





Boosting Engineering, Science, and Technology



## **Mission Statement**

BEST is a non-profit, volunteer-based organization whose mission is to inspire students to pursue careers in engineering, science, technology, and math through participation in a sports-like, science-and engineering-based robotics competition.



## **Our Principles**

- Students are the primary participants and benefactors. BEST is an extracurricular academic experience that engages students through teamwork, self-directed learning, apprenticeship, and problem solving.
- Students perform all of the work. Team mentors—engineers, technical professionals and scientists from industry—serve as guides to shepherd students through the engineering design process.
- Schools participate at no cost. There are no entry fees or kits to purchase associated with the BEST competition. Schools must fund their travel costs, team shirts, and other team enhancements.
- BEST is an equal opportunity program. Any public, private, or home school may participate in BEST.



## **The Gap**

In the 20 years of BEST we have given students a path, a path to their future, a path strewn with gaps. Maybe they don't realize the importance of these gaps, but we do. For without this realization on our part, BEST will cease to be BEST.

In BEST, students encounter problems. Solving these problems is not our goal, how to approach



these problems, is. We don't give the student everything to solve these problems. There is a gap, a gap we intentionally provide. Crossing that gap requires students to innovate, to create, and to discover the importance of crossing gaps, both professionally and personally.

In whatever aspect of Engineering, Science, or Technology they choose as their career, there will be these gaps waiting for them. Crossing these gaps will be their challenge, their vocation, and their very reason for doing what they do. We have discovered we are individuals who expect these gaps and have a talent for crossing them. We have even discovered we are individuals who covet the crossing. We want to find students who also may share this talent, this passion and show them that there is a career for crossing gaps.

But it is this very talent, this very joy of being able to cross these gaps and arrive at a solution that makes it so very difficult for us to create a problem that contains gaps. Our nature is to provide the method and materials



we know will take a student across gaps. But, against our very nature, we do not. We know that if we provide everything there will be no problem, no gap to be crossed. A gap is caused by something missing and we make sure something is missing. We provide the gap. For like us, students reach this gap, and like us, they smile.

**Steve Marum and Ted Mahler** *Co-Founders* 

## **President's Letter**

Over the course of my personal involvement with the BEST program, I have had to ask myself the same question each year at kick-off: "How are the kids going to do THAT?!" This year was no different. At the unveiling of the space elevator concept, the audiences were often very hushed and then we heard an eruption of excitement and noise as teams accepted yet another amazing challenge. Too often in our communities we hear of individuals and groups giving up when presented with an obstacle. This does not happen at BEST.

Watching students reach higher (literally) than ever before, we were able to see strong problem solving in action. Our volunteers, hub directors, mentors and coaches reached new heights of success as well. Working together toward a common goal of learning success is just one facet of the success of the BEST Robotics program. We are all grateful for the hard work everyone commits to across the program.



The priority of the Board of Directors this year has been focused on a sustainable future for the organization. A major part of that sustainability is the need to constantly add more leaders to the organization – these are individuals who are willing to serve in positions that direct the program as well as take roles in key committees within the organization. Thank you to those who have willingly volunteered their time to serve. This is what makes the organization strong.

As part of the effort toward a more sustainable future we have hired Mr. Greg Young (Capitol BEST) as our Director of Operations and Ms. Rhonda Sherrell has joined the team in an administrative capacity to keep the organization running smoothly. We are especially grateful to Ms. Janne Ackerman (CoCo BEST) for accepting the position of Interim Executive Director as we search out a new Executive Director for the organization. In developing this national office, we are seeking to create a more uniform organization that volunteers and participants can rely upon for day to day operations assistance.

Lastly, our strategic planning committee has been striving to assess our program and identify the areas where we can grow and improve to better meet the needs of the BEST community. Having studied the results, the board of directors continues to refine our organization goals for sustainability. Regardless of changes being made, the mission and basic principles of the program – student-designed, student-built, student-driven robots at a cost that allows any school to participate – remain paramount and constant.

Yours in BEST,

Eric Heiselt

President, BEST Board of Directors



## **Program Overview**

- **BEST** originated in 1993 when Ted Mahler and Steve Marum, two engineers with Texas Instruments in Sherman, Texas, started the program as a competition for rural schools in the area. The first competition hosted 14 schools and 221 students. In fall 2012, over 875 schools and 18,000 students participated.
- BEST Robotics, Inc. (BRI or BEST) incorporated as a 501(c)3, non-profit organization in 1998.
- BEST is a volunteer-driven organization, with over 10,000 people serving as "hub" (local competition site) organizers, event personnel, team mentors, and competition judges.
- BEST licenses use of its program to groups that want to start and host the program in their communities.
   Any group—companies, school systems, two- or four-year colleges or universities, professional engineering societies, or individuals—can start a hub. Funding for a hub must be raised by the local organizing group.

#### **Competition Overview**

- The competition itself is comprised of two divisions: Robotics and the BEST Award. All teams compete in the Robotics division. The BEST Award competition is optional for participating schools.
- Robotics Each team designs and builds a radio-controlled machine to accomplish defined tasks in a game-type format. In September six weeks before the competition, the teams gather at local hub sites for Kick Off Day where they receive identical kits of equipment (e.g., motors, R/C unit, batteries, processing board, etc.) and raw materials (e.g., plywood, PVC pipe and connectors, screws, bolts, nuts, glue, etc.) from which to build their machines. Teams also receive a detailed set of game rules and a demonstration of the game on the playing field. The machines they build cannot exceed 24 pounds, must fit within a 24-inch cube at the starting position, and must be built only from the materials provided in the kit.
- BEST Award teams are judged on the following: Project Engineering Notebook; Marketing (Oral) Presentation;
   Educational Display; Judges Interview; Spirit and Sportsmanship; and Robot Performance. Winning the BEST Award is considered the highest achievement any team in the competition can accomplish.

#### **Program Features**

**BEST** inspires students to pursue careers in engineering, science and tecnology. This is critical given the dearth of engineers that industry is experiencing now and will continue to experience in the future.

**BEST** helps prepare students to be technically proficient in tomorrow's workforce.

**BEST** teaches teamwork and leadership development as well as analytical, decision-making, and problem-solving skills.

**BEST** students experience "design-to-market" product development – experience that is transferable to all engineering and science disciplines and career pursuits



**BEST** provides participating students recognition and acclaim typically reserved for their peers in sports.

**BEST** enhances teacher effectiveness.

**BEST** is an outstanding educational program accessible to all students, schools, and communities.



## **2012 Game Description**

## The Story Behind the 2012 Game, "Warp XX"

#### **Educational Theme: The Space Elevator**

#### **The Story Line**

Hours before your cargo ship arrives at an equatorial island in the Pacific Ocean, you can see a thin, bright, vertical line bisecting the sky. As the ship draws closer, you see that the base of the line terminates at a large building that occupies much of the island. Your gaze follows the bright line from the building upward, but you cannot see its far end. The line is a ribbon of super-strong carbon nanotube grown around an unobtainium monocrystal-line structure and stretches from this equatorial island up to the anchor asteroid in geosynchronous orbit 62,000 miles above you.

Often hailed as the eighth wonder of the modern world, the Space Elevator is the premiere low-cost solution for lifting cargo out of Earth's gravity. It will expand lunar colonization, exobiological exploration, and asteroid mining. It has already spawned many new industries, and competition for Space Elevator contracts is fierce. The first stop on the Space Elevator is Midway Station, located just above the atmosphere, but well below geosynchronous orbit. Midway Station is a cargo transfer depot, solar power station, and a home away from home for the Space Elevator supervising engineers. The Space Elevator program needs unmanned robotic vehicles for routine cargo delivery and additional station expansion and construction.

#### **BEST Team Challenge**

Celebrating its 20<sup>th</sup> anniversary, BEST Robotics, Inc. (BRI) has published a request for proposal (RFP) for the production of efficient robotic lifting vehicles for the Space Elevator program. As suppliers of robotic systems, BEST teams have six weeks to respond to the BEST RFP with a technical design and development document (engineering notebook) and prototype demonstration system (robot). BRI judges will perform a technical and process evaluation of each team's document. This evaluation will be followed by a "fly-off" competition (Hub Game Day) consisting of head-to-head testing of the prototype systems. At the end of the "fly-off", BRI judges will select a limited number of teams to advance to the next phase. Advancing teams will have approximately three weeks to revise and resubmit their document and prototype system. BRI judges will evaluate revised documents and conduct a second "fly-off" competition (Regional Championship). The BEST teams with superior designs and top-performing prototypes will be awarded a coveted Space Elevator contract.

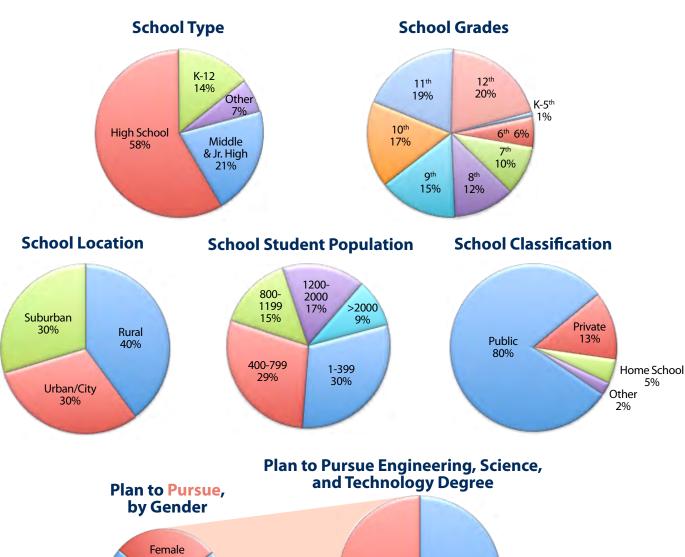
#### **Team Objectives**

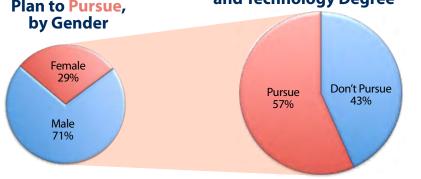
Design and build a prototype robotic system to transport cargo and equipment on the Space Elevator tower to and from Midway Station. The teams with the most success demonstrating the follow tasks during the "fly-offs" will win one of several follow on contracts.

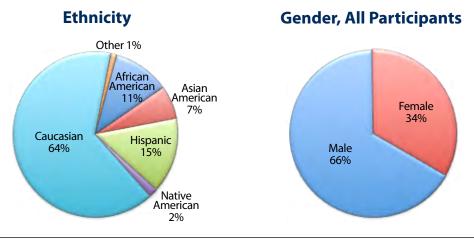
Cargo	Task Required	
Habitation Module	Lift from Base Station and install at Midway Station for added crew housing	
Solar Panels	Lift from Base Station and install panels at Midway Station for increased power production	
Waste Cargo Balls	Transfer from Base Station to cargo ship for disposal	
Light Cargo Balls	Lift from Base Station and deposit in cargo bin at Midway Station	
Empty Fuel Cells	Transfer from Midway Station to Base Station for refueling	
Full Fuel Cells	Lift from Base Station to Midway Station	
T-Structure	Lift from Base Station and install at Midway Station for future expansion	



## **2012 Demographics**



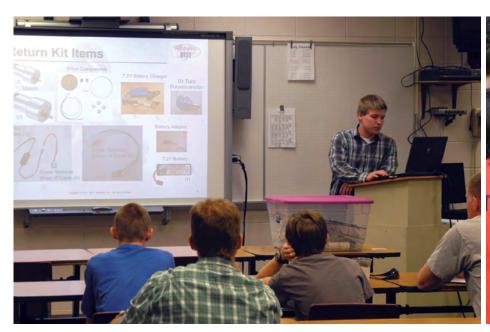




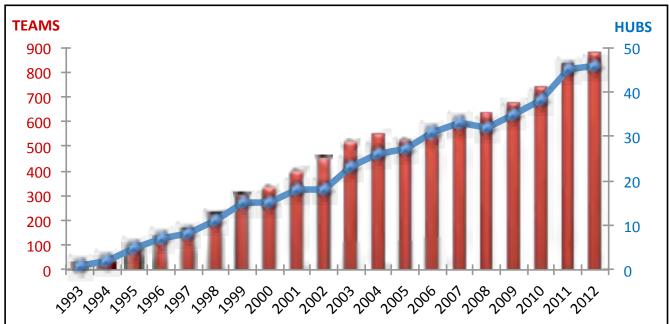
## **Hub and Team Growth**

#### As a result of participating in BEST, students...

- Understand real-world use of mathematical concepts and applied physics.
- Experience real-world science and engineering challenges, training that is transferable to all academic disciplines and career pursuits.
- Understand what engineers do engineering is "demystified".
- Experience "design-to-market" product development experience that is transferable to all career pursuits.
- Receive recognition and acclaim typically reserved for their peers in sports.







**Competition Sites** 

2012 Hubs and Regional Championships

HubsRegional Championship

#### **ALABAMA**

Blazer BEST (2008)

University of Alabama at Birmingham Birmingham, AL

Central Alabama BEST (2011) Central Alabama Community College Talladega, AL

Jubilee BEST (2004) Jubilee BEST Robotics, Inc. Mobile, AL

North Alabama BEST (2009) Wallace State Community College Hanceville, AL

#### Northeast Alabama BEST (new in 2012)

Northeast Alabama Community College Rainsville, AL

Northwest Alabama BEST (2011) Northwest Shoals Community College Muscle Shoals, AL

#### Selma BEST (new in 2012)

Wallace Community College Selma, AL

Shelton State BEST (new in 2012) Shelton State Community College Tuscaloosa, AL

Tennessee Valley BEST (2003) Calhoun Community College Decatur, AL

War Eagle BEST (2001) Auburn University Auburn, AL

Wiregrass BEST (2010) Wiregrass BEST, Inc. Dothan, AL

#### **ARKANSAS**

Crowley's Ridge BEST (2006) Arkansas State University Jonesboro, AR

Little Rock BEST (2009)
University of Arkansas at Little Rock
Little Rock. AR

Northark BEST (2006) North Arkansas College Harrison, AR

River Valley BEST (2003) University of Arkansas - Fort Smith Fort Smith, AR

#### **COLORADO**

Rocky Mountain BEST (2010) Rocky Mountain BEST, Inc. Denver, CO

#### CONNECTICUT

Connecticut BEST (2006)
Central Connecticut State University
New Britain, CT

#### **FLORIDA**

Emerald Coast BEST (2007) University of West Florida Pensacola, FL

#### **GEORGIA**

Georgia BEST (2003) Southern Polytechnic State University Marietta, GA

## KANSAS

Kansas BEST (1999) Wichita State University Wichita, KS

#### **LOUISIANA**

NOLA BEST (2011) Red Stick Robotics, Inc. New Orleans, LA

#### **MINNESOTA**

Minnesota BEST (new in 2012) New London-Spicer Schools New London, MN

#### **MISSISSIPPI**

Mississippi BEST (2005) Mississippi State University Starkville, MS

#### **MISSOURI**

Show Me BEST (2011) State Fair Community College Sedalia, MO

#### **NEW MEXICO**

New Mexico BEST (2001) New Mexico State University at Las Cruces Las Cruces, NM

#### **NORTH DAKOTA**

Bison BEST (2007) North Dakota State University Fargo, ND

Blue Hawk BEST (2011) Dickinson University Dickinson, ND

#### Wildcat BEST (new in 2012)

North Dakota State College of Science Wahpeton, ND

#### **OKLAHOMA**

Heartland BEST (2002) Northwestern Oklahoma State University Alva, OK

#### **PENNSYLVANIA**

Wolverine BEST (2010) Grove City College Grove City, PA

#### **SOUTH DAKOTA**

Jackrabbit BEST (new in 2012) South Dakota State University Brookings, SD

#### **TENNESSEE**

Music City BEST (2006) Lipscomb University Nashville, TN

#### **TEXAS**

Big Country BEST (2011)
Texas State Technical College – West Texas
Sweetwater, TX

Capitol BEST (2001) Capitol BEST, Inc. Austin, TX

Collin County (CoCo) BEST (1995) Collin County BEST, Inc. McKinney, TX

Cowtown BEST (2001) Lockheed-Martin Aeronautics Fort Worth, TX

Dallas BEST (1996) Texas Instruments Dallas, TX

Denton County (DC) BEST (1997) University of North Texas Denton, TX

Galveston BEST (2009) University of Texas–Medical Branch Galveston, TX

Heart of Texas BEST (2010) Texas State Technical College – Waco Waco, TX

Lion's Pride BEST (2010) Texas A&M University – Commerce Commerce, TX

North Houston BEST (1999) Baker-Hughes, Inc. The Woodlands, TX

Rio Grande Valley BEST (2011) Texas State Technical College – Harlingen Harlingen, TX

San Antonio BEST (1994) San Antonio BEST, Inc. San Antonio, TX

Southeast Texas BEST (2011) Sam Houston State University Huntsville, TX

West Texas BEST (1995) Texas Tech University Lubbock, TX

#### REGIONAL CHAMPIONSHIPS

Frontier Trails BEST (2005) University of Arkansas - Fort Smith Fort Smith, AR Northern Plains BEST (new in 2012) North Dakota State University Fargo, ND South's BEST (2003) Auburn University Auburn, AL Texas BEST (1994) University of Texas at Dallas Dallas, TX



## **2012 BEST National Partner**



In 2011, MathWorks became BEST Robotics' first-and-only National Corporate Partner through its generous funding support for the BEST Robotics organization. The company is the leading developer of mathematical computing software for engineers and scientists in the world. MathWorks equips BEST teams with software, training, and mentoring to tackle the same technical issues as professional engineers. Industry-standard MATLAB® and Simulink® provide a flexible design environment where BEST students can apply classroom theory to solve problems encountered in designing their robots.

## **2012 BEST National Sponsors**



In 2005, igus<sup>®</sup>, Inc. became BEST's first National Corporate Sponsor by donating its innovative polymer automated machinery parts to every BEST team for use in the design of their robots. The incorporation of these parts revolutionized the robotics competition by enabling students to design more innovative and efficient machines.



Since 2005, SolidWorks® has been providing their CAD Design software free to all BEST students. Their BEST and VEX CAD models, curriculum, tutorials, and design tools have been invaluable in helping students understand the basics of robot design.



Intelitek, developers, producers and suppliers of industrial Blended Learning Technology Training Systems, provides its EasyC programming software for the VEX Cortex microcontroller free to all BEST teams and teachers. Designed with BEST students in mind, easyC's simple to use drag-and-drop programming interface does all of the syntax and spacing, allowing students to focus on program flow and robot design.



The Robotics Academy at Carnegie Mellon University provides its ROBOTC programmable software free to all BEST teams. ROBOTC is the premiere C-based robotics programming language for educational robotics and competitions. It is ideal for those students who want to go beyond simple drag-and-drop programming to writing their own code.



InspirTech provides each BEST team with its Student Edition 2011, a structured Solid-Works training course that guides students through the learning process with a unique and highly effective holistic approach to teaching that inspires confidence rather than confusing and frustrating students.



Now owned by AutoDesk, HSMWorks is the leading Computer Aided Manufacturing (CAM) software for SolidWorks and AutoCAD. HSMWorks provides seemless integration of 2D and 3D toolpath programming directly into SolidWorks. BEST students can now take their CAD models developed in SolidWorks and within minutes be cutting parts out on their school's router or CNC machine, all from within the SolidWorks environment.

MAKERS OF MATHEMATICA AND WOLFRAM ALPHA

**WOLFRAM**RESEARCH Wolfram Research annually provides BEST students with its renowned computational product, Mathematica. Whether it is research, computations, or technical documentation tasks, Mathematica helps students be their most productive.



## **2012 Regional Championship Sponsors**



#### **Frontier Trails**

Platinum Level Sponsors

Gol

Gold Level Sponsors

**Baldor Electric Company** 

Fort Smith Convention and Visitors Bureau

Gerdau

OGE Energy Corp. Foundation, Inc.

Peterson Chemicals, Inc.

**United States Air Force** 

University of Arkansas - Fort Smith

Weldon, Williams & Lick, Inc.



#### **Northern Plains**

KL&J

North Dakota Department of Career and Technical Education



#### South's BEST

**Auburn University Outreach** 

Boeing

**Brasfield & Gorrie Construction** 

**Briggs & Stratton** 

Hyundai Motor Manufacturing Alabama

Neptune Technologies Group

**Rheem Water Heaters** 

**Southern Company Services** 

Southern Nuclear

Bechtel Plant Machinery Inc.



#### **Texas BEST**

Edward E. Whitacre, Jr. College of Engineering, Texas Tech University

Ericsson

**Lockheed Martin** 

Raytheon

**Texas Instruments** 



## **2012 Hub Sponsors**

#### **Big Country BEST**

Ludlum Measurements, Inc

#### **Bison Best**

KL&J

North Dakota Department of Career and Technical Education

#### **Blazer BEST**

Valmont-Newmark

#### **Capitol BEST**

**Advanced Micro Devices** 

**Technology and Education Executive Council** 

#### **Central Alabama BEST**

Alabama Governor's Office of Workforce

Development

Alabama Power Company

Central Alabama Community College

Honda Manufacturing of Alabama

**McCartney Construction Company** 

Talladega Rotary Club

Talladega Superspeedway

International Motorsports Hall of Fame

Representative Steve Hurst

#### **Collin County (CoCo) BEST**

Raytheon

Garry and Janne Ackerman

#### **Cowtown BEST**

Lockhed Martin

#### **Dallas BEST**

Texas Instruments - Analog Engineering Operations

Texas Instruments - DLP Products

Raytheon

#### **Emerald Coast BEST**

**Gulf Power** 

#### **Heart of Texas BEST**

Texas State Technical College Community Bank & Trust First National Bank of Central Texas

#### **Heartland BEST**

Northwestern Oklahoma State University

#### Jackrabbit BEST

First Premier Bank Vision Brookings Wells Fargo Avera Diamond Level Sponsors

Platinum Level Sponsors

Gold Level Sponsors

#### Jubilee BEST

J.L. Bedsole Foundation

Faulkner State Community College

ExxonMobil

University of South Alabama - School of Computing

Hargrove Engineers + Constructors

**Technip** 

**Ingalls Shipbuilding** 

**Aztec Maritime Services** 

**Fvonik** 

Airbus

**BASE** 

Alabama Power

University of South Alabama - College of Engineering

TSCI

Lowes

**Conde Systems** 

Chevron

#### **Kansas BEST**

The Boeing Company

Cessna Aircraft Company

Spirit AeroSystems

Airbus Americas Engineering, Inc.

349th Air Force Recruiting squadron

Great Plains Ventures, Inc.

#### **Lion's Pride BEST**

Harrison Walker & Harper 1887

**Region 8 Texas Education Service Center** 

#### **Minnesota BEST**

Kandiyohi Couty & Willmar Economic

**Development Commission** 

Prinsco

City of Willmar

Jennie-O Turkey Store

Hubs that are not listed did not provide any sponsor information



## **2012 Hub Sponsors** (continued)

Lakeland Broadcasting Q102 Willmar Lakes Area CVB

#### Mississippi BEST

Caterpillar EpsCor Milwaukee Tools Bagley College of Engineering

#### **New Mexico BEST**

Calculex
Jacobs Technology
New Mexico Space Grant Consortium
The Boeing Company
TRAX International
El Paso Electric

#### **North Houston BEST**

**Baker Hughes** 

#### **Northeast Alabama BEST**

**Tennessee Valley Authority** 

#### **River Valley BEST**

Fort Smith Convention and Visitors Bureau
OGE Energy Corp. Foundation, Inc.
University of Arkansas - Fort Smith
Peterson Chemicals, Inc.
United States Air Force
Baldor Electric Company
Weldon, Williams & Lick, Inc.
Gerdau

#### **Rocky Mountain BEST**

Club Workshop, LLC Jeppesen, A Boeing Company Dick and Judy Tumlinson Raytheon

#### **San Antonio BEST**

Best Buy Children's Foundation Tesoro Corporation Cogburn Family Foundation Cutshall Consulting LLC Rackspace Southwest Research Institute

#### **Show Me BEST**

Star Line Brass
Ditzfeld Transfer
Kansas City Power & Light
KEIPER Inc.

#### **Southeast Texas BEST**

Sam Houston State University Capsher Technologies Knowledge Based Systems Inc. Hydraulic Works, Inc.

#### **Space City BEST**

ASME NASA Johnson Space Center

#### **Tennessee Valley BEST**

**Toyota** 

#### **War Eagle BEST**

Auburn University Outreach
Boeing
Briggs & Stratton
Hyundai Motor Manufacturing Alabama
Neptune Technologies Group
Southern Company Services
Southern Nuclear
Brasfield & Gorrie Construction
Rheem Water Heaters

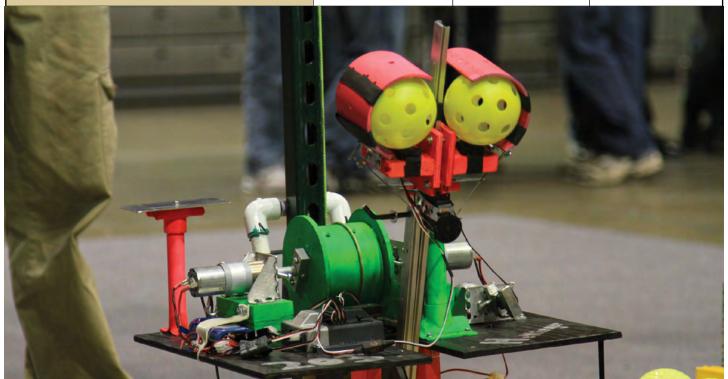
#### **Wolverine BEST**

Bechtel Plant Machinery Inc.

## **2012 Financials**

## Statement of Activities December 31

	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2010
Assets			
Cash and Equivalent			
Total Checking/Savings	\$272,479.77	\$182,594.47	\$167,590.93
Total Accounts Recievable	-\$81.85	-\$57.69	\$17,416.31
Total Other Current Assets	\$0.00	\$10,184.01	\$10,339.83
Cash and Equivalent	\$272,397.92	\$192,720.79	\$195,347.07
Total Assets	\$271,397.92	\$192,720.79	\$195,347.07
Liabilities and Equity			
Total Current Liabilities	\$0.00	-\$7,364.81	-\$6,342.55
Total Liabilities	\$0.00	-\$7,364.81	-\$6,342.55
Total Equity	\$272,397.92	\$200,085.60	\$201,689.62
Total Liabilities & Equity	\$272,397.92	\$192,720.79	\$195,347.07



## **2012 Board of Directors**

## Officers, Members, and Board Committee Chairs

President Eric Heiselt Vice President Larry Gewax
Secretary Ken Berry Treasurer Kathy Geise

#### **District 1 Representative Kevin Dinsdale** (Hub Director, Show Me)

Crowley's Ridge (Jonesboro, AR); Heartland (Alva, OK); Kansas (Wichita); Little Rock (AR); Northark (Harrison, AR); Oklahoma (Oklahoma City); River Valley (Fort Smith, AR); Show Me (Sedalia, MO)

#### **District 2 Representative GJ Snyder** (Hub Director, North Houston)

Brazos (Bryan/College Station); Coastal Bend (Kingsville); Galveston; North Houston (The Woodlands); Rio Grande Valley (Harlingen); Southeast Texas (Huntsville); Space City (Houston)

#### **District 3 Representative**Becky Musil (Hub Director, Heart of Texas)

Bobcat (San Marcos); Capitol (Austin); Cowtown (Fort Worth); Dallas; Heart of Texas (Waco); San Antonio

#### **District 4 Representative** Terry Blankenship (Hub Director, Big Country)

Big Country (Sweetwater); Collin County (McKinney); Denton County (Denton); Lions Pride (Commerce); New Mexico (Las Cruces); North Texas (Sherman); West Texas (Lubbock)

#### **District 5 Representative** Eric Heiselt (Hub Director, Mississippi)

Blazer (Birmingham, AL); Central Alabama (Talladega); Emerald Coast (Pensacola, FL); Georgia (Marietta); Jubilee (Mobile, AL); Mississippi (Starkville); Music City (Nashville, TN); NOLA (New Orleans, LA); North Alabama (Hanceville); Northwest Alabama (Muscle Shoals); Tennessee Valley (Decatur, AL); War Eagle (Auburn, AL); Wiregrass (Dothan, AL)

#### **District 6 Representative** Kathy Geise (Rocky Mountain)

Bison (Fargo, ND); Blue Hawk (Dickinson, ND); Connecticut (New Britain, CT); Philadelphia (PA); Rocky Mountain (Denver, CO); Wolverine (Grove City, PA)

**Regionals Representative** Ken Berry (Co-Director, Texas)

At Large Members Larry Gewax (Hub Director, Dallas)

Miguel Garcia-Rubio (University of North Texas)

**Board Committees and Chairs** Awards & Judging Mary Lou Ewald

Board Development Miguel Garcia-Rubio

Communications GJ Snyder
Game Greg Young

Hub Development Terry Blankenship

Kit David Kwast
National Championship Study
National Conference Eric Heiselt
Public Awareness Kathy Geise
Software Greg Young

## **Testimonials**



Thomas Ereckson Middle School ool District

January 27, 2004 Steve Marum President, BEST Robotics, Inc.

To Whom It May Concern:

Re: Robotics Program at Ereckson Middle School

From a principal's perspective, the Robotics program embodies all the quality today, as well as "leaders of tomorrow" to have. The program takes interes them what it takes to become a true "team." Students work together for for a competition that focuses on critical thinking, team planning, coope components, technology skills, as well as spirit and creativity. Each stu their contribution to the team is identified.

The competition is composed of a detailed, written notebook, outli through to build the robot. A verbal presentation of this process Demonstrations of the robot's ability to achieve the stated goal as is the "cheer section" we have at each competition, which y and their families. The creative aspect of the competition co students and staff wear to the event. If students are succes proceed to the state level. This is where the competition/ high schools, and this is where skill is key, and the stude regard to success, but rather the hard work put in by ty in large part, is the result of the amount of time, ded It does not come easy.

I am very proud of the accomplishments of our kj Gadd, as well as the skills shared with all studey what this program embodies—love of techan emphasis on hard wor

winner.

Sincerely,

Phyllis Spain, Principal

Ereckson Middle School

Mr. President:

As a senior in high school, I had the opportunity to participate in the B.E.S.T. Roll Competition. Before I began my work on the project, I was just another high scho As a senior in high school, I had the opportunity to participate in the B.E.S.T. Role student planning to pursue an ambiguous business degree in college. After the role Competition. Before I began my work on the project, I was just another high school experience — striving with a highly intelligent group of dedicated individuals in a cn student planning to pursue an ambiguous business degree in college. After the robe endeavor—I knew that only an engineering degree would do for me. experience — striving with a highly intelligent group of dedicated indeavor — I knew that only an engineering degree would do for me.

The Physics II AP class at my high school was a melting pot of talent. My peers had the West and hobbies the The Physics II AP class at my high school was a melting pot of talent. My peers had ranged from astronomy to soccer to chess. Many would not have been friends outside of the part of the property of the prop during our college breaks.

ethnic backgrounds that hailed countries of both the East and the West and hobbies that the classroom – if it were not for the robot project that drew us together. Now. we reuni ranged from astronomy to soccer to chess. Many would not have been friends outside of during our college breaks.

Any would not have been friends outside of the robot project that drew us together. Now, we reunit Our teacher made it a point not to tell us which of our ideas would work and which were in the sky. He knew we had to do thinos ourselves to really learn. We ended up

Our teacher made it a point not to tell us which of our ideas would work and which were building many robots as we felt our way forward.

Our teacher made it a point not to tell us which of our ideas would work and which were building many robots as we felt our way forward.

We ended up Just pie in the sky. The knew we had to do uningo obuilding many robots as we felt our way forward. My friends and I gained significant experience with practical engineering problem solving. but we also added powerful project management tools to our skill sets. We My friends and I gained significant experience with practical engineering problem solving, but we also added powerful project management tools to our skill sets. We associated the solving and coordinated the solving, but we also added powerful project management tools to our skill sets. We afford of our team members. As deadlines loomed, team members set aside the

ascertained permanent work sites, scheduled construction times, and coordinated the efforts of all of our team members. As deadlines loomed, team members set aside their Through hard work and cooperation efforts of all of our team members. As deadlines loomed, team members set aside their our combined vision became a reality.

Through hard work and cooperation Today I study aerospace engineering Torshowing me the right track. It was the Sincerely,

17 April 2013 Travje .

he limit. Thank you for d have happened to me.

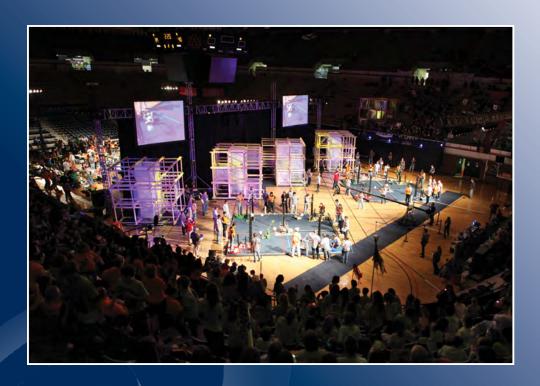
If of Davidson's Lopotics to thank you are the due on and you want stime on the first Dear Volunteur that you have this one of the program and up your time so the program and up your time so the that you would give up your have this one of the program of a muself, can have this open timits. amazing opportunity

Sincerelysm. Stanly





# 20th Anniversary





Boosting Engineering, Science, and Technology

http://www.bestinc.org