IRI
INDIANA ROBOTICS INVITATIONAL

The 2005 Indiana Robotics Invitational Information Document

I.   Introduction

This document is written to describe the 2005 Indiana Robotics Invitational, otherwise known as the "IRI". 2005 is the 6th year for the IRI, and this year is expected to be the biggest and best ever. The goal of the organizing committee is to make the IRI the premier out-of-season FIRST robotics tournament.

II.   History

The IRI began in 2000 and was originally developed by Team 45, the Techno Kats from Kokomo High School. By 2001, the IRI had outgrown the Kokomo facility and was too big to be managed by a single team. For the 2002 IRI, Team 234, Cyber Blue from Perry Meridian High School, and Team 393, Full Metal Jackets, from Morristown High School, joined forces with Team 45 and moved the IRI to its current location in Indianapolis.

For 2005, the IRI will expand to include up to 60 teams and special program events. The traditions of the All Team Dinner on Friday night, breakfast on Saturday morning, and a human player game continues.

The sections below provide details on the event.

NOTE: The links and email addresses may not be active before May 15, 2005.
NOTE: Please direct questions to <u>IRICoordinator@IndianaFIRST.org</u> .

III.   Hosts

A.   Event Hosts
1.   Team 45, Techno Kats, from Kokomo High School, Kokomo, IN
2.   Team 234, Cyber Blue, from Perry Meridian High School, Indianapolis, IN
3.   Team 393, Full Metal Jackets, from Morristown High School, Morristown, IN
B.   Site Hosts
1.   Team 1024, Kil-A-Bytes, from McKenzie Career Center, Indianapolis, IN

IV.   Location

A.   The 2005 IRI is at Lawrence North High School

Lawrence North High School
7802 Hague Road
Indianapolis, IN 46256

V.   Dates and Times

A.   Dates – The 2005 IRI is July 22nd and 23rd.
B.   Times - July 22
      Doors open at 7 AM
      Opening Ceremonies 10:45 AM
      Matches begin at 11 AM
      Activities end at 10:00 PM
      Doors close at 10:30 PM
C.   Times – July 23
      Doors open and breakfast starts at 7 AM
      Opening Ceremonies 8:00 AM
      Matches begin at 8:30 AM
      Finals begin at 1:30 PM
      Activities end at 4:00 PM
      Doors close at 5:30 PM

VI.   Entry Fees

A. $425 – Premier Pit Locations – Main Gym, Field Side (10 available)
Or $350 – Standard Pit Locations – Auxiliary Gym (50 available)

B.   Filled Back-Pack for a 2nd Grade Student
Materials: Small Backpack, 1 pair scissors, 3 pocket folders, 1 box of 24 crayons, 3 glue sticks, 1 ruler with inches and centimeters, 1 package pencils, 2 large erasers, 2 black pens, 2 red pens, 2 packages loose leaf notebook paper, 1 school supply box, 1 package colored pencils, 1 package washable markers, 2 packages tissues, 3 spiral notebooks.

Teams should also feel free to add something special to the pack – a team button, good luck card, or letter to create a special connection to a student.

Rolls-Royce supports several FIRST teams in Indianapolis, and is also active with several education-related activities in the local area. In addition to FIRST Robotics and Project Lead the Way at the high school level, and several programs at the elementary school level, there is a very special employee driven program called "Pack to School". Employees donate materials for a backpack equipped for a second grade student. These backpacks are collected and provided to a local elementary school with a high percentage of students who need this type of assistance. In 2003, Team 234 participated in the program and provided five complete backpacks. For 2004, the team wanted to find a way to significantly increase support of this program, and asked that "Pack to School" be made a part of the IRI. Over 60 backpacks were collected at the 2004 IRI, helping to make the start of school a little better for a special group of students. We continue support of this great program for 2005.

C.   Dinner Reservations Fee

A $1 per person dinner reservation fee will be used for 2005. This reservation fee will help insure an accurate dinner count to make sure we have plenty of food, but not so much as to go to waste.

VII.   Teams

A.   Entries will be limited to the first 56 teams (with 4 host teams = 60 total)
B.   All Indiana teams and returning 2004 IRI teams are guaranteed an entry in the 2005 IRI <u>if they register on the first day</u>.
C.   New participants will be on a first register / first in process
D.   A waiting list will be created after the registration is full
D.   Teams not making payment by the required date will be moved from the registered listing and replaced with a wait listed team to ensure a full field.

VIII.   Registration

A.   Registration begins at 6 PM (Indiana Time – currently central) on May 16th.
B.   Registration ends at midnight, May 30th, or when the field is full, whichever is first.
C.   Registration will be through the Indiana FIRST web site (www.IndianaFIRST.org).
D.   Payment in full must be received by July 1st.
   Make checks payable to "Perry Meridian High School – IRI".
   Checks must be in US Dollars.
   Credit cards are not accepted.
E.   Mail payment to:
   Indiana Robotics Invitational
   Perry Meridian High School
   C/o Steve Wherry
   401 West Meridian School Road
   Indianapolis, IN 46217
D.   An invoice can be emailed if it is needed for you to obtain a check for payment. Please indicate this when you register. A receipt will be provided after payment is received.
E.   The following information will be required when you register –
   a.   Team name, team number, point of contact, point of contact phone and email, number of students and adults attending, number of participants for the team dinner on Friday night and breakfast on Saturday morning, and a list of graduating seniors.

IX.   Volunteers

A.   Many volunteers will be required to make the IRI a successful event. A volunteer application form can be downloaded at www.IndianaFIRST.org. This form must be returned to volunteer@IndianaFIRST.org.

   Please note that not everyone who volunteers will be needed. You will be contacted to advise your selection as a volunteer.

X.   The Game

   A.   The IRI Challenge will be the 2005 "Triple Play" game.
   B.   There will be an "Adults Only" round during the Qualifications.

XI.   The Robot

   A.   Robots must meet the design and safety requirements of the 2005 "Triple Play".
   B.   Bring your Gracious Professionalism. There will be no weigh in or technical inspection.
   C.   The referees reserve the right to disqualify any robot that operates outside of the "Triple Play" rules and guidelines.

XII.   Matches

   A.   A limited number of practice times will be available, and practice time is not guaranteed.
   B.   Come ready to play!
   C.   Eight to ten matches is the goal.
   D.   One round will be a "TURNABOUT" match. Drivers and Human players MUST be over 21 and cannot have been a high school student driver or human player on a FIRST team. One high school team member MUST serve as the on-field coach but cannot touch the controls or the game elements. This match WILL count in your qualification points. You may recruit adults from another team if you cannot field a group of three adults from your own.

XIII. Webcast

   A.   We are working to webcast the event. No details are available yet.

XIV.   Food

   A.   At the IRI, food, snacks, and drinks will be available in the school concession stands. All concession proceeds go to team 1024, the Kil-a-Bytes. Please give them your patronage.
   B.   In the area – The IRI is located near 82nd Street and I-69, Castleton Mall, Keystone at the Crossing, and several other shopping areas. Just about any meal you desire is available in the general area.
   C.   Friday Night – All team members, engineers, and mentors are invited to dinner. Dinner will be served between match play and the Talent Show.
   D.   Saturday Morning – A light breakfast of donuts, juice and milk will be provided to all participants. Weather permitting, this will be outdoors and very casual so that teams can mingle and get to know each other.

XV.   T-Shirts

A. 2005 IRI T-Shirts will be available for purchase – cash or check only.
B. T-shirts will be $10.

XVI. Other Entertainment

A. Indianapolis is home to many family oriented attractions. Museums, the 500 track, bowling, laser tag, and other facilities are in the general area.
B. The Indianapolis Indians, Minor League Baseball Team are in town July 18th – 25th. Tickets are $8 - $12. The field offers a fantastic view of the Indianapolis skyline as well as exciting baseball, up close and personal. Visit www.IndyIndians.com for details and tickets.

XVII. Hotels

A. Many hotels are located in the I-69, 82nd Street, 96th Street area.
Be sure you are on the northeast side of Indianapolis.
B. The following hotels have provided special rates for the 2005 IRI.
1. The Hilton Hotel (this was the OMNI in 2004)
   a. $91 per room
   b. 8181 N. Shadeland Avenue, Indianapolis, 46250 317-849-6668
   c. High speed internet, king or double beds, indoor pool, fitness center, restaurant, shuttle within 5 miles of the hotel, free parking.
   d. Call 1-800-HILTONS by JUNE 30. Ask for the Indiana Robotics Invitational rate.
2. Staybridge Suites
   a. $89 Studio Suite, $99 one bedroom suite, $149 two bedroom, two bath suite.
   b. 9780 Crosspoint Blvd, Indianapolis, 46256 317-577-9500
   c. Free full buffet breakfast, indoor pool.
   d. Call 317-577-9500, ask for the IRI special rate.

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XVIII. Special Events

A. <u>Senior Recognition</u> – we will recognize all graduating seniors on Friday evening, before dinner. Please send a list of these students when you register, or to Seniors@IndianaFIRST.org. Please be sure to include the team number in the listing. Please send no later then July 15th, 2005.

B. <u>Talent Show</u> – Friday evening will feature the IRI Talent Show. The show will begin near the end of dinner time. The show will be held in the Lawrence North Auditorium.. All potential acts must be screened by the IRI committee. All performances must be in good taste, suitable for family enjoyment and no more than <u>5 minutes long</u>. Send entries to Talents@IndianaFIRST.org. Entries for the talent show are due Friday, July 15. After the talent show, the "Dean Simmons and the Kamen Brothers" band will be performing. www.deansimmonsandthekamens.com

C.   <u>IRI Quilt</u> – A friend of Team 234 has created a quilt of the 2004 IRI team shirts. It will be on display. Please bring a team shirt to donate for a special 2005 IRI memento.

D.   <u>Human Player Game</u> – Details will be provided.

E.   <u>Silent Auction Ritchie Family Fundraiser</u> - Throughout the event, various items will be available for bidding. All items will be donated for the purpose of raising money for the family of Scott and Libby Ritchie. Bidding will end at 11:00am Saturday. People who have the highest bids will be expected to pay that same day by check or cash only. If you want to donate items to this auction, contact Chris Fultz or Andy Baker. If donating items, please do so before July 15th so we can publicize these items. More details will follow.

XIX.   Awards and Competitions

A.   Awards
  1.   Team Awards Include
      a. Spirit of Indiana
      b. Most Awesome Drive-train
      c. Outstanding Quality
      d. Leadership in Control
      e. Imagery and Design
      f. Driving tomorrow's Technology
      g. Team Spirit
      h. FIRST Philosophy
      I. Rookie
  2.   Individual Awards Include
      a. * IRI Mentor of the Year
      b.   IRI Scholarship
      c.   Individual Recognition

XX. Key Contacts

Event Managers   Chris Fultz (234), Andy Baker (45)

OVERVIEW

This section provides a general summary regarding the awards and competitions for both team and individuals at the Indiana Robotics Invitational (IRI) 2005. Please read the following descriptions and that some of the competitions require a written submission or application for consideration.

TEAM AWARDS

The *Techno Kats* Spirit of Indiana Award
This award celebrates the top Indiana team regarding spirit, motivation and overcoming obstacles.

*The Most Awesome Drive System Award
This award will celebrate the team that has created, by the judge's best approximation, the most awesome drive system. The criteria and definition of the word 'awesome' is left up to the judges.

The Outstanding Quality Award
The Outstanding Quality Award celebrates quality and robustness in robot design, build, and operation.

The Leadership in Control Award
The Leadership in Control Award celebrates an innovative control system or application of control components to provide unique functions and a competitive edge in this year's game.

The Imagery and Design Award
The Imagery and Design Award celebrates attractiveness and uniqueness in engineering, aesthetics, design or construction.

The Driving Tomorrow's Technology Award
This award celebrates an elegant and advantageous feature of a machine. The criteria for this award are based on the team's ability to verbally describe, as well as demonstrate said feature.

The Team Spirit Award
This award celebrates the team who shows the best team spirit both in the stands and in the pits.

The FIRST Philosophy Award
This award celebrates the team that best displays the sense of "Co-opertition" by cheering and assisting others, while concurrently working their own strategy to perform their best.

The Rookie Award
This award celebrated the best all around rookie team (new to FIRST competition in 2005).

INDIVIDUAL AWARDS

The Indiana Robotics Invitational Mentor of the Year

This award celebrates the selected the mentor from a team participating in the 2005 IRI. Each team may nominate one individual for this award. Nominations should be a one page typed maximum, Microsoft Word document, 10 pt type minimum, essay describing the mentor's activities to help his/her team grow within itself and to help the FIRST community. Nominations should be e-mailed to Mentor2005@IndianaFIRST.org by July 1, 2005. Nominations should have the nominee's name, team number, and team name in the footer. The winner will be announced during the closing ceremonies.

IRI Scholarship

Multiple $1000 Scholarships will go to the selected graduating senior students from FIRST Robotics Teams competing at the 2005 IRI. The students must have either attended an Indiana High School or be currently accepted for the fall 2005 semester at an Indiana college or university. The student does not have to be in attendance, but his or her team must be competing at the IRI. Any college major is eligible for these scholarships. Entry requirements are:

1. A 500 word essay on how FIRST participation has impacted your life.
2. A reference from a Mentor, Engineer or Teacher on your team.
3. A reference from one other adult.

Once the essay is complete, please email it to IRIScholar@IndianaFIRST.org no later than July 1, 2005. The scholarship winners announced during the closing ceremonies.

IRI Individual Special Recognition Awards

The IRI judges often find individuals who are deserving of a special, personal award. In 2003, these were the Westland Helicopters "Time of Your Life" special clocks awards. The 2004 IRI featured "Thanks for the Memory" awards of computer memory keys. The judges will be selecting special individual awards again in 2005.

May 14   Release Information Package (IndianaFIRST and Chief Delphi)

May 15   Team Registration Begins
                Volunteer Registration Begins
                Links and Email Addresses Active

May 30   Registration Ends

July 1   Scholarship Applications and Reference Letters Due
                Payment Due
                Information for Senior Recognition Due
                Mentor of the Year Entries Due

July 15   Silent Auction items due
                Talent Show entries due

July 22   IRI Begins
                T-Shirts for IRI Memento Due
                Backpacks for 2nd Graders Due

IRI Scholarship Information & Application

Several major companies are providing financial support for the 2005 IRI Scholarships. These companies will be involved in the selection and award process at the IRI.

Criteria:

1. Applicants must be a recently graduated high school senior (2005).

2. Applicants must be from an Indiana high school OR must be attending post-graduate education (college, university, etc.) in Indiana during the fall of 2005. Any major is eligible.

3. Applicants need to write a one-page essay, describing their FIRST experience. This paper needs to be emailed to IRIScholar@indianafirst.org by July 1. Describe your experiences, skills, and/or stories about FIRST and its influence on you. The essays should not be over 500 words in length.

4. Applicants must also get two FIRST mentors to complete reference letters. These mentors need to send their recommendations to IRIScholar@indianafirst.org by July 1. Information that is requested to be included in the reference letter is included on the attached Application Form.

5. The applicant must be on a FIRST team who is attending the 2005 **IRI**.

These applications will be reviewed and judged by representatives of the sponsoring companies. The **scholarship** winners will be announced during the awards ceremony.

Good luck!

Indiana Robotics Invitational
Scholarship Recommendation

Note to applicant:
Please fill out the first four lines only and then give this sheet to an adult mentor in
FIRST who will recommend you for this scholarship. Two references are required.

Also, the only students who are eligible for this award are **current Indiana high school
students**, or **high school students who will be attending college in Indiana**.

Applicant:
Name: _____

Address: _____

College to attend: _____

Major course of study: _____

Authorization:
I hereby request and authorize you to disclose to the IRI Organizing Committee any and all
information requested on this form.

_____
Applicant name   date

Note to recommender:
Please complete this recommendation online at http://www.indianafirst.org. It will be
shared with the IRI organizing committee. Please answer only those questions for which
you can give a frank and honest opinion of the applicant. Your comments will be held in
strict confidence and should not be shown to the applicant or any person outside the IRI
organizing committee or corporate sponsor review committee members. Please add
comments.

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1. **How many years and in what capacity have you known the applicant?**
2. **How would you rate the student in terms of Leadership, Character, Maturity,
    Citizenship, Teamwork and respect from his / her peers?**
3. **What are the student's major strengths?**
4. **Is there anything special we should know about the student?**
5. **Please include your name, team affiliation, email address and contact phone
    number.**