



RUTGERS SOLAR CAR TEAM NEWSLETTER

MAJOR ANNOUNCEMENTS

On May 1st we have officially named our new car Aerosol

We will be at NYC Governors Ball Music Festival, come visit our booth!

Please follow us our socials to stay updated!

GAME ON!!!

Which material is primarily used for the fuselage and wings of the Boeing 787?

What is the main, load-bearing body of a car called?

What do you call the chain that supplies an organization with materials?

Note from the editors**:
As of this issue, the newsletter's game section will be on featured here while the answers will be revealed at the end.

NOTE TO OUR READERS!

With FSGP fast approaching, we've streamlined the layout to give you a more concise, focused look into the work we've been doing—making it easier to stay in the loop, even with your own packed schedules.

Though finals made things tough, we're back with even more drive and purpose. The road to FSGP is short, but our momentum is strong—and we can't wait to show you what we've been building.

Thanks for staying with us!

— The Team



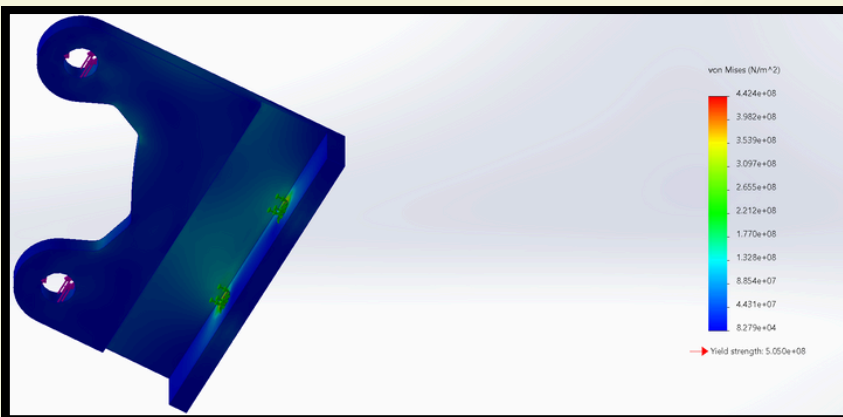
AERODYNAMICS & COMPOSITES

Our Aerodynamics and Composites team has been diligently working to prepare our car's aerobody. In the past month, they've sanded the canopy, commenced the curing process for the top mold, and experimented with fiber glass on the car's canopy. Additionally, the team has mounted wood paneling to the chassis, except for the front and rear extensions, which will be completed by the Mechanical team and Aerodynamics and Composites team respectively. Once the front and rear extensions are complete, the Aerodynamics and Composites team will mount the remaining wood paneling to the chassis.

MECHANICAL

BRAKES

Since the last newsletter issue, the brakes sub-team has made significant progress refining our car's components. They have finalized which brake discs to order after evaluating various options and running calculations, and they have reached out to Xometry regarding front rotors—currently finalizing choices on surface finish and steel types. We also contacted multiple companies about sponsorships for tire tools and other hardware. Now they are using the brake calculations to run a thermal simulation to confirm rotor specs, and then place orders for front rotors, Mitsuba rotors, and the front master cylinder with fittings.



CHASSIS

As for the Chassis sub-team, they have recently installed the floor and are now turning attention to the steering mechanism, a major step towards making the car drive-ready. In specific, they are installing a cover to the steering, protecting the driver from the bare steering mechanisms. For the chassis we still need to build the extension and purchase the jig plate. Footholds will also be added soon to improve the general driver ergonomics and driver support.

SUSPENSION

This month, the suspension sub-team has wrapped up the design for the 3/8th inch rear suspension upgrade, aimed at improving the component's general durability. We also finalized the design of the brake mounts that connect directly to the knuckle. These parts are now being outsourced for manufacturing, and we're working to have them ordered and delivered ahead of competition.

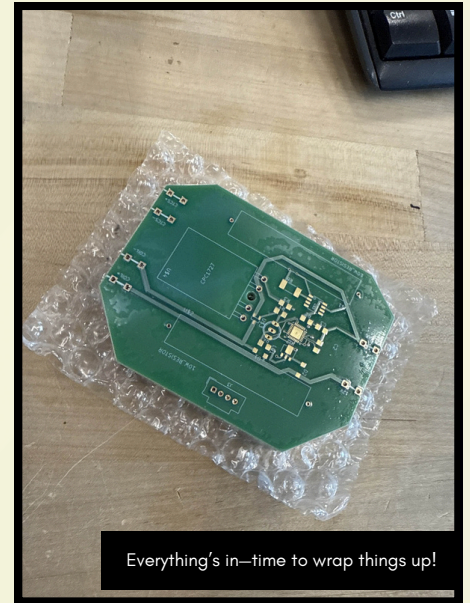
ELECTRICAL

LOW VOLTAGE

For the past month, the Low Voltage sub-team has made meaningful progress towards streamlining our system. They have integrated the telemetry system using the Blues Notecard and finalized a simplified one-board electrical layout. They also sourced regulation compliant lights from storage and are planning for a rearview camera system. The sub-team is now working towards transitioning to the one-board plan (LV2). In the near future, they are evaluating a switch to an STM32 development board, finalizing the wiring for LV2, and creating a physical layout and electrical service plan for the lighting system.

HIGH VOLTAGE

As for High Voltage, the sub-team is continuing to build critical systems. The FR4 cutting has begun for a newly designed electrical panel and casing. Earlier in the summer, they also drafted the new panel layout and learned valuable lessons about FR4 safety, including the need for PPE and thorough cleaning of dust or residue. As for the future, the sub-team is aiming to complete the panel and casing, finish the battery box, and prepare for HV system testing.



Everything's in-time to wrap things up!

SOLAR

The Solar sub-team has been making headway manufacturing solar panels for our car. They have currently made 36 panels, and 54 have been soldered. Earlier in the summer, they revised the solar panel array layout to match the updated vehicle dimensions and resumed work on panel fabrication from currently stored cell materials. They plan to encapsulate panels week by week, and create solid documents like the Solar Panel Assembly Guide and the Solar Composite Notes to deepen the sub-team's understanding of the task at hand.

BUSINESS

MARKETING

Our marketing sub-team continues to work hard for the past month. They've designed a new club banner and t-shirts while procuring stickers of our new logo. Additionally, they've created flyers we will use for our upcoming annual fundraiser at the Governor's Ball (Govball) on Long Island, New York from June 6th to 8th.

FINANCE

Our Finance team is currently in the process of completing the remaining Dares from our fundraiser near the end of 2024. In the coming months, they'll be brainstorming multiple fundraisers for the upcoming academic year.

LOGISTICS

The Logistics sub-team has been on a roll this past month. They've arranged for a total of 40 volunteers to staff booths at Govball where they'll be selling thousands of beverages every day over three days (June 6th to June 8th). We are expecting to raise approximately \$10,000 by the end of Govball. After which, the team will refocus towards completing preparations for our competition at FSGP.



This is the banner, the Business team, made for NYC GovBall

Lastly, the Corporate Relations and Supply Chain sub-teams, are taking a supporting stance, playing a crucial supporting role, working behind the scenes to ensure the technical teams are fully prepared and that the entire team presents a unified, professional face for both the New York City Governor's Ball and FSGP 2025.

DATA ACQUISITION

With the Spring 2025 semester wrapped up, and finals wrapped up, the Data Acquisition team took a small step back to reorganize goals and plan ahead. The team has begun to split into smaller sub teams to tackle more projects at once; the aim is to specialize each smaller team into a specific genre of goals so that the overall team can optimize at a pace that matches the goals of the club itself.

Regarding what the reorganization plan entails for our future, we're excited about our almost complete KPI-dashboard, a new website, a further development of our energy management strategy using driving data like turn angles. For now, the team is in a developmental phase, however, we are making steady progress towards meeting the goals made since the team's conception.



From top right to bottom left: Abdullah El-Dessouly, Daniel Gerber, Ethan Oliver, Rahul Gajra, Bin O'Garra, El Jaffe, Eryn Cain, Abdulbasit Malik, Daniel Gerber, Sri Leela Sattanapalli, Yousef Nasr, Kelly Yazlima, Bhavesh Narala, Saahir Syed

To our seniors
Thank you so much for being there for us and supporting us through everything. Your presence, encouragement, and kindness have meant more than words can express. As you move forward into the next chapter of your lives, we have no doubt that you're going to do incredible things. We're cheering you on every step of the way — good luck, and never forget how truly amazing you are!

GAME OVER!!!

Which material is primarily used for the fuselage and wings of the Boeing 787?

Answer: Carbon Fiber

What is the main, load-bearing body of a car called?

Answer: The Chassis

What do you call the chain that supplies an organization with materials?

Answer: The Supply Chain