

FRC Team 1640 Season Overview



Parents' Meeting
16-September-2009

Agenda

- Our Mission
- Safety
- A little bit about us
- What our year looks like
- Training
- Build Season
- Competitions
- Fund Raising





Our Mission



To inspire and educate pre-college students within the greater Downingtown Area school district in science, technology, engineering, and mathematics through hands-on experiences with robotic technology. Build knowledge, an understanding of planning and project management and life skills (especially gracious professionalism, team work, effective communications, coopetition and leadership). Promote expansion of this program both within and beyond the Downingtown District.



Safety

- We use power tools
- We use powered rotary equipment
- We weld
- We work safely
- We have a Safety Captain (Matt Klufas)
- There is Safety Training
- There are Safety Rules
- We build a safe robot





A little bit about Team 1640

- Formed in 2004 by Paul Sabatino
- Team name is Sab-BOT-age
- We've built 5 big robots
- Our robots are named DEWBOT (I – V)
- Last year was a very good one for us
 - Rockwell Automation Innovation Award
 - Champion @ PARC – Finalist @ Duel – 3rd @ (BR)²
- We currently have 10 mentors
- More info at <http://wiki.team1640.com>



What our year looks like

- Fall – Training & off-season competitions
- Season Kick-off (Saturday 9-Jan)
- Build Season (9-Jan – 23-Feb)
- FRC Competitions (March)
- Off-Season Competitions
- Outreach
- Fund-raising
- Summer Project



Fall Activities

- We'll learn the skills needed to design and build an FRC robot – Wed meetings at DEC
 - Safe use of basic power tools
 - CAD
 - Welding
 - Milling
 - Programming
- Participate in two off-season competitions
 - Duel on the Delaware – 10-Oct Salem CC NJ
 - Ramp Riot – 14-Nov Wissahickon PA
- Fundraise
- Recruit



Kick-off

- 9-Jan
- Upper Darby HS
- Objective of 2010 game will be revealed
- We will see mock-ups of field pieces
- Documents on FIRST's website will become available (rules)
- We will receive our Kit of Parts



Build Season 10-Jan – 22-Feb

- 45 days to strategize, prototype, design, build program & test a robot and train driver / operators
- Very intense
- We'll meet almost every day (watch schedule)
- 6:30 – 9:00 PM on school nights
- 10:00AM – 8:00PM on weekends
- We don't expect anyone to attend all meetings
- Students are responsible for keeping up with school work during build



FRC Competitions (3 days each)

- 1640 plans on participating in (2) FRC Competitions during the 2010 FRC season – probably:
 - March 4 – 6 (New Jersey or Finger Lakes)
 - March 25 – 27 (Philadelphia)
- Students attending remote competitions will need to cover their expenses



Off-Season Competitions

- Single-day events (Saturdays)
- Drivable (*wake up early!*)
- We do 4 or 5 per year
 - PARC – May – Tunkhannock PA
 - Monty Madness – May – NJ
 - Bridgewater-Raritan? – June – NJ
 - Duel on the Delaware – Oct – NJ
 - Ramp Riot – Nov – Wissahickon PA



Outreach

- Team 1640 participates in a number on community and school events.
- We work with other teams & districts.
- Team 1640 visits key sponsors
- Faculty demos
- Back-to-school night



Fund Raising

- It takes about \$30 K to run the team annually
- Money comes from
 - DASD (also space, insurance)
 - Corporate Sponsors
 - Grants
 - Fundraisers (Muffins, Hexbugs, etc.)
 - Private Sponsors



Recruiting

- Students
 - They build the robots. We need 'em.
 - Plus, they are the point of this program
- Mentors
 - 1640 mentors are technically and/or scientifically-trained professionals (from Industry & Academia) who volunteer their time for the students
 - We always need new mentors



Summer Project

- During the past (2) summers, we have selected a useful technology area we wanted to learn more about, so that we could use this knowledge on a future robot
- Meet 1 or 2 times a week
- We design, work out the math, build prototypes, test them & analyze the results
- Then work out what this means for a full-size robot



Contact Me

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