



BLITZ BITS

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IMPORTANT DATES FOR FRC:

COLORADO REGIONALS:
MARCH 26-29

NATIONALS:
APRIL 16-18



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2009 FRC Announced - Jimmy Harris

On September 13, 1962, President John F. Kennedy challenged our nation to land a man on the moon within 10 years. In 1969, eight years and two months later Neil Armstrong set foot on the lunar surface. The average age of the engineers cheering Apollo 11 that day was 26. Their average age at the time of President Kennedy's challenge was 18.

To honor the 50 year anniversary of this event, FIRST has defined a challenge like no other, of course it is like that almost every year! Yet this year has thrown something at us that we have never seen before. Usually there is a large structure or obstacle in the playfield, yet this year it is completely empty. Instead each robot has a circular trailer with a "basket" on it behind. A team's objective is that they must drive around and attempt to score a "moon rock" (a 9 inch ball) into the opponent's trailers. Scoring can be accomplished by either dumping the balls or shooting them into the trailers of the opponents. Oh, and the floor, it has a Coefficient of Friction that is equal to 0.5. For those who don't excel at physics (join the club) that is simulating the gravity of the moon, or 1/6 of what you would weigh here on Earth. So while slipping and sliding around, a team must place a 9-inch ball in an 18-inch basket.

Challenging? I think not!!!



Sponsorship Drive

Team Blitz would like to thank all our sponsors who are supporting our endeavor to compete in the 2009 FRC competition. We are excited to welcome our new gold level corporate sponsor Comcast Ne&To group.

We would like to welcome back corporate and local business sponsors from last year who are continuing to support Team Blitz for another season. Their continued support provides financial stability to Team Blitz which is critical to our success from year to year. Our returning Bronze level sponsors are Conifer Newcomers and Neighbors, Intermountain Rural Electric Association, Lockheed Martin, Aspen Park Veterinary Hospital, and C&R Technologies.

Thank you to Barnes and Noble, the Bleikamp family, and the Walsh family for joining the Team Blitz Booster Club. And a special thank you for the in-kind donations from Sanders Sound Systems for machine shop usage, and Our Lady of the Pines Catholic Church for use of their facility. Thank you also to the Walsh family for the use of their basement as our central build area this year.

If you are interested in supporting Team Blitz through a donation or a corporate sponsorship, please visit our web site <http://www.teamblitz.net/sponsors.html> to learn more about our sponsorship program and to download the enrollment form.

We're off to
a great start
this year and
are quickly
progressing
on our robot.

Team Blitz at 2008
Open House with
the 2008 robot



2008 in Review - Michaela Rillings

2008 was a great year! At the Colorado Regional, our robot Audrey III was one of only two robots that was able to successfully launch the ball over the rack! Most teams threw the ball under the rack or placed the ball on the top of the rack. Unfortunately we encountered several mechanical problems and were not able to launch the ball until our last match, which was in the quarter finals. Everyone was aware of the problems we faced so when at last we successfully launched the ball the crowd went wild!

Although we did not place in the finals at the regional competition we still walked away with an award. We won the **Kleiner Perkins Caufield & Byers Entrepreneurship Award**. This award recognizes the entrepreneurial spirit in a team. To win this award, a team must develop the framework for a comprehensive business plan to scope, manage, and obtain the teams objectives. We were given the award for displaying entrepreneurial enthusiasm and the vital business skills to create a self-sustaining program.

2008!!

New Control System for 2009 -Nathan Grubb

This year the new FIRST robotics competition has many new challenges, including a brand new control system. In previous years FIRST has used a Microchip PIC as the main component of the system, but starting in 2009 the National Instruments CompactRio will become the new center of the system. Although it increases the complexity of the electrical system considerably, it is a much more flexible and powerful system. Using off-the-shelf components like Linksys wireless, it moves the FIRST control system into a whole new league. There is also a whole method of programming. Instead of EasyC or Microchip C18, the new system allows teams to program either in Labview, a graphic programmer, or in ANSI C/C++, using WindRiver as an Integrated Development Environment. There is also a new library of common methods developed by Worcester Polytechnic Institute that will enable teams to concentrate on the competition, rather than wallowing in the technical aspects of the embedded pc. The new control system is a versatile, powerful new system. Although it will take some time to adapt to its peculiarities, the new system opens up new, exciting paths. You can expect a lot from FIRST programmers this season, and if you're interested in learning more, or writing some code yourself, feel free to attend any of the control system's meetings.

Being A New Mentor -Jim Intriglia

After watching Team Blitz in action last year, I decided to join the team this year as a mentor. The experience of participating and working with the team has been nothing less than exciting, challenging and best of all, fun.

This year's FRC game, Lunacy, challenges team members to develop and choose the best winning strategy for game play that will drive the design of the Team Blitz robot. Team mentors, leaders, and members gathered for the first strategy brainstorming session following the kickoff event at the Denver Museum of Nature and Science.

Successfully meeting the Lunacy challenge at the upcoming 2009 FRC competition will require leadership, teamwork, and coordination among all members and supporters of Team Blitz. This is no small challenge based on what I witnessed last year at the FRC regional competition and experienced during the first few days of this year's FRC challenge event.

There will be many opportunities for all team members, mentors, and supporters to gain new knowledge, learn, and apply new skills, and make new friends-- all in the spirit of gracious professionalism. Like many other endeavors of this kind, team members will get as much out of the 2009 FRC Team Blitz experience as they put into it.

Jim Intriglia is a Team Blitz mentor and supporter. Read more of his impressions of FIRST and Team Blitz via his personal blog at <http://JimIntriglia.wordpress.com>.

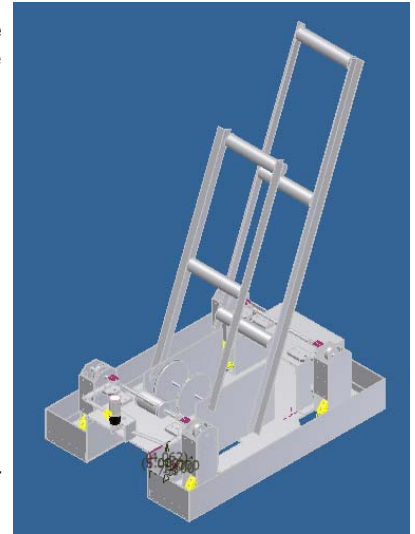
*Thanks to all
of our
sponsors for
getting the
team off to a
great start
and thanks
Mr. and Mrs.
Walsh for
letting us use
their lovely
home for
robot
construction!*

Inventors at Work

This year the team decided to take on the Autodesk Inventor Challenge. A group of the students have been learning Autodesk's Inventor, a CAD (Computer Aided Design) software package. In past seasons, the team has pretty much built the robot part by part with no design drawings to work from resulting in a single task build stream. This year we have designed the entire chassis and mechanism frame in Inventor. This has allowed us to print detailed part drawings for students to build parts from, allowing several students to be working on different subassemblies at the same time. We have stepping into the world of real design engineers and although it has been challenging, it has also been fun and exciting to see it all come together on the computer screen.

The resulting Inventor model provides a prototype of the design to help students visualize, simulate, and analyze how the robot will work under real-world conditions before a part is ever machined. This in turn helps reduce errors during the build process and significantly reduces the time to machine and build the robot. Now that we have this new skill in our pocket, hopefully next year we will be able to produce the CAD drawings faster and be able to further expedite the build cycle.

We plan to submit the final robot design to the Autodesk Inventor competition in February.



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TEAM BLITZ is a high school robotics team of students from the Conifer, Bailey, and Evergreen areas. We are affiliated with FIRST (For Inspiration and Recognition of Science and Technology), a non-profit organization founded in 1989 by inventor and entrepreneur Dean Kamen "to create a world where science and technology are celebrated". Team Blitz was organized by a group of local parents and technical mentors and is under a 501c3 sponsor and is one of 1,300 teams from around the world. This team of youth, ages 13-18, will compete in the FIRST Robotic Challenge.

Our Mission

To establish a permanent robotics organization in the 285 Corridor Communities, Conifer, Aspen Park, and Evergreen, whose purpose is to help our young people discover the fun and excitement of science, technology and engineering through challenges introduced to them by the FIRST robotics competition.

2009 Sponsors and Booster Club

Gold Sponsors

- Comcast

Bronze Sponsors

- IREA
- Conifer Newcomers and Neighbors
- Aspen Park Veterinary Hospital
- Lockheed Martin
- Sanders Sound Systems
- C&R Technologies

Booster Club

- Barnes and Noble
- Bleikamp family
- Walsh family



- Aspen Park Veterinary Hospital

Thanks also to our individual sponsors:
The Walsh family and the Bleikamp family

