Project 19: Wheelchair Adaptive Stand-Up Paddleboard

Team Adaptive Flow: Brandon Do, Charles Malnar, Chris Tran Rojas, Lambert Soto

Problem Statement / Need

Quality of Life’s Challenger Adaptive Freedom Foundation used an existing fleet of Wheelchair Adaptive Stand Up Paddleboards (WASUP) for 5 years and needed updating.

A new WASUP is needed which accommodates: various wheelchair sizes, maneuverability, buoyancy, stability, and ease of transportability.

Final Design

Final Design

Manufacturing

Testing

Advantages

• Buoyancy and Stability: Buoyant enough for 800lb verified with 1/14 scale models
• Strength: Normal loading on sample board

Left to right: Brandon Do, Charles Malnar, Chris Tran Rojas, Lambert Soto

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Challenger: Adaptive Freedom Foundation
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