

INTRODUCTION TO FRC TEAM 48 - TEAM E.L.I.T.E. AND *FIRST*



Presented by Travis Hoffman, Team 48 Lead Engineering Mentor



- FIRST For Inspiration and Recognition of Science and Technology
- Headquartered in Manchester, NH
- Website <u>www.firstinspires.org</u>



 Founded by Inventor Dean Kamen and MIT Professor Woodie Flowers in 1989.





- Team 48 competes in the *FIRST* Robotics Competition for High School students
 - FRC pairs students with skilled mentors and teachers and provides hands-on experience designing and building a robot to compete in a yearly robotics competition.
 - FRC is a great and FUN introduction to engineering and related disciplines it's a great excuse to apply all those "boring things" you learn in school textbooks.
 - The first-ever *FIRST* Robotics Competition was in 1992.
 - The game challenge changes every year
 - Games are modeled after professional sports
 - 1992 a single event held in a high school gym in New Hampshire
 - The game was called *Maize Craze*.
 - Robots were smaller and literally played on a bed of corn.
 - Video! <u>https://www.youtube.com/watch?v=0-m1QBOxsfg</u>
 - Video! St. Louis Championship 2013 Einstein Finals Match #3 the game was Ultimate Ascent - <u>https://www.youtube.com/watch?v=MQ0VNzIvHx0</u>
 - MUCH has changed over the years!





- We have a little over 6 weeks starting with the Kickoff on Saturday January 5, 2019 to design, build, wire, and test the competition robot.
 - On Stop Build Day in mid-February, the competition robot goes into a bag where it is sealed off until we get to our first regional competition.
 - We also build a nearly-identical practice robot so we can legally continue to make and test robot improvements and get drive team practice, even after Stop Build Day.
- Regional competitions are held throughout March and into early April. At the regionals, we attempt to qualify to attend the Detroit Championship Event. Option to swap to Houston – 24 hour bus ride!
 - We typically attend 3 regionals a year as well as the Championship if we qualify. This is not an easy task and requires every team member to contribute and do their part!
 - We are planning to attend the Midwest Regional (Chicago confirmed), Buckeye Regional (Cleveland – confirmed), and Seven Rivers Regional (La Crosse, Wisconsin – TBD) this season.



- Competitions are fun and exciting music, dancing, mascots, colorful team uniforms, emcee/game announcer, bustling pit area and playing field
 - Great opportunity to meet other teams and people, check out their robots, see how they chose to attack the same design challenge you did
 - Often international teams will be in attendance China, Israel, Turkey, Netherlands, Tonga, etc.
 - In addition to awards for doing well on the field, many judged awards are available for teams and individuals to earn.
 - <u>https://www.firstinspires.org/robotics/frc/awards</u>
 - Chairman's Award
 - Engineering Inspiration Award
 - Safety Award
 - Woodie Flowers Finalist Award
 - Team 48 currently has 3 mentors who have been nominated by team student and who have won the WFFA at the regional level – Travis Hoffman, Greg Christman, Donnell Conner
 - Dean's List Award



- Other *FIRST* Programs:
 - *FIRST* Tech Challenge middle school and high school students
 - FIRST LEGO League older elementary and middle school students
 - Team 48/Harding will host a FLL regional on Saturday 12/8, and we need as many students as possible to volunteer for this and also for Friday 12/7 setup
 - Frank will arrange volunteer registration at an upcoming team meeting
 - FIRST LEGO League Jr. Younger elementary school students







- Founded in 1998.
- 2019 will be Team 48's 22nd season competing in FRC.
- Primary Team Sponsors:
 - Warren City Schools
 - Aptiv / Aptiv Foundation
 - Nordson XALOY (EX-uh-Loy)
- Team Website <u>www.delphielite.com</u>
 - www.delphielite.com/sponsors
 - www.delphielite.com/calendar
- Team names:
 - 1998 E.L.I.T.E.
 - 1999 Team E.L.I.T.E. won the Championship!
 - 2000 2018 Delphi E.L.I.T.E.
 - 2019 Team E.L.I.T.E.





- E.L.I.T.E. Encouraging Learning In Technology and Engineering
 - NEVER "ELITE" or "Elite" ALWAYS "E.L.I.T.E."





• Robot Name – xtremachen (pronounced "Extreme Machine")



- Short Name XM1, XM2, XM21, etc.
- 2019 Robot will be xtremachen22, or XM22
- Each robot often gets nicknamed for its worst/most annoying characteristic. Has to end in an -y (long-E) sound:



Accepted Names 1998-2012:

- 1998 Shaky
- 1999 Flaky
- 2000 Gimpy
- 2001 Smoky
- 2002 Porky
- 2003 Tippy
- 2004 Murphy
- 2005 Frankie/Stewie
- 2006 Bessie
- 2007 Snoopy
- 2008 Jimmie
- 2009 Нарру
- 2010 Crappy
- 2011 Nessie
- 2012 Kyrie Cedi

Proposed Names 2013-2019:

2013 – Jammy 2014 – Floppy 2015 – Dumpy 2016 – CG (#neverforget) 2017 – Brownie 2018 – Rampy 2019 - ???

GRACIOUS PROFESSIONALISM



- What is Gracious Professionalism ("GP" for short)?
- <u>https://www.firstinspires.org/about/vision-and-mission</u>
 - Actions and habits that would make your grandmothers proud
 - We do not put other teams down, especially verbally
 - We actively seek to help other teams in need
 - We are open in sharing details of our robot and its design with others who ask
 - Compete like crazy on the field, collaborate like crazy off of it

NEOFRA



- NEOFRA is a PRIME example of GP in action locally.
 - www.neofra.com
- NEOFRA Northeast Ohio FIRST Robotics Alliance
 - Founded in 2007 back when there were only 4 local teams as a way for us to help each other more often, as well as "make it loud" in promoting FIRST throughout the Mahoning Valley
 - Achieving more together than we ever could have separately
 - We work together to:
 - Share ideas and designs
 - Loan parts and materials
 - Hold community demos



- Mentor rookie teams (like Team 7486 this year, and 3193, 4601, 5077, 5418, and 6054 in the past)
- Fundraise (GM)
- Host competitions, including FLL regionals in December, and the FRC Mahoning Valley Robotics Challenge (MVRC) offseason competition

NEOFRA



- 11 NEOFRA Teams (7 in Mahoning Valley, 4 a bit further away):
 - *48 Team E.L.I.T.E. Warren
 - *379 RoboCats Girard
 - *2010 Lightning Bots Champion
 - *3193 Falco Tech Austintown
 - *4601 Circuit Birds Canfield
 - 5077 RoboCards Youngstown Mooney
 - *5418 Sonic Screwdrivers Hubbard

- 1248 TITANium Allies Berea
- 1787 Flying Circuits Pepper Pike
- 6054 The Dukes Alliance
- 7486 SCRoLL Akron/Kent 2019 Rookie Team

(* = Aptiv Foundation sponsored team)

SCHOLARSHIPS!



- *FIRST* Scholarships 200 institutions, \$80 million!
 - <u>https://www.firstinspires.org/scholarships</u>
 - Naturally, FRC encourages further education at a college/university, but we do not EXPECT students to go that route.
 - We want all Team 48 students to see the importance of engaging in some form of additional education beyond high school.
 - This is of course in addition to taking care of your grades while IN high school.
 - Frank should have gone over all of the team-specific requirements for traveling, etc. with you.
 - Trade schools, apprenticeships, community college, and the military are all legitimate post-high school career paths.
 - College/University costs can be expensive you may generate quite a bit of college loan debt before it's all over without scholarships and other forms of non-loan financial aid.
 - There is a GREAT demand for skilled tradespeople currently. Machinists, welders, etc. Many of these jobs come highly-paid and the training required is often either paid for or relatively-inexpensive compared with college.
 - FIRST Scholarships if you really have your eye on going to college, CHECK OUT THE FIRST SCHOLARSHIPS PAGE. Many institutions have set aside scholarship funds specifically for students on FIRST robotics teams. Youngstown State University is one such institution.

TEAM 48 SOCIAL MEDIA

- Team Website <u>www.delphielite.com</u>
- Instagram @delphielite48, <u>https://www.instagram.com/delphielite48</u>
- Twitter @delphielite, <u>https://twitter.com/delphielite</u>
- YouTube
 - <u>https://www.youtube.com/user/homarv13</u> (me)
 - <u>https://www.youtube.com/user/curseofdragon33</u> (Tom Yuricek, Jr.)
 - <u>https://www.youtube.com/channel/UCPIXmDTjR680zGQSTY4L2aw/videos</u> (Team 48)
 - <u>https://www.youtube.com/user/FIRSTWorldTube</u> (FIRST)
 - <u>https://www.youtube.com/user/FRCTeamsGlobal</u> (FIRST)
- Facebook Group (private) <u>https://www.facebook.com/groups/team48/</u>
- Facebook Page <u>https://www.facebook.com/delphielite/</u>

TEAM 48 ONLINE COMMUNICATIONS



- Email, Phone, & Text are the best option to use when contacting some mentors (ask them):
 - Travis Mobile 330-219-7848
 - <u>travis.e.hoffman@aptiv.com</u>
 - Frank Mobile 330-647-6576
 - <u>frank.bosak@gmail.com</u>
- Team 48 Calendar/Website!
 - <u>www.delphielite.com/calendar</u>
 - www.delphielite.com/internal
 - Contains BLAR EFFECT information, this PowerPoint presentation
- Slack Workspace <u>http://frcteam48.slack.com</u>
 - STRONGLY RECOMMENDED!
 - Online team discussion/collaboration site. VERY useful for design/build collaboration
 - Join Link:
 - <u>https://join.slack.com/t/frcteam48/shared_invite/enQtMjk2MzM1OTYwMDM1LTE3Y2ViODc4NmU0MzRiNjU1NjI5MmMyNDYyN2FjYzZmNzFk_OTY2MTAyOTI1ZjIwZTgwZWRmNTdhMmFiMmJIMzE</u>
- Remind Messaging Service
 - ALL team members and parents should join this to receive important notices and info.
 - To join, text @team48 to 81010
- Messenging via Team Facebook Group (private)
 - https://www.facebook.com/groups/team48/
 - Ask to join the private group, and once approved, you can send messages to group members.
 - This is ANOTHER good place for parents to join.

OTHER FIRST WEB LINKS



- <u>www.firstinspires.org</u>
- <u>www.chiefdelphi.com</u>
 - Discussion forums covering a wide range of topics related to *FIRST*
 - Extremely popular! Find out what other team are doing all over the world
- <u>www.thebluealliance.com</u>
 - Search for and watch old match videos, watch live webcasts, find out event results, etc.
- <u>www.neofra.com</u>

QUESTIONS?



- ??????
- Volunteer for FLL Regional at Harding on 12/8 (Friday 12/7 setup) -Registration Form Link:
 - https://goo.gl/forms/gMbN3dejKjKTSiCz2
- Join Team 48 Slack:
 - <u>https://join.slack.com/t/frcteam48/shared_invite/enQtMjk2M</u> <u>zM1OTYwMDM1LTE3Y2ViODc4NmU0MzRiNjU1NjI5MmMyND</u> <u>YyN2FjYzZmNzFkOTY2MTAyOTI1ZjIwZTgwZWRmNTdhMmFiMm</u> <u>JIMzE</u>
- Join Team 48 Remind Text @team48 to 81010