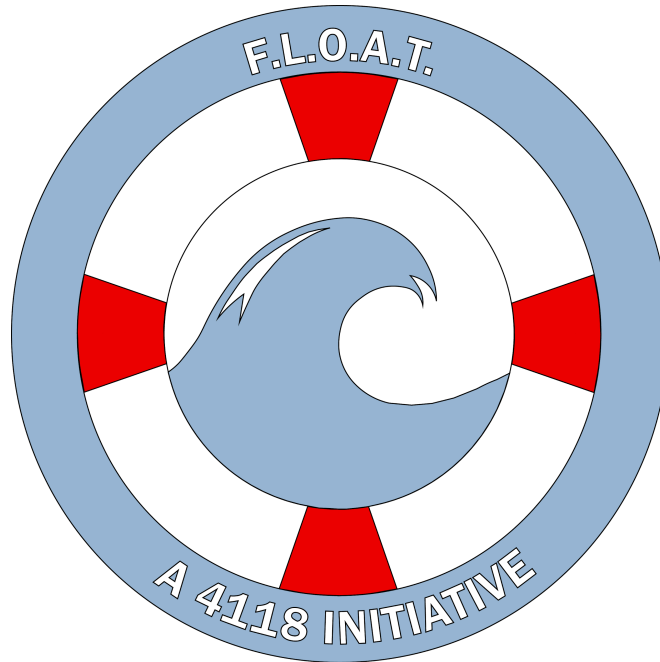


# F.L.O.A.T.



*An initiative by:*

**FRC Team 4118: Roaring Riptide**

**Fostering Longevity of Adjusting Teams**

## A Rising Riptide Lifts All Bots

“Where is team ####?”

Over the years, we at **FRC Team 4118: Roaring Riptide** found ourselves asking this question a lot at competitions. Many of the teams that we shared a rookie season with had seemingly disappeared. This inspired our team to do some investigating, and we were alarmed by the results. In 2012, Roaring Riptide was one of 25 rookie teams in the state of Florida. As of 2018, *only seven of those teams are still active*. Many of the teams in our state were not surviving past their first and second seasons, and we wanted to do something about it.

## The Establishment of FLOAT

In 2016, we hosted the first FRC Kickoff at the University of Florida where we met an enthusiastic rookie team, 6184 - Leon Robotics. They may not have known a motor driver from a screwdriver, but we saw a lot of potential. We knew that *with a little help, they could become a great team*. In order to assist them, we developed our own program called F.L.O.A.T. which stands for "Fostering Longevity of Adjusting Teams." FLOAT is Roaring Riptide's initiative to help all teams, but especially rookie teams, be sustainable and thrive within the FIRST program.

*“From teaching teams how competitions work...to how to build a robot, FLOAT strives to increase team sustainability in Florida.”*

During the build season, we traveled 2+ hours to Team 6184's humble build site (a grandparent's garage). In just one day, we were able to help them go from a partially assembled kit bot to a teleoperated chassis. While working with 6184, we also gave them a crash course about the inner workings of FRC, as well as what to strive to accomplish during build season, what to do right before competitions, and what to expect during competitions. We also shared what we believed would be great ways to continue on their own path to success.

*Over the years, our team learned many lessons the hard way; if we could help make their first couple seasons a bit smoother than ours, we felt that it might make it easier for their team to be sustainable.*

At the Orlando Regional, we did everything we could to help 6184 have a successful first competition. That season our team designed our wheel hubs to look like life preservers to match our team image. When 6184 broke the 3D printed wheel hubs that they had made at the competition, our life preserver wheels helped keep their team afloat as we were able to lend them our spares, allowing them to continue to compete.

In addition to mentors, parts, and technical support, we also shared our spirit. Pictured below, Roaring Riptide team members cheered for 6184 at their first competition. Many rookie teams are small and thus lack a strong presence in the stands, so we lend our team's poster board numbers (with their team numbers painted on the back), our spirit, and cheers to encourage our FLOAT teams when they take the field.



After the success we had with *Team 6184: Leon Robotics* in 2016, we expanded our FLOAT program in 2017 to include 3 additional teams - 6468, 6609, and 6322.

## **Paying FLOAT Forward**

At the 2017 Orlando Regional, one of our newer FLOAT teams learned Friday afternoon that they did not have hotel rooms for that night, due to a miscommunication. Discouraged and unable to find accommodations on such short notice, they planned on heading home that night, thus forfeiting their Saturday matches. The *now veteran* Team 6184 heard about their situation and immediately volunteered to work with our team to find a way for them to stay the night. Having been the first team to go through the FLOAT

program, we were so proud of 6184 and how selflessly they helped another team in need. Thankfully, the efforts made by 6184 and Roaring Riptide were enough to allow the rookie team to compete on Saturday.

## Inspiration and Next Steps

Every season, Roaring Riptide is continually inspired by stories of other FRC teams helping each other.

Back in **2016**, our original goal of establishing FLOAT was to help rookie teams overcome the steep technical and administrative learning curve that is associated with FRC, so that they would have a successful first season in the FIRST program. By accomplishing this goal, we hoped it would make the transition go more smoothly in terms of becoming sustainable. As a team, we felt that we accomplished this goal along with so much more!

*FLOAT has become more than just a mentorship program for rookie teams. It has developed into a family of teams that are committed to working together on FIRST's Core Values, along with a focus on the vision and mission of FIRST to continue to inspire our students to become future leaders in STEM fields.*

By helping these teams at such an early stage in their development as well as supporting other teams in working toward sustainability, we've seen a glimpse into how other one team has paid it forward through their own *Coopertition* and *Gracious Professionalism*. It was during their own rookie year, that they experienced FLOAT and thus internalized that FIRST teams work together.

In 2018, Roaring Riptide was excited to learn about the *Florida Robotics Leadership Grant*. We believe that this grant will help provide even more opportunities for established teams to support the newest and most vulnerable members of the FRC family. We strongly believe that if all of the FIRST teams work in tandem toward this goal of helping others, as well as helping themselves, we can foster a stronger, more sustainable FRC program for the State of Florida. In the remaining pages of this document, you'll find some of our compiled "Tips for a Successful Season". If you have questions (and we're sure you will), reach out to us! [frcriptide4118@pky.ufl.edu](mailto:frcriptide4118@pky.ufl.edu)

# FRC 4118: Roaring Riptide's Tips for a Successful Season

## ***Before Build Season (when possible):***

- Establish a Lead Mentor #1 and Lead Mentor #2 for your team - The Lead Mentor #2 is a required part of FIRST, but doesn't have to be someone who is 100 percent involved with your team. This person serves as a secondary contact.
- Register your team on [firstinspires.org](http://firstinspires.org)
- Register to attend a local Kickoff (the 1st Saturday in January when the game challenge is revealed) \*Note: This is completed by one of the two team's lead mentors through the FIRST Inspire Dashboard.
- Locate dates on FIRST Inspires website for district/regional registrations, payment of regionals to FIRST, Awards opening/closing dates. Use a poster for these dates or locate them someplace that your team will be meeting. Assign at least 1 person on the team to help keep up with these dates and relay the upcoming dates to the lead mentor(s).
- Create a list of mentors to include their experience/background and any experience with the FIRST program
- Snap a couple of quick photos of your team together! These come in handy for grants.
- Create a team roster. Include as much background, detail as you can about team members - ex: name, grade levels, ages, gender, ethnicity (when possible for grants/funding purposes), personal email address (one the student can access to set up their FIRST Inspires account to join the team), parent/guardian's name(s), phone numbers, address.
- Begin composing a Team Handbook for both Student and Mentor Expectations - Check Google for some great examples from other FRC Teams.
- Establish a method of contact for sending out emails and then one way to contact your team much quicker than email (ex: Remind - [www.remind.com](http://www.remind.com) , Slack)
- Create a list of businesses located near your team that you could potentially contact for sponsorships. Be sure to include the name, phone number, address, and website. Delegate contacting these businesses to an adult, when possible.
- Draft a team sponsorship letter and a list of possible levels of sponsorship for your team which you'll use to give to potential sponsors. If you're unsure where to begin, you can Google "FRC sponsorship letters or FRC sponsorship tiers/levels" and you should have a good start.
- Be "Event Ready" so that you are able to select your "1st Preference" to attend your choice of regional event (if you're on the district model, this may look a little different for you. You'll know if you're event ready by checking your FIRSTInspires

Dashboard and the words “Event Ready” will appear under the subheading “Team Events”. Typically, event selection occurs in late October/early November.

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### ***During Build Season:***

- Don't be afraid to call or contact other FRC teams for help! If you contact one and they are not willing/able to help, contact another and another until you get the help you need!
- Check out the websites Chief Delphi and The Blue Alliance. They're both extremely helpful in different ways!
- Be aware of upcoming dates for grants and payments for event registrations.
- Decide if your team would like to wear matching team t-shirts with their team number or even uniforms. Will your team have a mascot as well? If so, bring them along! Order t-shirts and uniforms well in advance of your competition date. Some vendors are a bit slower to process than others.
- Purchase a First Aid Kit to have on hand and one for competitions.
- Decide if your team wants to bring any spirit items, such as pom poms or signs with their team name/number along with them to the competition.
- Generate a bill of materials (BOM) of all of the components on the robot as your team is building it, try not to wait until the last minute
- Run through the inspector checklist before arriving at your first competition to ensure that your robot will be able to pass inspection
- Make sure that you're aware of the deadlines to submit for the Dean's List, Woodie Flowers, and Chairman's awards (typically in February)
- Make hotel arrangements early as they will fill up quickly. Ask hotels for “blocks” of rooms so that you may potentially get a discount. Don't forget to let them know if you are tax exempt. Also, ask the hotel about including overnight parking, breakfast (what type of breakfast, times of serving), and a separate room for a team strategy meeting the night before the last day of competition. Be prepared to know how many rooms you'll need and have a list of students for each room, as the hotel will need this information for their guest list, upon arrival.
- Make food arrangements for competitions including breakfast, lunch, and dinner. Many times the restaurants around these locations will get inundated with orders and won't be able to help when called at the last minute. Tip: Google restaurants around the venue of your competition. Call the venues and ask to speak with the manager. Tell them who you are, what you're attending, when you'll be there, and

ask them if they'd like to work with you to set up meals for either delivery, carry-out, or even dine-in.

- Many years you get points in autonomous mode just for driving forward, don't pass up on these easy points and make sure to write a simple autonomous mode to accomplish this
  - Make sure you also have the option of doing nothing in autonomous mode in case one of your partners needs the field clear to do a complex maneuver
  - Register all of your team members on FIRST Inspires.
  - Make sure parents acknowledge the Youth Protection Agreement through verifying a link in the parent's email and acknowledging the agreement within their own FIRST Dashboard. This is how a student will be completely verified within your FIRST roster/team.
  - Make sure that everyone reads the rule book.
  - Make sure you have both red AND blue bumpers. There are ways to build only one set and make the fabric interchangeable. If you'd rather do this, Google it!
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### ***Before the Competition:***

- Print out your team roster from your FIRSTInspires Dashboard and BOM and bring them with you to the competition
- Print out the FIRST Consent and Release Forms. Have students and parents complete the form in its entirety. The volunteers at the registration booth, at the competition, will ask for these from your lead coach/mentor. They can also be completed digitally on TIMS.
- Get mentors registered in FIRST Inspires. Have them complete the Youth Protection Plan Agreement and Consent and Release, as needed by FIRST.
- Input your Donors/Sponsors into the FIRSTInspires Dashboard.
- Build or buy a cart to transport the robot at the competition
- Build a driver station to make it easier for the drive team to transport their laptop and controllers (make sure that it fits within the rules - refer to the rule book.
- Work on team buttons or other items to give away at the competition, not required, but it's a fun way to get your team's name out.
- Come up with a team cheer (or two) that fits within your team's spirit ideas/mascot.
- Pack tools that you used to assemble your robot, any spare parts that you may have on hand that you may need if something were to break on your robot. Bring battery chargers, extension cords, at least 2-3 power strips, and an

organizer/toolbox for your tools, if possible. You will also want to bring a multimeter to test your batteries.

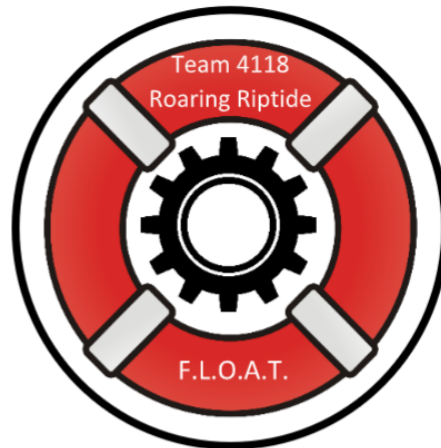
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### ***At the Competition:***

- Bring safety glasses for all team members at the event, need to be worn in the pits at all times. In addition, make sure ALL members, including coaches, have safety glasses for the load-in at the event. They are required at all times.
- You'll need to arrive at the venue before it opens if you want good seats in the stands. Bring parents, friends, and anyone else you can think of as supporters for your team!
- Wear comfortable closed-toed shoes.
- During the first day of the event you should try to:
  - a. Get your robot inspected
  - b. Reprogram your robot's radio
  - c. Play in as many practice matches as possible. Additionally, be sure to ask about or listen for an announcement to use the practice field. This is different from practice matches, but it's a great space to test your robot. You will most likely need to "sign-up" to use the practice field in advance.
- Don't be afraid to ask other teams to borrow parts or tools
- Make sure that you are always charging batteries.
- Try to have at least a couple students go to all of the different workshops that are available
- Ideally the team should have matching shirts for everyday of the competition, but it is most important to match on Friday and Saturday
- Unless you brought an excessive amount of buttons or items to give away, don't put them all out at once or you will run out of them quickly
- It is encouraged that all members of your team not on the drive team should be in the stands during your match to cheer for the team
- If you have a team flag/large prop, give it to the Master of Ceremonies (MC) for when they introduce your team on the field
- Tell the MC your team cheer
- There are a number of awards that are exclusively available to rookies
  - a. Rookie All Star Award (includes an invitation to the World Championship)
  - b. Rookie Inspiration Award
  - c. Highest Rookie Seed
- Make sure your bumpers are sturdy and that the fabric is tightly attached

- Make sure to check for any loose wires or mechanical hardware after each match
- FIRST is all about Gracious Professionalism, be respectful and nice to the volunteers, judges, spectators, and other teams
- Your team is always being watched. Anyone wearing a team shirt should be on their best behavior, even outside of the competition venue.
- Matches often run behind schedule
- Judges may ask any student in the pit questions. Make sure that they can effectively answer community/robot questions or pass the question to another student
- Your pit is important for your team image. If possible, add decorations and have your team name/number easily visible
- Keep your pit clean and organized so that you get good pit cleanliness ratings
- Don't lose the safety forms provided at the competition
- Make sure that your safety captain and drivers go to their respective meetings

*(FLOAT - Throwback Logo - est. 2016)*



*To learn more about our FLOAT program or to inquire about becoming a member, please contact a member of our team at: [frcriptide4118@pky.ufl.edu](mailto:frcriptide4118@pky.ufl.edu)*






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