



Mississippi State University

X-cited!

Vehicle Gets Paint, Students Get Money

Special points of interest:

- *The Equinox gets a fresh coat of paint! See adjacent article.*
- *See what each thrust is working on in our regular Thrust Update Area.*
- *Josh VanLandingham is featured as this edition's Student in the Spotlight.*
- *Elementary and junior high school students! Give us your ideas for a name for our Equinox! See page 2.*

The Equinox has a fresh coat of paint. The new colors incorporate MSU's colors of maroon and white and make the Equinox quickly recognizable and distinguishable from the other vehicles belonging to teams in the competition.

The painting was done by Allen Edward's Body Shop earlier in the month. The Equinox is white with a maroon stripe running around the bottom of the vehicle. The paint job is decorated with the Mississippi State University logo on the hood, and bears the number 15, the team's assigned number in the competition. The vehicle will soon be adorned by decals of logos of the Challenge X sponsors from around the country. One decal will belong to Allen Edward's Body Shop in recognition of their donation of time and resources that went into painting the vehicle.

"We really appreciate the generosity of Allen Edward's Body Shop in painting our vehicle," said David Oglesby, team leader.



The Equinox now reflects Mississippi State University school colors; maroon and white.

"They did an outstanding job and the Equinox is going to look great at this year's competition."

The new paint job is just in time for travel to this year's competition in Mesa, AZ; a trip that has now been funded by General Motors. On March 2, Bill Beggs, the team's mentor from General Mo-

tors, brought a check for over \$7,000.00 donated by the company to cover the team's travel to the competition. The check will cover airfare and hotel for 10 students and one advisor. The team will travel to the 10 day competition in Mesa, AZ on May 30.

Thrust Update Area: What are they working on?

Vehicle Modeling and Controls

The controls team has been calibrating and optimizing different critical parameters in the control strategy.

This calibration and optimization is being done to ensure optimal drive-ability and adequate driving safety while enhancing vehicle performance and technical specifications like fuel economy, and IVM-60 acceleration time, etc.

The shifting strategy is also being tested and should be complete later in the week.

Thrust Leaders: Jimmy Mathews and Kennabec Walp

Mechanical

The mechanical group has been working on getting our AC working, reinforcing the axles, and getting our engine and drivetrain broken in.

Thrust Leader: Brian Christian

Electrical

The electrical trust has been in the process of correcting a few wiring issues. We have also been working with the controls group to debug our control strategy, by doing on road simulations and testing on our newly commissioned chassis dynamometer.

Thrust Leader: Ron Lewis

Powertrain

We have been working on designing new axle shafts for our Equinox. We have also been tying up loose ends and preparing the vehicle for June competition.

Thrust Leader: Christopher Whitt

Outreach Program

On April 9 the team attended and exhibited the Equinox at the Columbus Air Force Base Show. This was a great venue for us, as over 60,000 people attended.

We'll also be present at the Tupelo Car Show this Saturday.

Outreach Coordinator: Amanda McAlpin

Upcoming Events

May 5—Exhibit Equinox at Tupelo Car Show

May 22—Equinox is shipped to competition location in Mesa

May 30—Competition in Mesa, AZ!

Atta-Dawgs

- Thanks to **Christopher Whitt, Kennabec Walp, Jimmy Mathews and Josh VanLandingham** for your help to the Outreach team by giving great presentations in the past weeks!

“Name our Vehicle” Contest

Open to grades K-8

Submit your idea for a great name for our vehicle! If your idea is chosen by the Challenge X team, we'll put it on our Equinox and you'll get a prize!

Deadline May 10

Please submit name ideas with your name and contact information to:

Challenge X

200 Research Blvd

Starkville, MS 39759

A special thanks to
Allen Edward's Body Shop
for painting our vehicle!



Students in the Spotlight

This column gives you a behind-the-scenes look at the students who are working on the Challenge X competition at MSU.

This week's student in the spotlight section features Josh VanLandingham, a mechanical engineering major. Josh has been a member of Challenge X since last summer. Josh's intelligence, enthusiasm, and warm smile are a valuable asset to the team. He's also a great speaker and is a great help to the outreach team. That's why we chose him for this edition's spotlight.

Name: Josh VanLandingham
Hometown: Jackson, MS
Major: Mechanical Engineering

Here Josh answers a few questions about his experience with Challenge X.

Q. What do you feel like you are gaining out of being part of Challenge X?

A. A good understanding of what it means to work as a team. A better understanding of what goes into developing a hybrid vehicle. A better ability to ana-



Josh VanLandingham

lyze and solve engineering problems.

Q. What do you enjoy most about being part of the competition?

A. The hands on work that goes into building the vehicle, and the problem solving that goes into finding solutions to various issues. Also testing numerous aspects of the vehicle. I'm getting a better understanding of how to properly engineer and modify a vehicle.

We also have fun. I had a great time riding Jimmy's two-cycle mountain bike!

Q. What is the most difficult part of being on the team?

A. Trying to find the time to work on the car while balancing family, school, and work.

Q. What do you plan to do after you get your degree?

A. I have taken an engineering job with Toyota Motor Manufacturing of North America. My wife and I are moving to Erlanger, KY at the beginning of July where I will begin my training at TMMNA headquarters.

For newsletter suggestions or corrections, please contact Amanda McAlpin at amcalpin@cavs.msstate.edu.