



TEAM INFORMATION PACKET

Congratulations on your Invitation to the FLL US Open Championship! I would like to wish everyone Good Luck and Good Sportsmanship!

Please read the information below carefully!

Spectators and cheering sections are always welcome.

Kathy Levine
FLL US Open Director

Date: May 7, 2009
Location: National Museum of the United States Air Force, Team Event
Date: May 8 – 9, 2009
Location: Ervin J. Nutter Center & Student Union, Wright State University,
Dayton
3640 Colonel Glenn Highway
Dayton, OH 45435-0001
<http://www.nuttercenter.com/dir.asp>
National Museum of United States Air Force

Basic Schedule: Thursday, May 7

- 2:00 PM: Team Registration Begins (Ervin J. Nutter Center, Pit Administration)
- 2:00 PM: Pit open for team set-up (no passes needed at this time – families welcome)
- 2:00 PM – 4:00 PM: Coaches pick up boxed lunches for team and special event pass holders that are with their group in McLin Gym 4. May eat in McLin Gym 4 or at your team's pit table in the pit area.
- 3:00 PM: Coaches' meeting on competition side of the arena (Ervin J. Nutter Center)
- 4:00 PM: Red Group to be transferred to National Museum of the United States Air Force on provided buses from Lot 1.

- 4:30 PM: Blue Group to be transferred to National Museum of the United States Air Force on provided buses from Lot 1.
- 5:00 PM: Museum event begins
- 8:30 PM: Museum event ends.
- 8:30 PM: Red Group to be transferred to Ervin J. Nutter Center parking Lot
- 9:00 PM: Blue Group to be transferred to Ervin J. Nutter Center parking Lot 1

Basic Schedule: Friday, May 8 (ONLY PRACTICE ROUNDS ARE OPEN TO THE PUBLIC; JUDGING IS CLOSED TO THE PUBLIC).

- 8:00 a.m. Pits Open
- 9:00 a.m. Judging Begins (Student Union & Ervin J. Nutter Center)
- 9:00 a.m. Practice Rounds Begin
- 9:00 a.m. FIRST Robot Demonstrations Begin, McLin Gyms 1 & 2
- 4:15 p.m. Judging Concludes
- 4:30 p.m. Pits Close
- 5:00 p.m. Opening Ceremony
- 6:30 p.m. Team Dinner Begins (WSU Student Union)
- 6:30 p.m. Engineering Extravaganza Begins (WSU Student Union)
- 9:00 p.m. End of Event for the day

Basic Schedule: Saturday, May 9 (OPEN TO THE PUBLIC – FREE TO SPECTATORS)

- 8:00 a.m. Pits Open
- 9:00 a.m. Official Robot Rounds Begin
- 11:45 a.m. End Round 2; Lunch Break
- 12:45 p.m. Round 3 Begins
- 2:00 p.m. End Official Rounds
- 2:15 p.m. Elimination Round
- 2:50 p.m. End Elimination Round
- 3:15 p.m. Begin Alliance Round
- 4:05 p.m. End Alliance Round
- 4:00 p.m. Pizza Party Celebration
- 6:00 p.m. Closing Ceremony
- 7:00 p.m. End of Event

Parking Instructions: Parking at the Nutter Center is free. Spectators should park in parking Lots 1 & 2 and enter through Gates 2, 3 or 4 on the Southwest side of the building.

Team Parking and Entrance Instructions (Nutter Center maps can be found in the “Venue Info” Section of the US Open website): Team entrance to the Nutter Center will be the same throughout the entire event. For teams walking to the venue, we recommend that you enter through “**Gate 10/McLin Gym, Private Entrance,**” which is the gate on the lowest level under the **Administrative and Berry Room Entrances.**

There is no problem if you park your team buses or vans in the Nutter Center parking lot during your time at the event on all three days. You can feel free to park in Lots 1, 2 or in Lot 9 around the back of the building, which may be your most convenient entry point if you have transportation.

If your team has accessibility issues, you can enter through the Berry Room Entrance. Take the elevator down to the lowest level (Level 1) for team registration. Refer to Nutter Center map.

The judging entrance will be through the **2nd floor room entrance** (below the **Berry Room Entrance**) if you enter from the outside. Again, reference the Nutter Center maps.

NUTTER CENTER PARKING – for teams that are driving (All venue maps can be found in the “Venue Info” section of the US Open website): You can either park in Lot 1 and come in through the **Gate 10** Entrance (see above), or you can drive around the Nutter Center and park in **Lot 9** and enter through the **Gate 9** entrance (no steps at this entrance).

STUDENT UNION PARKING: Parking at the Student Union is also free, but it is not as convenient and open as the Nutter Center parking. Park in the Visitor Parking Lot at the Student Union. If the lot is full, the attendant will give you a pass and direct you to another available lot so that you will still be able to park at no charge.

Bus accommodations at the Student Union are more problematic. You can drop off in front of the Student Union, but we ask that you park the buses at the Nutter Center. Contact Kathy Levine if you have questions about bus parking.

UNIVERSITY SHUTTLE SERVICE: On Thursday and Friday, you are more than welcome to use the university shuttle service. You can find that information at the Wright State University website at <http://www.wright.edu/admin/parking/shuttle.html>. You want to look at the times when the shuttle will leave the SU (Student Union – see Route 2); and the times when the shuttle will depart from McLin Gym (this is the Nutter Center). You can access a map of WSU at <http://www.wright.edu/aboutwsu/maps/>.

Buses begin running from the Student Union as early as 7:16 AM on Thursday and Friday, so if you are at a hotel that is closer to the Student Union, you might want to ride the bus over to the Nutter Center. It will reduce your walking distance by approximately a mile. The bus runs until 11:00 PM on **THURSDAY** night, so you can ride the bus from the Nutter Center to the Student Union, if that would be more convenient to walk from there to your hotel after the museum event. The shuttle only runs until **7:05 PM** on **Friday**.

NO SHUTTLE BUSES WILL BE AVAILABLE ON SATURDAY!

Teams that are Walking: (Walking map can be found in the “Venue Info” section of the US Open website): If you are walking to the venues from the area hotels, please be aware that the Colonel Glenn Highway that runs along the Wright State

University is a very busy highway. There are really only three places along this stretch where teams may cross: University Blvd (to cross directly over to the Student Union area); Center Park Blvd. (Cross here to catch the walkway over to the Nutter Center); North Fairfield Rd. (Cross over directly to the Nutter Center – this is the most dangerous of the three crossings). Allow your team plenty of time so that you do not have to rush those crossings to get to the event on time.

Rules

The list of rules and procedures for the competition is provided for you in **Attachment 1**. Please go over them with your team and make sure they understand the procedures to follow while competing.

Lunch

Coolers will not be permitted at this event. No outside food is permitted. Eating is permitted in the Pit Area, where a concession stand will be open for your convenience, and in spectator seating. Other concession stands will be open on the 4th floor concourse level. Teams may purchase breakfast or lunch a la carte at the concessions, which will be open on Friday and Saturday during the event.

If you are being judged at the WSU Student Union, you may choose to eat lunch at the food court in that building. Lunch time on Friday is very flexible. Eat as your schedule allows.

There will be an hour lunch break on Saturday. For either day, you are free to leave the facility to eat lunch at one of the many restaurants along Colonel Glenn Highway.

Team Registration: Thursday, May 7; 2:00 p.m. – 4:00 p.m.; Ervin J. Nutter Center; Pit Administration

Teams may begin registering at 2:00 p.m. on Thursday at the Pit Administration Desk. One coach should handle check-in.

Coaches Should Bring the Following to Team Registration (Forms Available for Download from the “Team Info” section of the US Open website):

- A **signed FLL Consent Form** for each team member, coach and mentor that will be participating with the team. A parent/guardian signature is required for all team members and any mentors who are minors.
- A signed **WSU Release Form** for each event participant.
- **Team Introduction Sheets** (if they were not e-mailed early)
- **Any Award Nomination Forms** (if they were not e-mailed early)
 - WPAFB Founder’s Award
 - Dr. Martin Luther King “Dream” Award
 - Adult Coach/Mentor Award
 - Young Adult Mentor Award

No team member will be able to participate in any part of the competition without signed FLL Consent and WSU Release Forms on file! The photo release allows us to use team and competition pictures to promote the FLL program and our WPAFB Educational Outreach programs. Please be aware that your child will be photographed at this event. (No child's name will ever be associated with any picture).

At Team Registration, Coaches Will Receive:

- A **Team Packet** that will include all of the information that your team will need throughout the tournament, including event schedules, program books, ceremony instructions, emergency procedures, etc.
- **Team Pit Passes** (one for each team member and two coaches): These Pit Passes are lanyards and they must be worn by team members and coaches in order to get access and remain in “Team Only” areas. “Team Only” areas are: Competition Floor; Pit Area; Judging Areas. **Badges must be worn at all times!** The coach badge lanyards are a different color than the team passes. Any adult caught with a team lanyard will be asked to leave the event. The coach passes may be shared by more than the two adult coaches, but no more than two adults may be with the team at any given time. Please decide beforehand what adults will be with the team throughout the event. For instance, one mentor may have worked very hard with the team on their judging presentations and would like to be with the team during the judging. Another coach may want to be with the team during the competition portion. This way the adults who worked with the team (if there were more than two) can still share the experience with the kids.
- **Special Event Wrist Bands:** The coach will receive wrist bands for every team member, two coaches, and for the special event tickets that were purchased under your team number. These **wrist bands** will be the **same color** for all associated with your team (either blue or red), and they must be worn throughout the entire event. **These wrist bands are non-transferable.** They will allow your team and your special guests access to the special team only events and meals. ***During the museum event and the team dinners, you will be organized by your wrist band color. This is very important!*** The coach should distribute these wrist bands immediately to the team members, coaches and special guests. ***DO NOT LOSE THESE!*** We will charge a \$70 replacement fee for any lost wrist band.
- **Team Gifts:** your team will receive a championship T-shirt for every team member and two coaches, as well as a few other gifts to help you to remember this very special tournament. You are not required to wear the commemorative shirts during the tournament, although you certainly may if you so choose.
- **Deluxe Boxed Lunches** (To be picked up by the coach in McLin Gym 4 after team registration): Sometime between 2:00 p.m. and 4:00 p.m., your

team and the special guests are invited to enjoy complimentary boxed lunches. The lunches will be packaged by coach name and must be picked up by the coach. Each lunch comes with the individual's choice of soft drink or water, which your team members may select on site. There will be seating in McLin Gym 4 for those who would like to stay in this area, or you may take your lunch into the pit to eat at your team table. **ALL LUNCHES AND DRINKS MUST BE CONSUMED BEFORE YOU BOARD THE BUSES TO GO TO THE MUSEUM.** Teams will receive order forms for the lunches after team registration closes on March 31. You will be able to order from the following: Italian Sub, Turkey Sub or Vegetarian Wrap. For those who don't order for their team by the deadline on the order form, we will give your team all turkey sub boxed lunches.

Team members and family members are welcome to come into the pit area at this time to set up your pit area and table.

Transportation of Judging Materials to the WSU Student Union:

If your team will be judged at the Student Union, we will transport your judging displays, signs, etc. for you (if you would like). We will have a judging drop-off area at Pit Administration when you register. You may drop off your judging materials at that time. We will transport those materials for you to the Student Union that you can pick up when you check in for judging on Friday. **NO COMPUTERS, LAPTOPS OR ROBOTS WILL BE TRANSFERRED FOR YOU.** We cannot guarantee the safety of expensive or fragile equipment. Make sure you include your team name and your FLL number on all of your materials.

National Museum of the United States Air Force Event:

This special evening at the National Museum of the United States Air Force is a team only, after-hours, closed event.

In order to participate in this event, participants must:

- **Be wearing an event wrist band**
- **Ride the provided transportation to and from the museum**

All food and drink must be consumed before you board the buses. For more complete information regarding this May 7, evening event, please visit the "Event Details" portion of the US Open website.

Do not bring expensive equipment to team registration unless you would like to carry it around with you at the museum all evening. Although the pit area will close when teams leave the venue, we cannot guarantee the safety of your personal effects.

Spectators

The competition is open and FREE to Spectators, who are welcome and encouraged to attend. They are welcome to watch the practice rounds in the Ervin J. Nutter Center on Friday, the official competition rounds, elimination round and alliance round on Saturday, and the Opening Ceremony on Friday at 5:00 PM and the Closing Ceremony on Saturday at 6:00 PM. Judging, however, is closed to the public.

Family members will not be permitted in the Pit area, on the competition floor, or in the judging rooms. Family members may look into the pit, which is in the main arena, but they will not be permitted access to it. Family members can leave messages with the Pit Administration; otherwise, plan times to meet (as the team schedule permits or during breaks in the competition action).

A **Parents Information** document is also posted on the “Team Info” section of the US Open website. Feel free to direct your parents to this information.

Gracious Professional Pins

Gracious Professionalism is part of the ethos of *FIRST*. The idea and phrase are found throughout *FIRST*, but no one has been a stronger champion than *FIRST* National Advisor, Woodie Flowers. Gracious Professionalism is a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. With Gracious Professionalism, fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process.

At this event, volunteers will recognize random gracious acts by team members with Gracious Professional Pins. Does this mean that team members will receive a pin every time they do something nice or thoughtful? Not necessarily. If, however, a volunteer happens to witness impressive gracious behavior, has pins to distribute and has determined that the recipient does not already have a pin, that volunteer may offer a pin to one or more team members.

You have two and half days to show volunteers what gracious professionals you all are! If you receive a pin, please wear it proudly!

SWAPS

A common tradition for teams at many tournaments throughout the United States is to “swap” team items or trinkets, or for teams to give away treats, stickers, etc. to other teams. We do not have a formal “swap” program here, but your team is free to bring small items that tell other teams about yourselves or your state. It helps to get teams to interact with each other, and swaps are just fun! If your giveaways cost more than a dollar or two, we ask that you not share these items with the judges. Although a small, rather inexpensive gift is not something that can bribe the judges, we want to avoid any appearance of impropriety.

Small bags of candy that you would like to share with other teams will not fall into the “No Outside Food” restriction, as long as you are reasonable about what you plan to share.

Pit Area Necessities

You will have a table (3 foot by 6 foot) and an electrical outlet in the pit area to use as a base of operations. Generally speaking, you can expect a 10 foot by 10 foot footprint in the pit, along with 8 chairs available per team (feel free to redistribute those chairs as needed among the teams that will be sharing your pit “pod.” You must bring your own

computer. We do not provide surge protectors, but you are free to bring one to use in the pit. There will be technical-savvy people on-hand to assist you.

There will be ten pit areas, that we fondly call “Pit Pods.” Each area is named for a famous inventor/scientist/engineer and includes 6 teams and one practice table. These six teams will share this practice table and are free to work out their own system for reserving time on the table. More information about your pit pod assignment, including the coach contact information for those who will be sharing the pod with you, will be e-mailed to the coaches during the first week in April.

There will be a concessions stand open right in your pit area for your convenience, and I will forward that menu to you once I receive it. Restrooms are also conveniently located just outside the pit area.

We will be projecting the robot scores into the pit area, and we will also project announcements as needed. If you have any problems or concerns in the pit, we would ask that you go to the Pit Administration area. You will find program books, tournament schedules, call-back schedules, first-aid kit (for the small stuff – like band aids, etc.). The Pit Administrator will have a public address system and can make announcements as needed.

It is advisable to bring a box in which to carry your robot onto the competition floor. Many times robots will fall apart as they are being carried to the playing field. If you drop your robot on the way to the playing field, your round will not be rescheduled. No large carts will be permitted into the competition area. We will be queuing up four teams every 5 minutes, so carts are not possible in these tighter spaces. Please use a couple of boxes to carry your competition materials.

We will provide a bin on the floor by the competition table that you may use for your spare parts, or you can use the boxes you bring with you to help you to organize at the competition table.

If you are using the RCX robot, you must use a box to block your IR signals when you download programs to your robot. IR signals can and do bounce all over and we want to make sure that your program does not end up in someone else’s robot!

You may bring a banner or some other means of identification for your team to hang up in front of your pit table. Other displays are fine, too, but do not remove the team placard that is taped to your table. We want the judges and team escorts to be able to find your team easily – the placards help them to find you.

No personal team competition mats and fields are permitted. Please use the practice table in your pit pod for robot practice.

There will be Pit Area guards to make sure that only team members with competition badges are allowed to enter. They are not, however, responsible for lost or stolen items. Never leave expensive equipment unattended!

Coaches: Please be advised that only team members may handle, repair, etc. the robot and its manipulators. No coach/mentor may do any programming. If your team has technical difficulties where adult intervention may be necessary, please inform Pit Administration. They will page a technically savvy person that can either help trouble shoot a technical problem or be that third party witness that adults on the team are not “cheating.” Teams whose coaches do work on the robot or its programs risk disqualification.

Alliance Team Rounds:

Your team will work with two other teams on a team alliance challenge. You can find the **rules for the team alliance in the “Team Info” section of the US Open website.**

Your alliance will be assigned to the same pit pod. During the Friday practice rounds, you will share your pit pod with only these other two teams. You will have a full half-day to work together on your alliance round. You may only be in the pit area for half the day on Friday, during the practice rounds.

If you are assigned to complete your practice rounds in the **morning**, your schedule will look like this:

8:00 a.m.: Pits Open for Morning Practice Round Teams ONLY
9:00 a.m.: Practice Rounds Begin
10:50 a.m.: Practice Rounds End
10:50 a.m.: Work on Team Alliance
11:30 a.m.: Lunch

(The only time there may be overlap between the morning and afternoon groups is during the lunch hour from 11:30 a.m. to 12:30 p.m. The morning group may leave at any time after their last practice round but may choose to stay as late as 12:30 p.m. to work on the alliance challenge. The morning group must leave the pit area by 12:30 p.m. at the latest).

If you are assigned to complete your practice rounds in the **afternoon**, your schedule will look like this:

(You may report to the pit as early as 11:30 a.m.)

12:30 p.m.: Pits officially open for the afternoon assigned teams ONLY
1:30 p.m.: Practice Rounds Begin
3:20 p.m.: Practice Rounds End
3:20 p.m.: Work on Team Alliance
4:30 p.m.: Pits Close for the day

Again, you do not have to remain in the pit area until 4:30 p.m. You may leave any time after your last practice round; however, you may want to stay until 4:30 p.m. so that you can work on your team alliance challenge. Any morning practice round groups who would like to work on their alliance for the last half hour of the day, may come back to the pit at 4:00 p.m.

Your alliance team may also work together at any time during your practice rounds, when your three teams are available to work on this challenge.

Cameras

Cameras will be permitted. Thorough testing has proven that flash photography does not disrupt the programs in the robot.

Judging Sessions

The judging will be held in a 90 minute block. A team escort will be assigned to your team. You will spend fifteen (15) minutes with each set of judges, and you will have fifteen (15) minutes before you begin your next judging session, which should give you plenty of time to change clothes, use the restroom, regroup, etc. before you go into your next judging session. Your team escort will be your guide. Please listen to his or her direction.

Please make sure you arrive to your judging area at least 15 minutes before your first judging time. Example: If you are scheduled to begin your judging sessions at 9:00 AM, you should report to the judging check-in station (2nd Floor check-in at the Ervin J. Nutter Center OR the Apollo Room at the WSU Student Union) no later than 8:45 AM. This gives you time to discuss your team's special requests or needs with your team escort and allows for you to hook up your computer, if you will be using one, before your judging session begins.

Each judging room will have no fewer than 2 judges and no more than 3 (most will have 2).

Judging sessions are closed to spectators. Up to two coaches/mentors may accompany the team into the judging room, and they are free to videotape the judging session; however, no coach or team member may go behind the judges – the judging table and the computer contain confidential information about not only your team, but other teams as well. **Coaches should not, in any way, influence the session.** This is a time for the kids and the judges to interact.

Please remember that the judges want to know how much the children know, so be polite observers of the judging process.

All cell phones (for team members and coaches) must be off during the judging sessions.

Project Judging:

This is your first stop. The project judging rooms will be equipped with a projector and a screen. If you have a laptop that you would like to connect to the projector to use for your presentation, let your team escort know. Up to two team members and one coach may enter the project presentation judging room five (5) minutes before your team's judging session begins in order to hook up your equipment. Please be courteous of the judges – do not speak to them and keep your voices low, as they are working to finish their paperwork. Please leave the room as soon as your set-up is complete. No other early set-up is permitted.

The room will also have one table and several chairs (approximately 4) that your team may utilize for your presentation. Room set-up must be done at the start of your presentation time.

Your presentation must be five (5) minutes in length. Although our judges have been instructed not to cut your team off in mid-sentence, they will let you know when you have exceeded your time limit. Your team may receive a time penalty for presentations that are a minute under or a minute over your target time of five (5) minutes. The judges will use the remainder of the fifteen (15) minute judging session to ask your team questions about your research.

For Project Judging you will need:

- Presentation materials
- Props (optional)
- Computer (optional)
- Costumes (optional)
- Judge handouts (optional)

Robot Design Judging:

From the project judging room, you will move to Robot Design Judging. You will have fifteen (15) minutes before this next session begins, so you should have plenty of time to get out of your project costumes, if you want to do so. Restrooms (in the Student Union) or locker rooms (in the Ervin J. Nutter Center) are easily accessible to the project judging rooms.

A competition table with a Climate Connections mat and field set will be available for you to use as you discuss your design, programming and robot game strategies. Your team will not be required to run your robot, although a judge may ask you to demonstrate a mission or two.

For the Robot Design Judging, you will need:

- Your robot
- Your attachments/manipulators
- Illustrations of your programming (flowcharts; printouts; computer displays; etc.)
- Judge handouts (optional)

Teamwork Judging:

From Robot Design Judging, you will go to Teamwork Judging after a fifteen (15) minute break.

The first half of your fifteen (15) minute judging time will be spent completing a teamwork activity. The judges want to see how well you communicate, problem-solve and manage your time as you work to complete the activity in the seven (7) minutes allowed for the activity.

The judges will spend the remainder of the fifteen (15) minute judging session asking your team questions about your teamwork over the course of the season. They want to understand your leadership style; how you divided your tasks; how you solved conflicts; how you solved problems; etc.

For Teamwork Judging you will need:

- o Your team!

Judging Rubrics (Posted on the US Open Championship, “Team Info” section):

We will be using the FLL approved judging process and standards at this event. The judging software that we will be using is based on the rubrics for each of the three judged areas and can be found on pages 90 – 95 of your FIRST LEGO League Coaches’ Handbook, Fourth Edition. Your team will receive judging evaluations for each of the three judged areas in your exit packets.

If you have any questions regarding judging procedures, contact the Judge Advisor, Skip Gridley at sgridley@usfirst.org.

Dress

Dress for all teams is casual. This is a sporting event. Team members will be very busy and have to do a lot of running around. We want everyone to have fun and be comfortable.

Competition Day Checklist

- ❑ Fresh batteries/spare batteries
- ❑ Computer/ USB Cable (for NXT downloads)
- ❑ Box for your robot
- ❑ Box for downloading programs (RCX)
- ❑ **Team Introduction Sheets (4 copies) – download from US Open Championship website; e-mail prior to the championship is preferred.**
- ❑ **Hold-Harmless/Photo release forms (for each team member, mentor and coach for both Wright State and FLL) – download from US Open Championship website**
- ❑ Presentation materials
- ❑ Graphics demonstrating programming strategy for Robot Design Presentation

Coaches’ Meeting

There will be a Coaches’ Meeting at 3:00 p.m. on Thursday, May 7, which will be held during team registration. This meeting will be in the Nutter Center spectator seating and is not exclusive to coaches. Team members may also attend this meeting, if they would like. At this time, coaches will have the opportunity to ask the Lead Referee, Richard Storricks and the Judge Advisor, Skip Gridley, questions about the robot game and the judging during this 45 minute meeting. Other information regarding the 2 and a half day event will be discussed during your 45 minute orientation at the museum later in the evening.

Team Size

Remember, the maximum number of children on your team is 10! All members should be between the ages of 9 and 14 (must have been no older than 14 years old as of January 1, 2008). Each team should try to have at least three team members present at the competition.

Awards

(A complete description of all of the Awards can be found at the “Event Details” webpage of the US Open Championship website). The following awards will be given at the FLL United States Open Championship:

- **Champion’s Award:** 1st Place; 2nd Place; 3rd Place
- **Robot Performance Award:** 1st Place; 2nd Place; 3rd Place
- **Teamwork Award:** 1st Place; 2nd Place; 3rd Place
- **Creative Presentation Award (Project Category):** 1st Place; 2nd Place; 3rd Place
- **Innovative Solution Award (Project Category):** 1st Place; 2nd Place; 3rd Place
- **Research Quality Award (Project Category):** 1st Place; 2nd Place; 3rd Place
- **Quality Design Award:** 1st Place; 2nd Place; 3rd Place
- **Innovative Design Award:** 1st Place; 2nd Place; 3rd Place
- **Programming Award:** 1st Place; 2nd Place; 3rd Place
- **Alliance Award**
- **Robot Elimination Award**
- **Judges’ Award**
- **Team Spirit Award**
- **Rising Star Award**
- **Dr. Martin Luther King “Dream” Award:** This is awarded to the team that best exemplifies Dr. Martin Luther King's vision of a future where people are judged on the content of their character regardless of race, gender, religion, background or other considerations. The award recognizes a team's effort to be inclusive and incorporate diversity into their team.
- **Founder’s Award:** The award is given to the team that best honors the mission of WPAFB Educational Outreach, and through community outreach and inspirational spirit best encourages others to explore math, science and engineering.
- **Adult Coach/Mentor Award**
- **Young Adult Mentor Award**
- **Outstanding Volunteer Award**

Battelle Award for Innovation in Science

\$6,000 will go to the team that wins the 1st Place Champion’s Award.

The Battelle Memorial Institute, the world’s largest non-profit applied science and technology company, is proud to announce that it has established a monetary STEM (Science, Technology, Engineering and Mathematics) grant that will go to the members of the *FIRST* Lego League winning national team. This \$6000 grant will be divided equally among the winning team members. Battelle simply asks that the winners use it to further their personal growth in the area of science, technology, engineering and

math. In addition, Battelle asks that they hear from each winning team member at least once a year regarding your personal progress. Further, each winning team member will be provided a STEM mentor from the more than 20,000 staff members at Battelle. This mentor can be used as a personal resource for helping these winners in assessing career opportunities, finding summer employment, and furthering their personal desires to enter the STEM workforce.

Event Details

See the website for those details for each day.

FLL United States Open Championship T-Shirts

Every team member and coach will receive a complimentary championship T-shirt; however, we do understand that other family members may want a shirt as well. Additional FLL United States Open Championship shirts are \$15.00 each and available by preorder only. Please submit one order per team. Payment is due at the time you pick up your shirt order, which will be during team registration on Thursday. If you pay by check, make the check payable to the **Ohio Educational Outreach Foundation**. Cash works, too, but please bring exact change.

Cancellation Policy

The FLL United States Open Championship will only be cancelled or delayed due to causes and conditions beyond our control, including, but not limited to Acts of God, Government restrictions, wars, insurrections and/or any other cause beyond our control.

For questions about anything in this packet, please contact:

Kathy Levine

(937) 255-5259

Kathleen.levine@wpafb.af.mil

Competition Rules and Procedures

Please go over these rules and procedures with your team and make sure they understand them. It is *highly* suggested that your team practice entering and exiting the competition floor and setting up the robot in the time allowed! It is also suggested that team members know what job they are responsible for when on the competition floor.

MATERIALS: At the competition table, the robot, its attachments, and all strategic objects must be made entirely of LEGO® elements in original factory condition (except LEGO® string and tubing may be cut to length). At the competition table, the total package of robot, attachments, and strategic objects when viewed all at once must conform to the following quantity limits on electrical parts, no matter what the team intends to use at any one time:

RCX:

- (1) RCX controller
- (2) Touch Sensors
- (2) Light Sensors
- (1) Lamp
- (3) Motors
- (3) Rotation Sensors
- (1) 3rd Touch Sensor OR 3rd Light Sensor
- (6) AA Batteries

NXT:

- (1) NXT controller
- (2) Touch Sensors
- (2) Light Sensors
- (1) Lamp
- (3) Motors
- (3) Rotation Sensors (3 minus the number of NXT motors present)
- (1) Ultrasonic Sensor
- (6) AA Batteries OR
- (1) Rechargeable Battery

LEGO® wires and converter cables are allowed as needed. Spare/alternate electrical parts are allowed in the pit area. Objects functioning as remote controls are not allowed anywhere. There are no restrictions on the quantity or source of non-electric LEGO® pieces. Stickers, paint, tape, glue, oil, etc. are not allowed, except marker may be used for owner identification in hidden areas only. To participate in a match, a team must follow this rule.

Staging:

- Teams will be called to competition play based upon the times in the tournament schedule.
- Each team will have a large table with electricity in the pit area to plug in computers and work on their robot. There will be space for any displays that they bring.
- Tables in the pit area will have a placard with the team number and name. The placard identifies the team and helps the judges find and recognize them.

- Teams must be in the bullpen at least 10 minutes before their scheduled round begins. Team escorts will take your team to the competition area. Please advise the Pit Administration desk if a team escort does not come within 10 minutes of your competition time.
- Note that traffic is one way from the pit area to the bullpen and the bullpen to the pit area. Make sure your team obeys the one way rules.
- **Only TWO team members are allowed to be directly on the playing field while the robot is running. Other team members must stand behind the line to cheer the team. Substitutions can be made at any time, but at no time can there be more than two robot handlers on the playing field.**
- ▪ **After the match is over, teams will go over the score sheet with the referee so that both parties agree with the scoring. They will then exit the competition floor and wait off to the side to see their scores.**
- After the scores are displayed, the scorekeeper will keep the score sheet. The score sheets will be returned to your team at the conclusion of the competition.

Tournament Play

- There will be two Practice Rounds, which will not count toward tournament placement. Teams will play three official rounds to determine the placing in the final scores. Your score will be the **BEST** of the three official rounds. Ties will be broken by comparing the next best round scores.
- The referee will have each team's score sheet when they enter the competition floor. Your team will have a score sheet for each round of play.
- Each team will have a total of 5 minutes to spend on the competition floor. Within that 5 minutes, you must complete a 2.5 minute round. The extra time is used for set-up and positioning the robot. The round will begin on a signal from the referee.
- Your team must exit the competition floor *promptly* at the end of the 5 minutes. The playing field is scored at the end of the round by the referees. All referee decisions are final.
- **Remote control use to change robot programs is not permitted. In fact, remote controls are not allowed anywhere! If you are using the NXT robot, Bluetooth may not be used. Your team could be disqualified if you are found with a remote control anywhere or if your Bluetooth is enabled in the competition area!**
- Teams may ask referees to remove any object on the playing field that was not there when the round began unless doing so will effect scoring.

In addition to the above rules, all rules set forth by the *FIRST* LEGO League for the Climate Connections Challenge season will be enacted!