



Team 418



Team Demographics

Grade Distribution

Seniors: 17, Juniors: 7

Sophomores: 9, Freshmen: 14

Gender Ratio

Male: 32, Female: 15

Community Events

Events - Wii Partii, SMART Camp, Movie Demos, Maker Faire, UT Edison Lecture Series, Helping Hands Home, etc.

Demonstrations - Over **150 public appearances and robot demonstrations** in the past 10 years. About **52,000 people** have attended our presentations

Recognitions

U.S. Senators recognized LASA Robotics as an example of integrating STEM curriculum through robotics competitions

Featured in EE Times Magazine

Student written title article about team 418's robot designs was published as part of the "Extreme Design Series," July 2008 Edition.

AISD Board of Trustees Recognition

Austin Independent School District; awarded 2007, 2006, 2005, 2004, and 2003.

Texas Senate Proclamation No. 685

The Senate of the State of Texas, Hon. Sen. Kirk Watson; December 2007.

LASA Robotics, team 418, is made up of 47 students from the Liberal Arts and Science Academy in Austin, Texas. We have been participating in FIRST for ten years, and have used the knowledge gained from our experience in FRC competitions to develop close partnerships with companies like National Instruments, and to work with other teams in the Austin area to inspire members of our community.



Our goal, as a team, is to enhance the skills and educations of high school students and to encourage members of our community to develop an interest in science and technology.

Partnership with FIRST

Official Central Texas FLL sponsors
Hosted an FLL Qualifier at LBJ High School
Secured finances for a **new FTC team** in 2009
Represented FIRST with other FRC teams at Maker Faire
Mentor FRC & FLL teams
In the process of creating **Central Texas Robotics** to provide support and funding to area teams, similar to **Houston Robotics**

Foundation for the Future

100% high school graduation rate
98% go on to study engineering
3 students have received FIRST scholarships
6 students have used knowledge from FIRST to receive internships and jobs in high school

Achievements

2009 Lone Star Regional – RCA Winners
2009 Lone Star Regional – Xerox Creativity
2009 Lone Star Regional – Woodie Flowers
2009 Dallas Regional – Winners
2007 Lone Star Regional – Innov'n in Control
2006 Lone Star Regional – Innov'n in Control
2006 Lone Star Regional – Winners
2005 Lone Star Regional – Finalists
2005 Lone Star Regional – Judges Award
2001 Lone Star Regional – Imagery Award
2000 – Rookie Year



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FRC 418 AristoPHanes

DRIVETRAIN

4-wheel skid (tank) drive
Excellent offensive / defensive maneuverability

CHASSIS

Wide drive base

OPTICS / TURRET

Automated tracking close-range shooter with rotating hood

ORBIT BALL STORAGE

Independent rear storage
Floor Replenishable
7 ball capacity

FIRE RATE

Can unload all balls in storage in less than 3 seconds



AUTONOMOUS ACTION

Autonomous evade and circle

ROBUSTNESS

Robust, low maintenance

FUNCTIONALITY

Shooter powered by a series of two belts connected to rollers with added fingers for extra grip;

BALL CONTROL

Options to feed balls into the hopper, out-feed balls through the bottom of the robot, or shoot balls out of the top

TRACTION CONTROL

Exponential Speed Ramping

FRC 418 AristoPHanes

DRIVETRAIN

4-wheel skid (tank) drive
Excellent offensive / defensive maneuverability

CHASSIS

Wide drive base

OPTICS / TURRET

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