LHRE

Longhorn Racing Electric Newsletter

Fall 2026: October Edition
10/22/2026



The team at FSAE EV Comp!

It’s Great To See You!

Hello from Longhorn Racing Electric! We hope this October has been just as exciting as it’s been for our team. These past few months have been filled with spectacular events and incredible progress that we’re excited to share with you!

47
New Members

5
Drive Days

25
New Welders

A Message From Team Captain Alice Di Mauro

Hello LHRE family!

It's been a busy start to the year for Electric, and I'm excited to share what we've been working on. After completing over 275 miles of testing last season, more than all our previous cars combined, we're carrying those lessons into the design and build of our 2027 car.

This past weekend, we raced Orion, our 2026 vehicle, at UTA's Texas Autocross Weekend, finishing third overall and second among EVs. Getting the car ready took a huge effort, and I'm proud of how our members worked together to troubleshoot issues and keep us on track.

Our goal this season is a Top-5 finish at Formula SAE Electric 2027. We're focused on building a reliable car, getting it running early, and giving our team the testing time and experience to keep improving.

To our Electric alumni, partners, families, and friends: thank you for continuing to support LHRE. Your contributions, advice, and time make a real difference in what we can accomplish. We're looking forward to keeping you involved throughout the season!

Hook 'em!

Your Support Matters

Your support is the foundation of Longhorn Racing Electric's success. Since 2016, this organization has served as an environment of engineering innovation, creativity, and collaboration for countless people. Now, more than ever, we need your help to build our car for 2027 FSAE-E.

Whether it means sharing the link or making a monetary donation, all contributions are truly appreciated. If you have the means, please consider donating to Longhorn Racing or Longhorn Racing Electric.

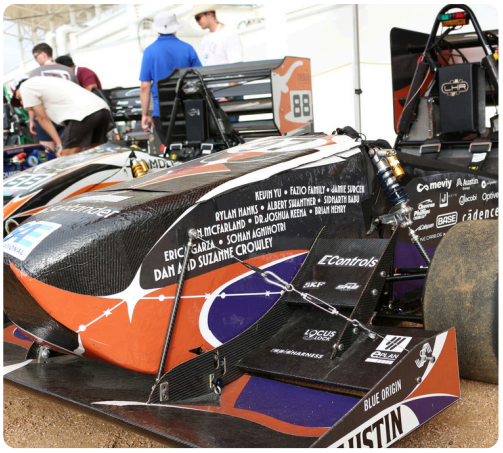
You can donate here & select "Longhorn Racing Electric"

Off To COTA We Go!

Longhorn Racing had the wonderful opportunity to showcase our Combustion and Electric cars at the Circuit of the Americans during the World Endurance Championship. We had a blast speaking with other teams and racing fans from all around the world. Our members also enjoyed walking down the pit, meeting the racers and teams.

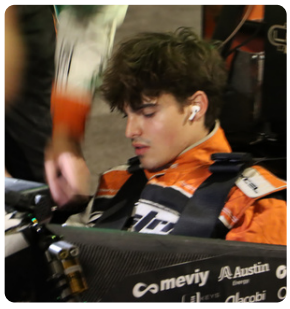






Drive to Thrive

Starting in late September, Trackside Engineering Lead Ava Barnhart led rounds of sim and kart racing to select drivers for the coming season. Current drivers share what it means to be a driver.



"Being a driver is more than just racing. You represent the team at competitions, outreach events, and anywhere the team is being showcased, and that requires a huge commitment of time."

-Oliver Belforti, Dynamics Engineer

"Each car is going to handle differently based on weight, dimensions, and setup configurations, last year we were able to run for somewhere around 275 miles before competition which really allows the drivers to feel a lot more confident."

-Viraj Bhalla, Trackside Engineer



New Beginnings: Orionwatch

Ava Barnhart, Longhorn Racing Electric's Trackside Engineering Lead, provides some insight on the progress made with the new Orionwatch, a newly developed "Franken-car" using the chassis of the '25-'26 season car Orion and the battery of '24-'25 season car Nightwatch and preparations for the UT Arlington Autocross Competition.

"After returning from Comp without Orion's battery, we assessed our options and landed on using Nightwatch's battery as a possible solution. We added the Nightwatch battery to Orion's CAD to check the fit, and found that the idea could work. From there, our work was split between electrical and mechanical. The electronics and powertrain teams worked together to splice the high voltage cables from the Nightwatch battery to the Orion chassis. The battery-related sensors also had to be integrated into the Orion electronics. On the mechanical side, Trackside engineering designed a mounting plate to adapt the Nightwatch battery to the Orion frame. The Body system moved Orion's frame tabs around, and the Dynamics system added new thermal paste to help with cooling. After final electronics and telemetry work the car, now called Orionwatch, ran for the first time with its new battery. Since then, we have had 4 drive days to improve reliability and prepare our drivers for the upcoming UT Arlington Autocross Competition."

-Ava Barnhart, Trackside Engineering Lead









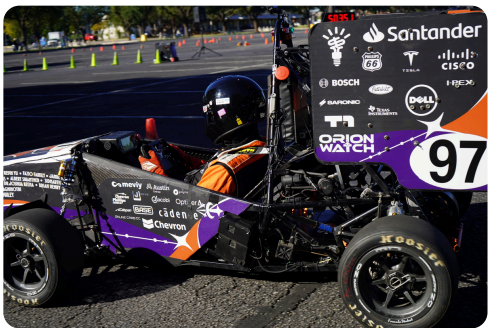
Orionwatch on the Podium: UTA Autocross Weekend

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The UTA Autocross Competition Barnhart mentioned took place during this October 14th weekend. Longhorn Racing took both Electric and Combustion vehicles to compete against other Formula SAE teams from across the country. Day 1 of the competition finished strong, with a fastest run of 60.747 seconds, followed by an exciting Day 2 race, with driver Andrew Cloran securing an astounding 47.621 lap time. The team did face some setbacks but swiftly recovered. Electrics performance coming out of the competition was stellar, placing 3rd overall and 2nd among EV's.

This was a huge milestone for Electric, being the first time our 2026 vehicle "Orion" has raced. Alumni donated over $10,000 this past weekend as well, noting how prepared and organized the team was. The team returned with heads high and new learnings they are prepared to take into developing the '26-'27 car.







System Spotlight

Let's see what our systems have been up to!





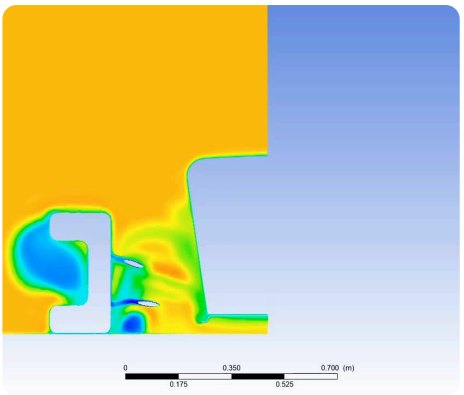
Electronics

Custom circuit boards have been ordered 3 weeks earlier than last season, putting us on track for a tabletop motor spin by November 13th. That is a full three months ahead of last year's schedule. The harness design software has also been upgraded to keep wiring clean, robust, and reliable.



Powertrain

After extensive data-driven endurance modeling, the new 132s3p battery pack has officially been locked utilizing Reliance RS50 cells. Partnering with About Energy, the thermal team finalized the battery cooling loop and selected the pumps and radiators to keep the motor and inverter running cool under heavy load.



Aerodynamics

The Revision 1 wing cascades (2-element front, 3-element rear) has been frozen. Next up is exploring 3D-printed structural components to drop weight and introducing advanced flow controls like turning vanes, strakes, and undertray footplates.

Outreach Events



On October 21st, members have the opportunity to attend a variety of events for COTA Week. To start off the day, members will step into the intersection of elite motorsports and robotics right on campus through the Sorama event, "The Sound of Success," in partnership with LHR. The gathering includes live tech demonstrations, industry panel discussions, and high-level networking. Simultaneously, at the Careers Talk and Q&A event with the Visa Cash App Racing Bulls Formula Team, members get to meet key members of the VCARB team and learn more about what it takes to work in the world of Formula 1. Finally, later in the evening, members will be able to attend the ultimate F1 kickoff party event with over 100 hypercars and supercars, live music, and military flyovers over at The Long Center terrace, all in support of Dell Children's Medical Center.



Hayden D'Gama

LHR President '25-'26

Pursuing J.D. at University of Houston Law Center

Alumni Corner

"My time in Longhorn Racing has given me life long friendships and truly unforgettable experiences. I really enjoyed serving my teammates as President. Shoutout to Electric"

-Hayden D'Gama

Partner Highlight

During our COTA drive day October 10th , our partner, Salvatore Di Mauro, had the opportunity to drive Orionwatch. Di Mauro drove the car and saw up close the work our members put in to make the car competition ready.



A Thank You To Our Partners

We would like to take a moment to extend our deepest gratitude to our partners. Thank you for your support!

Gold

About:Energy

Silver

Bosch | Reliance | Pressure Profile Systems

Bronze

Fazio Family | Di Mauro Franchini Family

Base

Locus Lock | IPCON | Mouser Electronics | Jane Street

Terence Dumas | Abishek Rathnakumar | Schmitt Family | Peechara Family | Ashwin Kuppahally

Partner

Oshcut | Bambu Labs | Brembo