

1.0 SIDESCAN SONAR SYSTEMS

comprising of the following equipment

1.1 - *Geoacoustics 160D Dual Frequency Sidescan Sonar System (1000m rated)*

inclusive of :-

- 1 x Geoacoustics SS941 Transceiver
- 1 x Geoacoustics 159D Towfish (100/410Khz)
- 1 x Deck Cable
- 1 x Geoacoustics SS941 Transceiver PCB Spares Kit
- 1 x EPC-1086 2 Channel 10" Thermal Recorder
- 1 x Electric Hydraulic Oceanographic Winch
c/w 3000m towcable
- 1 x Hytech Cable Counting System

or alternatively

1.2 - *Edgetech DF1000 Digital Dual Frequency Sidescan Sonar System (1000m rated)*

inclusive of:-

- 1 x Edgetech DF1000 DCU
- 2 x Edgetech DF1000 (100/500Khz)
- 1 x Deck Cable
- 1 x Edgetech DF1000 Spares Kit
- 1 x EPC-1086 2 Channel 10" Thermal Recorder
- 1 x Electric Hydraulic Oceanographic Winch
c/w 3000m towcable
- 1 x Hytech Cable Counting System

2.0 Optional Equipment

2.1 - *Triton Elics ISIS Sonar Acquisition System*

inclusive of:-

- 1 x 19" Rack Mounted Pentium 2/450MHz PC c/w
- 1 x 17" SVGA High Resolution Monitor
- 1 x 5.3GB M-O Optical Disc Drive
- 1 x 4 Channel Sonar Interface Unit
- 1 x Set ISIS Acquisition Software c/w
Pipeline Inspection and Delph Map mosaicing options

or alternatively

2.2 - *Coda PI100 Sonar Processing System*

inclusive of:-

- 1 x 19" Rack Mounted 100MHz Pentium PC
- 1 x 17" SVGA High Resolution Monitor
- 2 x Dual DAT Tape Drives
- 1 x Set PI100 Pipeline Inspection and processing software

3.0 Consumables (Sale or Return)

EPC-1086 Thermal Printer Film Roll

EPC-1086 Thermal Printer Paper Roll

M-0 Optical Discs

DAT Tapes

4.0 SUB BOTTOM PROFILING SYSTEMS

comprising of the following equipment

4.1 - Geoacoustics Geopulse Sub Bottom Profiling System (600m Rated)

inclusive of:-

- 1 x Geoacoustics 5430A Transmitter
- 1 x TSS360 Seismic Processor
- 2 x Geoacoustic 136 Towfish
- 8 x Geoacoustic 137D Transducers (3.5-7Khz)
- 1 x Deck Cable
- 1 x Ultra 3710 2 Channel Thermal Recorder
- 1 x Geoacoustics 5430A Transmitter PCB's Spares Kit
- 1 x Electric Oceanographic Winch
c/w 2000 Meter Towcable
- 1 x Hytec Cable Counting System

or alternatively

4.2 - Surface Tow Boomer System

inclusive of:-

- 1 x Applied Acoustic Power Supply (100J)
- 2 x EG & G 230 Catamaran
- 2 x EG & G Boomer Plate
- 2 x Power Cable
- 1 x TSS 360 Seismic Processor
- 2 x 8 Element Hydrophone Streamer
- 1 x Set Power Supply Spares
- 1 x Ultra 3710 2 Channel Thermal Recorder

5.0 Consumables (Sale or Return)

Ultra 3710 Thermal Printer Paper Roll

6.0 COMBINED SIDESCAN SONAR SUB BOTTOM PROFILER SYSTEM comprising of the following equipment

6.1 - Geoacoustics Combined Dual Frequency Sidescan Sonar, Geochirp Profiler and Cesium Magnetometer System (1500m rated)

inclusive of:-

- 1 x Geoacoustics 136 Towfish (combined)
- 1 x Geoacoustics CP931 Transceiver
- 1 x Subsea Electronics
- 1 x Ultra 200 3 Channel Thermal Recorder
- 1 x Geometrics Cesium G880 Magnetometer
- 1 x 3 phase Electric Hydraulic Oceanographic Winch
c/w Tow Cable
- 1 x Hytec Cable Counting System

Specialised 3 phase winch power requirements.
Please contact Seatronics Ltd for full details

Note: Items marked * require surface navigation input or NMEA dgps
Items marked ! Require preparation charge of **£1,000 exc VAT**

7.0 Optional Equipment

7.1 - Coda DA200 Processing System

inclusive of:-

- 1 x 19" Rack Mounted 100Mhz Pentium PC c/w
- 1 x 17" SVGA High Resolution Monitor
- 1 x Dual DAT Tape Drive
- 1 x DA200 Data Acquisition Software

8.0 Consumables (Sale or Return)

Ultra 200 Thermal Paper Roll

DAT Tapes

9.0 SINGLEBEAM ECHOSOUNDER SYSTEM

comprising of the following equipment

9.1 - Atlas Deso 25 Dual Channel Echosounder System

inclusive of:-

- 1 x Atlas Deso 25 Chart Recorder and Display Unit
- !1 x 33Khz Channel
- !1 x 210Khz Channel
- 1 x RS232 Data input/output Interface
- 1 x Combined 33 & 210Khz transducers c/w brackets
- 1 x TSS335B Motion Compensator System

10.0 Consumables (Sale or Return)

Atlas Deso 25 Paper Roll

11.0 MULTIBEAM ECHOSOUNDER SYSTEMS

comprising of the following equipment

11.1 - Reson 9001S Multibeam Sonar System (0.5 to 50m range)

inclusive of:-

- !1 x Reson 9001/S Seabat Head (90 deg 455Khz)
- 1 x Reson 9001/S Processor Unit
- 1 x 25m Deck Cable (longer cables available)
- 1 x Trackerball
- 1 x Sony PVM 1440 Monitor
- 1 x TSS 335B Motion Sensor
- 1 x SG Brown 1000S Gyrocompass
- 1 x Eiva Navibat Multibeam Data Acquisition System c/w software
- 1 x HP890C Colour Printer
- 1 x DAT Tape Drive or CD Writer

or alternatively

11.2 - Reson 8101 Multibeam Sonar System (1.0 to 300m range)

inclusive of:-

- !1 x Reson 8101 Seabat Head (150deg 240Khz)
- !1 x Reson 8101 Processor Unit
- 1 x 50m Deck Cable
- 1 x Trackerball
- 1 x Sony PVM1440 Monitor
- 1 x Trackerball
- 1 x TSS DMS-05 Motion Sensor
- 1 x SG Brown 1000S Gyrocompass
- * 1 x Eiva Navibat Multibeam Data Acquisition System c/w software
- 1 x HP890C Colour Printer
- 1 x DAT Tape Drive or CD Writer

Note: Items marked ! Will require installation through vessel gate valve or on an overside deployment arrangement and items marked * require surface navigation input or NMEA dgps position of the multibeam transducer for logging purposes and post processing.

or alternatively

11.3 Seabeam 1050 Medium Water Multibeam Sonar System

(10 to 3000m) inclusive of:-

- !1 x Set of SB1050 LSE237 Transducers 50KHz 153 Degree Swathe
- 1 x SEE 30-1055 Sonar Processor
- 1 x Pentium Workstation Windows NT 4.0 Surface Mapping System
- 1 x 17" SVGA Monitor
- 1 x Rocketport Multi-I/O Card
- 1 x Set Seabeam Hydro Star ONLINE Software
- 1 x Spares Kit
- 1 x A-Size Colour Plotter
- 1 x Colour Printer
- 1 x Valeport 600 Series CTD Probe
- 1 x SG Brown 1000S Gyrocompass
- 1 x TSS DMS-05 Motion Sensor
- 1 x Coris HIPS/SIPS Processing Software

Note: Items marked ! Will require installation through vessel gate valve or on an overside deployment arrangement and items marked * require surface navigation input or NMEA dgps position of the multibeam transducer for logging purposes and post processing.

12.0 Consumables (Sale or Return)

Plotter Paper (per pack 100 sheets)

CD Roms

13.0 Personnel

13.1 - Seabeam Operator/Post Processing

14.0 Optional Equipment

14.1 - Eiva Naviline Multibeam Post Processing Package

inclusive of:-

- 1 x HP700 Series Workstation
- 1 x 17" High Resolution SVGA Monitor
- 1 x Eiva Naviline/Naviedit Post Processing Software
- 1 x HP890C Colour Printer
- 1 x HP200 Surestore DAT Tape Drive
- 1 x HP Designjet AO Plotter

15.0 Consumables (Sale or Return)

- DAT Tapes
- CD Roms
- Colour Printer Cartridge
- Black & White Printer Cartridge
- AO Plotter Paper (Per pack)

16.0 Personnel

16.1 - Navibat Engineer

16.2 - Navibat/Naviline Engineer

Note: Personnel rate is based on a minimum 12 hour offshore day and exclusive of travel, accommodation and subsistence which will be charged to customer account or at cost plus 10%. Personnel hire is door to door Aberdeen, UK & Aarhus, Denmark.

17.0 USBL ACOUSTIC TRACKING SYSTEMS

comprising of the following equipment

17.1 - *Nautronix ATS-04 Portable Usbl System*

inclusive of:-

- 1 x Nautronix ATS-05 Surface Unit (4 channel)
- *1 x Nautronix ATS-04 Hydrophone c/w Pitch & Roll Sensors
- 1 x Nautronix 60m Umbilical Cable
- 1 x Nautronix Hydrophone c/w Pitch & Roll
- 3 x Nautronix ABM-210 Mini transponders
- 1 x Nautronix Battery Charger

or alternatively

17.2 - *Sonardyne 7707 Usbl Acoustic Positioning System*

inclusive of:-

- 1 x Sonardyne Usbl System Processor
- *1 x Sonardyne Usbl Transceiver
- 1 x Sonardyne Monitor/Keyboard
- 1 x Set System Cables
- 2 x Sonardyne 7970 Super Sub Mini transponders
- 1 x Sonardyne Charger

18.0 Optional Equipment

- 1 x TSS335 Motion Sensor

- 1 x SG Brown 1000S Gyrocompass

Note: Items marked * will require installation thro vessel gate valve or on an overside deployment arrangement

19.0 LBL/LUSBL ACOUSTIC TRACKING SYSTEMS

comprising of the following equipment

19.1 - *Sonardyne 7145B EHF or MF PAN Lbl System*

inclusive of:-

- 1 x Sonardyne 7145B Ehf or Mf pan unit
- *2 x Sonardyne Ehf or Mf Dunking Transducer
- 1 x Sonardyne Spares Kit
- 1 x Deck Lead
- 1 x Set Interface Leads
- 1 x Valeport 600 Series CTD Probe
- 1 x Sonardyne APS 3 Calibration Software and Hardware
- 1 x Colour Printer
- 1 x SG Brown 1000S Gyrocompass

Note: Items marked * will require installation thro vessel gate valve or on an overside deployment arrangement

19.2 - Sonardyne 7707 Combined LUSBL Acoustic Positioning System

inclusive of:-

- !1 x Sonardyne LUSBL System Processor
- *1 x Sonardyne LUSBL Transceiver
- 1 x Monitor/Keyboard
- 1 x Set of System Cables
- 2 x Sonardyne 7970 Super Sub Mini transponders
- 1 x Sonardyne Charger
- 1 x SG Brown 1000S Gyrocompass
- 1 x TSS 335 Motion Sensor
- 1 x Set of Calibration Software

Note: Items marked ! will require surface navigation input or NMEA dgps position of the transceiver hydrophone for tracking purposes.

Items marked * will require installation through vessel gate valve on an overside deployment arrangement.

20.0 Optional Equipment

20.1 - Sonardyne MF & EHF MK4 Instrumented Compatts c/w Hpr channel and release mechanism and 1000m rated float collar

21.0 Personnel

21.1 - USBL or LBL Engineer

Note: Personnel rate is based on a maximum 12 hour offshore day and exclusive of travel accommodation and subsistence which will be charged to customer account or at cost + 10%. Personnel rate is door to door Aberdeen, UK

22.0 Navigation Software and Hardware

comprising the following equipment

22.1 - Eiva NavipacNT On-Line Data Acquisition Package

inclusive of:-

- 1 x HP Vectra P2/333 Personal Computer
- 1 x 17" SVGA Monitor
- 1 x Keyboard
- 1 x Mouse
- 1 x 8 Channel Digiboard
- 1 x Helmsman Display PC c/w 15" Monitor
- 1 x Navigation NT 4.0 Version 6 Software
- 1 x Printer

23.0 Optional Equipment

- 1 x DGPS System
- 1 x SG Brown 1000S Gyrocompass

24.0 Personnel

24.1 - Hydrographic Surveyor

Note: Personnel rate is based on a maximum 12 hour offshore day and is exclusive of travel, accommodation and normal living expenses which will be charged to the customer's account or at cost plus 10%.