

Rookie Conference Call #8

Week 5 of Build: Fabrication and Assembly

Robot Check list for this week:

- Robot – continue build and assembly
- Testing/Debugging systems should be well into gear
- Begin students driving the robot – testing
- Bumpers need to be done!

Q: Where do we find information about the tournaments – schedules, maps, etc?

A: Go to the First in Michigan website:

<http://www.firstinmichigan.org>

- Go to FRC Events ->2012 season
- All the events are listed there – click on the one you want and you can find all sorts of information on the tournament there.

Q: What is the deadline for website submission and where do we submit?

A: *Deadline is February 16, 2012.*

- To submit your website, you need to have the students submit it via SIMS.
- To get the students registered to submit, you need to go into TIMS, and select which students can submit.
- Btw here is the Web Site Criteria for 2012 Season:
- <http://www.usfirst.org/roboticsprograms/frc/awards>

Q: What is this we heard about needing 2 volunteers per team?

A: In Michigan, each team is responsible for getting 2 volunteers per tournament that you will compete in.

- To register, go to the following sites (FiM= First in Michigan): FiM Volunteer = <http://firstinmichigan.org/volunteer.html>
- FIRST = https://my.usfirst.org/FIRSTPortal/Login/VIMS_Login.aspx

Q: Where do we go if we have pneumatic programming questions?

A: Look at the Pneumatics Manual =

<http://www.usfirst.org/roboticsprograms/frc/2012-kit-of-parts-pneumatics>

Pneumatic Site (Great Site) =

<http://team358.org/files/pneumatic/>

Q: We are having trouble with our controls – what do we do?

A: You have to figure out where the trouble is coming from – if isolated to the power distribution, get another one from Andy Mark (as an investment), then contact FIRST for a replacement.

- Power Distribution (AndyMark) = <http://www.andymark.com/ProductDetails.asp?ProductCode=am-0865>

Bumper Tips

- Check out white paper on Chief Delphi for how to make reversible bumpers
- Make them as easy as possible to remove/switch colors
- Don't forget you need your team number on them
- Bumpers need to be bagged
- Don't forget that you need to incorporate bumpers into overall design
- Team number must be on bumpers – 4" tall with a 3/4" stroke (White is easiest to see) - Lots of ways to do it: Embroider, Sew, Iron on

Q: What is the bumper zone:

A: The bumper zone: 2" off the ground to 10" off the ground

- Suggestion: try to make it 1" off the ground to keep bumpers as low as possible
- Keeps center of gravity lower, and balls won't get under your bumpers
- If bottom of bumper is too high, could get caught on other bumpers/robots/field components – robots could tip you over too and balls will get stuck!

Q: What is the Bumper weight?

A: Bumpers must be less than 20 lbs

- Most will be about 13 lbs – use this extra 7 lbs to add weight if desired (lower center of gravity/redistribute weight)

Q: Where can you buy fabric other than AndyMark?

A: Joann Fabric (look online) – “duck cloth” or any other fabric store

“Bagging” Tips

Q: Do you have to bag after each competition?

A: Yes, bring an extra bag, extra zip ties, and lockout sheet to competition

- This will be inspected at the competition (at beginning (“open”) and end (“close”))
- For a District competition you get 6 hours during the 7 days before the competition you compete in as open work time, called “Access Period”

- ***Do a TON of prep work before the access period to make most efficient use of the 6 hours (have CAD, drawings, tools, and to do lists ready before hand)***
- ***You don't have to do the 6 hours all in one shot – must be minimum of 2 hours***
- For a Regional competition you do NOT get the hours beforehand, but you do get the full day on Thursday to work on your robot. Check your regional for the hours.
- After you bag the robot, you can withhold 30 lbs to work on. Per FIRST, “Teams may bring a maximum of 30 lbs of Fabricated Items to each competition event to be used to repair and/or upgrade their Robot at the competition site. The Operator Console and any battery assemblies (see[R03]-A) are not applicable”
- During unbagging, you can work on any part of the robot
- Be sure to measure pertinent parts before bagging – access is difficult when bagged!

Q: What things do not need to be bagged?

A: The following items do not need to be bagged:

- Controls
- Batteries
- Off the shelf parts
 - If you buy off the shelf and drill a hole in it, it is no longer considered “off the shelf” – must be bagged (unless it is used as a spare part)
 - If you buy off the shelf and then drill at the competition, you don't have to bag it
- Spare/replacement parts
- Can bring into competition as long as it is the exact same as the current one on your robot

Q: What is the “BoM”?

A: The BOM is the Bill of Materials, which is a list of materials that you used on the robot and the costs. Don't have to include fasteners unless they cost > \$1 You MUST bring your BoM with you to competition - this is a requirement to compete!

A 2012 BoM Template

http://www.usfirst.org/sites/default/files/2012_Inspection_BOM_Template.xlsx

Q: Is there practice time at the competition?

A: Yes, in Michigan, you can go into pits at 6 pm on Thursday

- As fields are ready, you can begin practicing
- Practice rounds occur Thursday night and Friday morning
- Stand in line – first come, first serve

- Usually, cannot go out on the field until robot is inspected first
- At every competition, there is a practice field to use between your matches for testing (most likely will not be a full field but main field components)

Robot Graphics Reminders

- Team graphics need to be accounted for – get some!
- Don't forget sponsors should be on your robot!
- Need team nickname, sponsor, and team number on robot
- Check manual for rules on sizes/locations

Business update

- Continue to update sponsors/social media/website
- Complete Travel and Meal arrangements
 - *Get permission slips*
 - *Talk to school about what is needed*
- Uniforms
 - ***You are behind if you haven't started already! Need to do now!***
- Scouting plans
 - *See previous week's notes*
 - *What do you want to know?*
 - *How do you want to see the data?*
- Team Awards submissions
 - ***ONLY HAVE 7 DAYS!!!!***
 - ***Students must submit!!***
 - ***Go onto TIMS ->edit to sign up student for submitting***
 - Go to SIMS – for students to submit award submissions
 - ***Make sure they are submitting correctly – there is NOT an “undo” to online submissions!***
 - ***Feb 16th – DEADLINE for DEAN'S LIST!!***
 - Done through TIMS – Adults do this
- **Update Sponsors on TIMS**
- Check MI FIRST supplement update when it is released to understand the point system in Michigan
- Get as much sleep as you can now ... the next 2 weeks will drain you! 😊