

MOAS Project: Wind Energy Demonstration

A large white wind turbine stands in a field with mountains in the background. The turbine is the central focus, with its three blades extending outwards. The background features a range of blue mountains under a cloudy sky. The foreground is a green field with a fence line.

Members

Nicholas Bembridge

Victor Fontecchio

Bradley Kroger

Michael Sheehan

Suzanne Shepherd

Overview



Part Ordering

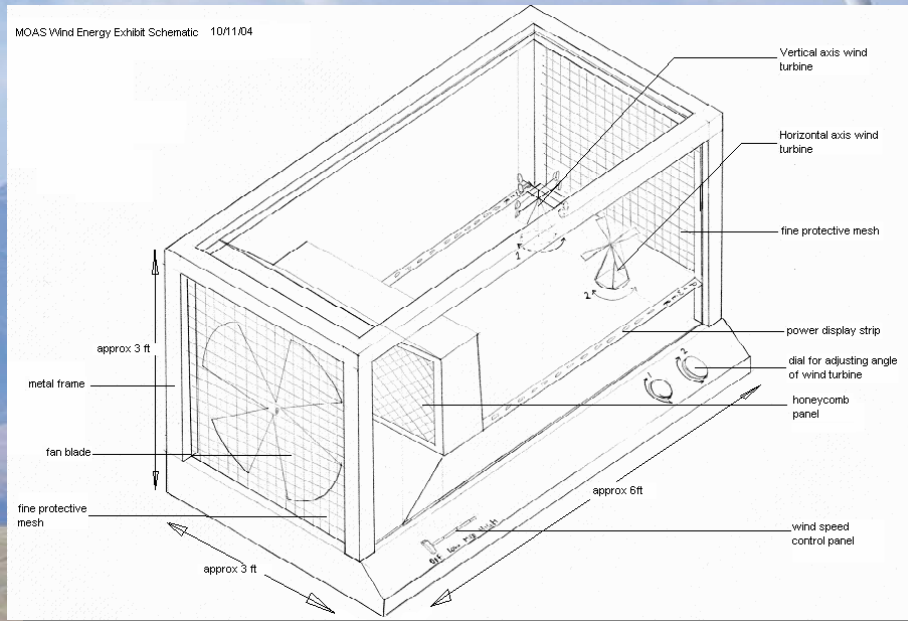


- During the final week of the fall semester parts were ordered using Purchase orders from Mr. John Cloos
- Hope to begin receiving parts in the next few weeks

Meeting with EE Dept

- Last Tuesday the group met with two seniors from the EE dept. They have been assigned to us by Ms. Li, they will help with the circuitry we need to run the light towers as well as building the circuits. This is going to be their senior design project.

Final Concept



● Pros

- Multiple Wind Turbines
- Variable Angle Of Attack
- Power Meters
- Flow Control

● Cons

- Limited Visibility due to metal casing

This became the final design concept

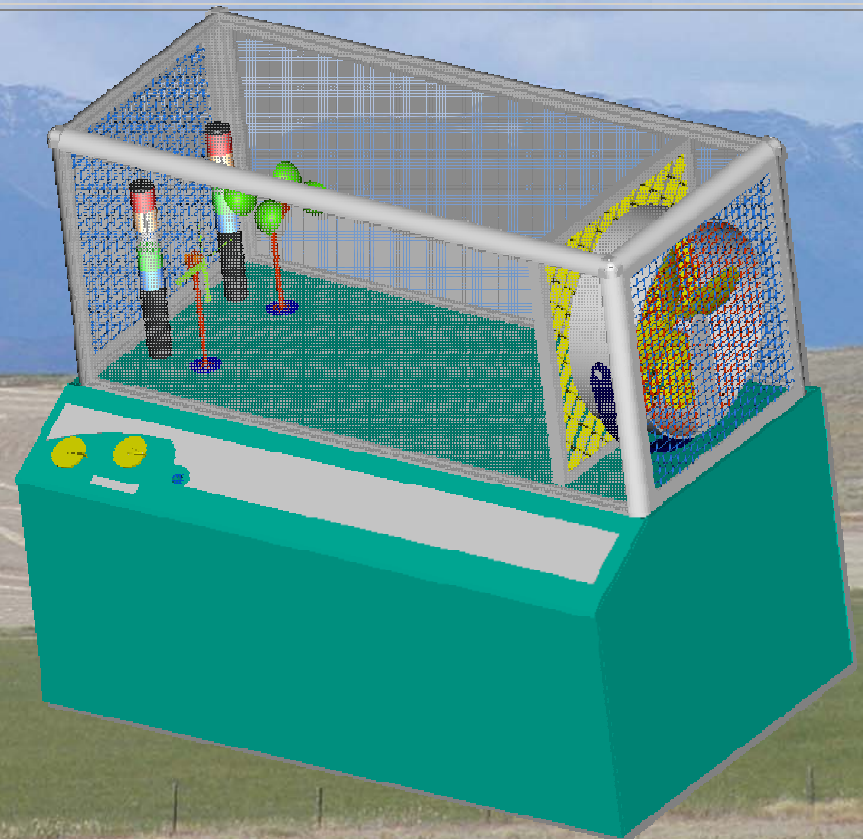
Final Design Specifications

- Project Analysis

- Exhibit Dimensions and Frame Design
- Frame Material and Building Options
- Cabinet Maker
- Wind Generation & Velocity Measurement
- Electrician
- Budget Analysis

- Components

- Wind Turbines
- Power Meters
- Start Buttons
- Kill Switch
- Honeycomb
- Fan



Budget



● Wind Generation	\$415.25
● Power Generation	\$352.64
● Electrical Systems	\$1502.37
● Flow Management	\$100.00
● Exhibit Casing	\$2300.00
● Pulley System	\$148.53
● Sub-Total	\$4818.79
● Cushion	\$200.00



Future Work

- Begin construction of project
- Final testing of components
- Begin documentation and instructional material
- Make project poster