

The Solar Splash competition began in 1994 and is known as the "World Championship of Intercollegiate Solar Boating." The competition presents the seemingly-contradictory challenge of designing a boat that runs well in both displacement and planing modes. Displacement performance comprises 40% of the total scoring, with teams running two endurance heats for distance over two-hour periods with 68 pounds of lead-acid batteries and a solar panel array rated at 480 watts. Planning performance comprises 25% of the total scoring, based on a 300-meter drag race for time with 100 pounds of lead-acid batteries. The balance of the scoring consists of 10% for qualifying times, 10% for maneuverability course times, 9% for a technical paper, 4% for a visual display and 2% for workmanship. Although teams arrive with full batteries, once the five-day competition begins they may only be recharged with solar energy. Since each team will have to run at least seven races, sun conditions play a significant role in the performance of the boats during the competition.

Solar Splash is the perfect SNAME student section activity because the competition encompasses all aspects of naval architecture and marine engineering. Working from a comparatively modest budget, our team had a great time designing and constructing a plywood boat, and varnishing it to look like a 1920s mahogany raceboat! We were thrilled to place third overall, the best performance by a rookie team in the history of the competition.

The team is bubbling with ideas for future entries; perhaps the only obstacle between Webb and a winning boat is a need for funding. Donald L. Blount and Associates and DLBA Robotics have generously agreed to construct a much lighter version of our existing hull. We're excited to have the opportunity to test the true capability of our design! We're also working to improve our propulsion system for this year's competition, which will be held from June 22-26 in Buffalo, NY. For more information, please visit the Webb Institute Solar Splash Team website at www.webbstudents.org/solarsplash, and the Solar Splash competition site at www.solarsplash.com.

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