

2011 EXECUTIVE SUMMARY

Sponsors

Qualcomm, Nordson, High Tech High, BlueChip, BAE Systems, Berggren Families, IEEE, Nypro, Red Sea Marketing, Miller Electric, SAIC, Sherrifs of San Diego County, Vivid Hosting, Downing Family Foundation, Gnostech, Spirit of Adventure, Brooks Family, and Judy Bramer and Trisha Daly Real Estate

Briefly describes the impact of the FIRST program on team participants with special emphasis on the 2010/2011 year and the preceding two years.

100% of Holy Cows alumni pursue higher education
95% of Holy Cows alumni pursue STEM majors
Members work alongside industry professionals
Career/internship opportunities
Students learn valuable engineering and business skills
Students give back to their community and inspire culture change
Students build confidence, gain social skills, and have fun

Examples of role model characteristics for other teams to emulate.

Structured like a business - Directors and managers of various departments
Calf to Cow - Internal mentoring to support sustained growth
Mentor/student collaboration
Composed of students from three different schools
FRC Support: One-to-One, Fall Workshops, Rookie Mentoring, sharing tools and supplies with local teams, Mobile Machine Shop
FLL Support: Mentor six FLL teams, hosted FLL Qualifying Tournament
Well rounded team - consistently produce high quality competitive robots

Describe the impact of the FIRST program on your team and the community with special emphasis on the 2010/2011 year and the preceding two years.

Encouraging the spread of FIRST and STEM, as four neighboring high schools adopted robotics programs
15% of HTH student population on team
Created two elective robotics course to supplement school curriculum
Partnered with Mayor Jerry Sanders to establish "FIRST Day"
Working with local politicians towards establishing a state-wide "FIRST Day"
Currently collaborating with San Diego Unified School District to offer more FIRST opportunities to students
Reached 200,000 people in the past three years

Team's innovative methods to spread the FIRST message.

Social Media presence (Facebook, Twitter, blog, website) which spreads FIRST and STEM through technology, Facebook over 580 "likes" and thousands of views
Use past robots and mini-robots as interactive learning pieces

Numerous media appearances in newspapers and television programs, including a one-hour special on Wealth TV

Created e-store to sell FIRST E-Watt Savers and team gear

Volunteered at over 50 community and FIRST events in the past three years and amassed 9600 service hours

Describe the strength of your partnership with special emphasis on the 2010/2011 year and the preceding two years.

Partnership with BlueChip seven years strong, students work with mentors and earn money to travel

Annually present an exemplary sponsor with the Founder's Award

Sponsors offer training opportunities to members

Connect with sponsors via social media

Leaders of Team San Diego, a coalition of all San Diego FRC teams, annually host Kick-off, and Co-host Pre-Ship Expo

BAE Systems offers seniors on team \$1,000 scholarship

Team's communication methods and results.

Members communicate through Google Docs and Google Groups

Team-wide calendar keeps members up to date

Weekly leadership meetings and year-round team meetings to train members

Due to effective communication methods, our team of over 60 has high levels of participation and functions like a well-oiled machine

Parent Google Group creates network who provide food, transportation, and support for the team

Other matters of interest for FIRST judges.

Two WFA regional winners

Regional Chairman's winners 2009 and 2010

Visited by FIRST President Jon Dudas due to exemplary reputation

EXECUTIVE SUMMARY:

Examples of role model characteristics for other teams to emulate.

o MENTORSHIP - cascades from adults to students, to FVC, FLL, down to JrFLL

o TEAMWORK - draw students from 32 schools & 4 states, melded into a cohesive, spirited group

o EDUCATION - share knowledge with rookie FRC teams via MOEmentum

o INSPIRATION - started 4 new FRC, 10 FVC teams

Describe the impact of the FIRST program on your team and community with special emphasis on the 2006/2007 year and the preceding two years.

IMPACT ON EDUCATION

- o 3 schools introduced robotic curricula; 1 funds team members
- o Lobbied DE to fund FIRST in all schools; collected 500+ signatures
- o Collected 10,000 lbs of books for donation

IMPACT ON STUDENTS

- o 700 elementary students in JrFLL, 10% of US total
- o 1700 middle school students in FLL
- o 300 high school students on our team, FVC & other FRC teams we started

LOCAL AWARENESS

- o Community events & demos - tens of thousands have attended, ~10% of local tri-state area population

Teams innovative methods to spread the FIRST message.

MORE LITERACY PROGRAM

- o Team-authored coloring & early reader books in 4 languages spread excitement of engineering
- o Run engineering & robot themed contests for young students
- o Developed classroom lesson plans & materials about engineering & innovation, submitted to NASA website

FLL/JrFLL/FVC COMBINED TOURNAMENT

- o Hold largest 1 day official FIRST event

MOEMENTUM

- o Provide weekly email tips to rookies

MOE VEX CHALLENGE

- o Inspired Northern Irish youth with 1 day Vex design/build competition

Describe the strength of your partnership with special emphasis on the 2006/2007 year and the preceding two years.

OUR STRENGTH IS IN OUR NUMBERS

- o 8 year partnership between MOE & DuPont
- o Partner with FIRST to pilot & expand FVC & JrFLL
- o Co-sponsor an offseason FRC competition with FRC316 & local college
- o Partnered with 5 local schools to develop FIRST programs
- o Partnership involves students from 100+ schools (K-12), 3 colleges, 60 corporate sponsors, 35 professionals & 8 alumni mentors, 13 nonprofits, 5 media groups
- o Nurture partnerships with diversity groups to expand FIRST programs

Teams communication methods and results.

LOCAL/ REGIONAL

- o 190 community appearances over 8 yrs for recruiting, fundraising & publicity
- o Distribute, read & donate team-authored coloring & early reader books at libraries
- o Exposure in newspaper & other media, 30 features in past 3 yrs
- o Weekly newspaper articles tracking 2007 build season NATIONAL/INTERNATIONAL
- o Wrote robotics chapter in national Science Educ. Encyclopedia
- o Award winning website
- o Share team's collective knowledge with others through MOEU, team handbook, MOEmentum

Other matters of interest to the FIRST judges, if any.

- o Non-school based organization open to students anywhere
- o Aligned FIRST programs to DE educ. standards
- o Enhanced sustainability via innovative funding (Community Foundation, 5K, United Way)
- o 86 members volunteered at FIRST events in past 8 yrs
- o Presented 5 topics at FIRST Robotics Conference past 3 yrs
- o Recognized by ASEE, ASME, state gov., DuPont, Jefferson Award for Volunteerism
- o 19 regional & 7 CMP FIRST awards including 2 Chairman's Honorable Mentions
- o 3 Woodie Flowers Finalists