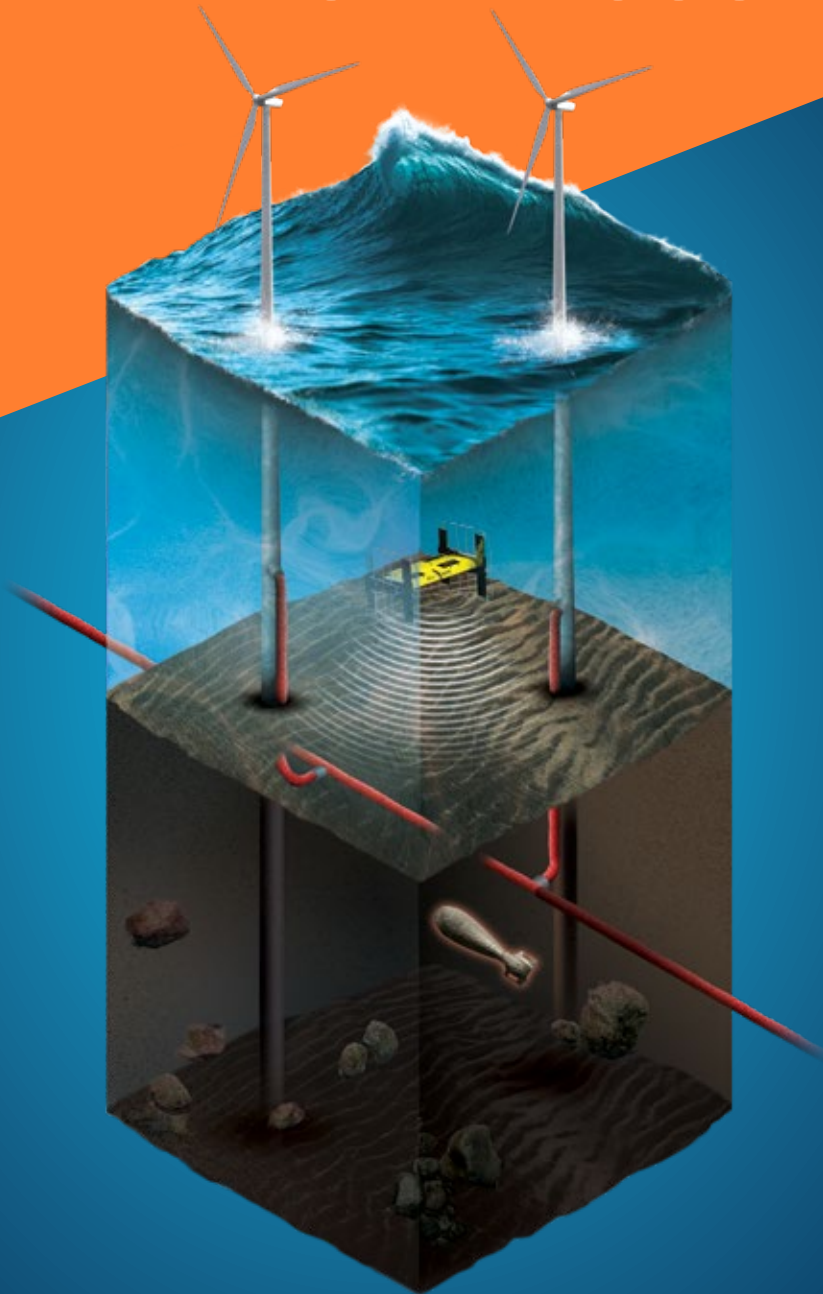


ENHANCED SURVEY RESULTS AT A LOWER COST



PANGEO
SUBSEA 
sounding out risk

THE SBI SEAKITE™ ROTV

FEATURES

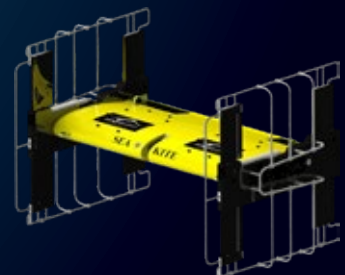
- All the features of PanGeo's SBI
- The ROTV platform uses an industry proven design: scaled from EIVA's 3D ScanFish
- SeaKite can support the SBI payload in addition to other sensors such as Multi-Beam and SSS offering a Multi Sensor Platform
- 3D automated control of altitude and run-line via EIVA Flight Software
- Auto-pilot capability: SeaKite receives NMEA distance offline string from survey software (e.g. NaviPac) to maintain run-line
- Provides a future interface for a gradiometer frame
- Next generation software with improved real-time quality to 10cm resolution
- Depth of Burial repeatability better than 10cm accuracy in a XYZ file
- SeaKite can support the SBI payload in addition to other sensors such as Magnetometer and SSS offering a Multi Sensor Platform

APPLICATION AND MARKET

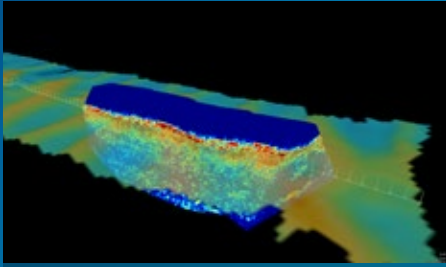
- Shallow Geo-hazard Pre-route Surveys for Cables & Pipelines
- Unexploded Ordnance (UXO) Surveys: Using the SBI's Acoustic Images to Verify Mag Targets
- Cable Depth of Burial Surveys
- Out of Straightness Surveys
- Debris and Decommissioning Surveys

BENEFITS

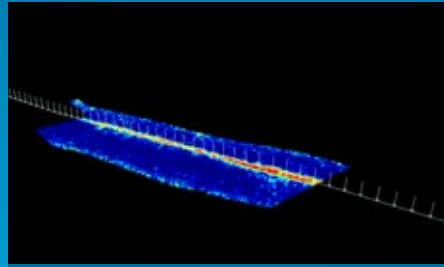
- ROTV: a more cost effective platform in comparison to an ROV requiring a smaller vessel and fewer crew
- Has capacity for multiple co-located sensors eliminating positional error across survey campaigns
- Flexible survey speed: up to 2.5 - 4 knots depending on target
- Multi-Sensor Data Sets in a Single Pass: Reduces survey time and overall campaign cost



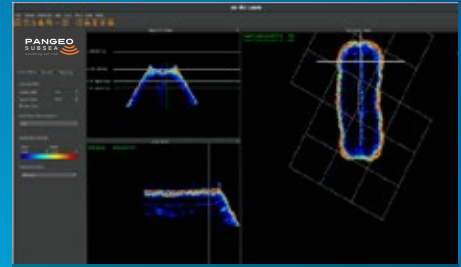
REAL-TIME VISUALIZATION TOOLS: 10CM VOXEL RENDERING ONBOARD VESSEL



3D Volumetric Data Set.



Horizontal Slice at Cable Layer.



Newest version of 3d pilot console viewer displaying Plan, Cross Sectional and Side views of live SBI data.

SEAKITE™ SPECIFICATIONS*



Internal components of the SBI Seakite.

DIMENSIONS	
Width	4.330m
Height	2.730m
Wing Depth	2.770m
WEIGHT	
	1,750 Kgs

*Preliminary Specifications: Subject to Change

SEAKITE™ NOMINAL OPERATING SPECIFICATIONS

- Water Depth: 7m – 250m
- Survey Altitude: 3.5m +/- 0.5m
- Survey Speed: 2.5 – 4 knots target dependent

SUB BOTTOM IMAGER (SBI™)

HIGH RESOLUTION 3D SAS SUB BOTTOM PROFILER

SBI™ FEATURES

- Acquires continuous 3D Acoustic Volumetric Swath: 5m wide to depths of 5m-8m
- Identifies size, shape and orientation of buried hazard
- Images AC and DC Cables: No Tone or Power required on Cable
- Depth of Burial repeatability better than 10cm accuracy with decimeter resolution in real time
- Images cable beyond the 1.5m limitation of other systems
- Has been proven to reduce the number of "false positives" commonly found with magnetometer surveys by up to 75% thus reducing the number of targets requiring subsequent "de-burial"



SBI Seakite™ on board the Aarhus University's Vessel MV Aurora.