit badges were awarded from that camp alone. Scouts were mixed into 4 teams for our custom *Rectangle Rumble* challenge, giving them a taste of teamwork and coopertition along with the excitement of robotics. To date, LiveWire has helped 26 Boy Scouts earn their robotics merit badges.

LiveWire has assisted area FLL teams in many ways, including mentoring teams from Pocatello and Declo. One of our team captains wrote a curriculum for a coaching workshop and presented in Pocatello and in Twin Falls to give an overview of requirements for starting a team and resources for help. Five teams were successfully started and mentored on a weekly basis from these workshops; including our little brother team "HotWired" of Declo! We assisted with Pocatello's FLL Kickoff and established e-mail to answer to FLL questions. We helped with 2 Idaho regional qualifiers (Pocatello and Twin Falls) providing emcees, field resetters, judges, referees, and even the head referee. Nearly all of LiveWire volunteered! We were excited when 2 of our mentored teams qualified and moved on to the Idaho FLL State Championship Tournament.

To raise awareness throughout our community, we dedicated a week to spreading the message of *FIRST* through presentations and service projects. An official proclamation, written by our team and recognized by the mayor of Pocatello,

started the 2011 Week of *FIRST* with recognition at a city council meeting attended by LiveWire and local FLL members. LiveWire took the opportunity to educate the Superintendent, School Board, and community about *FIRST* and to demonstrate Venom! We were able to publicly thank our coaches for all they do for our team. Continuing the Week of *FIRST*, we presented to a local Rotary Club and drew attention with robot demos at all 3 district high schools. We drove Venom through school hallways, gave demos at lunch, and presented at Back to School Night. The week drew to a close with a Robotics Open House. The open house consisted of an overview of FRC, presentations on Gracious Professionalism, and several stations: electronics, building, programming, and public relations, providing perspective team members a chance to experience LiveWire. On the last day of our Week of *FIRST*, the team volunteered alongside the community to construct Brooklyn's playground. It was a community wide effort to create the first all-access Idaho playground, giving the gift of play to children of all abilities. LiveWire helped with the week-long build session, routing boards, painting shapes, and constructing the fence around the perimeter of the playground.

All in all, we've been busy!

We're putting *FIRST* things first. We're building teams. We're building our community.