



## **Stabler Arena**

124 Goodman Drive, Bethlehem, PA 18015

**April 5 – 8, 2017**

# **Team Visitor Information Packet**

**Updated Monday, March 28, 2017 7:03 PM**

# **FIRST Mid-Atlantic District Championship**

## **WELCOME!**

*FIRST* Mid-Atlantic welcomes our students, mentors, sponsors, and guests to the 6th annual District Championship at Stabler Arena of Lehigh University. Congratulations to our top 60 teams from at our seven district events across our region.

This event marks the culmination of months of hard work, creative problem solving, and incredible team work. The *FIRST* STEAMWORKS competition was fierce, and your design, strategy, and fabrication skills will continue to be tested again at this District Championship. You have learned what it means to be part of a team and you have contributed to its success. In the spirit of Gracious Professionalism®, your opponents will become your friends and colleagues for years to come. From here, 22 teams will advance to represent the Mid-Atlantic Region at the *FIRST* Championship in St. Louis, MO on April 26th – 29th.

As you have seen this year's challenge is visually stunning, fast paced and has a lot of game pieces. As a result it takes longer to reset each match. We are planning on 8 minute cycles. Please check out the schedule for each day's start and end times. The goal is to let teams in at 7:45am and get you out by 6:00pm on Thursday and Friday so you can get home to rest.

To all of our volunteers, alumni, mentors, teachers, and parents: Hats off to you and thank you for your year-round support to create this outstanding opportunity for our students. Your investment of time and energy has been significant and you have served as terrific role models. You have positively impacted this next generation of innovators, educators, engineers and leaders and you should be proud of your accomplishments!

To all our sponsors and partners: You play a critical role thanks to your commitment of funding, volunteers, internships, and leadership. You know the importance of a workforce that is technically astute, innovative, and energized and recognize that *FIRST* participants are the future workforce that keeps our country competitive in the global economy. This *FIRST* Mid-Atlantic District Championship Event Sponsored by Johnson & Johnson and *FIRST* year-round STEM related activities have been made possible thanks to your support!

We invite everyone to join us to cheer for these students as they put into play lessons and skills learned over the past several months. Watch them compete on the arena floor and visit them in the pits. Talk to them and congratulate them! They are all winners! They are our future.

On behalf of *FIRST* Mid-Atlantic, we wish all participating team members great success, volunteers amazing fun, and spectators super charged excitement! Best of luck to everyone!

Brian Sherman, P.E.  
Chairman  
*FIRST* Mid-Atlantic

# ***FIRST* Mid-Atlantic District Championship**

## **DRIVING DIRECTIONS TO THE STABLER ARENA**

**Stabler Arena Address:** 124 Goodman Dr. Bethlehem, PA 18015.

**Google MAPS and iPhone tested:** Stabler Arena, Goodman Dr., Bethlehem PA

## **POINTS NORTH: EAST STROUDSBURG, SCRANTON**

From the East Stroudsburg area, take Route 33 south to Interstate 78 west. Follow Interstate 78 West to Exit #67 (Hellertown/Bethlehem). Continue straight through light between Wendy's and Turkey Hill. Follow signs that read "Lehigh University/Goodman Campus/Stadium and Arena."

From the Scranton area, take Interstate 476 South (formerly Route 9) to Route 22 east. Exit at Route 309 south and follow to Interstate 78 East. Follow Interstate 78 East to Exit #67 (Hellertown/Bethlehem). Turn right at traffic light at end of ramp and at next light, turn left between Wendy's and Turkey Hill. Follow signs that read "Lehigh University/Goodman Campus/Stadium and Arena."

## **POINTS SOUTH: PHILADELPHIA, DELAWARE**

Follow Interstate 476 North (formerly Route 9) to Exit #32 (Quakertown). Turn left onto Route 663 and continue to Route 309, turn left and go north. Follow Route 309 north to Route 378, turn right and go north. Follow Route 378 north approximately 4.5 miles to light at Seidersville Road. Turn right onto Seidersville Road and follow signs and to Arena.

## **POINTS EAST: NEW JERSEY, NEW YORK CITY**

Follow New Jersey Turnpike southwest. At exit #14, follow signs to Interstate 78 west. Follow Interstate 78 West all the way into Pennsylvania. Take Exit #67 (Hellertown/Bethlehem). Continue straight through light between Wendy's and Turkey Hill. Follow signs that read "Lehigh University/Goodman Campus/Stadium and Arena."

## **POINTS WEST: HARRISBURG**

Follow Interstate 78 East to Exit #67 (Hellertown/Bethlehem). Turn right at traffic light at end of ramp and at next light, turn left between Wendy's and Turkey Hill. Follow signs that read "Lehigh University/Goodman Campus/Stadium and Arena."

# FIRST Mid-Atlantic District Championship

## LOAD-IN/PARKING AT STABLER ARENA (VIEW FROM SPACE)



Main Entrance

Goodman Drive

Loading Area  
Parking  
Robot load in/out  
**No general parking**

Car and truck parking only!  
Please put trailers, large trucks and busses in overflow area.

**Note: Please follow the directions of the traffic attendants.**

Bus and Trailer Parking in overflow area

# **FIRST Mid-Atlantic District Championship**

## **GENERAL EVENT INFORMATION**

Please read the following restrictions and adhere to them in order to promote an orderly and exciting competition. As a group, we all should honor agreements with the venue and help promote the spirit of good partnership.

- **Please do not attempt to deliver or ship robots directly to the site.**
- **Please do not remove any FIRST or Team number signs.**
- **Please do not bring food into the arena.** Any food or beverage not provided by Stabler Arena must be consumed outside the building.
- **Please do not sell any products.** Only our approved vendor may offer to sell apparel. No other items, including food, hats, shirts, or any promotional products, may be sold.
- **Please do not give out any free food products,** such as candy, water, soft drinks, or fruit. You may trade team pins or buttons, however. Stickers or Decals are NOT allowed to be distributed as they are often left behind in the venue
- **Please do not sell raffle tickets.**
- **Please do not use extremely noisy devices,** such as floor stompers, whistles, or air horns.
- **Please do not invite or bring live bands** to play in the audience. This dilutes the presentation on the playing field and is too confusing for the audience.
- **Do not play loud music** in the Pit because it interferes with important announcements. If a team is uncooperative, the power to the team's Pit Station will be shut off and/or the music confiscated.
- **Please do not save seats.** It is not fair to other teams or the public that we hope to interest as team sponsors & volunteers.
- **Please do not bring helium tanks.** Helium balloons are NOT allowed at the Arena!
- **Please do not arrange for Internet access** on the site or attempt to connect to the Internet.
- **Please do not use walkie-talkies** as they interfere with the wireless radios used by event service providers as well as the regional staff
- **Please do not form "tunnels"** during the Awards Ceremony.
- **Please do not run in the venue.**
- **Please do not wear open-toed or open-backed shoes in the Pits or on the playing field.** This includes "clog" and "mule" style shoes, such as Crocs.
- **Please ensure anyone in the pit area – including walkways – is wearing safety glasses.**
- **Please have fun and good luck!!!**

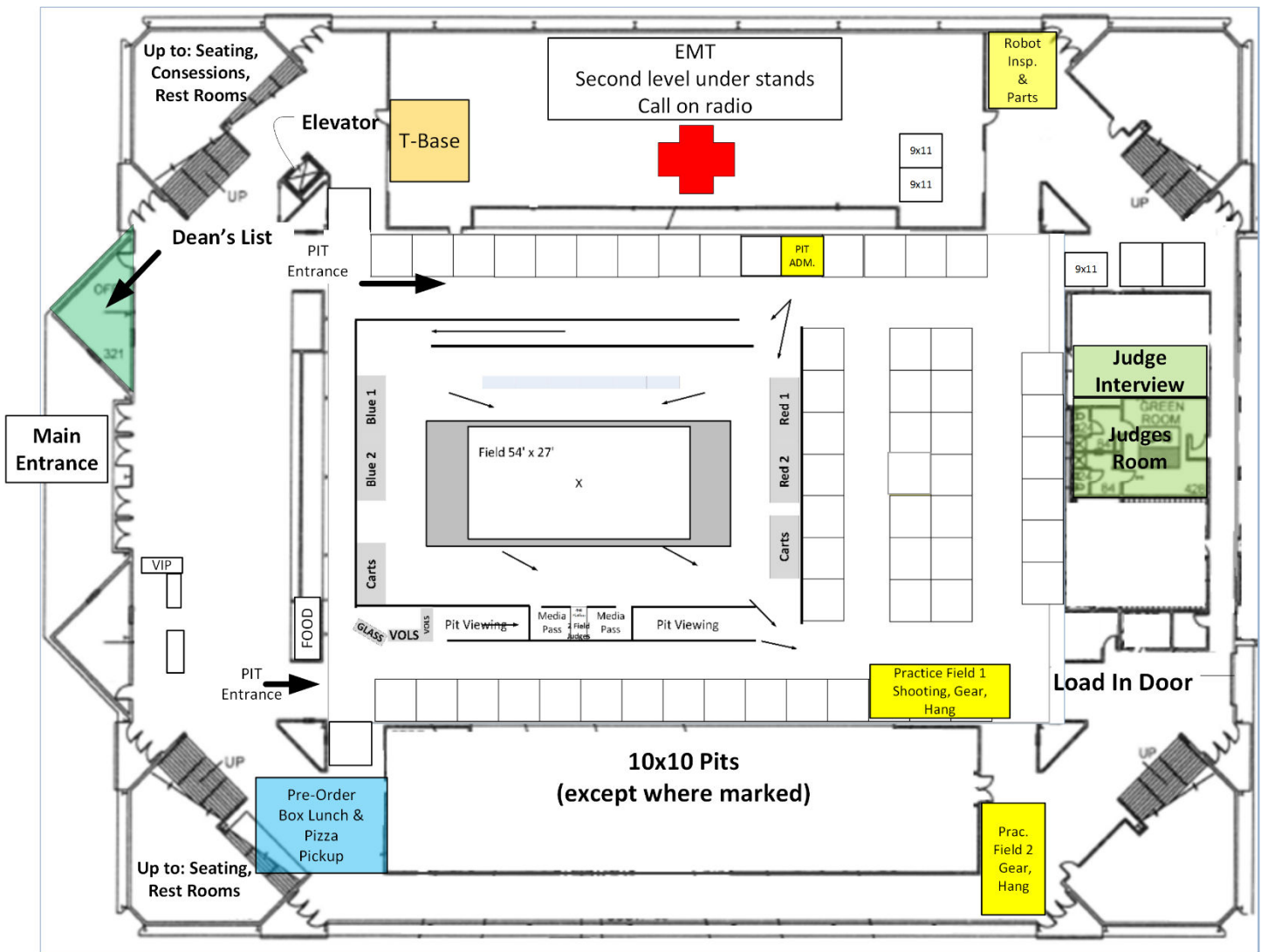
Finally, please respect the event staff and volunteers as we are attempting to run a smooth event and keep everyone safe. Remember without volunteers none of this is possible. Please thank them for their help.

# FIRST Mid-Atlantic District Championship

## THE ARENA, PLAYING FIELD, QUEUING, PITS, AND PARCTICE AREAS

Seating is available on 3 sides of the playing field. Arena ushers will make sure spectators do not block aisles and walkways. There is no assigned seating and seats cannot be saved. Teams and the general public have equal access to the seating area throughout the competition. You are responsible for your belongings.

### 2017 MAR Champs 60 Teams Arena Layout (please note several changes)





# FIRST Mid-Atlantic District Championship

## IN CASE OF EMERGENCY

In the event of an emergency at the MAR Championships Event make sure to listen to the instructions from the event staff as it may be necessary to evacuate or clear a path for emergency personnel. We recommend setting up a team meeting place outside of the arena beforehand. A card with this location as well as your hotel and other important team contacts would be a great handout to remind your team! First Aid is located on the second level as designated in the Arena drawing.

**Note: If you have an emergency please contact one of the volunteers for directions.**

## EMERGENCY PHONE NUMBERS

- General Emergency 911

## EVENT CONTACT INFORMATION

- Frank Larkin Event Coordinator (before event) 215-823-9593 (at event, team 272)
- TBD Event Manager (at event, contact Pit Admin, they are on radio)
- Cathy Morgan Volunteer Coordinator (before event) 215-219-7513 (at event on radio)
- Event Website <http://www.midatlanticrobotics.org/events/mar-championship/>

## FIRST AID

Please go to EMTs for first aid treatment. If stand on the field looking at the scoring table, they are located on the second level, in the middle of the arena. If you need first aid at any time and are not sure what to do, please see a volunteer. They will direct you.

## PIT AND COMPETITION FIELD SAFETY

Safety glasses **must** be worn in the Pits and Competition Fields at all times. Teams and mentors must bring their own safety glasses. Safety glasses will be available for visitor use at the event but must be returned upon leaving the Pit area.

## GENERAL CONDUCT

All participants, volunteers and supporters are expected to exhibit Gracious Professionalism during the entire competition. Any behavior causing safety concerns may result in a warning, or possibly being escorted off the site. Reminder no smoking is permitted in the Stabler Arena.

## SAFETY QUESTIONS OR ISSUES

If you need safety information, or encounter unsafe behavior that you are uncomfortable dealing with, please notify the Safety Advisor, Volunteer Coordinator or the Event Manager.

# FIRST Mid-Atlantic District Championship

## REGISTRATION AT PIT ADMIN

As soon as your team arrives on Thursday please register at the Pit Admin table. We will need your rosters at that time. Only then will you be allowed to have an inspector come over the watch you unbag.

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### CONSENT FORMS

All participants in FRC events must submit a FIRST Consent and Release form (either an electronic form via the FIRST website or a hard copy of the downloaded form) and a separate MAR Consent and Release form (adult version or minor version as appropriate) at their initial event of the season. Additional copies of the forms are not required at subsequent events.

To register at this event, each team must provide a Team Roster listing all team members. A complete description of the FIRST Consent and release process may be found at...

<http://www.midatlanticrobotics.org/downloads/>

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### TEAM MEDIA PASSES

Because of the layout of this year's game we are able to have a Media Gallery for teams to send 2 representatives to take video and photos of their teams **while they play**. For each team there will be 2 Media passes in your team registration packet.

We will use the following process...

- 1) Before the match, the team media people will queue with their teams and stand in the queuing area with their robot. **Do not go to Media Gallery early.**
- 2) The team media people will move to the Media Gallery when their team is cleared to load the robot on the field. **Please make sure you do not stop to take pictures or video while this is happening.**
- 3) Please wait patiently for the others to leave. They will be moving that out as soon as their robots are cleared to be removed from the field.



# FIRST Mid-Atlantic District Championship

## THE PITS

Teams will receive a final pit map when they register at the arena on Thursday at the Pit Administration Table.

- Each team's pit station will have a table. Most of the pits are 10 x 10 with the exception of a few. These are almost 10 X 10. (See right side of drawings )
- We may ask you to connect to the Power spider box within 10 feet of your pit or we may drop power to the back of your pit. Please have at least a 10 foot extension. If you do not have one, one will be provided.
- Due to safety and insurance regulations, teams cannot build any structure that supports people or items for storage above the work area in their pit space.
- No structures can be higher than 10 feet above the floor and must safely support any signs or displays mounted to the structure. We will require the removal of any pit structure that is deemed unsafe by event management personnel and local committee members.
- The current match and the match being queued will be displayed on the Stabler Arena Scoreboard at either end of the arena under words MATCH and QUEUEING. **There will be no calls for queuing on Matches. Your team is expected to be in the queue area and ready to go when your match comes up.**
- Because of the sound at the competition and Pit layout, we will be keeping Pit announcements to a bare minimum. If you need parts or help please visit your neighbors to see if they can help. Experience tells us someone will always offer to help.

### AS A SPECIAL REMINDER, DON'T FORGET:

- A 25 ft. extension cord and a power strip.
- A small cart to transport your heavy robot from the Pit to the playing field.
- Safety glasses for **everyone** on your team and your guests if they will be visiting the pits.
- Safety gloves for team members that will be handling the robot during transport to and from the field.

### PIT VIEWING AREA

As we did last year there will be a pit viewing area. This is provided **primarily** for pit crews to watch their teams in action. Please do not abuse this by setting up cameras or video equipment. If your team is not yet up please do not stand in front of those whose team is competing. Move to the back or exit this viewing area when your team is not competing. We will discourage large numbers of team members from coming into this area to cheer. This is best done from the stands.

### TEAM NUMBER SIGN

We will be putting a team number sign near each pit. Please make sure it can be seen by judges from the ground.

# **FIRST Mid-Atlantic District Championship**

## **MACHINE SHOP INFORMATION AND PROCESS**

Below are the general rules and process for machine shop work requests:

- You must supply any material that is needed for repairs. The machine shop cannot provide scrap material.
  - One team representative must initially go to Pit Admin to get a Machine Shop form. They will also sign the Machine Register indicating they are asking for Machine shop help. They must include the time they entered the request.
  - They then go fill out the form back at your pits or at the Machine Shop table near the large rear door of the arena. The form should explain what needs to be done. There is room to include a drawing and dimensions. Leave the form and any materials at the table.
  - **You may not observe your job being worked due to safety and liability.**
  - All work requests are First Come First Serve, unless a reasonable exception can be made. The machine shop cannot guarantee timing for any ASAP requests.
  - Your team should check back at the machine shop table when the part is ready. You can pick it up at the machine shop table.
- 4) In the Gallery please do not block any other outside press, photographers, videographers or media people from other teams. If there is an issue, please contact the usher managing this area.
  - 5) **There will be no power provided in the Gallery.**
  - 6) When your round is over please be prepared to finish what you are doing. Once teams are allowed to clear the robots from the field you MUST leave the Gallery as quickly as possible to make room for the next team.

***Note: These passes are a privilege not a right. The local committee reserves the right to revoke this privilege.***

# FIRST Mid-Atlantic District Championship

## FOOD/MEALS

Please take advantage of the pre-order meal options for this event since there are not a lot of outside meal options near the Stabler Arena. Food items will be available for purchase in the Arena during the event which is open to all spectators and teams. Pre-orders offer immediate availability and team time management.

- Sandwich pre-orders for lunch only will be managed directly with Lehigh Catering. Pizza pre-orders will be handled by the Stabler concession folks. Please see the separate Pre-Order forms and other information on the MAR Website. We have been able to extend ordering to **Wednesday April 5<sup>th</sup>**!  
<http://www.midatlanticrobotics.org/events/mar-championship/>
- Food will also be available from the Stabler Arena vendors. They have a variety of food that is all described in the Stabler Arena Menu. This too is viewable on the MAR website link above. The food concessions are located on the second level above the Arena Entrance. This area has been remodeled to make it more like a food court. We suggest you get food at a break in the action for your team before the official lunch break. This is to help avoid the crowds.

The hours of operation will be...

Thursday	10:00 am - 7:00 pm
Friday	10:00 am - 5:00 pm
Saturday	10:00 am - 5:00 pm

# FIRST Mid-Atlantic District Championship

## HOTELS & SCHEDULE FOR SHUTTLE SERVICE

Shuttle service is planned to start Wednesday afternoon and run through Saturday morning. The shuttle will serve these five hotels:

#1	Comfort Suites	120 West 3 <sup>rd</sup> Street	
#2	Holiday Inn Express & Suites	2201 Cherry Lane	(east of town)
#3	Hyatt Place	45 West North Street	(old city)
#4	Hampton Inn	200 Gateway Drive	(north of U.S. Route 22)
#5	Best Western	300 Gateway Drive	

Thursday morning and each afternoon there will be one bus in service. Friday and Saturday mornings there will be two buses in service. Please note that the first time in each segment is fixed; the other times are approximate, because of the continuous schedule and dependent on local traffic. Also note that teams will be asked to separate their passengers into multiple groups in order to maximize the number of teams that can be served in each trip.

## THE SCHEDULE AND ROUTING

**Important Note: Each bus can accommodate only 48 passengers per trip.**

### WEDNESDAY, THURSDAY, AND FRIDAY AFTERNOONS

4:00 pm First departure from Stabler Arena to any of the five hotels – based on which teams are using the bus for each trip. Bus will return to Stabler Arena and continue pick-up and drop-off based on hotels to which passengers need to be transported.

### THURSDAY MORNING

6:45 am First departure from #3 to #1 to #2 to Stabler Arena  
7:35 (approx.) First departure from #4 to #5 to Stabler Arena  
8:20 (approx.) Departure from #2 to #3 to #1 to Stabler Arena  
9:15 (approx.) Departure from #4 to #5 to #1 to Stabler Arena

### BUS #1 FRIDAY AND SATURDAY MORNINGS

6:45 am First departure from #3 to #1 to Stabler Arena  
7:15 (approx.) First departure from #2 to Stabler Arena  
7:35 (approx.) Departure from #2 to #3 to #1 to Arena  
8:15 (approx.) Departure from #2 to #3 to #1 to arena  
9:15 (approx.) Departure from #1 to Stabler Arena

#### **Passengers on Saturday**

**morning only** can carry personal luggage on bus from hotel to arena for storage in a designated POD container behind the arena.

### BUS #2 FRIDAY AND SATURDAY MORNINGS

**Important Note: Travel time is considerably longer than other hotels.**

6:45 am First departure from #4 to #5 to Stabler Arena  
8:00 (approx.) Departure from #4 to #5 to Stabler Arena  
9:15 (approx.) Departure from #4 to #5 to Stabler Arena

If there are questions in Bethlehem about the shuttle service, contact the on-site coordinator, Gene O'Brien, via mobile phone (908.715.1301).

# FIRST Mid-Atlantic District Championship

## TEAM LUGGAGE STORAGE (SATURDAY ONLY)

We know that some teams will be traveling to the event by their own bus and then using our shuttle busses. MAR is trying to help by providing those buses and recognizes that luggage storage on Saturday only can be an issue. We would rather not have it in the arena.

When you are coming on Thursday or Friday we ask that you; 1) go to your hotel and drop off your luggage. They will store it for you. 2) Then use your bus to get you to the Stabler Area. **We will not be holding any luggage at Stabler on Thursday or Friday.**

**MAR Shuttle service will start at 4:00 pm from Stabler Arena to the designated hotels.**

On Saturday you take your luggage with you in the MAR supplied shuttle busses and arrive at Stabler between 7:30 and 9:00.

- 1) Carry your luggage to the area outside the back loading doors. There will be a POD available for you to put your luggage into. **For your own sake, you MUST have an ID tag on the luggage.** You then place the luggage in the POD near your teammate's luggage.
  
- 2) You will be able to pick up luggage at the following times (there will be an announcement).
  - a. For those leaving early, for 1 hour only following the Volunteer Break
  - b. Final pickup immediately after the Award Ceremonies.

Again, with your adult mentors and/or chaperones help...

- a. You then enter the POD, find your bag. **Make sure the ID matches you.**
- b. Take it out to the person watching over the POD and **show them the ID.**
- c. If your bag does not have ID you may be asked to identify what is in the bag.

## SCHEDULE CONSIDERATIONS

We are altering the schedule a little to accommodate many of the issues generated from this year's event match cycle of 8 minutes. We will be starting every day at 7:45am and allowing teams to leave by 6:00pm. This is to allow those traveling by bus to have a hard stop time for the bus to pick them up. All will get home a little earlier to get much needed rest. We are trying not to stress teams and volunteers.

Thursday will be devoted to inspection, robot tweaks, practice and a few qualification matches. **We fully expect that since all teams have been to at least two MAR District events, you will all be fully inspected, field connections tested and competition ready by Thursday at 1:30 pm to start qualification matches.** We will be shooting for a 8 minute cycle time. This is based upon the 7 district events we have just completed over the past 5 weeks. Since we will have 60 teams and the pits are close you should have ample time to fix problems. We are looking to you to help us provide a great, fast paced and exciting event.

# FIRST Mid-Atlantic District Championship

## EVENT SCHEDULE

### WEDNESDAY APRIL 5, 2017

- 12:00 PM Setup - If you can spare some time come help get the *FIRST* Mid-Atlantic Championship ready.
- 6:00 PM Pits Open members to drop off and do pit setup. Max 10 people only (Load-In Door)**
- 8:00 PM Pit Access Closed

### THURSDAY APRIL 6, 2017

- 7:30 AM Teams begin to arrive, stage in building if possible. Cannot get to stands or pits.
- 7:45 AM Seating Opens, Pits Opens, Machine Shop Opens, Inspection begins, registration begins.**
- 9:00 AM Field open for Measurement and Camera Calibration
- 10:00 AM Driver's Meeting**
- 10:30 AM Practice matches begin (assigned matches and filler queue as available)**
- 11:00 AM Safety Captain Meeting (Location TBD)
- 12:30 PM Practice Matches End**
- 12:30 PM Volunteer Replenishment Time (*we suggest you eat when you can to avoid long lines*)
- 1:30 PM Qualification Matches Begin**
- 6:00 PM Qualification Matches End for the day**
- 7:00 PM Pits, machine shop close**

### FRIDAY APRIL 7, 2017

- 7:30 AM Teams begin to arrive, stage in building if possible. Cannot get to stands or pits.
- 7:45 AM All Open, Stands, Pits, Machine Shop, Inspection resumes**
- 8:00 AM Optional Driver Meeting for Overnight Updates (at head referee's discretion)
- 8:30 AM Opening ceremonies**
- 9:00 AM Qualifying Matches (continue)
- 12:00 PM Volunteer Replenishment Time (*we suggest you eat when you can to avoid long lines*)
- 1:00 PM Qualifying Matches (continue)
- 6:00 PM Qualification Matches End for the day
- 6:30 PM Pits and machine shop close or ½ hour after last qualification match whichever is greater**

### SATURDAY APRIL 8, 2017

- 7:30 AM Teams begin to arrive, stage in building if possible. Cannot get to stands or pits.
- 7:45 AM All Open, Stands, Pits, Machine Shop, Inspection resumes**
- 8:30 AM Opening ceremonies**
- 9:00 AM Qualifying Matches (continue)
- 12:30 PM Alliance Selections**
- 1:00 PM Volunteer Replenishment Time (*we suggest you eat when you can to avoid long lines*)
- 2:00 PM Playoffs Begin**
- 2:00 PM Practice Field Closes
- 5:00 PM Awards ceremony**