



CREATE. INNOVATE. INSPIRE.

**WALTON
ROBOTICS**

FIRST TEAM 2974

STRATEGIC BUSINESS PLAN 2015-2016



The mission of the Walton Robotics Team is to help students develop personal and professional skills, inspire students to pursue careers in science, technology, engineering and mathematics (STEM), and promote STEM as fun, rewarding, and a pathway to a brighter future.

EXECUTIVE SUMMARY

Executive Summary

Team History

Walton Robotics, FIRST Team 2974, started in 2008 in Marietta, Ga. with 10 members, 2 mentors and 2 sponsors. We now have 37 members, 18 mentors and 20 sponsors. The chart on the next page summarizes our growth.

Our most significant challenges come from lack of an independent build site. We are currently working out of our high school, but we do not get financial support from the high school, school district or state.

Contributions from parents and corporations fund our robot, outreach, training, travel, and facility costs. Our non-profit Walton Robotics Foundation raises and manages team funds. Our sponsors generously provide \$45,000 in grants and substantial in-kind support.

Our coach, a Walton High teacher, spends 1,000 hours yearly on FIRST. Unlike other coaches at school, he is not compensated for time spent outside class. It has been impossible to find another teacher to help for free, and we will be lost if he retires as coach. Similarly, an accomplished FRC team in our area lost all school support and must now function without that help. We support the independent community team formed in its place. We have begun discussions with state officials about permanent funding for robotics coaches.

Lastly, we had to find a space to house our team, and we have moved three times in the last 3 years. This challenge provided us a remarkable opportunity, the Walton Regional Robotics Center, but we have been relocated to our school due to the loss of that resource. We are still able to run full-scale competition and open-field build and scrimmage events, but we continue to search for an independent work site.

Major Accomplishments to Date

- 58,000 Hours Worked
- Over 200 Outreach Activities
- 100+ FRC Teams Supported
- Two FTC and Two FRC Teams Formed
- Hosted 6 FLL Tournaments
- Co-creator of Destination Einstein
- 25 Million People Reached
- All 7 Continents and Space Reached
- 100% Of Alumni In STEM Fields
- \$1,000,000 Earned In Student Scholarships
- Over 1,000 Hours of Student Training Each Year
- 2015 World Championships Entrepreneurship Award
- 2015 World Championships Alliance Captain
- 2015 Peachtree Regional Dean's List Finalist
- 2015 Peachtree Regional Industrial Design Award
- 2015 Orlando Regional Chairman's Award
- 2015 Orlando Regional Robot Winner
- 2014 Peachtree Regional Chairman's Award
- 2014 Peachtree Regional Dean's List Finalist
- 2014 Peachtree Regional Robot Finalist
- 2014 Palmetto Regional Engineering Inspiration Award
- 2014 Palmetto Regional Robot Finalist
- 2013 Peachtree Regional Chairman's Award
- 2013 Peachtree Regional Dean's List Finalist
- 2013 DC Regional Innovation In Control Award
- 2012 Peachtree Regional Engineering Inspiration Award
- 2012 Palmetto Regional Entrepreneurship Award
- 2011 Smoky Mountain Regional Robot Winner
- GRITS Cooptition, Spirit, Outreach and Robot Awards

Executive Summary

Growth Indicators at a Glance

Year	Students	Mentors/ Sponsors	Engineering			Outreach			Destination Einstein		
			Training Hours	Robots	Awards	Outreach Activities	People Impacted	Awards	Events	Partic. Teams	DE Sites
2008-2009*	10	2/4	50	Competition		2	< 1,000				
2009-2010*	30	8/5	150	Competition		6	1,000				
2010-2011*	35	10/11	200	Competition	Competition Winner	12	5,000				
2011-2012*	40	14/16	500	Competition Practice		25	20,000	Engineering Inspiration Entrepreneurship			
2012-2013	43	20/20	750	Competition Practice T-Shirt Cannon	Innovation in Control	35	1.25 million	Chairman's	4	8	1

* Estimates

Executive Summary

Growth Indicators at a Glance

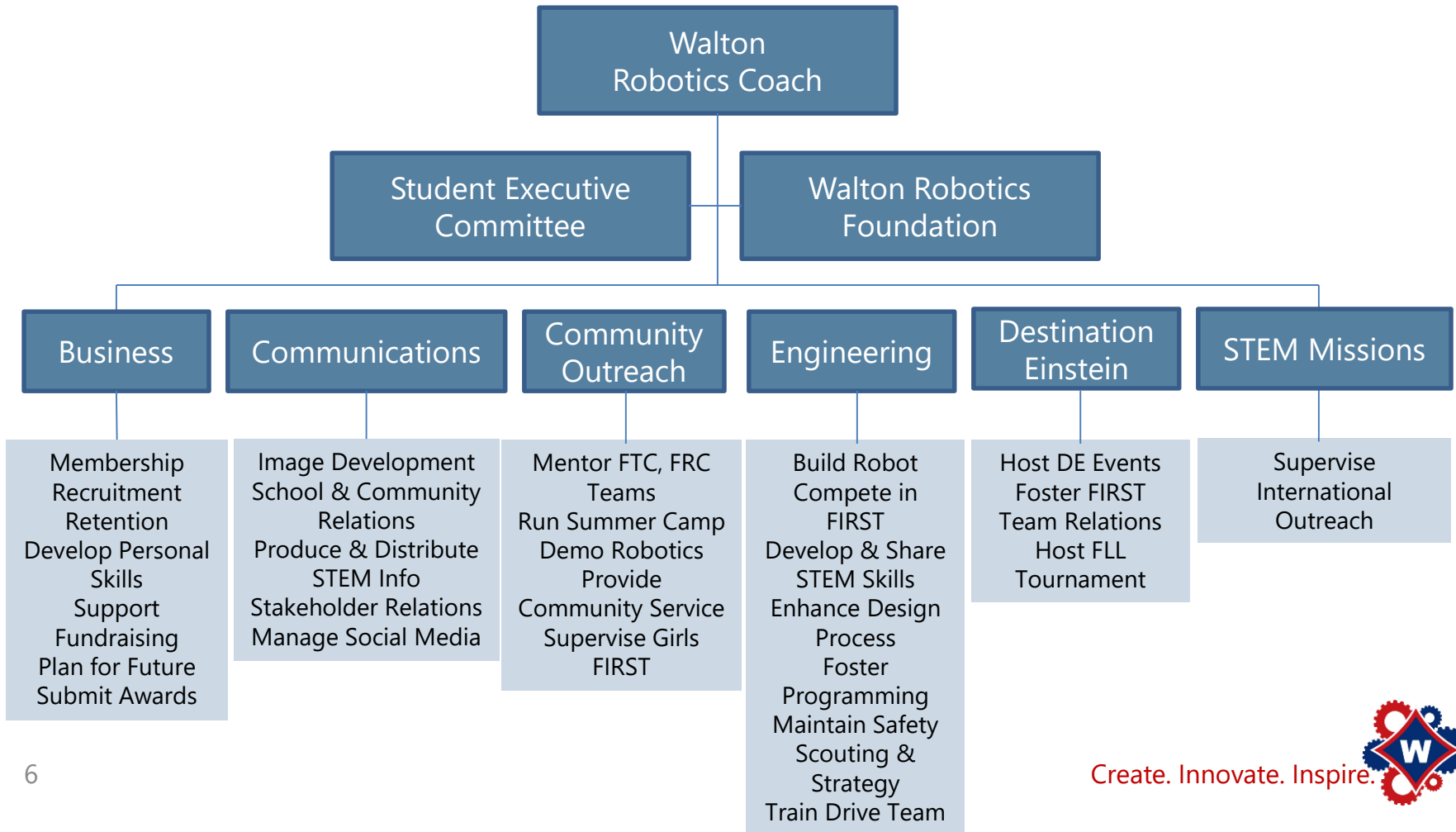
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2013-2014	41	20/27	1,150	Competition Practice T-Shirt Cannon 2.0 iConductor	Two-Time Robot Finalist	50	3.5 million	Engineering Inspiration Chairman's	10	26	2
2014-2015	38	16/20	1,500	Competition Practice T-Shirt Cannon 3.0	Robot Winner Industrial Design Championship Division Alliance Captain	50	3.5 million	Chairman's Championship Entrepreneurship	10	45	3
2015-2016	37	18/20	1,500	Competition Practice T-Shirt Cannon 3.0 Soccer Bot	Competition Winner Championship Division Winner	50	15 million	District Chairman's** Championship Engineering Inspiration**	5	60	4

* Estimates

** Targets

Executive Summary

Organizational Structure



Executive Summary

Strong Stakeholder Relationships

Students, mentors and sponsors are considered equally important members of the Walton Robotics Team, and we work diligently and proactively to engage, inspire and retain them.

Team Members

- Veterans adopt new team members to help them get adjusted
- Students develop skills via outreach and robot training modules
- Students build skills in off-season projects
- 50 outreach events engage and showcase students
- Build season assignments give students focus
- 14 leadership/assistant positions build ownership and responsibility
- Students earn varsity letters
- Counselor works with students to balance school and robotics
- Leadership retreat allows focused executive team planning for upcoming season

Mentors

- Mentors are strategically recruited to meet team and mentor needs
- All mentors work directly with students
- Students present at mentors' companies and participate in their outreach initiatives
- Students write articles and produce videos for companies documenting mentor contributions
- Mentors are thanked in all presentations and in year-end "We Love our Mentors" video
- Regular mentor dinners highlight challenges and accomplishments, encourage networking and promote fun
- Mentors participate in and help organize leadership retreat

Sponsors

- We train other teams supported by our sponsors
- Students show progress and use of funds via presentations, newsletters
- Sponsors and families are invited to build site events and open house to see work in progress, drive robots and view presentations
- We support sponsors' educational, charitable and social responsibility initiatives
- White papers showcase how we use sponsor products in unique ways
- We participate in and present at sponsors' outreach activities and family days



Executive Summary

Deployment of Resources

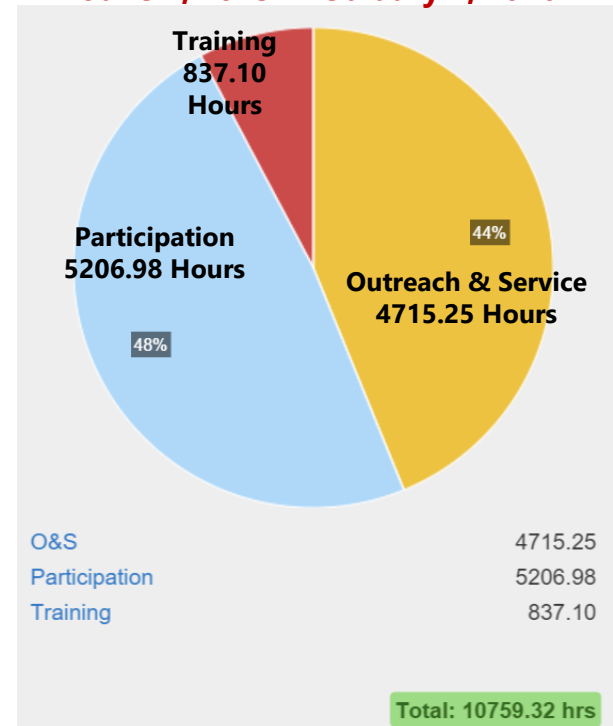
Team members and mentors spent a total of 10,759.32 hours on team activities from June 1, 2015 to February 1, 2016. Community outreach and skill development are the heart of Team 2974's mission and drive all team activities. Students are required to give at least 40 hours to outreach/service events and attend at least 5 training sessions each year.

We shared FIRST's message with an estimated 25 million people in the last 5 years. Our annual goal is to reach millions of people via outreach activities in 4 categories:

- Community-wide activities, such as Atlanta STEM Fest and East Cobber Parade
- School Activities, such as pep rallies where we showcase the fun side of STEM, and presentations for teachers and administrators to encourage creation of more FIRST teams statewide
- Activities for the FIRST teams, such as FLL tournament, summer camps, and FRC trainings and scrimmages
- Communications initiatives, such as a sponsor recruitment video and social media campaigns

Roughly 30% of all team resources are devoted to outreach. Team members spent over 4,715 hours in over 50 outreach activities from June 1, 2015 to February 1, 2016, and team members received 837 hours of training during that period.

**Distribution of
Team Hours Worked**
June 1, 2015 – February 1, 2016



Total Team Hours:
10,759.32

Create. Innovate. Inspire.



Executive Summary

Annual Team Budget

Revenue		Expenses	
Grants- Miscellaneous	\$31,300	Competition Registration & Travel	\$60,000
Grants- STEM Missions	10,000	Robot Build	8,000
Grants- World Championships Support	10,000	STEM Missions	18,000
Membership and Student Travel Fees	57,000	Community Outreach & Camps	15,000
Camp Revenue	11,400	Build Site and Information Systems	2,500
Georgia FIRST DE Support	5,000	Marketing & Team Morale	7,300
Miscellaneous Income	4,750	Destination Einstein	10,000
Total Revenue	129,450	Total Expenses	120,800
Excess of Revenue over Expenses			\$8,560

Executive Summary

Long Term Goals and Objectives

Integrate STEM into Popular Culture

- Have STEM topics featured on radio and television
- Have FIRST tournaments televised
- Have Walt featured on Coke can/in Coke commercial
- FIRST has same name recognition/popularity as major league sports
- Have T-shirt cannon robot featured at major sporting event

Be a Recognized Leader in All Aspects of FIRST Robotics

- Play on Einstein field at Championships
- Develop CAD models others can use
- Go to Championships every year
- Present a seminar at Worlds
- Win Chairman's at Worlds
- Present a seminar at a relevant national conference
- Support GaFIRST efforts to get permanent funding for robotics programs and coaches

Enhance STEM Education in Underserved Areas

- Create children's book/coloring book
- OiaBucket to leave behind
- Children's toy/Walt paper robot

Promote the FIRST mission via the Walton Brand

- Have a comprehensive and cost effective communications plan
- Walt is an internationally recognized character
- Build a Walt robot

Expand Destination Einstein

- Replicate worldwide
- Obtain permanent space and funding
- Prepare and distribute operations manual
- Support sustainable growth of FIRST teams

Executive Summary

Risk Analysis

Based on a thorough risk analysis Team 2974 identified several threats to its continued operations. One risk in particular, the potential loss of the new build site, was deemed critical to the ongoing success of the team and the growth of its Destination Einstein (DE) program.

Critical Risk: Loss of Warehouse

The team had occupied a 19,000 square foot warehouse and office building in which it built robots, housed a full-sized FRC field and hosted DE scrimmages and training sessions for Georgia FIRST teams year round. The property was donated on a month-to-month basis by its owner, Taylor & Mathis. At any time, the team could be asked to vacate the site, leaving it without a space to house the field and its DE events.

Mitigating Risk: Actions Taken

Team leadership ensured a strong relationship with Taylor & Mathis, giving presentations and site tours, explaining the value of FIRST Robotics and the importance of the DE program.

As We Feared: Loss of the Build Site

In June 2015 Taylor & Mathis asked Team 2974 to vacate the space in favor of a paying tenant. We had 30 days to move.

The Result: Persistence and Continuing to Deliver Excellent Results

Team leadership did not panic; instead, we were prepared and asked our school to allow us to take over the old Auto Tech room. Although it was old, small, and in need of repair, we have since used the room and our school to continue to host Destination Einstein events, Girls FIRST events, interview workshops, open field days, and much more. In 5 months we have hosted numerous special events, an FLL tournament and an FRC offseason competition (GRITS). Throughout the build season we had many teams building robots, developing game strategies, video conferencing and preparing award submissions – all at the same time.



Executive Summary

Risk Analysis

	Strengths	Weaknesses	Opportunities	Threats
Leadership/ Organization	<ul style="list-style-type: none"> Strong Leaders Sustainable structure Thorough strategic planning 	<ul style="list-style-type: none"> Some Non-Contributors 	<ul style="list-style-type: none"> More training More positions 	<ul style="list-style-type: none"> Graduations leave experience vacuum
Partnerships	<ul style="list-style-type: none"> Strong relationships Many partners 	<ul style="list-style-type: none"> Inconsistent communication 	<ul style="list-style-type: none"> Digitally accessible sponsorship package 	<ul style="list-style-type: none"> Loss of partners
Facilities	<ul style="list-style-type: none"> Functional build site with field space at school 	<ul style="list-style-type: none"> Dependent on school support for large-scale event hosting 	<ul style="list-style-type: none"> Start-Up build site for rookie teams Networking through DE Partner with Coke 	<ul style="list-style-type: none"> Loss of GAFIRST's support
Finances	<ul style="list-style-type: none"> Many generous sponsors 	<ul style="list-style-type: none"> Expensive for students to join and travel No stipend for coaches 	<ul style="list-style-type: none"> Endowment Grants for teachers 	<ul style="list-style-type: none"> Loss of key sponsor Loss of parental support Loss of teacher

Executive Summary

Risk Analysis

	Strengths	Weaknesses	Opportunities	Threats
Business	<ul style="list-style-type: none"> Well developed infrastructure 	<ul style="list-style-type: none"> Continuity and growth in sponsorship 	<ul style="list-style-type: none"> Partner with GAFIRST Higher-tier professional events 	<ul style="list-style-type: none"> Potential loss of information/expertise
Communications	<ul style="list-style-type: none"> Clearly defined brand Unique tools Marketing/graphics mentors 	<ul style="list-style-type: none"> Infrequent efforts Inconsistent 	<ul style="list-style-type: none"> Focus on social media Leverage materials 	<ul style="list-style-type: none"> Unauthorized access to accounts and website
Community Outreach	<ul style="list-style-type: none"> Extensive, year-round In high demand 	<ul style="list-style-type: none"> Too few students, mentors involved Leaders are rookies in training 	<ul style="list-style-type: none"> Systematize demos and presentations 	<ul style="list-style-type: none"> Burnout for students and mentors
Destination Einstein	<ul style="list-style-type: none"> Successful initiative Meets defined need Four sites in Georgia 	<ul style="list-style-type: none"> Lack of documentation 	<ul style="list-style-type: none"> Replicate in other locations 	<ul style="list-style-type: none"> Loss of build site Loss of technical experts
Engineering	<ul style="list-style-type: none"> Committed students and mentors 	<ul style="list-style-type: none"> Insufficient depth of knowledge 	<ul style="list-style-type: none"> More training More focus on strategy 	<ul style="list-style-type: none"> Poor performance at competition
STEM Missions	<ul style="list-style-type: none"> Defined international outreach product line and brand 	<ul style="list-style-type: none"> Infant department 	<ul style="list-style-type: none"> Patent outreach products More international camps and outreach 	<ul style="list-style-type: none"> Loss of major sponsor support for global initiatives



*"You are a team
we try to emulate."*

*Adi
Ben-Yehoshua
Team 4272 Mentor*

TEAM HISTORY

Executive Summary

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Team History

Highlights

2008-2009

- The 2008-2009 season was the first year for the Walton Robotics Team.
- We started with 10 members, 2 mentors and 2 sponsors.
- Our first competition was the Peachtree, at which inspection didn't go as planned. We were forced to drastically change the design of our robot because of an issue regarding our bumper placement. We had failed to read and follow the rules correctly. We learned our lesson the hard way, although our rebuilt robot performed well.
- That year our team applied for the Chairman's award as a part of our NASA grant program.

2009-2010

- Our team increased drastically in number with 30 active members, and we focused on building the team's infrastructure.
- We hosted our first robotics camp for middle school students using LEGO NXT kits.
- General Electric sent us the first of many mentors.
- We started cleaning teachers' computers, which we still do today.
- We created a new robot for the fall GRITS competition and kicked off our Guest for a Day recruitment program.
- At the Peachtree competition our Breakaway robot was the first team to pass inspection. We were an alliance captain and choose teams 832 (Team Oscar) and 2415 (The Wired Cats) as our alliance partners. We placed third.
- At the Palmetto, South Carolina Regional we made it to the quarter-finals.
- We presented for the Chairman's Award, and although we did not win, a judge said we "looked like [we] had been doing this for 10 years".



Team History

Highlights

2010-2011

- Team membership reached 35; Additional mentors from GE, AT&T, Southern Polytechnic State University and Dixie Industrial joined the team.
- Our programmers developed a modular, extensible, and more versatile code base.
- 24 children attended our 2nd annual Robotics Summer Camp, Lego NXT's;
- We demonstrated FRC robots at Centennial Olympic Park and marched in the East Cobber Parade.
- We began and mentored a FIRST Tech Challenge (FTC) team at Dodgen Middle School.
- We hosted our initial FIRST Lego League (FLL) tournament.
- At the Peachtree Regional we finished in 7th place overall. Off the field, we worked with Wheeler and Kell to create an open "scouting database."
- At the Knoxville competition, we were picked by the first alliance, teams 71 and 48, and we won!
- We attended our first World Championship in St. Louis.

2011-2012

- In the summer we hosted our first strategic planning meetings; we revised our mission statement and crafted a business plan.
- We held our third annual Summer Camp with 30 kids.
- Applications rose again, and we formed a team of 40.
- We formed a Sponsorship Team that prepared marketing materials and a sponsorship plan.
- We added a rigorous programming training program, OSHA certification and Pumpkin Chunkin' to our fall activities.
- We marched in the parade and for the first time went to Elementary School Fall Festivals and Oktoberfests.
- We hosted our second FLL Tournament.
- Rebound Rumble was the year's game.
- We won the Engineering Inspiration Award and made it to the quarterfinals at the Peachtree Regional.
- A week later we were off to the Palmetto Regional, where we received the Entrepreneurship Award for our business plan.
- St. Louis for our second international competition: we came in 20th in our division.

Team History

Highlights

2012-2013

- Taylor & Mathis donated an 8,000 sq. ft. build site to us.
- We recruited 43 members
- The communications department was formed.
- We hosted summer camp
- We attended the off-season competition, GRITS, where we won the Outreach Award and the Coopertition Award
- Developed and built T-Shirt Cannon robot and showcased it regularly at our school's home football games, including the nationally televised ESPN playoff.
- Hosted our annual FLL Tournament in December, which was by far our most important outreach event.
- We also hosted the inaugural Girls' FIRST event at our build site to empower girls in STEM.
- We partnered with Georgia FIRST to establish Destination Einstein
- Frisbee Bot required countless hours of building, tweaking and programming.
- At the Peachtree Regional we choose our alliance and participated in the semi finals.
- We won the Chairman's Award!
- Alyx Falis, our Executive Director, was named a Dean's List Finalist
- At the Washington, DC Regional we made it to semifinals on the number one seated alliance.
- Our team was given the Innovation in Control Award because of our impressive camera tracking program!
- Our trip to World Championships included a wedding of two Walton Robotics' mentors on the Einstein field. Of course, they rode away in a carriage and had their first dance at Roboprom.

Team History

Highlights

2013-2014

- We recruited 40 members
- We hosted a robotics summer camp
- We mentored 2 FTC teams and 1 FLL team.
- We helped Pope High School start a FRC team, invited them to all of our trainings, and shared our buildsite with them
- We attended the off-season competition, GRITS, where we won the Coopertition Award and shared our Field Management System with GA FIRST
- Upgraded T-Shirt Cannon robot which was showcased at our home football games, was broadcasted on Georgia Public Broadcasting, and was presented in a video submission for NFL's Together We Make Football Contest.
- The Walton Football Booster Club donated money to our team in support of robotics.
- Designed and built a conductor robot, iConductor, which conducted the song "Mr. Roboto" to our school orchestra
- Made 2 computer games using our team mascot that was played by 4,000 people
- Hosted our annual FLL Tournament in December, which was by far our most important outreach event.
- Upgraded our team mascot, Flat Walt, to a 3D printed not-so-flat Walt
- Presented at professional conferences including SCTE, Leadership & Learning, Georgia Science Teachers Association, STEM Bootcamp at Kennesaw State University
- We partnered with Georgia FIRST to establish Destination Einstein which expanded to Columbus and Atlanta, GA.
- Developed OIFMS system which we implemented during our Destination Einstein events and publicly released the system
- Pneumatatron (our Aerial Assist robot) required countless hours of building, tweaking and programming.
- At the Peachtree Regional, we were a robot finalist and were broadcasted live by CBS Atlanta.
- We won the Peachtree Chairman's Award!
- Alex Bassett, our Chief Engineer, was named a Dean's List Finalist
- At the Palmetto Regional we were robot finalist.
- We won the Palmetto Engineering Inspiration Award!
- Our trip to World Championships included a dinner with 2 Korean FTC teams hosted by Novelis and an interview of one of our mentors and 2 students

Team History

Highlights

2014-2015

- We recruited 38 members.
- We hosted 3 robotics summer camps: NXT, VEX, and Java.
- We mentored countless FLL, FTC, and FRC teams and continued to work with the teams we started, 4749, 4910 and the Dickerson and Dodgen community FTC teams.
- We helped East Cobb Robotics after their loss of school support, invited them to all of our trainings, and shared our build site and field with them.
- We hosted GRITS, a full-scale FRC off-season competition, where we were Robot Winner and shared our Field Management System with GA FIRST.
- Upgraded T-Shirt Cannon robot which was showcased at our home football games, broadcasted on Georgia Public Broadcasting, and presented in a video submission for NFL's Together We Make Football Contest.
- The Walton Football Booster Club donated money to our team in support of robotics.
- Continued to use 2 student-developed computer games using our team mascot, played by thousands of people.
- Hosted our annual FLL Tournament in December, which was by far our most important outreach event.
- Hosted a full-size FRC scrimmage with 24 teams at our build site, a 19,000 square foot warehouse and office space donated by Taylor and Mathis.
- Upgraded our team mascot, Flat Walt, to the newly redesigned and customizable Walt, and reached space.
- Presented at professional conferences including SCTE, Leadership & Learning, Georgia Science Teachers Association, and STEM Forum.
- We partnered with Georgia FIRST to expand Destination Einstein, which has grown to four sites in Georgia.
- Stacker Bot/Ralph (our Recycle Rush robot) required countless hours of building, tweaking and programming.
- At the Orlando Regional, we were the robot winner.
- We won the Orlando Regional Chairman's Award!
- Keren Park, our assistant executive director, was named a Dean's List Finalist .
- At the Peachtree Regional, we won the Industrial Design award.
- We won the World Championship Entrepreneurship Award on our combined field!



"If the kids don't do it, it won't get done."

Brian Benton
Coach

LEADERSHIP & ORGANIZATION

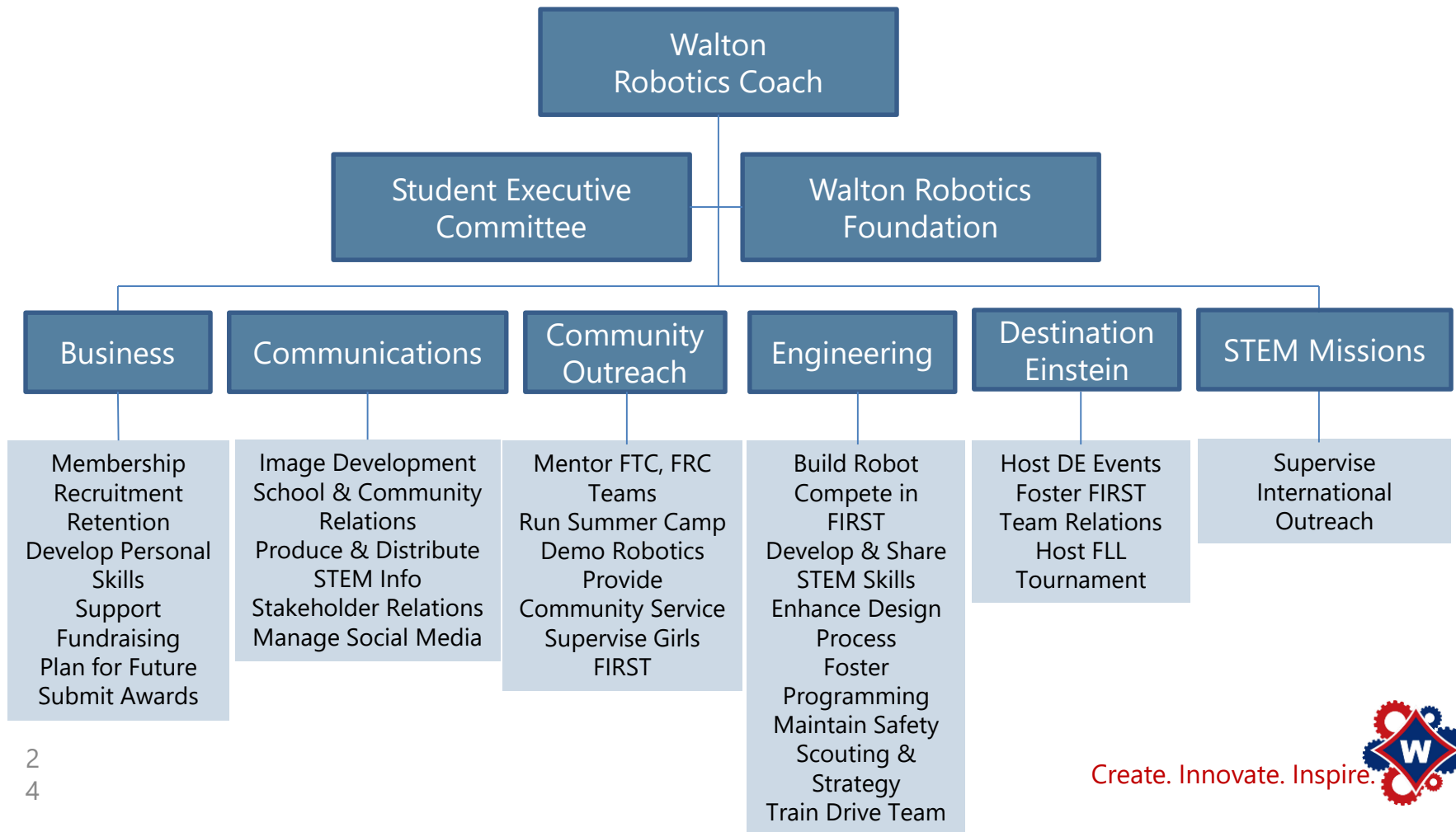
Leadership & Organization

Highlights

Coach	Since its inception, the Walton Robotics Team has been coached by Brian Benton, engineering and computer science teacher at Walton High School in Marietta, Georgia.
Functional Organization	To maximize the potential of our team and its opportunities, Walton Robotics is divided into six major departments – Business, Communications, Community Outreach, Engineering, STEM Missions, and Destination Einstein.
Student Leadership	Each division is led by a student leader and an assistant student leader, with the guidance of a mentor. These students leaders form the Executive Committee, which meets weekly throughout the year to manage team activities. Students learn important leadership skills.
Training and Sustainability	Student leaders coach assistants so they can take over the next year, thereby ensuring continuous, trained leadership. Mentors also share important technical, business and leadership lessons. Core and apprentice teams are used during build and competition seasons to provide instructional opportunities for less experienced members. This self-sustaining system makes Walton Robotics a stable, well prepared organization.
Job Descriptions	Job descriptions for student leads and project managers make sure all important tasks are accomplished and students understand their responsibilities.
Team Handbook	The team handbook addresses team expectations, requirements to travel with the team to competitions, and requirements to earn a varsity letter.
Walton Robotics Foundation	The Foundation, a non-profit organization, handles all the financial aspects of the team. Details are contained in the financial section of this plan.

Leadership & Organization

Organizational Structure



Leadership & Organization

Student Leadership Positions

Executive Director
Assistant Executive Director
Communications Director
Assistant Communications Director
Community Outreach Director
Assistant Community Outreach Director
Destination Einstein Lead
Assistant Destination Einstein Lead
STEM Missions Director
Assistant STEM Missions Director
Chief Engineers
Build Lead
Programming Lead
Strategy and Scouting Lead
Safety Captain

Additional Student Teams

Chairman's Team
Awards Team
Varsity, Main, and Extended Build
Pit Crew
Drive Team
FLL/FTC Mentors

Student Distribution

Freshmen	10	26%
Sophomores	12	31%
Juniors	10	26%
Seniors	7	18%

Men	29	74%
Women	10	26%

Leadership & Organization

Applications

Membership Application

WALTON ROBOTICS MEMBERSHIP APPLICATION 2014-15 (RETURNING STUDENTS)			
APPLICANT INFORMATION			
Name: <input type="text"/>	Grade: <input type="text"/>	HR Teacher: <input type="text"/>	
Cell phone: <input type="text"/>	Home phone: <input type="text"/>		
Email: <input type="text"/>			
HOME INFORMATION			
Your address: <input type="text"/>			
Parent's name(s): <input type="text"/>			
Parent cell phone: <input type="text"/>		Other parent cell: <input type="text"/>	
Parent email: <input type="text"/>		Other parent email: <input type="text"/>	
EXPERIENCE / OTHER COMMITMENTS			
Robotics: <input type="text"/>			
Leadership: <input type="text"/>			
Extracurricular commitments (distinguish between fall and spring semesters): <input type="text"/>			
Where do you work? <input type="text"/>			
TALENTS / INTERESTS / CAPABILITIES			
Answering this section does not lock you into any area of the team. We just want to know about your talents.			
Web design <input type="checkbox"/>	Build <input type="checkbox"/>	Photography <input type="checkbox"/>	Publicity <input type="checkbox"/>
Grant writing <input type="checkbox"/>	Design <input type="checkbox"/>	Programming <input type="checkbox"/>	Financial <input type="checkbox"/>
Fundraising <input type="checkbox"/>	Electrical <input type="checkbox"/>	CAD <input type="checkbox"/>	Planning <input type="checkbox"/>
Graphics <input type="checkbox"/>	Mathematical <input type="checkbox"/>	Community Svc <input type="checkbox"/>	Story writing <input type="checkbox"/>
Other: <input type="text"/>			
PARENT INVOLVEMENT REQUIREMENT			
Parental involvement is absolutely essential to the success of the Walton Robotics team. Think about what your parent can do to help the team successfully spread the word about STEB and robotics. Fill out and return with this application the Parent Application. We need parents to help with fundraising, transportation, chaperoning, and much more. Without a definite parent commitment to helping the team, your application will likely be denied.			
I am committing to volunteer to help the team. <input type="checkbox"/> Parent signature: <input type="text"/>			
EMERGENCY CONTACT			
Name of a person to contact in emergency: <input type="text"/>			
Best Phone: <input type="text"/>	Alternate Phone: <input type="text"/>		
Name of another person to contact in emergency: <input type="text"/>			
Best Phone: <input type="text"/>	Alternate Phone: <input type="text"/>		
Food allergies: <input type="text"/>			
OTHER INFORMATION			
Shirt size (adult): <input type="text"/>			
How will you get to meetings at the build site? <input type="text"/>			
What college majors are you considering? <input type="text"/>			

APPLICANT ESSAY QUESTIONS

(Note: the spaces following the questions will expand to fit your text)

To be considered for membership to the Walton High School Robotics Team, each applicant must complete the following questions. Please take the time to consider your answers for each of these questions. There are no right or wrong answers. The responses to these essay questions and a personal interview will be used in a selection process. Past membership on the Walton Robotics Team is NOT a guarantee of membership for the coming year.

What did you contribute to Walton Robotics during the 2013-14 year? Be specific, accurate, and complete, but do not embellish.

How did your parents contribute to Walton Robotics during the 2013-14 year? Be specific, accurate, and complete, but do not embellish.

Why do you want to join the Walton Robotics team? What do you expect to gain from this experience? Be specific.

What qualities/experiences do you have that would make you a significant contributor to our team? (These do not have to be robotics related!)

If you are accepted as a team member, how would you like to contribute to the team next year? With what parts of the team would you like to work?

SIGNATURE	
I understand that participation on the Walton Robotics team may involve the use of robotic equipment including power tools. I promise to abide by the team rules for my safety and the safety of my teammates. I understand that not following safety rules may result in my dismissal from the team. I understand that participating on the Walton Robotics team is a major commitment of time and energy. My teammates will rely on me to do my part. I promise to dedicate myself to the team. Behavior deemed detrimental to the team (by either a student or parent) may result in the student's dismissal from the team.	
Signature of applicant: <input type="text"/>	Date: <input type="text"/>

Leadership Application

WALTON ROBOTICS LEADERSHIP APPLICATION (2014-15)	
APPLICANT INFORMATION	
Name: <input type="text"/>	Cell phone: <input type="text"/>
Email: <input type="text"/>	
Current GPA (weighted): <input type="text"/>	
EXPERIENCE / OTHER COMMITMENTS	
Robotics experience: <input type="text"/>	
Leadership experience: <input type="text"/>	
Commitments outside robotics (be specific, as a WRT leadership position is a major commitment): <input type="text"/>	
For what position(s) are you applying: <input type="text"/>	

APPLICANT ESSAY QUESTIONS

(Note: the spaces following the questions will expand to fit your text)

To be considered for a leadership position on the Walton Robotics Team, each applicant must complete the following questions. Please take the time to consider your answers to each of these questions. Thorough responses might increase your chance of earning a leadership position. Having a leadership position this year is no guarantee of a leadership position next year.

Why do you want to be a leader on the Walton Robotics team?

Explain how you meet the requirements of the job for which you are applying. Why should you earn this leadership position?

Describe your vision of the job for which you are applying. Please include some of the goals that you would like to help the team to achieve while you are in this leadership position.

What has not been asked that you would like to tell us? What else should we consider in our decision?

An interview will be scheduled for you to personally present yourself for a leadership position. The interview will involve multiple WRT mentors. Please prepare for the interview. Talk with one of the mentors for more information.

COMMITMENTS AND SIGNATURE	
Check three boxes, sign and date.	
<input type="checkbox"/> I understand that holding a leadership position on the Walton Robotics team involves a major commitment of time.	
<input type="checkbox"/> I understand that, as a leader, involvement with Walton Robotics should be my primary extracurricular activity.	
<input type="checkbox"/> I will do my best to meet deadlines for assignments.	
<input type="checkbox"/> I will communicate roadblocks to mentors.	
<input type="checkbox"/> I will ask for help when necessary.	
<input type="checkbox"/> I have read the job description regarding the position for which I am applying.	
<input type="checkbox"/> I understand the responsibilities of the position for which I am applying.	
<input type="checkbox"/> As a leader, I am expected to attend all team competitions (GOTS, regional competitions, World Championships).	
<input type="checkbox"/> Excellent communication is an important part of our team. I will check my team email and the team calendar regularly.	
<input type="checkbox"/> I will attend team leader meetings when they are called.	
<input type="checkbox"/> I will commit to earning good grades as I can attend competition.	
Signature of applicant: <input type="text"/>	Date: <input type="text"/>



Leadership & Organization

Travel Requirements

Requirement	GRITS	Pre-Build Season Check	District/Regional Competition	World Championships*
Participation	25 hours	50 hours	85 hours	125 hours
Outreach/Service	10 hours	35 hours	35 hours	40 hours
Computer Cleaning	_____	1 computer cleaning session	1 computer cleaning session	1 computer cleaning session
Training	Safety + at least 2 other training sessions	Safety + at least 4 other training sessions	Safety + at least 4 other training sessions	Safety + at least 4 other training sessions
Grades	Passing or parent waiver	_____	Passing or parent waiver	Passing or parent waiver
Travel Fee	✓	✓	✓	✓
Recommendation from team coach	✓	✓	✓	✓

****Students must attend at least one district/regional competition in order to go to World Championships. Attendance only at the weekend portion of the competition does not count.***



Create. Innovate. Inspire.

Leadership & Organization

Varsity Letter Program

Requirements

Walton Robotics team members who contribute significantly to the team's success can earn a Walton varsity letter. Requirements to earn a letter are:

- At least 250 hours of participation
- At least 70 hours of community outreach/service
- At least 1 business event
- Completion of 1 computer cleaning
- Completion of safety training
- Completion of 4 other training sessions
- Attendance of world championships and at least one district/regional competition
- A recommendation from the team coach

T-sheets Time Reporting

Walton Robotics uses T-Sheets online time sheet to track hours spent on team activities. To keep track of hours and events, both for lettering, students must use T-Sheets consistently.



The Walton Robotics business division works to efficiently manage the team and acquire sponsors. Specific responsibilities include:

- *Drafting team policies*
- *Preparing the annual business plan*
- *Attracting and retaining sponsors*
- *Tracking team participation and accomplishments*
- *Preparing FIRST competition award packages*

BUSINESS

Business

Activities & Results

Executive Committee	Leaders from each of the team's six divisions meet weekly to discuss team issues, plan upcoming events, and manage the team's actions. Mentors attend as well to provide assistance in decision making. This group also works with the coach to set team expectations and requirements.	<i>Weekly Leadership Meetings</i>
Sponsor and Grant Procurement	The business department gives presentations to existing and potential sponsors. This department manages the sponsor package and prepares grant applications.	<i>24 Sponsors \$100,000+ in Support</i>
Awards	The business department manages the compilation of all awards submissions.	<i>Chairman's Entrepreneurship Dean's List Woodie Flowers</i>
Information Systems	The team uses donated systems to document important information, such as team files, work hours and engineering notes. This information is shared by all team members and used to track progress against goals. Team communications are coordinated using Walton Robotics Google accounts.	<i>LabArchives PB Works T-Sheets Google Accounts</i>
Planning	The business department meets during the summer to plan for the coming year and prepare the team's business plan. The business department also monitors team progress in meeting goals.	<i>2013-2018 Plan</i>
Team Meetings	The business department is in charge of planning, coordinating, and leading weekly team meetings and trainings.	<i>Year Round Weekly Meetings and Trainings</i>



Business

Activities & Results

Work Collaboratively with Stakeholders

The business department works with all divisions of the team and our stakeholders, including FIRST, Walton High School and our corporate sponsors, to promote robotics and STEM education in the community. Team members create and deliver presentations,, conduct demonstrations and information sessions, support other teams, and share training and outreach resources.

Growing network of sponsors

Involve New Members

As the center force of the team, the business department sets expectations for new members, tracks membership hours, and takes innovative measures to keep new members involved.

*All students qualify for competition
Rookie time checks by December
Rookie-specific emails for events
Rookie-invitation outreach events*

Train 2nd year members for leadership

The business division ensures sustainability of skills and student resources on the team by giving leadership opportunities to underclassmen. Certain events such as the FLL tournament, GRITS and outreach activities are organized by a group of experienced leaders working with younger students to grow their skills.

*Assistant positions for each department
Underclassmen outreach leads*

Business

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Host Exec Committee Meetings			←→									
Update Team Requirements	←→											
Recruit Team Members										←→		
Submit Grant/Sponsor Applications				←→								
Give Stakeholder Presentations			←→						←→			
Present at National/International Conferences and Events			←→								←→	
Prepare Award Submissions						←→						
Prepare and Update Business Plan	←→											

Business

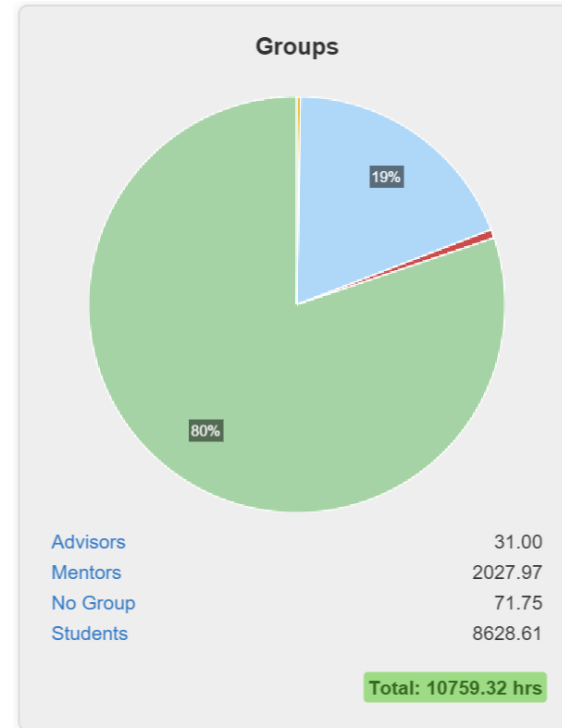
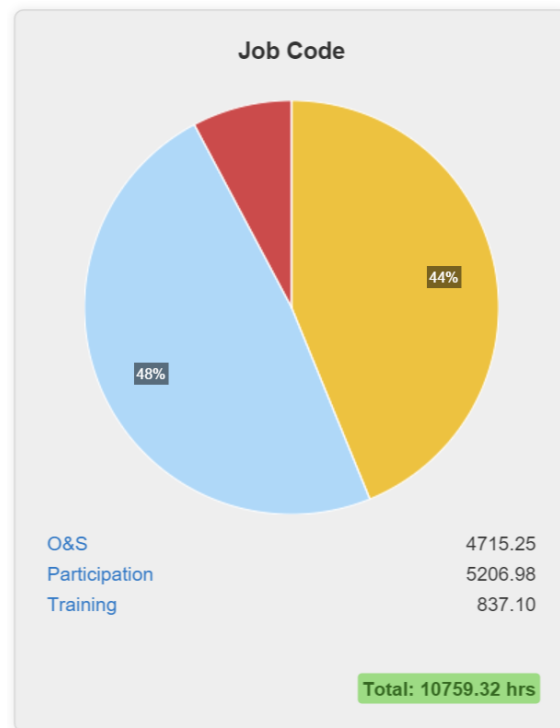
2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Support GA FIRST's Initiatives	←					→		←	→			
Host Business Seminars at DE Events							←	→				
Develop Relationship with Coke			←			→			←	→		
Obtain Recognition for Robotics at Walton High School		←				→				←	→	
Present to Possible Buildsite Supporters	←			→								
Implement Measures to Incorporate New Members		←	→									
Train 2 nd Year Members for Leadership		←						→				

Business

Resource Utilization

Total Hours: Students and Mentors*

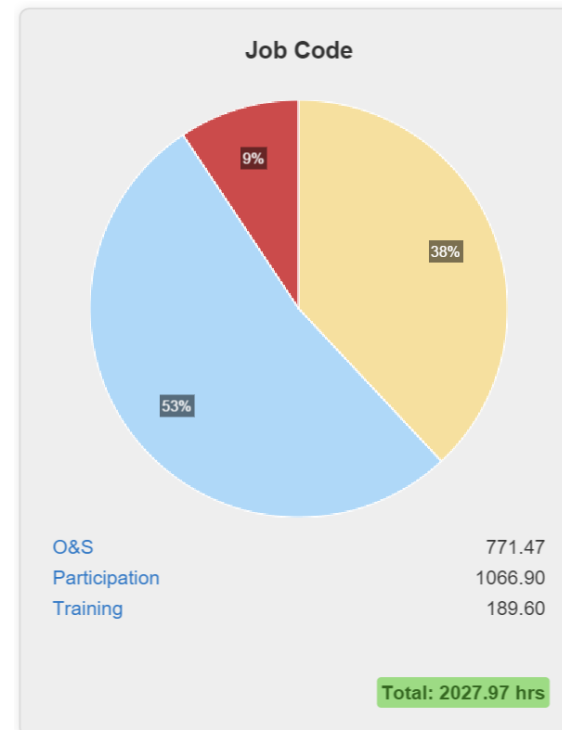
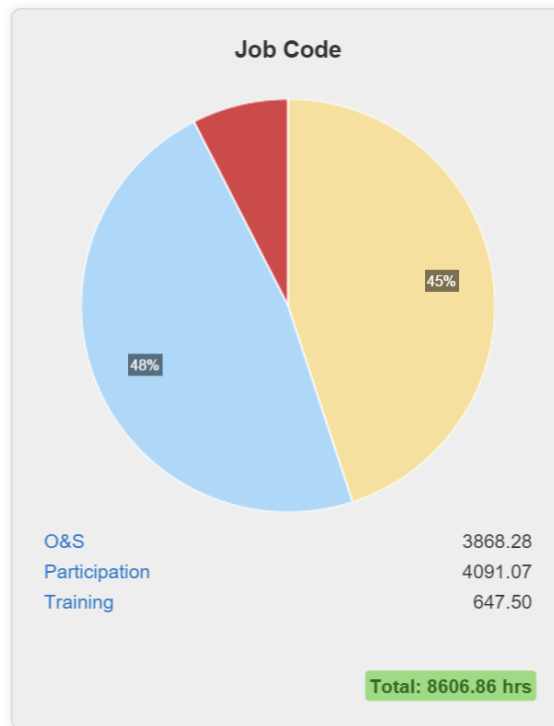


* From June 1, 2015 to February 6, 2016

Business

Resource Utilization

Hours Breakdown: Students and Mentors*



* From June 1, 2015 to February 6, 2016



The Communications Department is responsible for building the Walton Robotics brand and maximizing the effectiveness of communications within the team and with sponsors, FIRST and the world.

In five years we have reached an estimated 8 million people.

COMMUNICATIONS

Communications

Activities & Impacts

Internal Communications

Email	We use emails as our main way to communicate with students and mentors regarding events, meetings, build sessions, and presentation opportunities. We also use emails to establish regular communication with our sponsors.	<i>Created @waltonrobotics Team Emails</i>
Engineering Notebook	We use an online engineering notebook to document all engineering and programming progress through the year. This is a generous donation from our sponsor, LabArchives.	<i>Continued Use</i>
Wiki	A wiki, provided by PBWorks, is used to document any event with online sign-up sheets. It is also used to share and archive any document within the team, sponsors, or parents.	<i>Addition of Parents' Page</i>
Team Meetings	Mandatory meetings are held to discuss specific topics to the team and to address important topics such as Competition details. Parents attend these as well to receive additional information.	<i>Multiple Mandatory Meetings Per Year</i>
Google Calendar & Drive	Google Calendar is used daily by the team to stay updated with deadlines and manage all team events. Google Drive is used to share documents and allows multiple students to work on projects simultaneously.	<i>Ongoing Use</i>
Communications Training	Communications leads teach team members how to use and add to team communications tools, especially social media. Graphics, photography and videography are taught through one-on-one trainings between experts and apprentices. Since communications is a young department, we are exposing it as a promising path to the team.	<i>Sustainable Communications Program</i>



Communications

Activities & Impacts

External Communications

Website	We use WaltonRobotics.org to communicate to our sponsors, colleagues and others. Blog posts, business resources, Flat Walt pictures, team info, and contact information can be accessed and used by the general public. In the 2015-2016 season, due to being hacked, we have redesigned the website to be more functional.	<i>Resources Expanded Security Enhanced 2,000 Views/Week</i>
DE Website Launch	Create and maintain DestinationEinstein.org as the DE hub website.	<i>Website Launched For 3 DE Sites</i>
Videos	Videos are used to make our message heard by millions. They highlight our passion for STEM and robotics and provide news about team activities. This year's video's include a sponsorship recruitment video, occasional webisodes for Novelis and online video contests.	<i>Sponsor Video Novelis Webisodes Together We Make Football Video 3.5+ Million Viewers</i>
Social Media	The team uses Facebook, Twitter, LinkedIn, Instagram and YouTube to distribute information about Walton Robotics and FIRST, including competitions, team activities, other team successes, DE events and more. During this season we will synchronize these outlets to reach the widest audience possible.	<i>Thousands Reached</i>
Walt	We manage the use of these conversation starters, which include information about Walton Robotics and FIRST. Following Walt's redesign, we will expand him into multiple versions, i.e., an interactive moving robot.	<i>On All 7 Continents New Walt Released and Renamed 2/2015.</i>

Communications

Activities & Impacts

External Communications

Print and Broadcast Media	We feature important robotics events in local newspapers and on broadcast media.	<i>GPB Feature NBC 11 Alive Story East Cobber/MDJ</i>
Promotional Items	We use promotional items to promote our team's and FIRST's message and ensure the messages resonate with target audiences. Our cord wrappers were a hit at all competitions.	<i>Promotional Items Designed</i>
Stakeholder Communications	eNewsletters are sent out periodically for alumni, teachers and sponsors to keep them abreast of team activities.	<i>Editorial Calendar Monthly/Bi-Monthly eNewsletters</i>
School Communications	We keep the Walton community informed of team activities via weekly eBlasts, school announcements, a bulletin board and school display case. We also invite school administrators to team functions, such as open houses and presentations, and we clean teacher computers once each year.	<i>Continued School Support of Robotics Team</i>
Market Competition Robot	Create and distribute a robot reveal video via the internet; work with scouting team to scope out competition; use robot specifications card, Chief Delphi and Frank's Blog to inform other teams.	<i>Have Well- Recognized Robot; Be Chosen Alliance Partner</i>
Pit Redesign	The pit we bring to each competition will be resigned to be more functional and visually appealing by adding a truss element to hold TVs and giveaway materials.	<i>Functional Pit Design</i>



Communications

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Internal Communications Efforts	←											→
Wiki, Website and Graphics Training			←			→						
Revise Website	←		→									
Write Weekly Blog				←								→
Video/Publish Team Activities				←								→
School Communications			←									→

Communications

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Actively Use Social Media			←									→
Expand Online Resources						←					→	
Print & Broadcast Media					←							→
Stakeholders and Alumni eNewsletters	↔			↔		↔			↔		↔	
Market Robot for Competition								←			→	
Develop Promotional Items								↔	↔			
Design Competition Pit					↔	↔						

Communications

Sample Materials



Competition Promotions

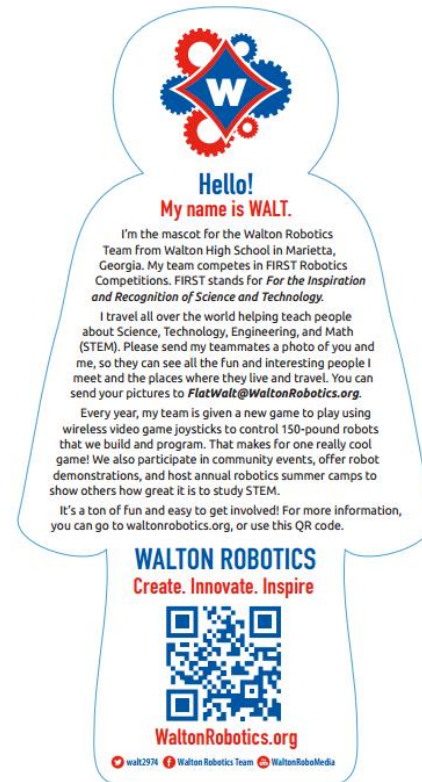
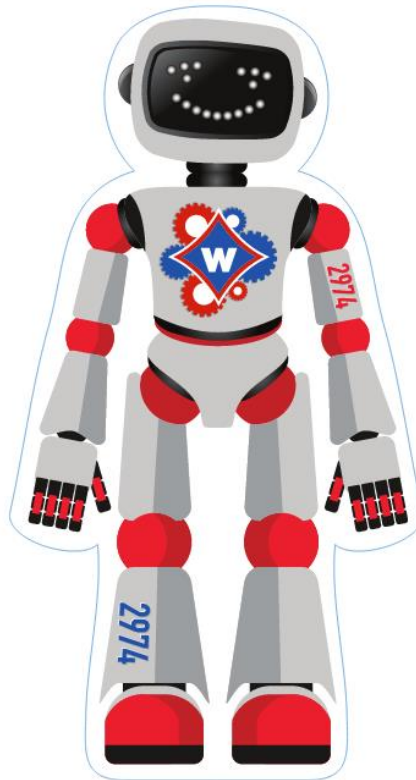


Business Card



Communications

Walt



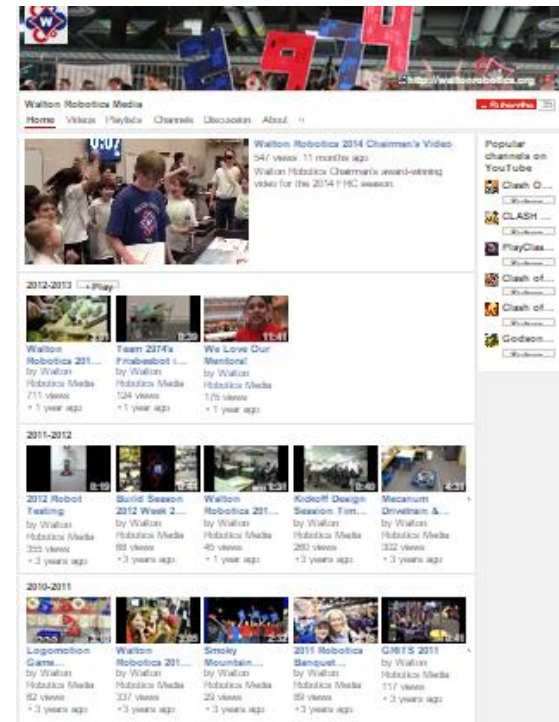
Social Media



Facebook Page

Twitter Account

YouTube



Create. Innovate. Inspire. 



The community outreach department strives to engage and inspire members of the local and global community to pursue STEM and experience FIRST. Students interact personally with children, teachers, and professionals at over 50 outreach events each year, sharing the message that FIRST is about much more than building robots.

COMMUNITY OUTREACH

Community Outreach

Audiences

Walton Robotics participates in over 50 outreach events throughout each year. Events are designed to spread FIRST's message to select, targeted audiences:

Community-Wide:

Events introduce broad segments of the community to robotics and FIRST.

Within FIRST:

Events promote the development and expansion of FIRST programs and teams.

Students:

Events give students – both typical FIRST audiences and unconventional audiences -- opportunities to see and touch robots and explore the relevance of STEM in their lives.

Educators:

Demonstrations and presentations give teachers and administrators tools they need to start and expand FIRST Robotics programs.

Business Community:

Demonstrations at expos, business meetings and sponsor events inform the business community about FIRST impacts and opportunities to get involved.

Activities in each of these categories are described on the following pages.

Community Outreach

Activities & Impacts

Community-Wide

East Cobber Parade and Festival	We showcase our robots at the annual parade and carnival event. Children earn robot Driver's License and receive Flat Walts, while parents receive information on how to involve their children in FIRST. New Outreach activities are also field tested.	<i>10,000 Community Members</i>
Robotic Demos and Presentations	We demonstrate and present at places including The World Congress Center, Georgia Aquarium, and Georgia Universities. Audiences include professional organizations such as Novelis, WIT, General Electric, and the Rotary Club. Our robot has made several appearances at Family Days and Take Your Kids to Work Days.	<i>10,000 Students, Professionals, Sponsors</i>
Dog Days Fun Run	During the East Cobb Rotary Dog Day's Event, we host a booth and speak to local families and other sponsors and supporters of the event about STEM, FIRST Robotics and the benefits of involvement. We also provide personnel for the event to support our sponsor and the community.	<i>1,500 attendees</i>
SciTech Now on GPB	We continue our partnership with Georgia Public Broadcasting. The host of SciTech Now attended our off season tournament and tweeted about it. A segment of SciTech Now filmed at our site last year describing FIRST and its impact on students, mentors and the community continues to air. It was aired March 18, 2015 and continues to run throughout the year.	<i>1,500,000 Georgia viewers</i>
Atlanta Science Festival	We serve on the board of directors of ASF (a week-long event to promote STEM in the southeast U.S.). During the event itself, we coordinate an engineering activity and allow attendees to interact with our robot. We also collaborate with local FTC and FLL teams to host additional ASF activities.	<i>500 at Walton Robotics Center 45,000 at ASF</i>

Community Outreach

Activities & Impacts

Within FIRST

Summer Camps	This summer we continued offering three robotics camps: beginning robotics, advanced robotics java programming.	<i>?? Middle School Students</i>
Pete Nance Boys & Girls Club	This year we were invited by STEM Compass Atlanta to run a 3 day camp in Greene County, Georgia to promote an understanding and appreciation of STEM to underprivileged elementary and middle school students.	<i>50 4th –8th grade students</i>
Georgia Tech Camp	Because of our success with the Pete Nance B&G Club Camp, we were invited to collaborate on an all day, week long camp at Georgia Tech University for underprivileged youth in the Metro Atlanta area. We also trained students from East Cobb Robotics to run summer camps.	<i>25 middle school students 4 East Cobb Robotics members</i>

Community Outreach

Activities & Impacts

Within FIRST

East Cobb FIRST Alliance	We continued our efforts to connect the FIRST teams in our area into a collaborative group by, sharing expertise in sponsorship, team development, volunteer recruitment area outreach opportunities, collective team support, and resources. This past year we helped a local FRC team host an FLL qualifying tournament and the State Super Regional with judging, resources, and field support.	<i>500 People</i>
Georgia FIRST Support	Our students and mentors volunteer as field reset teams, event support teams, robot inspectors, judges and VIP greeters during Georgia FIRST FRC events.	<i>5,000 Attendees</i>

Community Outreach

Activities & Impacts

For Students

Pep Rallies and Sporting Events	We continue our collaboration with the sports department at our school to demonstrate our robots at pep rallies and sporting events. We attend all home football games, shooting football sponsor t-shirts from our t-shirt cannon robot to promote the excitement of STEM in the community. During the basketball season, we showcase our basketball robot at pep rallies. During these events, we are frequently cheered for by the football team, basketball team, and cheerleaders alike. The football booster club supports our efforts with sponsorship as they believe it adds an important element to the game and to the community experience. Their support indicates that our involvement in school sporting activities has changed the culture of STEM and robotics at our school.	<i>5,000 People</i>
Volunteer Services	We make special effort to assist our school when called upon as well as host an annual computer cleaning drive to support the teachers and staff.	<i>2,800 Teachers and Students</i>
Girls FIRST	We host annual events exploring opportunities for girls in STEM and connecting girls within and outside of FIRST with female STEM professionals. We also collaborate with sponsors and community organizations to offer workshops to the girls in our region. This year, we hosted 2 GirlsFIRST events for 85 girls and 15 speakers, including Heather Rocker, the president of Georgia FIRST.	<i>100+ Girls Reached Events and Workshops</i>

Community Outreach

Activities & Impacts

For Students

Science Olympiad	We support the regional Science Olympiad with student support and engaging demonstrations encouraging students to further pursue STEM with participation in FIRST.	<i>2,000 students and spectators</i>
Educational Video Games	Our members launched two games highlighting aspects of FIRST and Walton Robotics. We shared the games at a DE event, GRITS, and for an Atlanta Public School demo. The games have been a big hit, and we plan to publish them to the App Store soon.	<i>6,000 Students</i>
100 Black Scholars Demo	We continue to support this effort with demonstrations at our pit, robot driving on the field, driving and shooting the t-shirts cannon using stress balls, and information to teachers and students on how to become involved in all levels of FIRST.	<i>4,500 students</i>
Cobb EMC LEGO Build	Several times during the year, Cobb EMC promotes STEM in our community by hosting LEGO Build Competitions. At these events we supply manpower to set up, reset, and clean up the event, concessions, filming, judging, crowd control, demonstrations for our robots and information about involvement in FIRST. The funds raised at these events goes to support science initiatives across the county.	<i>2,000 Students and Parents attending 111,500 Students in Cobb County</i>

Community Outreach

Activities & Impacts

For Educators

Cobb Teachers Training	We host and present at professional education events in our county for science teachers. We inform educators about the benefits of robotic programs and how the programs can become a pathway to excellence in education. Attendees are thoroughly impressed by the confidence and real-life skills demonstrated by the students.	<i>100 Teacher and Science Coordinators</i>
GA STEM Forum	We host a workshops in Athens for Georgia teachers, science coordinators and administrators. During our presentation, we showcase how Walton Robotics has changed education at our school. We presented details on how to start a program and make it successful while encouraging students to become involved in STEM classes and careers, with an emphasis on attracting females to STEM fields.	<i>1,000 Teachers</i>
Georgia Science Teachers Association (GSTA)	Walton Robotics presents at the annual GSTA Conference in Macon, Georgia. We host a workshop explaining how to initiate and integrate a successful robotics program at any level in education and addressed recruiting students, establishing business partnerships, setting goals, and training students.	<i>400 Science Educators</i>

Community Outreach

Activities & Impacts

For the Business Community

Sponsor Family Days	We attend sponsor Family Day events including Picnics and Take Your Kid to Work Days. During these events, we demonstrate robots, host activities, and explained the partnership between FIRST and corporations. Students share a personal story about how FIRST and robotics has impacted their life and future.	<i>1,000 Employees, Families</i>
Novelis Women's Month Outreach-In-a-Box Project	Female students and mentors spent an afternoon with female Novelis employees preparing 100 Outreach-in-a-Box kits, which will be distributed to Novelis facilities worldwide. Team members explained the purpose of Outreach-in-a-Box and shared their experiences within FIRST. Novelis representatives shared their experiences as women in STEM fields.	<i>150 Students, Mentors and Novelis Employees</i>
Kids Business Expo	At the Expo we introduced young entrepreneurs and their families to STEM careers and FIRST programs. Students designed, tested and evaluated sling shot rockets and pencil catapults.	<i>1,000 Attendees</i>

Community Outreach

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
East Cobber Parade & Festival				↔								
Demos and Presentations				←								→
Cobb EMC Lego Build				←				→				
Dog Days Fun Run			↔									
STEM Forum					↔							
Summer Camps	↔											
FLL, FTC & FRC Mentoring			←								→	
East Cobb FIRST Alliance	←											→

Community Outreach

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
SciTech Now Television Show													
Atlanta Science Festival													
Pete Nance B & G Club Event													
Georgia Tech Camp													
Georgia FIRST Support													
Girls FIRST													
Volunteer Service at School													
Pep Rallies & Sporting Events													
iConductor													
Educational Games													
Leadership & Learning													
Georgia STEM Forum													



Community Outreach

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
GA Science Teachers Assoc.									↔			
Science Olympiad									↔	↔	↔	
Sponsor Family Days	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Atlanta Public Schools Demo											↔	

Community Outreach

Sample Materials

FLL "How To" Brochure

What Is FIRST?

FIRST (For the Inspiration and Recognition of Science and Technology) was founded with the goal of promoting collaboration and teamwork. Founded by Dean Kamen in 1989, FIRST has grown immensely in the last few decades.

With a highlight on Science, Professionalism and Leadership, FIRST strives to promote Science, Technology, Engineering, and Math among our youth. Through four different levels of Robotics Competitions, FIRST provides educational opportunities for all ages.

With 350,000 students, 28,000 robots, 64,000 mentors, 32,000 teams, and 60,000 other volunteers, there are plenty of ways to get involved!

The FIRST Mission:
"To create a world where science and technology are celebrated and where young people dream of becoming science and technology heroes"

Science Is Fun:
Let's Make a Compass!


Materials:

- Sewing needle
- Small bar magnet
- A cork
- A small bowl of water
- Pair of pliers

Procedures:

1. Rub a magnet over the needle a few times, always in the same direction. This action magnetizes the needle.
2. Cut off a small circle from one end of the cork, about 1/4-inch thick. Lay the circle on a flat surface.
3. Using a pair of pliers, carefully poke the needle into one edge of the circle and force the needle through the cork so that the end comes out the other side. Push the needle far enough through the cork so that about the same amount of needle is sticking out each side of the cork.
4. Place the assembly in the bowl of water. The needle should point north or south, depending upon where you live!

Walton Robotics Presents:



How to Get Involved in the FIRST Lego League

Walton Robotics


FIRST

What is the FIRST Lego League?

The FIRST Lego League (FLL) is the simplest of the three competition levels offered by FIRST. Directed toward elementary and middle school students, FLL is designed to highlight teamwork and technical design.

Every September, the FLL season begins. FIRST releases the new challenge for the year and the teams get busy preparing for their competition in late fall.

Each new challenge is based on a real-world scientific topic. The teams have to design a robot to complete tasks related to the topic and also research a problem related to the topic.



Let's Get Started!

There are 3 basic steps to creating your own team:

1. **Organize a team**
Recruit students between the ages of nine and fourteen. You can have a team from your school, church, or neighborhood. There is even a tool offered on the FIRST website to find kids in your area who are also interested in FLL!
2. **Register your team**
Based on the 2013 season, the start-up cost of a team is \$600 - \$1200. This cost can be covered through member dues, sponsorships, and other fun fundraisers! The return on the investment is priceless!
3. **Start Building**
Kids will have a great learning about the competition, developing personal skills, and competing in a friendly yet challenging competition.

Walton Robotics

FIRST

Walton Robotics sponsors Lego Robotics camp every summer for middle school students. Go to WaltonRobotics.org to find out more!

Summer Camp Flyer

Join us this summer!

WALTON ROBOTICS

SUMMER CAMPS 2014

HOSTED BY: THE WALTON HIGH SCHOOL
F.I.R.S.T. ROBOTICS TEAM

This year, Walton Robotics is hosting three camps targeting different areas of engineering.

LEGO NXT

- The LEGO NXT camp is the original camp that our team has been hosting in the past. Students will learn to collaborate in designing, building, and programming the NXT Mindstorms kit to solve various game missions.
- For rising 6th-8th graders

VEX Advanced

- VEX Advanced is a new camp this year for students who have had more experience in building and programming robots, including those who have attended our LEGO NXT camp. Students will use VEX robotics kits to explore intermediate principals of engineering.
- For rising 7th-9th graders

Programming

- Using Java programming language, students will learn how to logically solve problems in code, properly handle user input/output, fix technical and logical errors, develop efficient algorithms, and have various program components work together effectively.
- For rising 7th-9th graders

GENERAL INFORMATION

When: June 9-12, 2014 (for all camps)

Where: Engineering Rooms at
Walton High School
1590 Bill Murdock Road
Marietta, GA 30062

APPLICATION INFORMATION

Applications available March 1, 2014.

Please visit our website at www.waltonrobotics.org for the application and updates.

Any questions? Contact us at waltonroboticscamp@gmail.com.





I cannot thank
the Walton team
enough ... for
seeing a need
and working to
fill the gap.

Connie Haynes
GaFIRST
Regional Director

DESTINATION EINSTEIN

Destination Einstein

Overview

Goal:

The goal of Destination Einstein (DE) is to build networks of competitive robotics teams capable of reaching the Einstein field at FIRST World Championships.

Partners:

- FIRST Team 2974, Walton Robotics
- GaFIRST
- Kimberly Clark, Automation Direct

Activities:

- Full-size FRC field is hosted at Team 2974's build site and is made available to all Georgia teams throughout the year
- Teams design, test and refine robots at DE during build season
- Scrimmages are held before tournaments and bag-and-tag to give teams practice
- Fully functional field management system and real-time scoring mimic competition conditions
- Pits and tools are available for visiting team use
- Teams share strategy, competition advice and camaraderie
- GaFIRST and FIRST teams bring potential sponsors and mentors to DE to assist in recruiting efforts
- Coaches collaborate during "Coaches Coffees"
- Special events target specific goals (i.e., Girls FIRST)
- Full-scale offseason events hosted with the support of Ga FIRST (GRITS)

Results:

- Over 40 events since inception
- 45 teams have participated in DE Walton events
- Team 2974 advanced to Archimedes quarterfinals as an alliance captain, the farthest any Georgia team has made it at Championships
- All Georgia teams attending Championships attended DE Marietta
- Expansion of DE to 3 new sites in Georgia

Destination Einstein

Activities & Results

Field Support	As part of the Destination Einstein initiative, our mentors and parents combined with our students and Georgia FIRST work together to get the field elements for the new game to be built as quickly as possible for our team and other teams in the area to practice on. During the offseason and build season, the students help take down and put up the field for events such as GRITS and week 0 scrimmages.	<i>Provided Field and Support for GRITS and Scrimmages</i>
Scrimmages	We host scrimmages to help team prepare for off season tournaments, bid farewell to previous year's challenge, and prepare for competitions. We also host strategy and other information sessions, including Girls FIRST.	<i>At least 2 Scrimmages Per Year and 2 other Events</i>
Open Field	The DE field is available for use by all Georgia robotics teams throughout build season, so they can test and perfect robots with real field elements. Teams are provided competition-like pit space, and they are invited to use Team 2974's tools and materials. The only requirement is team's let us know when they plan to attend, so we can ensure the facility is open.	<i>Daily Visitors</i>
Field Elements	Mentors assist GaFIRST to build and install field elements. Our goal is to have a fully functioning field and host the first DE event within one week of kickoff.	<i>Field Fully Assembled within One Week</i>



Destination Einstein

Activities & Results

Sustainability	Initially, DE was realized through the extensive efforts of a few partners, mentors and students. Additional mentors and students are being trained in program management and field technology to ensure program continuation.	<i>Additional DE Team in Place</i>
Duplicate DEs	Based on the success of DE, GaFIRST has helped to create two more DE programs in Georgia. We continue to support these initiatives with technical expertise, management advice and manpower. Ultimately, we would like to support DE programs in FIRST programs worldwide.	<i>Continue support for growing sites</i>
FLL Qualifying Tournament	Each year we host a large, fun and competitive FLL qualifying tournament to support and promote FIRST and FLL in our area. We provide the space, materials, training, judging, concessions, crowd control, and demonstrations for 24 FLL teams, their families, and spectators. During the event we are ever present to provide support and information on how to get and stay involved in all levels of FIRST.	<i>1,000+ attendees</i>

Destination Einstein

Activities & Results

GRITS

This past year, we worked with Georgia FIRST to host a local off-season regional event known as GRITS. GRITS provides teams with critical driving practice in a competition environment, allowing new teams to acclimate to competition before build season begins and allowing veteran teams to train new members. 25 teams competed, giving unanimous positive feedback. We hope to continue and to expand GRITS in future years so that teams can continue to benefit from the practice and experience.

*Hosted Large Scale
Off-Season
Competition*

Destination Einstein

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Host Scrimmages & Special Events				↔				↔				
Open Field								↔				
Build/Install Field Elements								↔				
Set Up New DE Website				↔								
Train New DE Team				↔				↔				
Assist New Georgia DEs								↔				
FLL, FTC, and FRC Mentoring				↔				↔				
GRITS					↔							
FLL Tournament							↔					
Field Support								↔				

Destination Einstein

****2013-2014 Calendar of Events

August 17: Open House for GA Mentors and Coaches

September 14: SHRIMP Scrimmage

November 9: Farewell to Frisbees Scrimmage

January 12: 2014 Games Collaboration

March 15: Peachtree Prep Scrimmage

April 12: World Prep Scrimmage

January – April: Open Field

****Event Participants

Pope Robotics
Pisgah Robotics
Kell Robotics
Westminster
Roswell High
Blessed Trinity
Grady High
Peachtree Ridge
Glambots
Warbots
Fernbank Links
1648

Northview Robotics
Techno Titans
Wheeler Circuitrunners
4H Chargers
TechnoTribe
Global Dynamics
Clockwork
Reboot
Swagbots
Gear Devils
Lotus Robotics
BT Bots
Forsyth Alliance

Destination Einstein

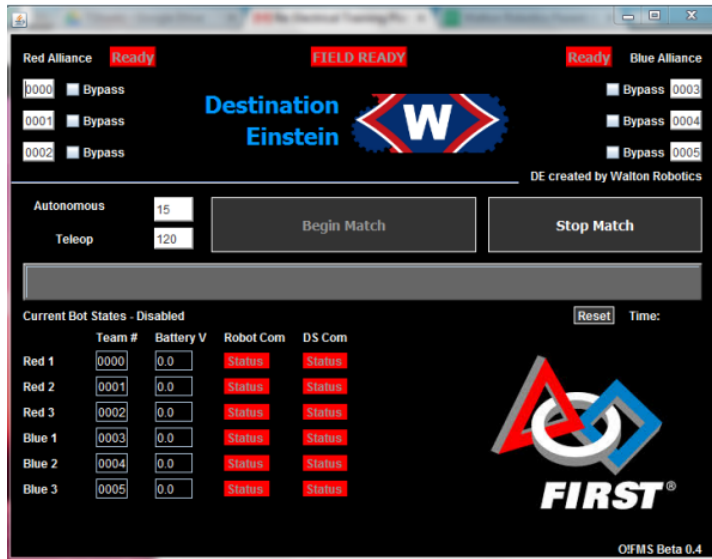
Components



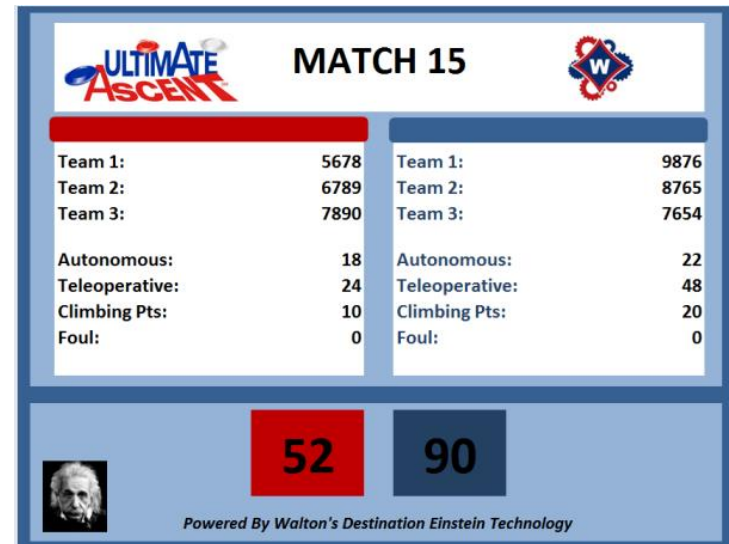
DE Promotional Video



DE Website Design



DE O!FMS Field Management Technology



DE Live Scoring System





The Walton Robotics STEM Missions department works to inspire children to pursue careers in STEM related fields on a local and international level.

Responsibilities include:

- *Foster Global STEM Mission Work*
- *National Professional Events*
- *Translate STEM Materials*
- *Plan and Lead International STEM Camps*
- *Local STEM Mission Work*
- *Storybook Creation*
- *Presence at Professional Sports Games*

STEM MISSIONS

STEM Missions

Activities & Results

STEM Camps

Local STEM Camps

The Walton Robotics STEM Missions team will go into underserved areas around Georgia to hold STEM camps to expose students to core science and engineering concepts in the hope to foster future scientists and engineers.

17 Camps Run in 5 Years

International STEM Camps

The Walton Robotics' STEM Missions team plans, coordinates, and executes international STEM camps in underserved areas to expose students to various levels of science projects to teach them about core science concepts. The camps are sustained after we train their leaders and counselors.

STEM Camp in Brazil Summer 2015

Mentoring Brazilian Students

We send monthly packages to Brazil to keep in touch with the children and the Brazilian team we worked with in Brazil. We will continue to work with ETEP to help them run a camp this upcoming summer by themselves in Brazil.

Cultural Exchange

Camp in a Can

We have created a can of 15 STEM projects that anyone can take and use to run their own camp for a week. This will include a variety of experiments for different age levels. We hope to present this idea at World Championships.

Sustained and Exponential Impact

STEM Missions

Activities & Results

Regional, National and International Outreach

NASA Event at TJFR	The Walton Robotics STEM Mission team educated students and parents on how to set up robotics team while providing activities to introduce students to robotics and the fun of STEM education. Students were able to control robots and build slingshot rockets.	<i>Impacted 500 People</i>
Outreach in a Box	The girls on the team have created, built and provided a fun interactive way to teach students basic engineering concepts of STEM while leaving them with memorable take-away through building and decorating sling shot rockets.	<i>Distribute Outreach in a Box 2.0</i>
Boys and Girls Club FLL Team	Provide hands on guidance with a local Boys & Girls rookie FLL team to help them foster their teams leadership, project development, and overall capability to run their team on their own.	<i>Ran NXT Camp Fostered Team Leadership</i>
Translate FRC Resources	In order to help other international teams have more resources, the Walton Robotics STEM Mission team translated materials such as Chairman's essays, STEM Missions packets, and others into various languages such as Korean, Spanish and Portuguese.	<i>Translate and Distribute Team Resources to Spread STEM</i>

STEM Missions

Activities & Results

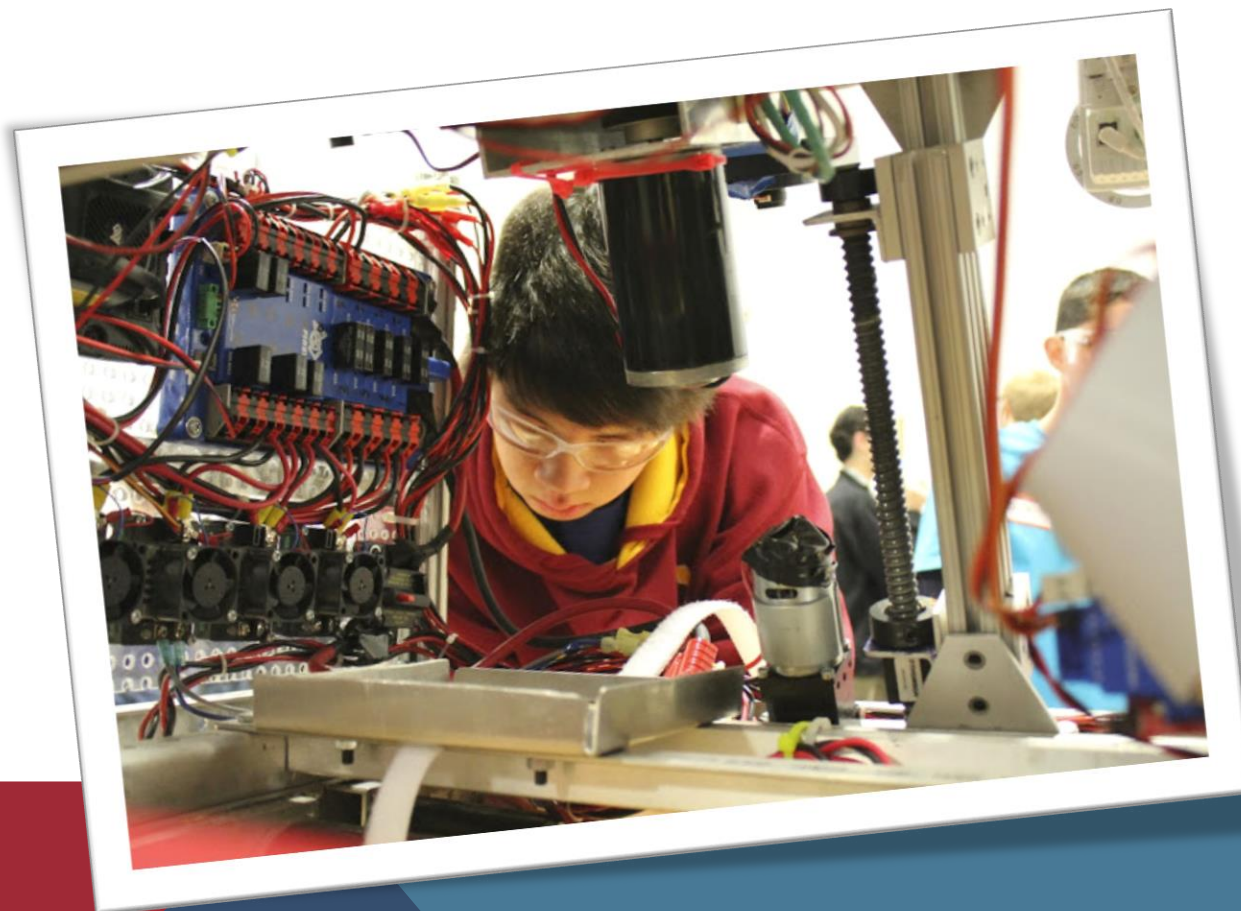
Regional, National and International Outreach

Falcons Game	Our team is creating a soccer bot to be featured at a Falcons game in late December. The bot is meant to help promote the new MLS team that is coming to Atlanta in 2017.	<i>Sponsor and Community Support</i>
Storybook	We are creating a story book to be used for elementary level children. The book includes different topics about a variety of engineering topics. Stickers are also going to be included to make the book more interactive for children.	<i>Spreading STEM to Younger Audiences through Creativity</i>

STEM Missions

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Local STEM Camps	↔									↔		
Mentor Brazilian Team			↔									↔
Camp in a Can					↔							
Arthur Blank Foundation Work	↔				↔						↔	
TJFR NASA Event				↔								
Outreach in a Box				↔								
Boys and Girls Club Mentoring	↔											↔
Translate Materials				↔								
Falcons Game							↔					
Storybook Development					↔							



The engineering division teaches members engineering skills and crafts a successful, competitive robot during build season. We also provide robots to the outreach division, to promote STEM in the community.

ENGINEERING

Engineering

Activities & Results

T-Shirt Cannon	The T-shirt Cannon continues to gain presence in the school and community by appearing in school pep rallies, football games and even local television. It has even helped us partner with the football booster club to keep entertaining the crowd with the t-shirts that they supply.	<i>Featured In # of Community Outreach Activities</i>
Demo Support	One of the major commitments during the off season is outreach demo support. We make sure that all of our robots are always ready to be taken out to community and corporate demos, someone is able to perform quick maintenance if the robot is to break, and people can watch the robot perform at its best.	<i>Robot Available at All Demos and Presentations</i>
Flat Walt	Flat Walt Bot will ultimately be a robot specifically for outreach demos. It is approximately two feet tall and has three joint arms. It features a tablet for a face that will interact with people standing in front of it.	
iConductor	iConductor is a collaboration between our team and our school's orchestra. The robot was created last year and showcased at our annual orchestra concert. iConductor has been updated to include more life like and aesthetically appealing motions.	<i>iConductor 2.0 Presented at Global Connections</i>

Engineering

Activities & Results

Build Training	Mentors and student lead technical training sessions throughout the fall to teach new skills and ensure the team is prepared for build season. Topics range from CAD and safety to programming and electrical. Team members are required to participate in safety and at least three other trainings to attend competitions. Other teams are encouraged to attend our training sessions, and we offer customized training for less experienced teams.	<i>Team Members Received Over 1,000 Hours of Training for Build Season</i>
Engineering Notebook	We use our engineering notebook in order to document our work, and to update other members of our teams. This allows use to efficiently work even if another group was working before.	<i>LabArchives</i>
Robot Build	Build season is, of course, the most exciting time of the year for us. We use a systems engineering approach to ensure that we stay on schedule and that all the parts of our engineering team are communicating and working together. We are also focusing on expanding our use of CAD to reflect changes to the robot.	<i>Ultimate Goal: Play in the afternoon at Championships</i>
Manufacture Parts	One of our major goals as engineering is to manufacture 90% of the parts used on our robot. By doing this, we have the ability to have a robust and consistent robot.	<i>CNC and CAD</i>

Engineering

Activities & Results

Develop good relationship with machine sponsor	We are currently working with Kennesaw State University, a local college, on water jetting parts as well as a machine sponsor, Wintech, on multitudes of machining techniques.	<i>Advanced Machining Techniques</i>
Sustainability of student roles	We are currently using a pyramid system where we take in a large group students starting freshmen year and then progressively narrow down the students from year to year until we have a Chief Engineer (Senior) who will teach Build Leads (Juniors).	<i>Multiple Build Levels</i>
Create guidebook for CNC	Last year we began using a desktop CNC in our build site. While having this, only a few students were able to learn how to use this machine. Because of this, we came up with a guidebook which contains the basics to run the CNC. This will allow students to learn while being able to function the machine.	<i>CNC and CAD Guide</i>
Maintain a hazard free work environment	We hold a multitude of safety meetings to teach the kids on the team the correct way to use the tools that are commonly used in the build site. The kids are also taught what to do in a multitude of dangerous situations from a small cut to something damaging the eye. Every kid on the team knows what is safe and what is not safe.	<i>Safety Captain and Safety Team</i>

Engineering

Activities & Results

Programming Guide Book

We want to create a guidebook for programming. This guide book will be created by students and demonstrate the proper techniques and structure that should be used when programming a robot. In addition, it will detail some problems that may be encountered and simple solutions to counter them. This will provide sustainability to the programming division and it will allow other teams to learn from our experiences.

*Sustainability in
Programming*

Engineering

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
T-Shirt Cannon Robot												
Demo Support												
Field Support												
Training												
Beta Test												
Robot Build												
Field Elements Build												
Soccer Bot												



The Strategy & Scouting Department researches other teams' best practices in order to find potential ways of improving our team's current methods. They are also in charge of scouting other teams during the competition season to assist the drive team.

STRATEGY & SCOUTING

Strategy & Scouting

Activities & Results

Make Strategy & Scouting a Department	Since Strategy & Scouting is a new department, one of our goals is to make Strategy & Scouting into a full-fledged department of the team with a clear structure and purpose, including new job descriptions for the positions of Strategy & Scouting lead and Asst. Strategy & Scouting Lead.	<i>New Functional Department</i>
Establish strategic network of info-sharing teams	One of the goals of the Strategy & Scouting Department is to create a network of teams through which ideas and information can be shared during the competition season. This would include sharing ideas about robot design and game strategies, as well as scouting data from regionals our team did not attend.	<i>Sharing of Strategy and Information on a Connected Network</i>
Create flexible system for Scouting	In previous years, our Scouting Team has used an app designed by some of our programmers to collect data at competitions. Our goal for this year is to partner with the Walton Programming Club to create a template for a scouting app that can be altered each year depending on the game in order to provide the most essential data to our drive team.	<i>App Changes With Game</i>
Create training program	In order to make Strategy & Scouting as effective as possible during competitions, it is important that the members of the team be well prepared before we go to regionals. To accomplish this, our goal is to set up a training program that can be applied each year with minimal alterations.	<i>Scouting Training at Off-Season Competitions and DE Events</i>

Strategy & Scouting

2015-2016 Action Plan

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Best Practices Hunting	← →											
Pre-Scouting								← →				
Scouting Training					↔				↔			
App Development								← →				



"Tell me and
I forget,
teach me
and I may
remember,
involve me
and I learn."

Benjamin
Franklin

PARTNERSHIPS

Partnerships

Mentors

Mark Bassett
DE/IT Mentor
Meditech

Don Belcher
Website Mentor
Automated Logic

Kathleen Bennett
Engineering Mentor
Novelis

Brian Benton
Coach
Walton High School

Mary-Kathryn Boler
Business/Awards Mentor
TAG Education Collaborative

Chris Jarrell
Engineering Mentor
Southern Polytechnic State University

Frank Jarrell
Engineering Mentor
Dixie Industrial

Deborah Kauffman
Community Outreach Mentor
Murdock Elementary Teacher

Eric Kauffman
Engineering Mentor
GE

Kaitlin Kress
Engineering Mentor
GE

Pamela LaVangie
Academic/Travel Mentor
Walton High School

Eileen Mittlieder
Communications Mentor
Marketing/Communications
Specialist

Chris Raczynski Ph.D.
Engineering Mentor
GE

SK Raj
DE Mentor
Forar Tech, LLC

Ashton Schimmel
Electronics Mentor
Southern Polytechnic State
University

Tim Stanistreet
Engineering Mentor
Novelis

Partnerships

Sponsors

Automation Direct

Technical Support

Automated Logic

Financial Support

Benton Advisory Group

Financial Support

Best Network Support

Financial Support

Cobb EMC

Financial Support

Dixie Industrial Finishing

Technical Support

East Cobb Rotary Club

Financial Support

ForarTech

Financial Support

GA FIRST

Financial Support

GE Volunteers

Financial & Technical Support

Georgia Power

Financial Support

LabArchives

Electronic Engineering
Notebooks

Lockheed Martin

Financial Support

Novelis

Financial & Technical Support

PBWorks

Wiki Services

Randstad

Financial Support

Taylor & Mathis

Build Site Space

T-Sheets:

Online Time Sheet Services

Walton High School

In-Kind Support

Win-Tech Inc.

In-Kind & Material Support

Women in Technology

Financial & Technical Support

Partnerships

Sponsors

Walton Robotics Sponsorship Levels



	Diamond Sponsors	Platinum Sponsors	Gold Sponsors	Silver Sponsors	Bronze Sponsors	Friends
Giving Level	\$5,000	\$3,000	\$1,500	\$750	\$250	\$25 minimum
Bring robot to company to demonstrate capabilities for a week.	X					
Company/Individual name and logo displayed on the robot	X	X				
Company/Individual name and logo announced at all FIRST competitions	X	X				
Company/Individual name and logo included in team presentations	X	X				
Company/Individual name and logo displayed in the pit competition area	Largest Banner/Display	Medium Banner/Display	Small Banner/Display			
Company/Individual name and logo displayed on team T-shirts	Largest Font	Medium Font	Small Font	Small Font		
Invitation to end of year recognition event with the team	X	X	X			
Special recognition award	X	X	X			
Company/Individual name and logo displayed on the web site with link	X	X	X	X	X	
Token of Appreciation	X	X	X	X	X	X



Partnerships

Support for Mentor & Sponsor Organizations

Presentations

**Walton High School/
Cobb County School
District**

Cobb Science Teachers
Freshman Orientation

Cobb EMC
Lego Build

East Cobb Rotary
Dog Days Fun Run

GA FIRST
Board of Directors
STEM Fest
Georgia Southern Classic
Regional

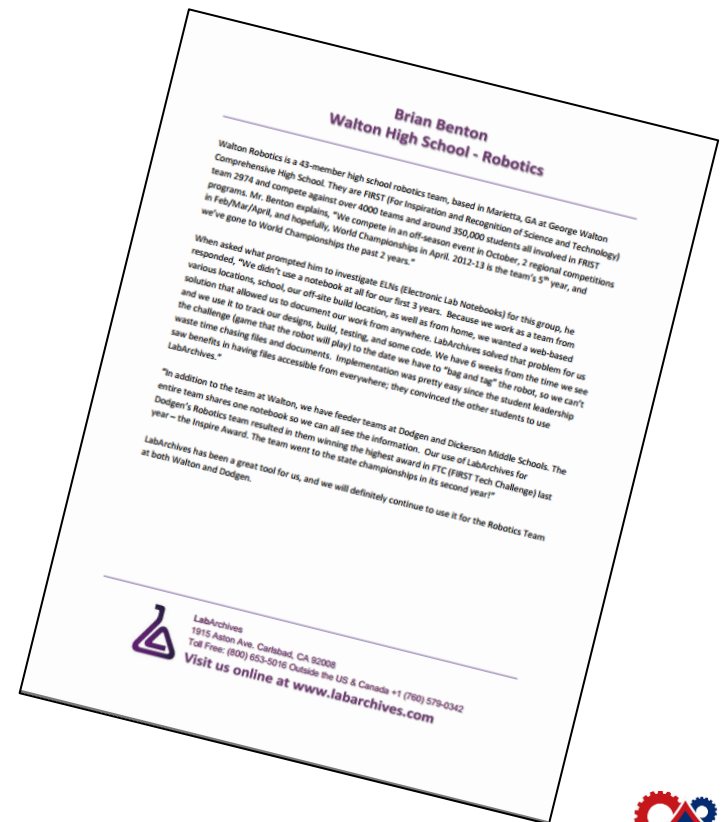
GE Volunteers
Engineers Week

Novelis
Webisode Series
Women's Month
Project
Family Day
STEM Camp in
Brazil

**Women In
Technology**
Video

White Papers and Articles

LabArchives
T-Sheets
PBWorks





Building a solid foundation in the early years of a child's life will not only help him or her reach their full potential but will also result in better societies as a whole.

Novak Djokovic

FACILITIES

Facilities

Walton Regional Robotics Center



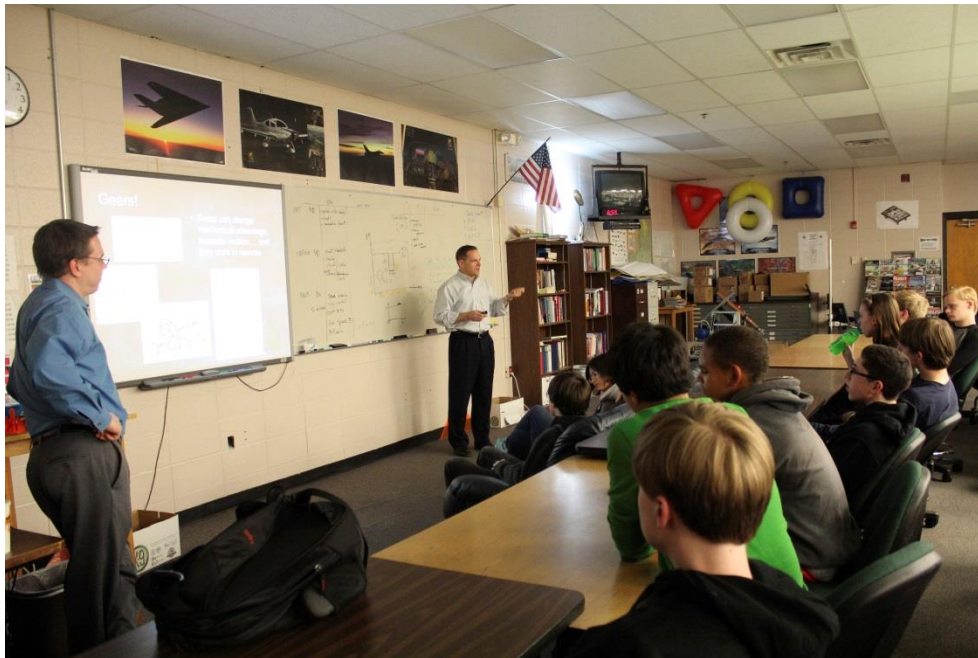
Walton High School
1590 Bill Murdock Road
Marietta, GA 30062

One of Team 2974's most significant challenges is its lack of a permanent build site. This year, we moved to our fourth build site in four years- the old auto tech lab at our school. We use the space for programming, building, and holding a full-size FRC field. Classrooms provide additional meeting and work space. We use the school's gym to host off season tournaments and scrimmages.

The Walton Robotics Foundation is working to find the team a permanent space.

Facilities

Engineering Classroom & Administrative Space



Walton High School
1590 Bill Murdock Road
Marietta, GA 30062

Walton High School provides this room for meetings that require a larger space or do not need the full build area.

Meetings include:

- Informational team meetings
- Training sessions
- Executive team meetings.



*Team 2974's
finances are
managed by the
not-for-profit
Walton Robotics
Foundation.*

Finances

Annual Team Budget

Revenue		Expenses	
Grants- Miscellaneous	\$31,300	Competition Registration & Travel	\$60,000
Grants- STEM Missions	10,000	Robot Build	8,000
Grants- World Championships Support	10,000	STEM Missions	18,000
Membership and Student Travel Fees	57,000	Community Outreach & Camps	15,000
Camp Revenue	11,400	Build Site and Information Systems	2,500
Georgia FIRST DE Support	5,000	Marketing & Team Morale	7,300
Miscellaneous Income	4,750	Destination Einstein	10,000
Total Revenue	129,450	Total Expenses	120,800
Excess of Revenue over Expenses			\$8,560

Finances

The Walton Robotics Foundation

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: APR 04 2011

WALTON ROBOTICS FOUNDATION
C/O ANNELEISE ELKHOF
4191 THUNDERBIRD DR
MARIETTA, GA 30067

Employer Identification Number:
80-0623275
DIN:
17053660349011
Contact Person:
GLENN W COLLINS ID# 31392
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
May 31
Public Charity Status:
170(b)(1)(A)(vi)
Form 990 Required:
Yes
Effective Date of Exemption:
July 5, 2010
Contribution Deductibility:
Yes
Addendum Applies:
No

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. We determined that you are a public charity under the Code section(s) listed in the heading of this letter.

Please see enclosed Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, for some helpful information about your responsibilities as an exempt organization.

Sincerely,



Lois G. Lerner
Director, Exempt Organizations

Enclosure: Publication 4221-PC

BYLAWS OF WALTON ROBOTICS FOUNDATION, INC.

ARTICLE ONE - Name and Purpose

1. Name: The name of the corporation is WALTON ROBOTICS FOUNDATION, INC.

BYLAWS OF WALTON ROBOTICS FOUNDATION, INC.

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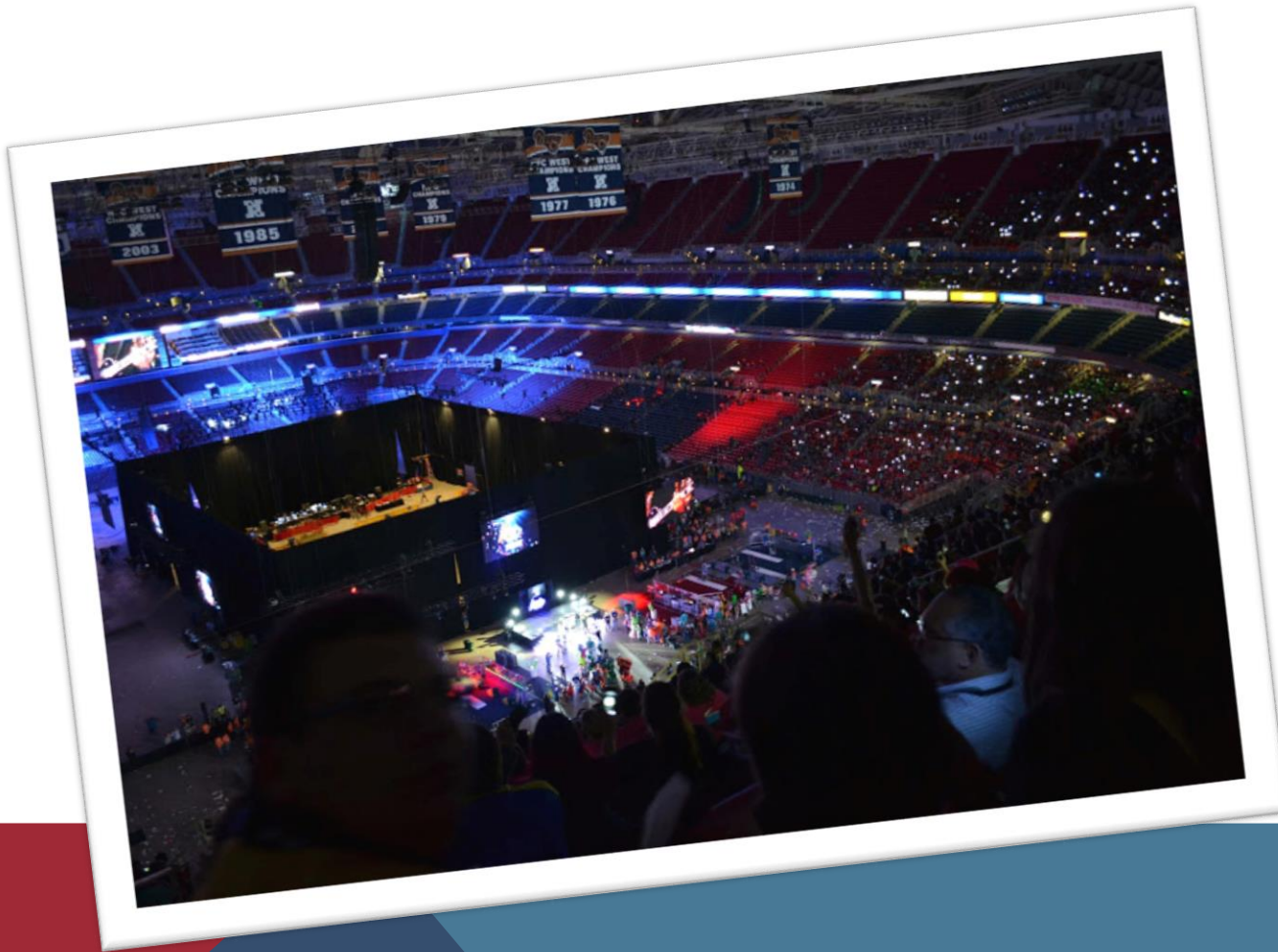
BYLAWS

OF

WALTON ROBOTICS FOUNDATION, INC.

Incorporated under the laws of the State of Georgia





This year, Team 2974 continues to reach for five modified five-year goals:

- 1. Integrate STEM into popular culture*
- 2. Be a recognized leader in all aspects of FIRST*
- 3. Enhance STEM education in underserved areas*
- 4. Promote the FIRST mission via the Walton Brand*
- 5. Expand Destination Einstein*

LONG TERM GOALS

Long Term Goals

Goals, Objectives & Progress to Date

Goal 1: Integrate STEM into Popular Culture

Develop a STEM app that is #1 in the app store	<ul style="list-style-type: none">▪ <i>FIRST scouting app available for 2014, 2015, and 2016 competition season.</i>▪ <i>Developed two educational video games featuring robots, featured at outreach events and regional and off-season tournaments.</i>
Have STEM topics featured on radio and television	<ul style="list-style-type: none">▪ <i>Our team has been featured on 11 television stations, including ABC, CBS and Rede Globo, the second largest commercial network in the world.</i>▪ <i>Reaching music community with iConductor.</i>▪ <i>Reaching more sports fans with T-Shirt Cannon and Soccer Bot, supporting the MLS.</i>
Have FIRST tournaments televised in primetime	<ul style="list-style-type: none">▪ <i>Begun exploring possibility with GPB to have primetime feature about robotics. Will explore tournament programs in future.</i>
Have Flat Walt featured on Coke can/in Coke commercial	<ul style="list-style-type: none">▪ <i>Flat Walt's redesign has led to a more customizable, crowd-friendly mascot that has been widely distributed over multiple types of media.</i>▪ <i>Currently exploring ways to build a relationship with Coca Cola.</i>
FIRST will have the same name recognition as football	<ul style="list-style-type: none">▪ <i>Making the FIRST message loud in our school, community, state, country, and world.</i>▪ <i>Have reached an estimated 25 million people to date.</i>
Have t-shirt cannon robot featured at the Super Bowl	<ul style="list-style-type: none">▪ <i>T-shirt cannon featured at school and professional sports events and on television.</i>▪ <i>Introduced FIRST and t-shirt cannon to NFL in Together We Make Football contest video; featured on front page.</i>

Long Term Goals

Goals, Objectives & Progress to Date

Goal 2: Be a Recognized Leader in All Aspects of FIRST

Win on Einstein field	<ul style="list-style-type: none">▪ Expanded training programs, built an excellent robot, developing alliances with proven Georgia teams, alliance captain at Championships
Develop CAD models others can use	<ul style="list-style-type: none">▪ CAD model of robots done and available▪ Exploring FIRST directory in GrabCAD
Go to World Championships every year	<ul style="list-style-type: none">▪ Building excellent robot, win regional tournament, strengthen alliances▪ Preparing outstanding Chairman's Award submission
Win Chairman's at Worlds	<ul style="list-style-type: none">▪ Focusing on mission, leading loudly, preparing outstanding presentation.
Present a seminar at Worlds	<ul style="list-style-type: none">▪ Submitting proposals for two conference sessions about Destination Einstein and Walt's Toolbox.
Present a seminar at NSTA	<ul style="list-style-type: none">▪ Presented workshop at the Georgia State Teachers' Association; exploring attendance at national conference.
Be recognized for academic excellence	<ul style="list-style-type: none">▪ Recruited team academic advisor assisting with grade and time management.▪ Team always puts school work first, students with poor grades need waiver to travel.
Patent and commercialize a product	<ul style="list-style-type: none">▪ Working on branding and patenting Walt's Toolbox product line.

Long Term Goals

Goals, Objectives & Progress to Date

Goal 3: Enhance STEM Education in Underserved Areas

Promote STEM Worldwide

- *Partnered with Novelis to travel to Brazil and run a STEM camp with FIRST team ETEP*
- *Taught ETEP to run future camps, will provide support*
- *Working for more global outreach*
- *Outreach in a Box spread across the globe*

Spread STEM to Underserved Local Areas

- *STEM camps run for the Boys and Girls Clubs in Greensboro and Atlanta*
 - *Will run YMCA camps this summer for kids in the foster care system*
 - *Focusing on underexposed areas in our community*
 - *Partnering with businesses and companies to reach out locally*
-

Long Term Goals

Goals, Objectives & Progress to Date

Goal 4: Promote the FIRST Mission via the Walton Brand

Have a comprehensive and cost effective communications plan	<ul style="list-style-type: none">▪ <i>Recruited communications mentor specializing in social media.</i>▪ <i>Updated website, incorporated blog</i>▪ <i>Developed comprehensive social media plan including Facebook, Twitter, LinkedIn, YouTube, video games</i>
Flat Walt will be an internationally recognized character	<ul style="list-style-type: none">▪ <i>Walt has been to all 7 continents and space</i>▪ <i>Created new Flat Walt with 3D printer to generate additional buzz</i>▪ <i>Students tweet as Walt</i>▪ <i>Walt redesigned for further appeal to a wider audience and customizability</i>
Flat Walt goes into space	<ul style="list-style-type: none">▪ <i>FRC Team 4188, Columbus Space Program, took Walt into space on a weather balloon.</i>
Build a Flat Walt robot	<ul style="list-style-type: none">▪ <i>Will tackle once Flat Walt redesign is complete.</i>

Long Term Goals

Goals, Objectives & Progress to Date

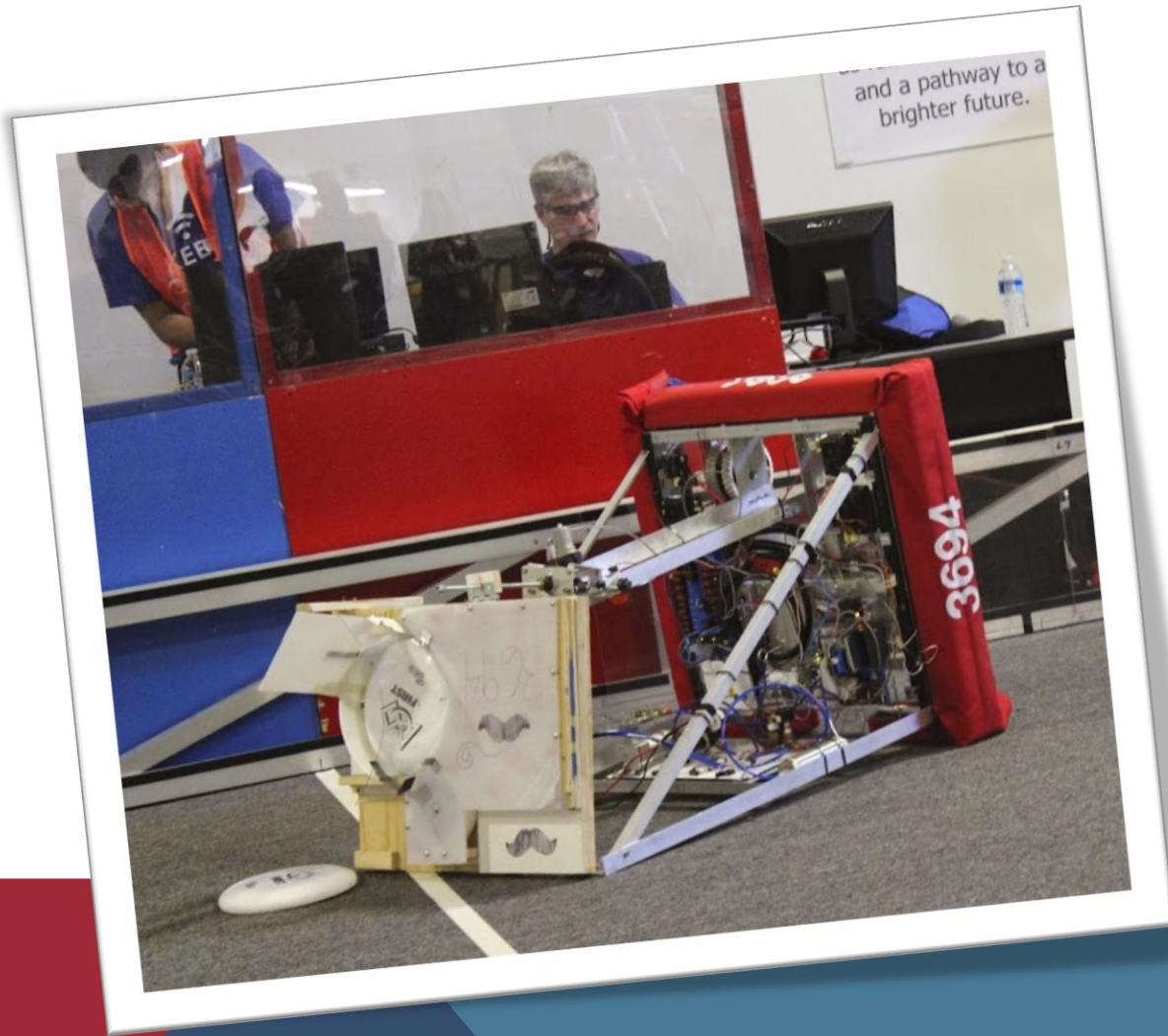
Goal 5: Expand Destination Einstein

Replicate in other regions

- *DE replicated at 3 other Georgia sites.*
 - *Created improved field management system, real-time scoring and audience presentation technology; will write technical manuals this summer.*
 - *Prepared and distributed DE promotional video.*
 - *Submitting proposals for DE presentation at 2016 World Championships.*
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A team that participated in Destination Einstein wins on Einstein field at Worlds

- *Alliance captain in the Archimedes field at 2015 Championships, the first alliance captain at Championships from Georgia.*
 - *Over 45 teams have participated in DE events.*
 - *Open field and strategy sessions help teams collaborate and improve.*
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Team 2974 incorporates into its goals, objectives and action plans steps to mitigate significant risks to the survival and continued success of the team.

RISK MANAGEMENT

Risk Management

Risk Analysis

	Strengths	Weaknesses	Opportunities	Threats
Leadership/ Organization	<ul style="list-style-type: none"> Strong Leaders Sustainable structure Thorough strategic planning 	<ul style="list-style-type: none"> Some Non-Contributors 	<ul style="list-style-type: none"> More training More positions 	<ul style="list-style-type: none"> Graduations leave experience vacuum
Partnerships	<ul style="list-style-type: none"> Strong relationships Many partners 	<ul style="list-style-type: none"> Insufficient communication 	<ul style="list-style-type: none"> Digitally accessible sponsorship package 	<ul style="list-style-type: none"> Loss of partners
Facilities	<ul style="list-style-type: none"> Functional build site with field space at school 	<ul style="list-style-type: none"> Dependent on school support for large-scale event hosting 	<ul style="list-style-type: none"> Start-Up build site for rookie teams Networking through DE Partner with Coke 	<ul style="list-style-type: none"> Loss of GAFIRST's support
Finances	<ul style="list-style-type: none"> Many generous sponsors 	<ul style="list-style-type: none"> Expensive for students to join and travel 	<ul style="list-style-type: none"> Endowment Grants for teachers 	<ul style="list-style-type: none"> Loss of key sponsor Loss of parental support

Risk Management

Risk Analysis

	Strengths	Weaknesses	Opportunities	Threats
Business	<ul style="list-style-type: none"> Well developed infrastructure 	<ul style="list-style-type: none"> Continuity in sponsorship 	<ul style="list-style-type: none"> Partner with GAFIRST Higher-tier professional events 	<ul style="list-style-type: none"> Potential loss of information/expertise
Communications	<ul style="list-style-type: none"> Clearly defined brand Unique tools 	<ul style="list-style-type: none"> Infrequent efforts Inconsistent Need marketing and graphics expertise 	<ul style="list-style-type: none"> Focus on social media Leverage materials 	<ul style="list-style-type: none"> Unauthorized access to accounts
Community Outreach	<ul style="list-style-type: none"> Extensive, year-round In high demand 	<ul style="list-style-type: none"> Too few students, mentors involved 	<ul style="list-style-type: none"> Systematize demos and presentations 	<ul style="list-style-type: none"> Burnout for students and mentors
Destination Einstein	<ul style="list-style-type: none"> Successful initiative Meets defined need 	<ul style="list-style-type: none"> Still in infancy Lack of documentation 	<ul style="list-style-type: none"> Replicate in other locations 	<ul style="list-style-type: none"> Loss of build site Loss of technical experts
Engineering	<ul style="list-style-type: none"> Committed students and mentors 	<ul style="list-style-type: none"> Insufficient depth of knowledge 	<ul style="list-style-type: none"> More training More focus on strategy 	<ul style="list-style-type: none"> Poor performance at competition

Risk Management

Critical Threats and Mitigating Actions

Graduating students results in loss of experienced leadership and technical experience

- *Team members are distributed fairly evenly among grades to ensure constant flow of experienced members*
- *Assistant and project lead positions provide on-the-job training.*
- *Core and apprentice roles let students acquire new skills and contribute at their own pace.*
- *Designated mentors provide continuity and training for new student leaders.*

Loss of valuable team documents and expertise resulting in wasted time and effort

- *Team wiki created as repository for all team materials.*
- *Information Technology mentor helps data collections and systems management.*
- *Wiki reorganization and maintenance is necessary this year.*

Unauthorized access to social media accounts and information systems jeopardizes communication efforts

- *All accounts are password projected.*
 - *Passwords are changed frequently by team coach and online activity is closely monitored.*
 - *Students are removed from all accounts upon graduation or withdrawal.*
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Risk Management

Critical Threats and Mitigating Actions

Loss of key partner or sponsor could reduce team monetary and/or technical resources.

- *Frequent communication with all partners ensures they understand the value of their contributions and intend to continue working with us.*
- *Student leaders and mentors support sponsor activities, such as GE's Engineer's Week, Rotary's Dog Days Run and Cobb EMC's Lego Build, whenever possible.*
- *Designated sponsorship mentor is responsible for sponsor relations, as well as new sponsor recruitment.*
- *Partners are invited to attend Destination Einstein events and FIRST competitions to see us in action.*
- *Frequent thank you's, end of year gifts and our "We Love our Mentors" video remind our partners that we appreciate them.*

Burnout for student leaders and mentors could reduce the number of activities and effectiveness of outreach efforts

- *Two deep leadership helps spread responsibilities.*
 - *Weekly executive team meetings help identify pressures and available resources.*
 - *Volunteer coordinator recruits parents to assist with less critical roles.*
 - *Participation requirements ensure all students support outreach and service efforts.*
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WALTON ROBOTICS

CREATE. INNOVATE. INSPIRE.

GE Volunteers



Novelis



United Technologies



ForarTech



PBWORKS

Net2Atlanta