Endeavor Enterprises

Sea-Tech 4-H Club

Skagit County 4-H Program – Washington State University Cooperative Extension

Mount Vernon, Washington, USA

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Team Captain,
CEO & CFO
3rd Year at Regionals
10th grade Homeschool

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Sensors Operator
& Public Relations
1st Year at Regionals
10th grade Homeschool

Jacob Hamiter
Tether Tender
& Mission Specialist
4th Year at Regionals
12th grade

Dean Jones
Pilot &
Electronics Engineer
4th Year at Regionals
11th grade

Joshua Nelson
Manipulator Operator &
Design Engineer
2nd Year at Regionals
10th grade Homeschool

- Over 1,891 miles (3,043km) to travel to International Competition
- This is Endeavor Enterprises first year participating in the International competition.

Endeavor

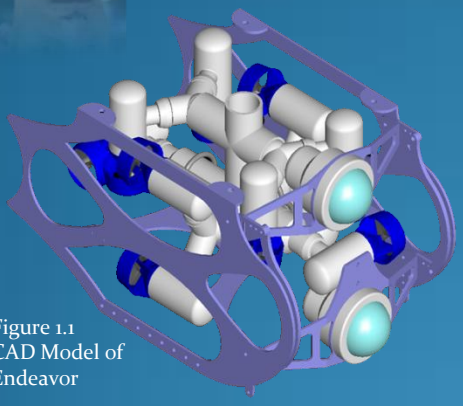

Figure 1.1
CAD Model of
Endeavor

- Primary Material –
  - Endeavor uses a combination of aluminum, PVC & high density foam.
- Total Cost – $2,400
- Total Weight – 27kg
- Total Size –
  - Height – 50cm
  - Width – 43cm
  - Length – 64cm

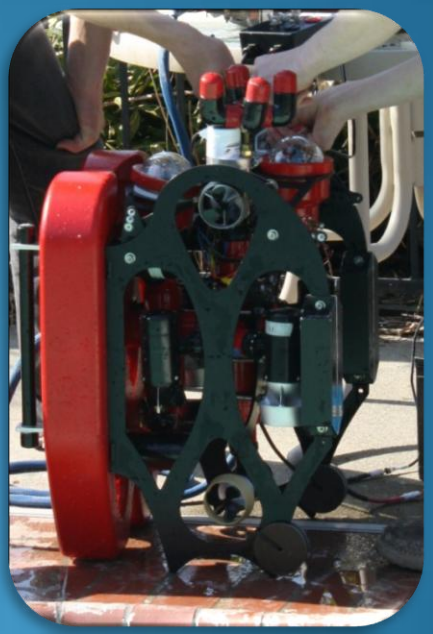

Figure 1.2 Maintenance inspection after mission practice.

- Special Features –

  - A Four fingered rotating claw powered by a bilge pump with 8:1 gear reduction to gives it for rotating the valve wheel.
  - A Pneumo – fathometer to measure the ambient back pressure in order to detect depth.
- Safety Features –
  - Endeavor was designed with shrouded thrusters recessed inside the aluminum frame, to protect them from damage.
  - Warning Labels are placed on every moving part.