



'Taking engineering to new depths'

Blue Toon ROVers Company Spec Sheet



We will travel 2200+ miles to St John's Canada

Company Specifications

- **Company Name** - *Blue Toon ROVers*
- **School** – Peterhead Academy
Aberdeenshire



History of MATE ROV Competition

Peterhead Academy has now competed in the MATE ROV Competition twice – once in 2011 and last year (2014). In last year's competition the team placed 4th overall, with team members who had no prior experience in the competition.

Back Row: Ian Buchan (Tooling), Daniel Mehigan (Tooling), Ewan Marr (Structure), Aaron Reid (Marketing), Kieran Ritchie (Structure)

Front Row: Sean Whyte (Structure), Stuart Hope (Marketing), Lauren Godfrey (Tooling), Jamie Fenty (CEO/Marketing) & Callum Christie (Structure)

Returning Members from 2014 Team: - Callum Christie
- Jamie Fenty

Pilot: Ian Buchan Co-Pilot: Callum Christie

Range of Grades Amongst Team Members

Our team members range across S4-S6, therefore there is a variety of potential grades amongst the team – these include National 5's, Highers and Advanced Highers. All team members either have sat or are currently sitting Engineering Science / Technological Studies along with other related subjects such as Maths and Physics.

ROV Specifications

- **ROV Name** – ROV Njord
- **Total Cost** - £444.50 plus donated/reused items = £851.78
(\$635.36) (\$1328.78)
- **Dimensions (mm)** – L.450 x B.400 x H.250 **Frame** – 21.5mm Ø PVC pipe
- **Safety Features**
 - 25A fuse fitted to main power connection as per MATE regulations
 - All electrical components have been secured in a waterproofed container.
 - Each of the bilge pumps is fitted to stay within the frame of the ROV.
 - Also all pipes and fittings have been secured using non-corrosive materials.
 - All propellers have been shrouded to protect the blades from becoming tangled in anything.
 - All metals edges have been filed down to eliminate any potentially sharp edges.
 - Each item that could potentially cause harm/risk has been labeled with a warning label.
- **Special Features**
 - Several tools specifically designed to carry out certain missions including;
 - Motorised (servo-motors) Manipulator
 - Measuring Device
 - Water Pump
 - 800 Gph, 750gph and 500 Gph Bilge Pumps
 - 6 Underwater Cameras
 - Complex control system of bi-directional motor controllers, controlled by joysticks.

