

TEAM NEWSLETTER



MARCH 2025



UNIVERSITY OF NORTH FLORIDA

THE D13 FRAME IS HERE

As we prepare for competition this May, one of our biggest milestones has been the arrival of our new frame for the D13—our latest race car. Designed entirely in-house, our tubular space frame chassis was developed with careful attention to performance, rigidity, and weight optimization. Once finalized in CAD, we sent the design to our trusted manufacturer, VR3, to be fabricated and shipped back to us.

Now, the frame sits in our shop, where our team is hard at work welding suspension tabs and preparing it for the next stages of assembly. One of the most significant changes to this year’s design is in the rear section, where we’ve reworked a large portion of the bars and mounting around the sprocket and engine. These updates aim to improve structural integrity and packaging while optimizing for performance and serviceability.

IN THIS NEWSLETTER YOU CAN EXPECT:

D13 Frame

Aero Changes

Testing Updates

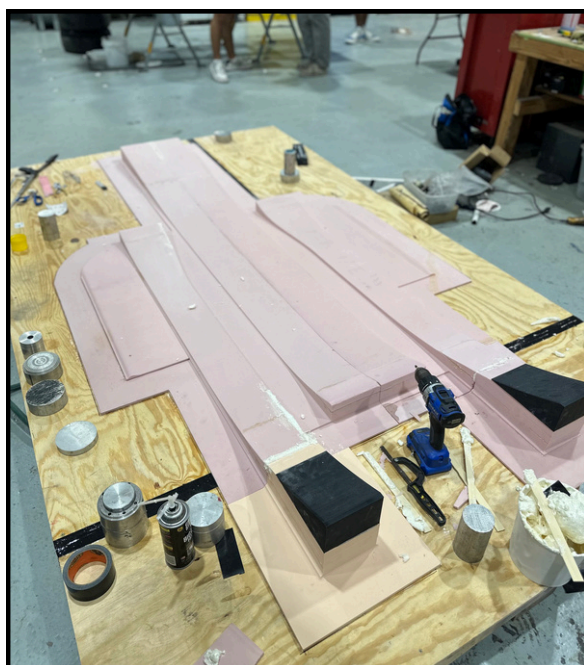
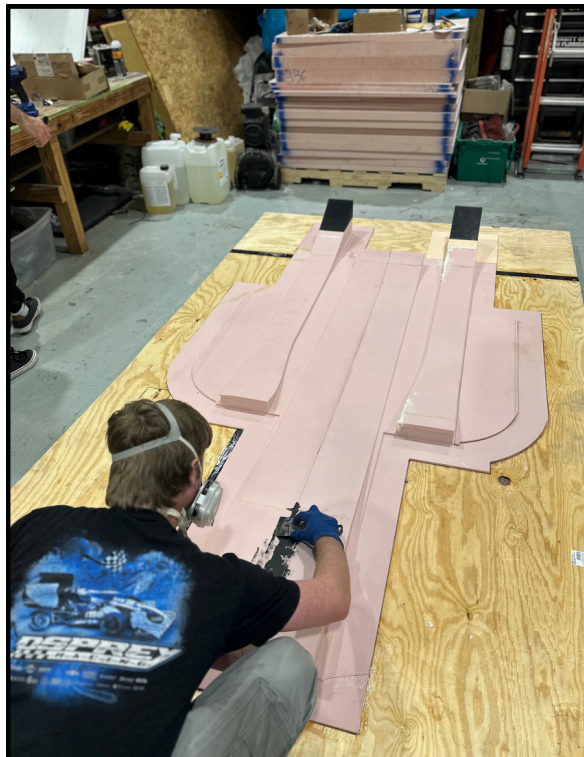


OUR FIRST AERO REDESIGN

For the first time in Osprey Racing's history, we are making a major change to our aero package. Up until now, our car has relied solely on front and rear wings to generate downforce, but this year, we're taking things a step further with a brand-new undertray featuring a ground-effect-style diffuser.

This marks a significant shift in our aerodynamic approach, allowing us to utilize airflow beneath the car to improve stability and grip. The undertray has been fully designed, and the mold has been completed. Now, it's in the final sanding stage, after which we'll begin carbon fiber layups to bring it to life.

With this addition, we're excited to see how our new aero package enhances performance on the track. Stay tuned as we continue refining and integrating this big project!



TESTING UPDATES

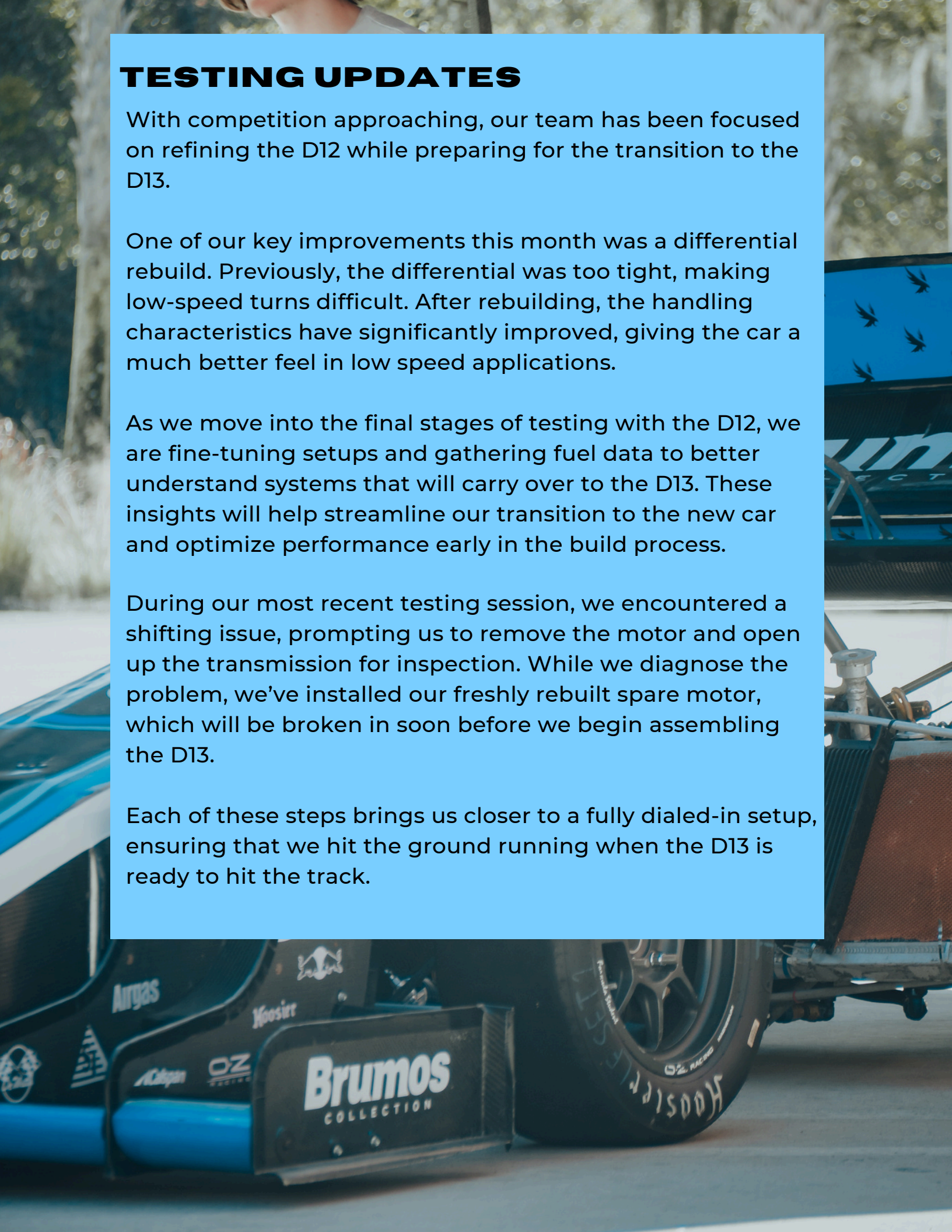
With competition approaching, our team has been focused on refining the D12 while preparing for the transition to the D13.

One of our key improvements this month was a differential rebuild. Previously, the differential was too tight, making low-speed turns difficult. After rebuilding, the handling characteristics have significantly improved, giving the car a much better feel in low speed applications.

As we move into the final stages of testing with the D12, we are fine-tuning setups and gathering fuel data to better understand systems that will carry over to the D13. These insights will help streamline our transition to the new car and optimize performance early in the build process.

During our most recent testing session, we encountered a shifting issue, prompting us to remove the motor and open up the transmission for inspection. While we diagnose the problem, we've installed our freshly rebuilt spare motor, which will be broken in soon before we begin assembling the D13.

Each of these steps brings us closer to a fully dialed-in setup, ensuring that we hit the ground running when the D13 is ready to hit the track.



Thank you for reading!



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