

# LINN-BENTON ROV

Linn-Benton Community College  
Albany, Oregon, USA



Distance to travel: 3529 km / 2193 mi



Back, left to right: Sara Leathers (CEO), Emily Nussdorfer (CFO), Greg Mulder (Mentor), Josh Palmer (Safety Officer)  
Front: Epoxy Parton (ROV)  
Not pictured: Dale Sydnam (Pilot)

## COMPANY SPECS

### 2021 Explorer Class

**Overview:** Linn-Benton ROV, based out of Linn-Benton Community College (LBCC) in Albany, Oregon, is made up of participants from a variety of disciplines spanning science and engineering. Like undoubtedly all teams this year, the LBCC posse has faced many hardships this year in the construction of this underwater remotely operated vehicle (ROV). As such, the team is small, consisting of only four members. Two members are returning to MATE competitions: Sara Leathers and Emily Nussdorfer; while two members are new: Josh Palmer and Dale Sydnam.

**History of Linn-Benton ROV:** Linn-Benton ROV has been participating in MATE competitions since 2008.

## VEHICLE SPECS

**ROV name:** Epoxy Parton

**Total cost:** \$4000.80

**Safety features:** Different sizes and shapes of connectors are used to ensure there are no wrong connections. Thrusters are within a shrouded casing to ensure propellers are not a finger hazard. Metal components have been powder-coated to ensure that sharp edges are eliminated. Fuses are used in the power conversion boards to ensure that the boards do not short in a failure.

**Special features:** Modular components including detachable tether, thrusters, receiver Arduino, cameras, and power conversion in order to build a platform with room for improvement.

**Total student-hours to design and build:** roughly 10,000 hours from September 2018 to May 2019, plus roughly 1,000 hours from September 2019 to July 2021.

**Size:** 55 cm x 52 cm x 19.4 cm (L x W x H)

**Weight:** 13.8 kg, out of water.