

### "Extreme Velocity Vortex"

Hello 2017 Extreme Game FTC Participants,

- We are now about a week away from the "Extreme Game 2017 (South)" FTC NJ Off-Season Scrimmage. Hopefully, everyone is looking forward to this scrimmage as much as we on the NJ FTC Planning Committee.
- A BIG Thanks goes out to The YALE School, Shari Murray, and Yaliens. This is our third time at their Cherry Hill location and we are really looking forward to it.
- As always, we'd like to send out a very early THANK YOU to all of our great NJ FTC volunteers who are helping to make this event a solid success.
- Included in this document are Helpful Notes, Event Schedule, and more.
  - Event Location: The Y.A.L.E. School 11 Connecticut Ave Cherry Hill, NJ

     Map and Driving Instructions can be found near the bottom Home Page at ...
     http://www.yaleschool.com/campuses/ellisburg/
     Sunday, May 21<sup>st</sup>
     Teams Arrive: 9:00 Event Ends: 3:30

#### **Event Information**

**Parking** - There is plenty of parking on the side of the school and signage will point the way to the event in the school gymnasium.

**Team Arrival** - Teams are expected to arrive between 8:30am - 9:00am. Since some are traveling a bit, we want to allow more time for everyone.

**Robot Readiness** – The full event is played with this year's Robot. No modification is necessary as we move from traditional Velocity Vortex to "Extreme Velocity Vortex" later in the day.

Please assure that your robot is ready to compete. We have a very full day, including reconfiguring the field at midday. Excess time spent in Inspection or remedying non-operative robots will take away from Extreme Game strategizing and playing time.

Please double-check your Android mounting and USB cabling to make sure that your robot is trouble-free. At this point in the season, we are expecting robots to be sound.

**Extreme Game** – The folks who have attended Extreme Game during the past 5-6 years know that we typically reconfigure the field at lunchtime. The 12x12 Field will definitely grow in size at midday to allow room for the additional goals and game elements.

New game rules will be distributed, once the Extreme Field is set, and will review them in a special Drivers Meeting. Expect more goals, point value changes, modified rules, and likely insertion of more color dependence. Some elements of Autonomous Scoring will be maintained, as possible.

**Number of Matches Planned** - Teams will operate in two-team alliances. Our plan is to have five qualifying matches per team in the morning. The Match count may be reduced to four per team in the morning if we encounter delays. We want to leave plenty of time for the Extreme Game.

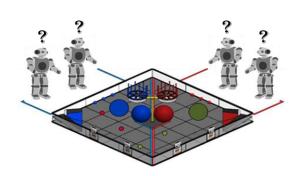
If the team count remains at eight, we are able to enter immediately into Semi-Finals after lunch. It may actually be possible to use a "3-Match Win" criteria (rather than 2 Wins) to advance teams to Finals. This would allow more Extreme Game play. We'll make that decision on game day, dependent on how many additional teams join us on Sunday.

**Food** – The folks at YALE School have plenty of typical great scrimmage food. Ask team members to bring pocket money. We'll take morning orders & send out for pizza at lunchtime. All will be well fed and fine.

**Volunteers** – We are reasonably staffed for this event, but as usual at our no-charge events, we are always delighted to take the names of walk-in (potential) volunteers at the time of Team Registration. We may not need all of the walk-in volunteers but it is smart to have them in reserve.

# - Sunday Schedule

7:00	Arrival Time for Load-In / Set-Up Crew
8:30	Doors Officially Open for Early Bird Teams / Volunteeers
9:00 - 10:00	Teams Arrive, Check In and Head for Inspection
	Cursory Mechanical Inspection & Software Inspection
10:00	Inspections Complete - Match Lists Available
10:15	Opening Ceremonies
	Drivers Team Meeting (inclduing Coaches) on the Fields
10:30	Qualifying Rounds (8 - 10 Teams play 5 Matches each)
12:00	Qualifying Rounds (~13) Completed
	Lunch Starts
12:15	Field Reconfiguration
12:45	Lunch Over - Extreme Game Field Ready
	Explanation of Extreme Game
1:00	Alliance Selection
	(NJ Scrimmage Rules)
	(Alliance Captains cannot pick Alliance Captains)
1:15	Alliance Strategizing Time
1:30	BeginSemi- Finals Matches (Winning 3 of 5 advances)
	(Milel Oam Mariah & Daar of O Mariahaa 15 additional Taama)
	(Wild Card Match & Best of 3 Matches IF additional Teams)
	#2 versus #3
	#1 versus #4
3:00	Begin Finals
3:30	Complete Finals
	Closing Ceremonies - FTC - Event Complete



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## **Extreme Game 2017** Southern Venue Team List

Team #	Team Name	Coach / Contact
365	MOE	Ron Prettyman
6613	Yaliens	Shari Murray
7035	Radical Robots	Pamela Mercouris
7149	ENFORCERS	Hector Tavarez
7556	Inner City Circuits	Cortney Bolden
9765	Atlantic County 4-H Robotics	Jim Bates
11241	Blue Steel, Howell HS	Rich Morgan
12365	MATES Robotics, Terrabots	Gerald Luchs

Field of Teams may increase as responses from Pending Teams are received.



#### The 2016-2017 Game:

VELOCITY VORTEX<sup>™</sup> presented by Qualcomm<sup>®</sup> is played on a 3.7m × 3.7m (12 ft. × 12 ft.) square field with approximately 0.3m (1 ft.) high walls and a soft foam mat floor. The field is divided diagonally into a "red" and a "blue" side corresponding to the two alliances. In the center of the field are two goals on a rotatable stand called the Center Vortex. Two ramps, each with a goal, called the Corner Vortex, are placed in opposite sides of the field. The Center Vortex Goals and Corner Vortexes are alliance specific. There are also four alliance neutral Beacons, two placed on each front wall next to the Corner Vortex. There are floor markings as well as Vision Targets placed on the field walls as reference points for robot navigation.

Alliance specific scoring elements for VELOCITY VORTEX<sup>344</sup> are five small balls called Particles and one large ball called a Cap Ball per alliance. At the start of a match, each alliance has three Particles available for preloading and scoring during the Autonomous period. Each alliance can earn up to two more Particles for use during the Driver-Controlled period by claiming Beacons during the Autonomous period.

Matches have two distinct periods of play: a 30-second Autonomous period followed by a two-minute Driver-Controlled period, the last 30 seconds of the Driver-Controlled period is called the End Game which adds new scoring opportunities for robots to achieve.

#### Autonomous Period:

During the Autonomous period, robots operate using only pre-programmed instructions. Alliances earn points by: claiming Beacons, moving the Cap Ball off of the Center Vortex base onto the field floor, scoring Particles into their alliance's Center Vortex or Corner Vortex. Alliances may also gain points by parking their robot in contact with the Center Vortex base or on the Corner Vortex.

#### Driver-Controlled Period:

During the Driver-Controlled period, alliances earn points by scoring Particles into their alliance's Center Vortex or Corner Vortex. Robots may also claim Beacons for their alliance by triggering them to illuminate their alliance color. There is no limit to the number of times that a Beacon may be triggered. At the end of the Game, the color of the Beacon determines the alliance credited for claiming it.

#### End Game:

The final 30 seconds of the Driver-Controlled period is called the End Game. In addition to the Driver-Controlled period tasks, alliances earn points by raising the Cap Ball off the playing field floor or by capping their Center Vortex with it.

#### Autonomous Period Scoring:

Robot Parked partially on Center Vortex base5 points		
Robot Parked fully on Center Vortex base10 points		
Robot Parked partially on Corner Vortex5 points		
Robot Parked fully on Corner Vortex		
Particle scored in Center Vortex 15 points/Particle		
Particle scored in Corner Vortex 5 points/Particle		
Cap Ball in contact with the floor5 points		
Claimed Beacon		
(plus 1 extra Particle per claimed Beacon, up to 2)		

#### **Driver-Controlled Period Scoring:**

Particle scored in Center Vortex 5 points/Particle
Particle scored in Corner Vortex 1 point/Particle

#### End Game Scoring:

Claimed Beacon	10 points/beacon
Cap Ball raised off floor but	
below 76 cm (30 inches)	10 points
Cap Ball raised above 76 cm (30 inch	es)20 points
Cap Ball scored in Center Vortex Goa	al40 points



