



## UPCOMING EVENTS

- Stop Build Day  
February 21
- Central Valley Regional  
March 10-12
- Sacramento Regional  
March 23-25
- Las Vegas Regional  
March 30 - April 2

## SPONSORSHIP UPDATES

- Jupiter  
DJUSD  
DMG Mori  
FMC Schilling Robotics  
NVIDIA
- Neptune  
DHS PTA  
UCD College of Agriculture & Environmental Science  
UCD College of Biological Sciences  
UCD School of Education  
UCD College of Engineering  
UCD School of Medicine  
UCD School of Veterinary Medicine

- Venus  
Far Western Anthropological Research Group  
First St. Reality - Claire  
Black-Slotten  
Hill Engineering  
KibbleWhite Machining Inc.  
Northbay Healthcare  
UCD Division of Mathematical & Physical Sciences  
UCD Division of Social Sciences  
UCD Global Affairs

- Mercury  
ACEC  
Carr Electric  
Davids Engineering  
Da Vinci Boosters  
M. Cubed  
UCD Extension

- Inkind  
Aerometals  
Innovation FIRST International  
Fastenal  
Github  
Martin's Metals  
Solidworks  
Vivid Hosting

## LINKS

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## 2017 FRC SEASON TAKES FLIGHT!

STEAMWORKS is here! On January 7, Citrus Circuits met at 6 a.m. to carpool to the Kennedy High School in Sacramento, where many other teams in the region met and watched a reveal video for the 2017 season. This year's game is STEAMWORKS, a steampunk themed game, where teams must collect fuel (plastic balls) and bring them to a boiler to obtain points. They also need to collect gears and deliver them to an airship located on the Alliance's field manned by two human player pilots. Once the airship is complete with all needed gears, the ship prepares to take off and robots attach themselves to a rope in the last 30 seconds of the game. Team 1678 immediately rushed back to the high school to read the game manual and to discuss our upcoming strategy and design plan. The next day, the team finalized the requirements for our robot and then worked on how we could accomplish our strategy. The busy weekend was spent prototyping and testing the needed mechanisms. Over the next five weeks of build season we will be designing, assembling and programming our robot.



## CONFIRMED COMPETITION SCHEDULE

This season Citrus Circuits will be competing in three regional competitions. Our team will travel to the Central Valley Regional in Madera from March 10-12 and be back at home for the Sacramento Regional from March 23-25 at UC Davis. We have also confirmed that 1678 will be participating for the first time in the Las Vegas Regional from April 5-8. Based on our success at the regional competitions, we are hoping to attend the FIRST Championship - Houston on April 20-22.

## LAST DYR TOURNAMENT

At the new gym of Davis Senior High School, Citrus Circuits hosted a Davis Youth Robotics (DYR) Tournament on December 11, which had over 20 teams, with members aged 8-14. Members of Citrus Circuits volunteered to help run the tournament smoothly, and it was a great success. During the tournament, the Teamwork Challenge was won by Speed Demons and Bron-tobots, and the STEM Research Project Award was won by Banana Gears. Congratulations to these three teams for not only winning, but for also moving on to the Sac Regional tournament.



## DAVIS ROBOTICS FOUNDATION

The Davis Robotics Foundation is now established as a non-profit corporation to support the activities of Citrus Circuits and the Davis Robotics Foundation, as well as other robotics and STEM programs. With the Foundation now in place, Citrus Circuits will be accepting all future donations to the Davis Robotics Foundation. For quite some time, the Davis High School Blue & White Foundation has graciously acted as our non-profit representative to accept donations to the team. This new Foundation provides more financial control for the team, as well as new opportunities for students to be directly involved in helping to run a non-profit business organization. All future checks for donations or purchases from the team should be made out to "Davis Robotics Foundation." Checks can be dropped off in the white mailbox in room M1, or mailed to Davis Robotics Foundation at P.O. Box 577, Davis, CA 95617.

## SPONSOR DMG MORI VISITS CITRUS CIRCUITS

On December 16, DMG Mori visited our facilities and were given a tour. DMG Mori is not only one of our biggest sponsors, but they have annually donated their auditorium for the WiSTEM (Women in STEM) conference that we hosted in November. Before the tour, Citrus Circuits presented the 2016 recap video about our competitions and building season. Representatives of DMG Mori were introduced to each team and learned about what they were accomplishing. DMG Mori is one of the largest machine tool builders in the world and operates a large, highly-automated factory in Davis. Headquartered in Japan, DMG Mori's major products include various models of computer numerical control (CNC) lathes and machining centers. We are very thankful for DMG Mori's ongoing sponsorship of our team.

## HARVEY DOWN UNDER

On December 12-13, Stephen Harvey went to speak at a conference held at Mentors Without Borders conference in Sydney, Australia. He was joined by three other successful FRC robotics team mentors from Team 610 Crescent Robotics from Toronto, Canada; Team 359 The Hawaiian Kids



from Waialua, Hawaii; and Team 118 Robonauts from Houston, Texas. They spoke to FRC teams in Australia about how to deal with and overcome the many challenges they face. Australian teams have only three weeks to build their robot and many of the regional competitions are thousands of miles from Australia. This conference was part of an outreach program to help the 12 new rookie teams across the outback become successful. The conference featured information on build season and how to start strategizing and designing the robot. According to one attendee, "As a new mentor, I got a lot of vital information in regards to FRC, and my only wish is that we could have attended a conference like this in our rookie year!"

## INTERVIEW WITH GEMMA BERTAIN

- Q: What sub team are you part of and what do you specialise in?  
A: I am in Robot programming, and I specialize in programming robots.
- Q: Why did you choose to join citrus circuits?  
A: Katie Stachowicz came up to me and said, "Gemma you should totally join Citrus Circuits," and I was like, "That sounds fun, I think I'll try it out." So I did.
- Q: Why did you choose your subteam group?  
A: My dad programs for his job and I tried a couple of times before but I could never get into it so I decided to finally try it out.
- Q: What is your favorite part about Citrus Circuits as a whole?  
A: I really love the people and also I really everything about it, like the robots, the math, and the science.
- Q: What is your biggest goal for the year?  
A: My biggest goal is to learn how to code better and to actually understand how to code a robot. I would also like to get to know everyone better.

