

Hi Everyone,

It is hard to believe that it has been more than 10 years since I became involved with robotics. We used to only start meeting in December just prior to kickoff and we ended our meetings with the local regional event.

I now have 4 FLL teams, 3 VEX teams, and FRC team and a MATE team. We work year round not only on robotic stuff but on service projects and travel that has taken us across the continental United States, and across the Pacific to Hawaii, New Zealand and Japan.

If I stopped long enough to figure out how much time I spend doing robotic stuff I am sure it would be more time than I have thought. I had a chance to look back and find out what some of my former team members have been up to since graduating from high school and I am proud to tell you that they are doing remarkably well. There are plenty of them at big time engineering schools, some going after advanced degrees and some with jobs at our corporate team sponsors with others working for the government helping to keep us all safe.

Like many of you I am constantly amazed at my kids and they always seem to step up when they are really needed.

Lets make this a great year with lots of wonderful stories,

-Nancy Mc



The Annual Fall Classic:

This is an opportunity for the local teams to take out their 2010 FRC robots and compete one more time. The teams will be playing Breakaway. This is a great chance for you to bring out new team members so they can learn what it is like to be part of the team. It is also a good way to introduce potential new sponsors to your teams. This is a fun day for everyone who takes part.

When: Saturday, September 25th 9:00 am to 5:00pm

Where: John Burroughs High School Main Gymnasium 1920 Clark Ave Burbank, CA 91103

See high school robotics teams competing in an exciting game!

Free admission to the public

Information and team registration visit: http://larobotics.org/FallClassic2010.html

Additional Information please contact: David Brinza FRC Team 980 Lead Mentor 818-522-1456 **Team980@ix.netcom.com**

Don't forget to update your TIMS account for FRC at

https://my.usfirst.org/frc/tims/site.lasso?r=15385 88&-session=FRC-

TIMS:C77D64051612a258EBMVu2E8D9F9&fusea ction=home.welcome&-session=FRC-

TIMS:C77D64051612a258EBMVu2E8D9F9

BODY

on Friday September 3, 2010 and the teams are off and running assembling their field elements, designing their missions, brainstorming their robot designs and doing research on their projects. Information on the challenge can be found at

http://www.firstlegoleague.org/media/twocol.aspx?id=247

I came across this programming worksheet and found it to be helpful in organizing my own programmers. The link can be found at

http://www.techbrick.com/Lego/Lego20 10/Documents/FLL-BodyForward-StepByStepProgramming.pdf

LeRoy Nelson is the partner in Los Angeles <u>LeRoyNelson@earthlink.net</u> Lynn Crockett is the partner in San Diego

Lynn.Crockett@LEGOLAND.com
Sara Tamayose is the partner in Hawaii
stamayose@gmail.com
http://www.hawaiifll.org/

This year's FTC Kickoff will be held online in September 11, 2010, and the 2010 Tournaments will run from early December through early March of 2011. The season will conclude with the FIRST Championship at the The Edward Jones Dome in St. Louis, featuring the FIRST Tech Challenge World Championship Event. Information on eligibility for the World

Championship Event will be released and posted in October.

Los Angeles Partner Suparna Mukherjee suparna.mukherjee@jpl.nasa.gov

San Diego Partner John Brooks jbrooks6@att.net San Diego Partner Marion Brooks manybrooks@att.net

VE~

The 2010/ 2011 Game has been announced last spring and teams have been working all summer on Round Up.

I already hear that the teams in New Zealand can easily hang from the high bars.

VEX Robotics is announcing two upgrade incentive programs aimed at assisting those customers who wish to acquire the latest VEX technology.

We realize that discontinuing the VEXnet Upgrade puts a financial burden on VEX Robotics Competition teams that are planning to attend certain events that run on VEXnet only. The programs below are aimed at helping teams that want to upgrade their technology while minimizing their costs.

These programs **are not** mandatory for participating in the VEX Robotics Competition. Most events in 2010-2011 will still allow teams to run on 75 MHz Crystals or VEXnet. Check with your event organizer to be sure what system is being used where you are competing. Please note that the 2011 VEX Robotics Competition World Championship will be a VEXnet only event.

VEXnet Upgrade Return Incentive

Send in both the VEXnet TX Upgrade Module and the VEXnet Microcontroller Upgrade Module (keep your VEXnet USB Adapter Keys) and receive a \$50 coupon code good towards any purchase made on vexrobotics.com. This offer is valid for units returned from September 3 - December 17, 2010.

PIC Microcontroller V0.5 AND 75 MHz Transmitter/Receiver Trade-In Program

The following offer is valid ONLY for VEX Robotics Competition teams that are registered and paid for the 2010-2011 "Round Up" season.

Send in a PIC Microcontroller V0.5, a 75 MHz Transmitter AND a 75 MHz Receiver and receive a coupon code for \$200 off a VEXnet System Bundle.

There are already 110 events posted at RobotEvents at http://robotevents.com/robot-competitions/vex-robotics-competition

VEX CAD files can be found at http://www.vexforum.com/wiki/index.php/VEXCAD

Vex Design Overview http://www.vexrobotics.com/design?ref=home



MATE Underwater Robotics Program

As announced in Hawaii, the 2011 international competition will be held at the NASA Johnson Space Center's Neutral Buoyancy Lab in Houston, Texas. The dates are TBD, but will take place in mid to late June. Stay tuned for updates. We appreciate Lisa, Susan, Pat, Kevin, and all of the folks at NASA and the NBL for inviting us back!

No surprise that the theme for 2011 will focus on the role that ROVs played in containing the Gulf of Mexico oil spill. The specific tasks as well as the design specs and rules will be released in mid to late November.

For additional information see their website at http://www.marinetech.org/rov_competition/i ndex.php

International Micro Robot Maze Competition

The International Micro Robot Maze Contest has been held for 13 years in Nagoya, which is in parallel with the International Symposium on Micro Mechatronics and Human Science (MHS)

http://imd.eng.kagawau.ac.jp/maze/index_e.html

Challenge for your Programming Teams

NASA and MIT are challenging high school teams to design software to program small satellites aboard the International Space Station. The competition centers on the Synchronized Position Hold, Engage, Reorient, Experimental Satellites, or SPHERES. SPHERES are bowling-ball-sized spherical satellites used to test maneuvers for spacecraft performing autonomous rendezvous and docking. Three of these satellites fly inside the station's cabin. Each is self-contained with power, propulsion, computing and navigation equipment. Zero-Robotics investigation, run by the Massachusetts Institute of Technology in Cambridge, Mass., is designed to inspire future scientists and engineers. The teams are asked to address challenges of satellite docking, assembly and flight formation. The 2010 Zero-Robotics Challenge expands on a limited pilot program performed in fall 2009. This expanded pilot, called HelioSPHERES, will involve high schools from across the country during the 2010-2011 academic year. This new education program builds critical engineering skills for students, such as problem solving, design thought process, operations training, teamwork and presentation skills. The first 100 high school teams to pre-register by **Sept. 10, 2010**, will be able to submit full proposals for the

competition. Their full proposals are due by Sept. 14. More information and registration instructions are available at

http://zerorobotics.mit.edu. Twenty teams selected from the 100 candidates will compete using simulations and ground-based testing at MIT. The software of the top 10 winners will be sent to the station, and an astronaut aboard the orbiting laboratory will program the SPHERES satellites to run the students' tests. MIT's Space Systems Laboratory developed the SPHERES program to provide the Defense Advanced Research Projects Agency, NASA and other researchers with a long-term test bed for validating technologies critical to the operation of future satellites, docking missions and satellite autonomous maneuvers. SPHERES have been used by many organizations, including other government agencies and graduate student research groups, since the program began in 2006. The satellites provide opportunities to test a wide range of hardware and software at an affordable cost. For additional information on NASA and MIT's Zero-Robotics program, visit

http://www.nasa.gov/mission_pages/station/s cience/experiments/SPHERES-Zero-Robotics.html. To read about last year's competition, visit

http://www.nasa.gov/audience/foreducators/ 9-12/features/code-of-space-robots.html. To read more about the SPHERES satellites and to see videos of them in action on the International Space Station, visit http://www.nasa.gov/mission_pages/station/ main/spheres.html. Please e-mail any questions about this opportunity to Jason Crusan at Jason.Crusan@nasa.gov.

College Intern needed at Frazier Aviation

If anyone of you have a college student from your team who is local to the San Fernando Valley Frazier Aviation is looking for someone.

http://www.frazieraviation.com/

For more information please contact David Caldwell at dcaldwell@frazieraviation.com

818 898-1998

Upcoming Events:

Rookie Workshop: Friday, September 10, 2010 from 5:00pm to 8:00pm Media Center in the Science building at Chaminade College Preparatory 7500 Chaminade West Hills, CA 91304

Fall Classic: Saturday, September 25, 2010 John Burroughs High School Burbank

CAMS/SMI VEX Tournament: Saturday October 16, 2010

San Diego Fall Workshop: October 30, 2010

Greater Los Angeles Area Fall Workshop: FRC, FTC and VEX teams welcome. Saturday November 6, 2010 CSUN

Granada Hills/ SME VEX Tournament: Saturday, November 20, 2010

VEX Pan Pacific Games: December 2-4, 2010 Honolulu Convention Center, Hawaii

Los Angeles VEX Competition: Saturday, December 11, 2010 CSUN

Los Angeles FLL Regional: Saturday, December 18, 2010 Chaminade College Preparatory Chatsworth, CA

FRC Kickoff 2011: USC School of Engineering Saturday, January 8, 2011

Resources:

FIRST www.usfirst.org

VEX www.vexrobotics.come

Robotevents www.robotevents.com

Carnegie Mellon Curriculum

http://www.education.rec.ri.cmu.edu/robotics curriculum/index.html

ROC http://www.hawaiiroc.org/

Autodesk Student Community http://students.autodesk.com/

Robot Magazine http://www.botmag.com/

Chief Delphi

http://www.chiefdelphi.com/forums/index.php

(My school e-mail is still the best way to reach me during the academic year.)

nmcintyre@chaminade.org nancy@futurefound.org



Grants and Fund Raising Ideas:

Target Field Trip Grant:

http://sites.target.com/site/en/company/page .jsp?contentId=WCMP04-031880

Hexbugs:

http://robotevents.com/fundraising.php

Youth Service America:

https://mail.chaminade.org/owa/?ae=Item&t =IPM.Note&id=RgAAAAARb0RXjnMnRLCykRT 1TAvDBwBymuBpX6iOSI6h%2fLOGV%2fokAA ftwSU5AABymuBpX6iOSI6h%2fLOGV%2fokA Aq5y1hpAAAJ&cb=0

Quote for the week:

Have a great week,

-Nancy Mc FUTURE Founding Board Member