

# Virginia/DC FLL

Tournament Leaders Meeting

September 24, 2011



# Agenda

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- **Overview**
  - Tournaments
  - Theme
- **Tournament Director Info**
  - Pre-Tournament
  - Tournament Details
  - Post-Tournament
- **Judges**
  - Overview
- **Referees (overview)**
  - Overview
  - Missions



# Tournament Directors



- **Northern (10)**

- **Eagle Ridge (11/5) – Mark Vanderlyn**
- **Metz (11/5) – Janet Graham**
- Chantilly (11/12) – Anne Meyer
- **Reston 1 (11/12) – Steve Scherr**
- **Reston 2 (11/13) – Steve Scherr**
- Haymarket 1 (11/19) – Gail Drake
- Haymarket 2 (11/19) – Gail Drake
- Stafford (11/19) – Dave Shotwell
- **George Mason 1 (11/19) – Nirup Menon**
- **George Mason 2 (11/20) – Wendi Manuel-Scott**

- **DC (1)**

- Smithsonian (11/12) – Nick Swayne

- **Capital (3)**

- **Bird (11/5) – Nancy Hoover**
- Maggie Walker (11/19) – Mark Allen, Cliona Robb
- Deep Run (11/19) – Sally Sylvester

- **Central (3)**

- Harrisonburg (11/5) – Ralph Grove
- Lynchburg (11/12) - Barbara Bragg
- **Martinsville (11/19) – Anne Stultz**

- **Southwest (2)**

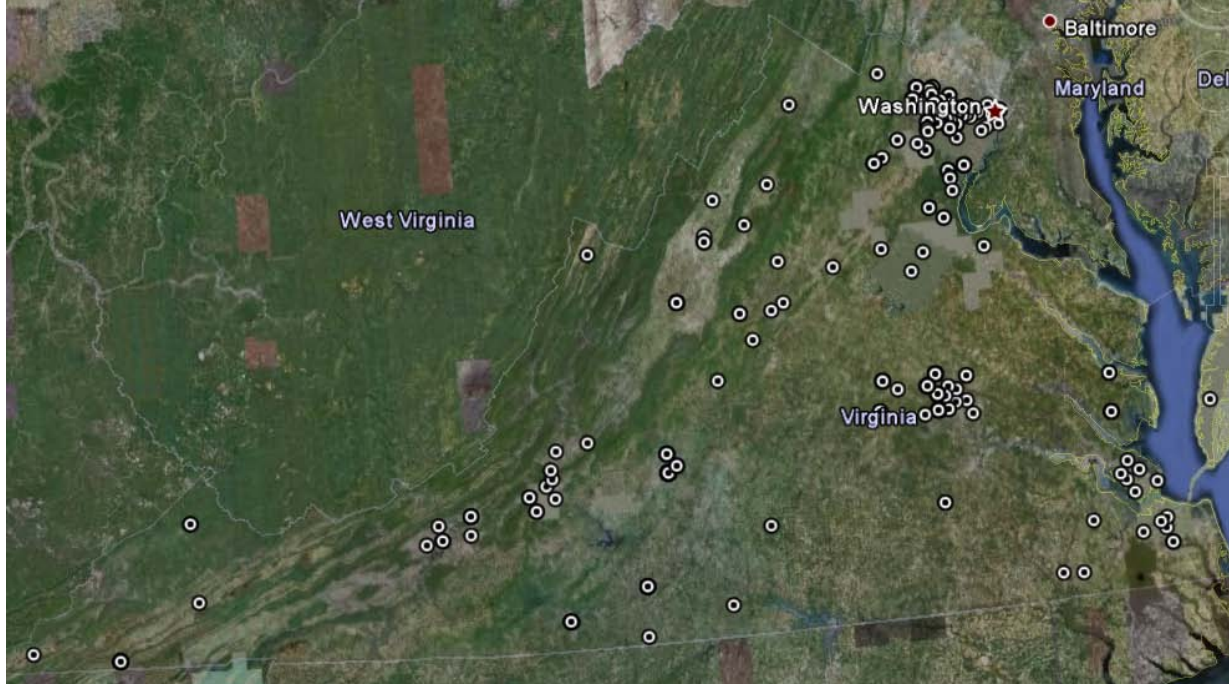
- Christiansburg (11/5) – Bill/Susan Duggins
- Abingdon (11/12) – Jeff Webb, Deborah Hensley

- **Southeast (2)**

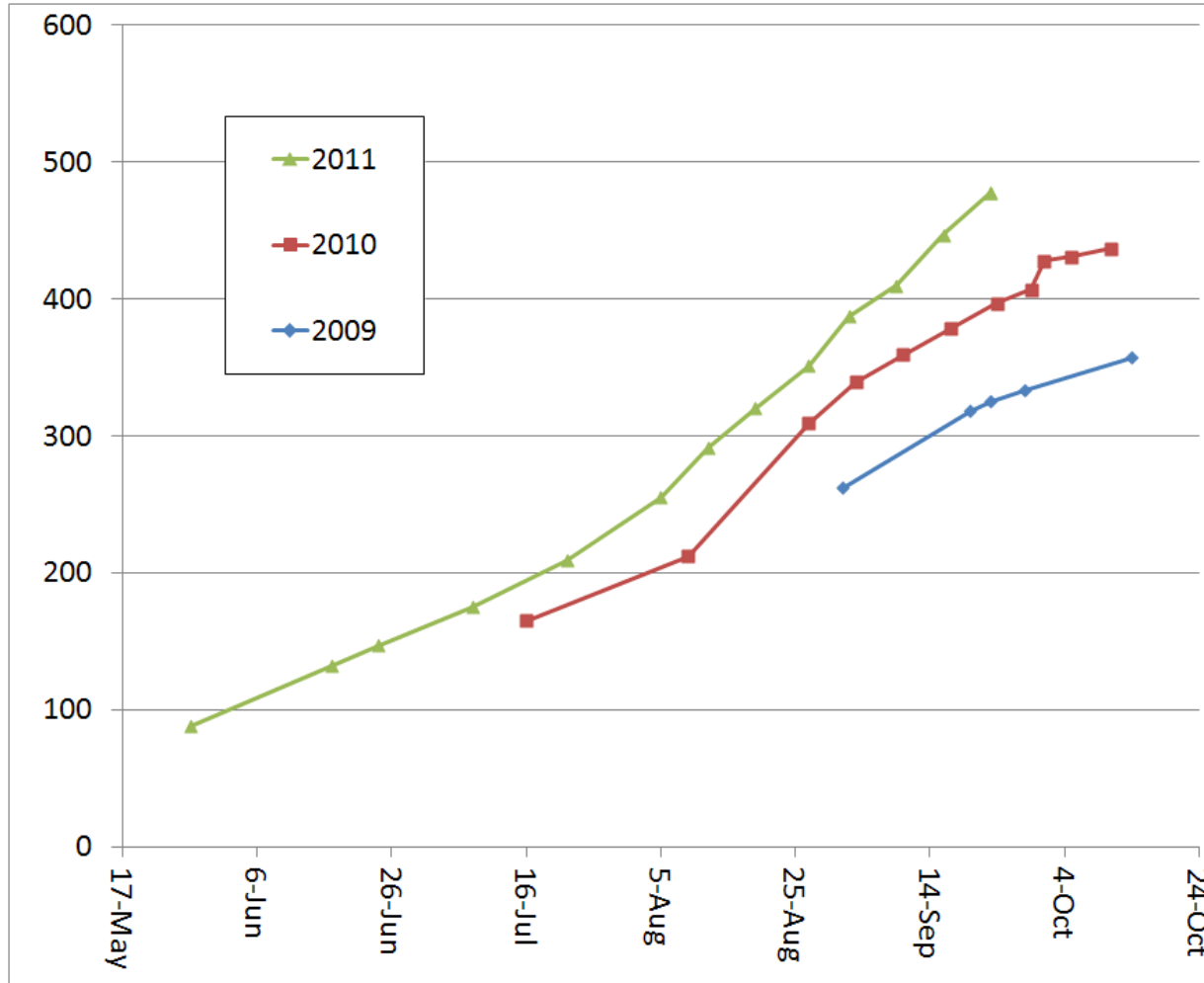
- Newport News (11/5) – Karen Berger
- Norfolk (11/12) – Karen Berger

# VA/DC FLL Current Status

- **508 Teams in Virginia/DC as of 9/30/11** (compared to 428 on 10/1/10)
- 21 Regional Tournaments up from 17 in 2010
  - Returning events at Abingdon, Christiansburg, Chantilly, Harrisonburg, Lynchburg, Maggie Walker, Deep Run, Newport News, Norfolk, Reston (x2), Smithsonian, Stafford, Haymarket (x2)
  - New events at Bird, Martinsville, George Mason (x2), Eagle Ridge, Metz
  - Discontinued events at Science Museum, Rocky Run, Thomas Jefferson



# VA/DC FLL Growth





# General Announcements



- 
- Please note that all judge and referee materials are for tournament organizer eyes only unless otherwise specified. **Do not release these to teams.**
  - Teams can receive the “scored” judging forms (there are no actual scores on it now)
    - Comments should be added to the form and how the team performed in each area should be marked
    - Note that this is a change in previous FIRST policy
  - All forms, score sheets, training materials, etc. will be emailed to the head referees/judges for the tournaments as well as tournament directors
    - They will also be available on an ftp site



# Not new this year, but still great...

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- Tables still do not require lights!!!
  - If your site offers poor lighting, please continue to use
  - Otherwise, they are not needed for judging, pit or competition areas
- VA/DC FLL has 3 Tournament on Wheels (TOW) for use at events.
  - Trailers come with 10 tables, required kits, t-shirts, supplies, etc. to run event
  - Do not come with sound system, computer, printed, paperwork or volunteers
  - Last year these were used at:
    - Smithsonian, Reston, Thomas Jefferson, Science Museum, Deep Run, Haymarket, Championship
  - This year, tournaments indicating an interest are:
    - Bird (Capital, 11/5), Deep Run (Capital, 11/19)
    - Smithsonian (DC, 11/12), Haymarket (11/19)
    - Eagle Ridge (Northern, 11/5), Reston (11/12, 11/13), Haymarket (Northern, 11/19)
    - Martinsville (11/19) – will send supplies separately
  - All other tournaments indicated that they had or had access to tables already...
    - If you require tables, please notify us ASAP!!!



# Tournament Director Support



- New tournament coordinators conference calls
  - Once a week, informal meeting (optional)
  - Wednesdays, 8:30-9:00 pm
  - Phone number: (866) 951-1151, Conference Room Number: 2240710
- All tournament directors, feel free to contact Karen anytime at:
  - 757-746-0756 (anytime), 757-814-3733 (evenings/weekends only)
  - Email – [Karen.T.Berger@nasa.gov](mailto:Karen.T.Berger@nasa.gov) (faster response but only for tournament directors/key staff)
  - If you need to give my email to anyone (parent, coach, etc.) please use [Karen@vadcfll.org](mailto:Karen@vadcfll.org)
- Listserv – [VADCFLL-Tournament-Directors-L@LISTSERV1.JMU.EDU](mailto:VADCFLL-Tournament-Directors-L@LISTSERV1.JMU.EDU)
  - All tournament directors have been added, key volunteers can be added
  - Important information and paperwork will be emailed
  - Great place to ask questions of other directors – all can post to listserv
  - Not for general team use – information on listserv should remain within this group





# The 2011 CHALLENGE



Can FIRST® LEGO® League teams improve the quality of food by finding ways to prevent food contamination? In the 2011 Food Factor Challenge, over 200,000 9-16\* year olds from over 55 countries will explore the topic of food safety and examine the possible points of contamination our food encounters – from exposure to insects and creatures, to unsterile processing and transportation, to unsanitary preparation and storage – then find ways to prevent or combat these contaminants. In the Food Factor Challenge, teams will build, test, and program an autonomous robot using LEGO® MINDSTORMS® NXT to solve a set of Food Safety missions as well as research, develop, and share their innovative food safety solutions. Throughout their experience, teams will operate under FLL's signature set of Core Values



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# Tournament Directors

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# Pre-Tournament Details



# Basic Tournament Volunteers



- Tournament Director
- Assistant Tournament Director
- Set Up volunteers (night before?)
- Registration (am only)
- Emcee
- Head Referee and either
  - 2 referees per table side
  - 1 referee and one table setter per table side
- Floor Manager
- Score Keeper
- Score runners
- Pit Manager
- Head Judge
  - 2 judges per core values room
  - 2 judges per research project room
  - 2 judges per robot design room
- Judge assistant(s)
- Teardown volunteers (pm only)

## Can be any age:

- score runners
- Judge assistants

## High school students or older:

- Registration
- Emcee
- Referee (if mature)
- Score keeper
- Pit manager
- Floor manager
- Set up
- Tear down

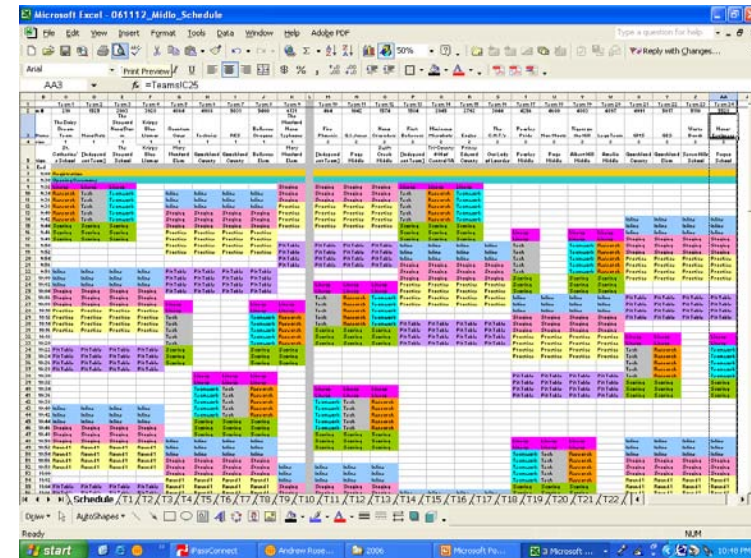
## Adults only:

- Judges
- Head referee
- Head judge

This is a generic list – you may not need all these people.  
Feel free to talk to Karen if you have questions about how  
many you need for your tournament

## Scheduling Options

- Use Schedule Program
  - Program developed by Phil Smith, VA/DC Technical Advisor
  - Scheduler can be accessed at <http://grove.cs.jmu.edu/scheduler> or by getting a copy from Phil Smith
  - Assistance available from Phil Smith or Karen Berger
  - Program supports 2 divisions, multiple judging rooms, competition rounds of different lengths, etc.
- Develop Your Own (sample shown here)



The screenshot shows a Microsoft Excel spreadsheet titled "Microsoft Excel - 061112\_Midlo\_Schedule". The spreadsheet is a complex scheduling grid with columns representing rounds (e.g., Round 1, Round 2, Round 3, Round 4, Round 5, Round 6, Round 7, Round 8, Round 9, Round 10, Round 11, Round 12, Round 13, Round 14, Round 15, Round 16, Round 17, Round 18, Round 19, Round 20, Round 21, Round 22, Round 23, Round 24, Round 25, Round 26, Round 27, Round 28, Round 29, Round 30, Round 31, Round 32, Round 33, Round 34, Round 35, Round 36, Round 37, Round 38, Round 39, Round 40, Round 41, Round 42, Round 43, Round 44, Round 45, Round 46, Round 47, Round 48, Round 49, Round 50, Round 51, Round 52, Round 53, Round 54, Round 55, Round 56, Round 57, Round 58, Round 59, Round 60, Round 61, Round 62, Round 63, Round 64, Round 65, Round 66, Round 67, Round 68, Round 69, Round 70, Round 71, Round 72, Round 73, Round 74, Round 75, Round 76, Round 77, Round 78, Round 79, Round 80, Round 81, Round 82, Round 83, Round 84, Round 85, Round 86, Round 87, Round 88, Round 89, Round 90, Round 91, Round 92, Round 93, Round 94, Round 95, Round 96, Round 97, Round 98, Round 99, Round 100) and rows representing teams (e.g., Team 1, Team 2, Team 3, Team 4, Team 5, Team 6, Team 7, Team 8, Team 9, Team 10, Team 11, Team 12, Team 13, Team 14, Team 15, Team 16, Team 17, Team 18, Team 19, Team 20, Team 21, Team 22, Team 23, Team 24, Team 25, Team 26, Team 27, Team 28, Team 29, Team 30, Team 31, Team 32, Team 33, Team 34, Team 35, Team 36, Team 37, Team 38, Team 39, Team 40, Team 41, Team 42, Team 43, Team 44, Team 45, Team 46, Team 47, Team 48, Team 49, Team 50, Team 51, Team 52, Team 53, Team 54, Team 55, Team 56, Team 57, Team 58, Team 59, Team 60, Team 61, Team 62, Team 63, Team 64, Team 65, Team 66, Team 67, Team 68, Team 69, Team 70, Team 71, Team 72, Team 73, Team 74, Team 75, Team 76, Team 77, Team 78, Team 79, Team 80, Team 81, Team 82, Team 83, Team 84, Team 85, Team 86, Team 87, Team 88, Team 89, Team 90, Team 91, Team 92, Team 93, Team 94, Team 95, Team 96, Team 97, Team 98, Team 99, Team 100). The cells contain text representing team names and round numbers, indicating the schedule for each team across the rounds. The spreadsheet is color-coded with various colors (blue, green, yellow, red, purple, pink, orange, brown, grey) to distinguish between different teams and rounds. The spreadsheet is displayed in a window titled "Microsoft Excel - 061112\_Midlo\_Schedule" with a standard Excel interface including a menu bar, toolbar, and status bar.





# Setup Recommendations



- 
- New mats flatten much faster and do not need to spend as much time rolled out
  - Get access to the site and setup the day before
  - Take digital pictures of any rooms so they can be used to recreate room condition
  - Put a protective material (cloth, sock, carpet, etc.) on below the table legs to prevent damage to floor
  - Watch the kind of tape used on floors (painters tape recommended or talk to school)
  - Thoroughly test audio equipment/timing system and scorekeeping computers, preferably the night before

# Communications

- Teams
  - Send email by 10/22
  - Provide all the logistical details (via email and Web) when available
    - Examples available
  - Provide information on tournament to Ralph Grove
    - Tournament website URL (if you have one), or
    - Tournament details (Ralph will add to VA/DC FLL website)
- Volunteers
  - Check in with your head judge and head referee – they need the most pre-tournament preparation and will be responsible for training the other judges and referees
  - Confirm, reconfirm, have a meeting?
- VA/DC FLL website – [www.vadcfl.org](http://www.vadcfl.org) – will post important policy related announcement to teams (e.g., using carts, numbers of adults in judging, etc.)

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# Tournament Details



# Registration

- **Cost (note increase)**
  - \$75 to Virginia/DC FIRST LEGO League (check, cash or school PO)
- **Return to JMU**
  - Registration money/information
  - Release forms
  - Leftover supplies (shirts, awards, ribbons, etc.)
- **Release Forms – MUST have release forms for:**
  - A child to participate
  - Any coach or mentor who will be on the competition floor
  - All volunteers
- **Programs**
  - Will you provide them?
  - What will they include?
  - Standard Template will be provided (see to the right for sample from previous years)




Welcome to the

**Virginia / DC  
FIRST Lego League  
Regional Qualifying Tournament**

at  
James River High School

Saturday November 10<sup>th</sup> 2007

Sponsored by:  
**James Madison University**

Dominion Power  
Chesterfield County Schools

Local Spons or #1  
Local Spons or #2

**Schedule of Events**

Team Registration	8:00 – 9:00
Opening Ceremony	9:00 – 9:30
Competition Events	9:45 – 2:30
Robot Performance	
Robot Design	
Project Presentation	
Teamwork	
Parade of Teams	2:45 – 3:00
Closing Ceremony	3:00 – 4:00

**Event Locations**

**Pit Area** – Spectators Welcomed  
Division 1 – Auxiliary Gym  
Division 2 – Auxiliary Gym

**Robot Performance** – Spectators Welcomed  
Main Gym

**Robot Design** – Teams Only  
Division 1 – Rooms 106 & 107  
Division 2 – Rooms 108, 109, 110 & 111

**Project Presentation** – Teams Only  
Division 1 – Rooms 116 & 117  
Division 2 – Rooms 118, 119, 120 & 121

**Teamwork** – Teams Only  
Division 1 – Rooms 126 & 127  
Division 2 – Rooms 128, 129, 130 & 131

**Behavior and Safety Guidelines**

Behavior Expectation –  
Safety Exits –


**Challenge Background**  
Power Puzzle: Energy Resources - Meeting the Global Demand

How do our personal energy choices to heat our homes, fuel our cars, charge our cell phones, power our computers, or even download music to our iPods impact the environment, economy, and life around the globe? Which resources should we use and why? Explore how energy production and consumption choices affect the planet and our quality of life today, tomorrow, and for future generations.


**Scoring Processes**

Robot Performance	25%
Robot Design	25%
Project Presentation	25%
Teamwork	25%

**School Layout**



**2007 State Tournament**  
December 9<sup>th</sup> – 10<sup>th</sup>  
James Madison University, Harrisonburg, VA



About FLL  
FLL (for Inspiration and Recognition of Science and Technology) was founded in 1989 by inventor Brian Lawson to inspire young people's interest and participation in science and technology. Based in Manchester, N.H., FLL is a 501 (c) (3) not-for-profit public charity. FLL is supported by a strong network of sponsors and volunteers.

FLL provides the FIRST Robotics Competition for high school students and the FIRST LEGO League for 6 to 14-year-olds. FLL also offers the Junior FIRST LEGO League for 6 to 9-year-olds and the FIRST Tech Challenge, a multi-level robotics competition for middle school students and their teachers. All events are open to all students and their teachers. For more information, visit [www.fll.org](http://www.fll.org).

About the LEGO Group  
The LEGO Group, a privately held, family-owned company based in Billund, Denmark, is one of the world's leading manufacturers of high quality, creative educational toys, marketed to children. The company is committed to the development of children's creative and imaginative abilities, and its employees are guided by the motto adopted in the 1950s by founder Ole Kirk Christensen: "only the best is good enough." For more information, visit [www.LEGO.com](http://www.LEGO.com).

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# Opening Ceremony/Housekeeping



- Facilities
  - Fire Exits
  - Restrooms
- Rules
  - Who is allowed in Judging Rooms (maximum of 3 adults - 2 coaches and 1 “historian”)
  - # of kids at table
  - Areas off limits
  - Where is food allowed?
- Food
  - Is any available or where to get some
- Schedule
- Recognize Sponsors and Volunteers



# Scorekeeping



- Programs
  - Head Referee/Judge will send out approved scoring program
  - Test before the tournament
  - Save during tournament day numerous times including to a USB drive
  - Save paper results
- Results Presentation
  - What and when will you present
  - Each tournament will receive a tournament specific set of award to give (note that you may have more awards than authorized to give). Please follow the worksheet
- Complete award selection prior or during Parade of Teams

# Award Determination

- **Tournament Directors will receive a list of awards to be given at their event**
- **Only one judged award per team (robot performance is NOT a judged award)**
- **Robot performance – highest score wins**
  - If teams tie, go to second highest score, third highest if necessary
  - Teams can win robot performance and a judged award
- **Judged Awards - Give awards in order of:**
  - Champions award(s)
  - 1<sup>st</sup> place robot design, research project and teamwork
  - You will not have 2<sup>nd</sup> places except possibly for Championship (except for Haymarket???)
  - Each tournament will get Judge's Awards to give out
- **Hint: list teams with the top 4-5 scores for each category before deliberation**
  - Identify teams that did well in all categories – discuss who should win champions award(s)
  - Once a team wins an award, cross off for all other categories
  - Identify teams that did well in robot design – discuss who should win 1<sup>st</sup>
  - Cross off team from all other categories
  - Repeat for Research Project and then Teamwork
  - New judging process and scoring program helps with this
- **Discuss any teams that remain on lists for possible Judges Awards (optional)**
- **Approximately 30%-50% of teams should win awards (suggestion)**



# Closing Ceremony and Awards



- Parade of Teams
  - Format is up to tournament – some have a formal parade, some call up teams individually
  - Make sure to recognize each team (a great time to give out ribbons) since this may be all some teams get
- Recognize Volunteers and Sponsors
- Awards
  - TD's will receive a list of standard awards to give
  - Consider recognition of non-award winning teams
  - Have judges write 1-2 sentences about winning team for awards ceremony
- Announce Advancing-to-Championship Teams
  - Provide Championship Info to Teams at Tournament
  - TD's will receive list of how many teams per division move to Championship
  - Follow the worksheet directions on the number of teams advancing. There are limited number of Championship slots and numbers are pre-determined
- Announce how teams should pick up judge comments

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# Post-Tournament Details

# Teardown

- Table disassembly
  - A lot easier this year without the lights!
- Facility Cleanup
  - Make sure site is cleaner than you found it
  - Return rooms to original condition or better (use digital photos)
  - Check with facility staff before leaving
- Material Storage
  - Field setup kits are needed for tournaments the next weekend/states
    - After the tournament, go through kits, make sure they are complete
    - Consolidate any incomplete to make as many complete as possible
    - Mark what is missing from incomplete kits
    - Email Karen Berger with how many completes/what is missing
    - A little work after your event but saves major headaches for next person!
  - Return all materials to the TOW in an organized format if applicable

# Results

- **Championship and Awards**
  - Send via email to Karen Berger that night
  - Include team name, number, and division that
    - will be going to championship tournament
    - won each award at your tournament
  - You can just fill out the worksheet
- **Lessons Learned**
  - Expect to receive an email after the tournaments wind down, please be thinking about what went well and what didn't
  - Send any comments, good or bad, from yourself or participants to Karen Berger
- **Volunteer List**
  - Provide a list of volunteers, affiliation, and electronic contact information for your tournament. We want to thank them and possibly solicit for greater involvement.





# Return of Materials



- Awards, T-shirts, etc.
  - Send to JMU – coordinate with Karen (you may be able to send with someone else and reduce shipping)
  - Some can be carried to JMU in a TOW or by someone going to states
- FLL Kits
  - See notes on previous page/kit movement plan
  - Send all kits to Week 2 or 3 Location(s) or to Championship tournament
- Expense Reimbursement
  - Send receipts to JMU (Nick Swayne) along with your W-9
  - Send in a timely manner (please don't wait until January to send!)
  - It can take 4-6 weeks (early January likely)
- Additional Award Requests
  - Only in VERY rare occasions (provide all necessary info)



# Kit Movement Plan



Week 1

(who is transporting)

Week 2

(who is transporting)

Week 3

Christiansburg (12) → (Duggins) → Abingdon → (Duggins) → Martinsville

Newport News (12) → (Karen) → Norfolk → (Karen) → Stafford

Harrisonburg (12) → (Nick) → Smithsonian → (Nick) → Haymarket \*\*\*TOW\*\*\*

Bird (12) → (NA) → NA → (???) → Deep Run \*\*\*TOW\*\*\*

Eagle Ridge (14) → (Steve) → Reston → (???) → Haymarket \*\*\*TOW\*\*\*

NA (12) → (NA) → Lynchburg → (???) → Maggie Walker

Metz (14) → (???) → Chantilly → (???) → George Mason



# Jr. FLL and FTC



- Jr. FLL
  - If you are interested in adding a Jr. FLL tournament to your event, let us know
  - Relatively little impact
  - ~90 minutes
  - Would need table space and a few judges only
  - Consider having someone else organize the event?
- FTC
  - If you have space and want them, there is a group interested in doing FTC demos at FLL tournaments
  - Please let Karen know if you are interested



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# **Head Judge Training**

## **(also see attached Judge Presentation)**

Mark Allen

VA/DC Championship Tournament  
Head Judge 2008 – 2011

# Judging

- Judge Rubrics
  - Posted under “coaching resources” at [www.vadcfll.org](http://www.vadcfll.org)
- Judges for each Division
  - How many will you have?
  - How will you manage the divisions?
- Judges “Scoring”
  - Must “score” each team, not just winners
  - No need to turn in score sheets during the day anymore
  - Provide comments to teams!!!
- Core Values
  - Have both a room and roving evaluation? – at least room is required
  - Teamwork challenge will be emailed in week before event
  - Consider input from the Pit Manager and Referee



# Judge Info/Conference Calls



- Important Judge Documents:
  - “Score Sheets” (judges only) – will be given to teams at the end of the tournament
  - Judges Guide (judges only)
  - Missions, Field Set Up, Rules, Q&A for robot design judges (teams already have)
    - should be at least familiar with missions
  - Rubrics (teams already have)
- Training with Skip Gridley and Jodi Kravitz will be in the form of modular recording and are forthcoming
- Recording details will be sent out at a later date and made available to tournament directors.



# Role of Head Judge



- 
- Know the rules concerning FLL awards, challenges, rubrics etc.
  - Assure your tournament has an adequate number of judges (and hopefully experience). Pair judges accordingly.
  - Assure facilities are adequate (with TD).
  - Train the judges. Make sure judges are aware of the difficulty in catching up and remembering previous teams if they do not stay on schedule with good notes.
  - Assure Teamwork exercise has appropriate materials.
  - Take care of the judges needs (schedule, breaks, food, forms etc.)
  - Resolve issues or conflict – keep judges separated from coaches or parents
  - Keep on time, Keep TD informed of any and all issues. Assure volunteers to keep teams in line, on time, and quiet when outside judging rooms.
  - Lead deliberation process and resolve issues quickly (must make decisions).
  - Make final decisions on awards.
  - Others?



# Some Details for Most Tournament



- 
- 2 sets of judges – leave deliberation time before last robot run
    - 1 hr minimum
    - 1.5 if call backs
  - First scoring done with both sets of judges to calibrate
    - Try to get middle team before opening ceremonies
  - Calibrate time at opening ceremonies
  - Make sure there is interaction time for core values and project presentation
  - 2 adults per room – manage where they are
  - Take notes
  - Have extra judge of each type
  - Leave facility clean
  - Leave room set up the same and write a thank you
  - No more than four judging sessions per hour per set of judges
  - TD's – Let teams know in advance to bring copies of programs
  - Bubble sort sheet – use to keep track of top teams





## Core Values

## Team Number Judging Room

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the awards for which you would like this team to be considered.



	Beginning	Developing	Accomplished	Exemplary	
Inspiration	<b>Discovery</b> Balanced emphasis on all three aspects (Robot, Project, Core Values) of FLL; it's not just about winning awards				
	N D	emphasis on only one aspect; others neglected	emphasis on two aspects; one aspect neglected	emphasis on all three aspects	balanced emphasis on all three aspects
	<b>Team Spirit</b> Enthusiastic and fun expression of the team identity				
	N D	minimal enthusiasm AND minimal identity	minimal enthusiasm OR minimal identity	team is enthusiastic and fun; clear identity	team engages others in their enthusiasm & fun; clear identity
Comments:	<b>Integration</b> Application of FLL values and skills outside FLL (ability to describe current and potential examples from daily life)				
	N D	team does not apply FLL values and skills outside FLL	team able to describe at least one example	team able to describe multiple examples	team able to describe multiple examples, incl. individual stories

Teamwork	<b>Effectiveness</b> Problem solving and decision making processes help team achieve their goals				
	N D	team goals AND team processes unclear	team goals OR team processes unclear	clear team goals and processes	clear processes enable team to accomplish well defined goals
	<b>Efficiency</b> Resources used relative to what the team accomplishes (time management, distribution of roles and responsibilities)				
	N D	limited time management AND unclear roles	limited time management OR unclear roles	excellent time management and role definition allows team to accomplish most goals	excellent time management and role definition allows teams to accomplish all goals
Comments:	<b>Kids Do the Work</b> Appropriate balance between team responsibility and coach guidance				
	N D	limited team responsibility AND excessive coach guidance	limited team responsibility OR excessive coach guidance	Good balance between team responsibility and coach guidance	team independence with minimal coach guidance

Gracious Professionalism™	<b>Inclusion</b> Consideration and appreciation for the contributions (ideas and skills) of all team members, with balanced involvement				
	N D	unbalanced team involvement AND lack of appreciation for contributions	unbalanced team involvement OR lack of appreciation for contributions	balanced team involvement AND appreciation for contributions of most team members	balanced team involvement AND appreciation for contributions of all team members
	<b>Respect</b> Team members act and speak with integrity so others feel valued-- especially when solving problems or resolving conflicts				
	N D	not evident with majority of team members	evident with majority of team members	almost always evident with all team members	always evident, even in the most difficult situations
Comments:	<b>Cooperation™</b> Team competes in the spirit of friendly competition and cooperates with others				
	N D	not evident with majority of team members	evident with majority of team members	almost always evident with all team members	always evident, even in difficult situations--and team actively helps other teams

<b>Awards Consideration:</b>	<b>Inspiration</b>	<b>Teamwork</b>	<b>Gracious Professionalism™</b>
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Project

Team Number  
Judging Room



Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the awards for which you would like this team to be considered.

		Beginning	Developing	Accomplished	Exemplary
Research	<b>Problem Identification</b>	Clear definition of the problem being studied			
	N	unclear; few details	somewhat clear; details missing	clear; detailed	very clear; very detailed
	D				
	<b>Sources of Information</b>	Types (e.g. books, magazines, websites, reports and other resources) and number of quality sources cited, including professionals in the field			
	N	one type of information cited; minimal sources	two types of information cited; several sources	three types of information cited; many sources, including professionals	four(+) types of information cited; extensive sources, incl. professionals
	D				
	<b>Problem Analysis</b>	Depth to which the problem was studied and analyzed by the team			
N	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team	
D					
Comments:	<b>Review Existing Solutions</b>	Extent to which existing theories and solutions were analyzed by the team, including an effort to verify the originality of the team's solution			
	N	minimal review; no team analysis	minimal review; some team analysis	sufficient review and analysis by team	extensive review and analysis by team
	D				
Innovative Solution	<b>Team Solution</b>	Clear explanation of the proposed solution			
	N	difficult to understand	some parts confusing	understandable	easy to understand by all
	D				
	<b>Innovation</b>	Degree to which the team's solution makes life better by improving existing options, developing a new application of existing ideas, or solving the problem in a completely new way			
	N	existing solution/application	solution/application contains some original element(s)	original solution/application	original solution/application with the potential to add significant value
D					
Comments:	<b>Implementation</b>	Consideration of factors for implementation (cost, ease of manufacturing, etc.)			
	N	minimal factors considered	some factors considered	factors well considered; some question about proposed solution	factors well considered and feasible solution proposed
	D				
Presentation	<b>Presentation Effectiveness</b>	Message delivery and organization of the presentation			
	N	unclear OR disorganized	somewhat clear; minimal organization	mostly clear; mostly organized	very clear AND well organized
	D				
	<b>Creativity</b>	Imagination used to develop and deliver the presentation			
	N	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative	very engaging AND exceptionally imaginative
D					
Comments:	<b>Sharing</b>	Degree to which the team shared their Project before the tournament with others who might benefit from the team's efforts			
	N	shared with one individual	shared with one group	shared with one individual or group who may benefit	shared with multiple individuals or groups who may benefit
	D				
<b>Awards Consideration:</b>		<b>Research</b>	<b>Innovative Solution</b>	<b>Presentation</b>	



Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the awards for which you would like this team to be considered.



		Beginning	Developing	Accomplished	Exemplary
<b>Mechanical Design</b>	<b>Durability</b>	Evidence of structural integrity; ability to withstand rigors of competition			
	N	quite fragile; breaks a lot	frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs
	D				
	<b>Mechanical Efficiency</b>	Economic use of parts and time; easy to repair and modify			
N	excessive parts or time to repair/modify	inefficient parts or time to repair/modify	appropriate use of parts and time to repair/modify	streamlined use of parts and time to repair/modify	
D					
<b>Comments:</b>	<b>Mechanization</b>	Ability of robot mechanisms to move or act with appropriate speed, strength and accuracy for intended tasks (propulsion and execution)			
	N	imbalance of speed, strength and accuracy on most tasks	imbalance of speed, strength and accuracy on some tasks	appropriate balance of speed, strength and accuracy on most tasks	appropriate balance of speed, strength and accuracy on every task
	D				
	<b>Programming Quality</b>	Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults			
N	would not achieve purpose AND would be inconsistent	would not achieve purpose OR would be inconsistent	should achieve purpose repeatedly	should achieve purpose every time	
D					
<b>Comments:</b>	<b>Programming Efficiency</b>	Programs are modular, streamlined, and understandable			
	N	excessive code and difficult to understand	inefficient code and challenge to understand	appropriate code and easy to understand	streamlined code and easy for anyone to understand
	D				
	<b>Automation/Navigation</b>	Ability of the robot to move or act as intended using mechanical and/or sensor feedback (with minimal reliance on driver intervention and/or program timing)			
N	frequent driver intervention to aim AND retrieve robot	frequent driver intervention to aim OR retrieve robot	robot moves/acts as intended repeatedly w/ occasional driver intervention	robot moves/acts as intended every time with no driver intervention	
D					
<b>Comments:</b>	<b>Design Process</b>	Ability to develop and explain improvement cycles where alternatives are considered and narrowed, selections tested, designs improved (applies to programming as well as mechanical design)			
	N	disorganized AND poorly explained improvement cycles	disorganized OR poorly explained improvement cycles	systematic and well-explained improvement cycles	systematic, well-explained and well-documented improvement cycles
	D				
	<b>Mission Strategy</b>	Ability to clearly define and describe the team's game strategy			
N	no clear goals AND no clear strategy	no clear goals OR no clear strategy	clear strategy to accomplish the team's well defined goals	clear strategy to accomplish most/all game missions	
D					
<b>Comments:</b>	<b>Innovation</b>	Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or applicator(s) that are beneficial in performing the specified tasks)			
	N	original feature(s) with no added value or potential	original feature(s) with some added value or potential	original feature(s) with the potential to add significant	original feature(s) that add significant value
	D				
	<b>Awards Consideration:</b>	<b>Mechanical Design</b>	<b>Programming</b>	<b>Strategy &amp; Innovation</b>	





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# Review of Missions

## (also see attached Referee Presentation)

September 24, 2011

Steve Scherr

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# Referee

- Referee Materials
  - Thoroughly review materials
  - Read the listserv questions
- Rounds
  - 1 Practice round
  - 3 competition rounds
- Scoring
  - Have one person ultimately responsible—have enough computers!
  - How will you handle video tape results – This is FLL, not NFL so “instant replay” is not allowed
- Table Access
  - Manage proximity and number of people
  - When will Referees/Table Setters remove materials or get a robot?



# Referee Conference Calls



- Important Referee Documents:
  - Referee Guide (referees only)
  - Score Sheet (referees only) – score sheet must match scorer's program
  - Missions (teams already have)
  - Field Set Up (teams already have)
  - Rules (teams already have)
  - Game Updates (3 p.m. Friday before tournament) (teams already have)
- Oct. 25<sup>th</sup>, 7-8 pm: Referee Training with Dave Brooks/Scott Evans
  - (866) 951-1151
- Robot Game discussion for teams:  
<http://www.firstlegoleague.org/challenge/teamresources>
- All calls will be recorded



# Food Factor Robot Game







# Robot Game Rules



- 
- The FLL Robot Game is played by an autonomous robot
  - A match is 2 1/2 minutes long. Teams get at least 1 minute to set up.
  - Two game fields are joined back-to-back, with one team on each side
  - Multiple table pairs may run simultaneously



# Robot Game Rules



- 
- Two members of a team may be at the table operating the robot
  - The rest of the team stands nearby
  - Team may store objects in a box
    - Try to provide space and a stand at each table, e.g. tray table or chair



# Robot Game Rules



- 
- Cycling all teams through one match each is called a round
  - Each team has at least 3 matches, → 3 rounds
  - The practice round is very helpful—both for volunteers and for teams
    - Beware of rookie teams being confused about “practice tables” and the “practice round”. Suggest “pit tables”
  - The team’s best score in any competition match is what counts



# Robot Game Rules



- 
- Missions are results or actions worth points
  - After the match, the referee records the state of the playing field and gets agreement from the team
  - The Scorekeeper uses the scoring program to total points and compile results
  
  - Timekeeper needs audible signal
  - Scorekeeper needs computer



# Missions



- 15 missions
- No official maximum score
  - The game is designed so that no team can score all available points. (Practical < 350)
  - Each match starts with 72 points in scoring position.
- Lots of game pieces!
  - Allow time for pre-tournament setup and QA
  - Allow time for scoring and table reset between matches

# Mission Categories

- Prevent Contamination: Source to Store
  - Pollution Reversal (contaminant balls)
  - Corn Harvest (red harvester)
  - Pest Removal (rats)
  - Fishing (fish)
  - Refrigerated Ground Transport (white trailer)
- Keep Food Safe: Store to Home
  - Farm Fresh Produce (yellow truck)
  - Groceries (groceries & table)
  - Pizza and Ice Cream

# Mission Categories

- Handling Food Safely: At Home
  - Storage Temperature (thermometer)
  - Cooking Time (timer)
  - Disinfect (germ dispensers)
  
- Keeping Yourself Clean and Healthy
  - Hand Wash/Bacterial/Viral (bacteria, viruses, sink)
  - Distant Travel (robot to far wall)
  - Good Bacteria (yellow bacteria in base)



# Tournament Specific Information

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- Notify in advance and in coaches meeting
- Accessibility issues
- Space for storage near table
  - Will your tournament provide stands or space?
- Option: Coaches/spectators nearby during a match