

## **Product Hardware**

### **Overview**

The Product Hardware course is designed to introduce the various pieces of hardware associated with ION - Concept Systems software. The course will cover the architecture of the equipment and provide lessons in configuring and troubleshooting the equipment.

### **Duration**

A two day course primarily held at our Edinburgh training facilities. (09:30 ~ 17:00)

### **Who should attend**

This course is designed for experienced Navigators (Chief Navigator/Shift Leader) who are proficient in configuration and operation of the software systems (Spectra, Orca, Gator).

### **Objectives**

The course will introduce the hardware architecture and teach configuration and troubleshooting methods.

### **Prerequisites**

Delegates must have previously attended the Spectra Configuration course. It is desirable that they are in a senior or supervisory role. Delegates must also be proficient in the use of the Linux command line.

### **Teaching Methods**

The course will be a mixture of lectures and practical sessions. Hands-on experience and practice time will be given at every available opportunity.

### **On completion of the course delegates will be able to**

- Configure and boot Real Time Navigation Units (PowerRTNU/PowerRTNUII/RTNu)
- Data Distributor
- Understand RAID technology and how it is implemented with systems onboard
- Troubleshoot and debug the hardware
- Configure and operate the Work Boat Node (where applicable)
- Configure the Alarm Control Unit (where applicable)

## **Course Content**

### **Real Time Navigation Units**

- Hardware Configuration and Boot Procedures
  - PowerRTNU
  - PowerRTNUII
  - RTNu

### **Data Distributor**

- Operation and Configuration

### **RAID**

- What is RAID?
- RAID levels
- RAID implementation

### **Troubleshooting and Debug**

- Udpmsgsvr
- monitor command
- boardmon

### **Work Boat Node**

- WBN Software installation and configuration
- Configure GPS
- Configure Radio

### **Alarm Control Unit**

- Software installation and configuration
- ACU configuration and operation
- Spectra alarm configuration