

# CHAIRMAN'S ESSAY

Year 2030—Kids I mentor on 1511 want to know how I got my job at Harris, how I invented the compost-fueled engine and about my time on the team. I dug out my diary.

7/12-This summer I'm going to get a head start on my achievements like student-organized robot demonstrations (demos), community service and fundraisers like our Patron Drive (\$20k in 3 years!) where we visit 250+ businesses. These are all Thunderbolts, units to track ways we promote FIRST and our community impact. We met our goal last year to do 1511 Thunderbolts by our 10th year!

8/20-I gave the Chairman's speech for the Mentor Luncheon at Harris, our main sponsor. Our team leader and 13 mentors are from Harris. The Model Shop makes our student-designed parts. One year we taught employees to drive the robot! The VP of Technical Operations said, "FIRST is a key element in our community support plan." This year, Harris donated 7 tablets for our new portable scouting system!

8/25-Just got back from our annual 2-day demo at the NYS Fair! I had fun hanging out with 4H members, showing off the robot and talking to the public. The place was packed! Over 70,000 visitors a day!



9/7-Team Spirit Day! School staff wore red camo pants like me! Lots of them attend our events. We're friends with the custodians because of the long hours we work and from sharing our family style dinners. I heard our Principal, Superintendent and Harris' Finance Director are coming to FLR again!

9/15-Sold 66 E-Watt bulbs at the 2-day Greentopia environmental festival. I lost my voice talking about FIRST to many of the 23,000 visitors. The organizers loved us last year so they had us show off our bot in the kid's play area!

9/21-This is my 3rd year at Light the Night Walk. We raised over \$4K for the Leukemia & Lymphoma Society with a Harris match! My teammate has Leukemia and I donated for the first time at a blood drive she organized. Cancer stinks so I'm glad we could help. Last spring we walked to support a team member with Cystic Fibrosis. We were a top 5 fundraising team, over \$2200!

10/10-Went to the Amazing Maize Maze. We worked in groups to get out. I felt more a part of the team after getting lost with them! Team building activities help us retain 98% of students. We recruit members with demos at Pep Rally, Club & Activity Fair and Freshman Orientation, as well as friends, family and FLL alumni.

10/27-Home from RahChaCha Ruckus 8, a Halloween-themed off-season competition we host with a committee we formed of FIRSTers. The news was there because of our PR efforts! I met over 35 teams, from 4 states and Canada! We've grown into the Dome Arena, a donated space. They also let us use it for Rochester Rampage, a full field demo we started in 2010 at the Monroe County Fair with 30,000+ people. We have a FLL booth there, and inspired a woman to start a 4H FLL team. We invited them to Rumble, our offseason FLL event. During build season we build a FULL field and invite teams to Rochester Rally, our pre-ship event to test their robots, use our shop and hear tech sponsors and alumni speak. We host so many events!



11/10-Leadership Boot Camp! I learned my strengths and how to motivate and delegate. FRC3181 joined us. The human knot activity was the best! I'm psyched to apply for Leadership, a big responsibility: train students, lead meetings and help meet team goals. I have to prep for my interview with the mentors and my speech to the team to get voted in!

11/11-I spent weeks organizing Razzle Dazzle, an FLL pre-competition. It went great after all the planning! 8 teams got to test their bots and get feedback from judges. The FLL team I mentored for the last 2 months came. I helped them solve problems and design their robot.

12/9-A whole crew of us reffed and judged at the local FLL Champs like we did at 3 qualifiers. And 2 team members have emceed and head reffed the Clarkson FTC Qualifier! We've sponsored 113 FLL/JFLL teams in the last 9 years and started 24 this year. It makes sense as we host 100+ kids at 4 FLL camps and a new Big Brothers and Big Sisters camp and hold coach seminars every year. I'm proud our team funded the 2010-12 FLL Championship winners to go to World Festival! We expanded our FLL outreach into Orleans County by teaching teams how to fundraise!

12/11-We built epic trebuchets to prep for build season, learning the engineering design process. We also do FLL bot contests and build pasta bridges, newspaper towers, bottle rockets, and designed a pump for a water game challenge in our pre-season academy.

12/17-I worked with Marines at Toys for Tots. We've packed over 2000 toys in the last 2 years. We've sorted Thanksgiving baskets and medical supplies, volunteered at a nursing home and Foodlink. Being known in our area has drawn 14 community mentors and 67 sponsors this year who get newsletters and attend our events.

1/8-After Kickoff, mentors and alumni ran the Rookie Quick Build, helping 8 rookies build their chassis. We provide help to many teams by mentoring, providing tools, financial support and expertise. We teach teams about sustainability and strong team structures, recruitment and fundraising. Many teams have used our handbook as a model. We've even helped teams with their Chairman's essays! We've

mentored FRC73, an inner-city STEM school, since 2006. Veteran teams call our shop ThunderMart because they can borrow tools and spare parts!

1/11-I drove 1 of 4 robots in the school talent show! I wasn't nervous because I already had mad driving skills from our demos at RMSC Science Saturday, the Rochester Rhinos Game in front of 18,000, and the 4th of July Parade. We average 2 demos a month year-round like at schools and scout troops!

1/12-A presenter came from National Instruments in Texas for a LabVIEW training we hosted. An all-girl FTC team & 6 FRC teams attended. As a Beta Test team for the last 4 years, I learned how the control system works. We shared this info with other teams at pre-build open house and Kickoff. I liked helping FIRST improve the controls.

2/16-I'm sick :( Can't go to robotics. I watched the live webcast to check our progress. I read our blog, weekly email, and Wiki engineering notebook to see what happened in the Integration Meeting. While browsing FIRST's website for resources, I found our Rookie Resources page linked there!

2/19-Just found out we won \$10k as National Honorees with FRC340 for the FIRST MegaDrive! For 2 years, on Make a Difference Day, we've collected 65 blood units, 613 food items, 2070 books and 7000+ lbs of recyclable electronics.

3/4-I'm working on a presentation about leadership for a Regional Showcase. We will also present on safety and FLL. At Champs, mentors and students gave seminars on PR, leadership and running an offseason event.

3/15-At competition! We've assisted over 300 FRC teams in 9 years with everything from programming to emergency robot support. The FLR pit admin sends teams directly to us for parts! The FLR Rookie All-Star winners were excited when we lent them a crate we built and painted to ship their bot to Champs in style! We hope to see them there at the All Rookie Meet & Greet, an event we've hosted since our rookie year, for teams to mingle and make new friends doing fun activities.

4/3-I promoted FIRST to 1000+ business leaders at Eyes on the Future Economic Summit. I think I sparked their interest! We also demoed our robot to 800+ professionals at TEDx Rochester, a conference where innovators share ideas and experiences. I've learned how to network and be confident speaking to professionals.

5/1-I never knew how much our community outreach was noticed until we received the Youth Asset Builder award from Penfield's Parks & Rec and Monroe County Youth Bureau. We've also received recognition from the Penfield Town Board, Monroe County Legislature AND a NYS Senate Resolution!



5/5-What a fun weekend! We demoed FLL and FRC bots in RIT's gym at ImagineRIT, a creative tech festival. Then, at the Team Picnic, I got the "FIRST for Life" award because it IS my life! We gave mentors funny paper plate awards. Alumni came and talked about their internships at Harris, NASA and Philips; 7 of them are my mentors. Our Team Leader is working with Harris to recruit alumni; 1 works there and 4 interned! In 9 years, 92% of our alumni attended college, 87% pursuing STEM careers. I plan to be one of them! We keep track of our 52 alumni on social media and 1511 Alumni Association.

5/29-I gave the year-end report to the Penfield Board of Ed who recognizes us for being a well-run student program! We drove our bot and thanked them for their support. With our input, renovations nearly tripled our work area. Our shop is full of equipment I love using. I take classes with all 3 teacher advisors, one says we inspired him to go to school to become the District's Tech Education Admin. I'm glad our school district supports us to make sure FIRST and 1511 is here for future students!

6/2-I spent a month helping a teacher create an FLL-based curriculum for his special needs class. I taught him to build and program NXT robots. We got FLL into 5 Penfield Schools and the District bought 28 NXT kits. We've put FIRST into the curriculum! Mentors work with students on engineering design projects .like robot drivetrains in Project Lead the Way classes. My teammate's independent project was a shop safety program used by PHS tech classes. We got "The New Cool" added to the PHS summer reading list and gave 30 copies to county libraries.



6/15-PTC and the FLR committee asked OUR team to show our robot to companies to spread FIRST to other parts of NY. What an honor!

6/20-Graduation! I joined 1511 for the robot. I didn't realize I'd get so much more! Harris, PHS, Rochester and 1511 have made FIRST an inspiring experience for me and my whole team. I can't wait to come back to mentor.

Year 2030-WOW! 1511 really did change my life. Wait till I share this with the kids! It reminds me of our team motto: The Thunder Just Keeps Getting Louder!