



Newsletter – *Mar 2015*

ASB Systems Pvt. Ltd.

Explore the seas with ASB

A warm hello to our readers, and apologies for being missing from the scene for the past few (but busy) months.

ASB was present at the Underwater Technology 2015 symposium at NIOT last month. It was a warm reunion of friends...customers and competitors alike! And ofcourse, a stage for making new friends too.

This issue covers the UT15 event as we experienced it. Also introducing the product portfolio from nke – it's instrumental , and highlights from the latest release – Hypack 2015.

So read on, and *explore the seas... with ASB !!*

About nke: nke was originally established in 1984, and has an oceanographic instrumentation department since 1993.

nke instrumentation manufactures a wide range of autonomous data loggers for physicochemical parameters as well as more specific types of measurements (sedimentology, corrosion...). Since 2004, nke instrumentation has been deploying automated networks, designed to monitor inland and marine waters. It proposes technical solutions for the measurement, transmission and retrieval of data. In the specific fields of deep sea and sea floor measurements, nke manufactures a range of products designed to monitor the environment (observatory, wireless communication module) or to carry out measurements in the sediments (piezometer, thermal flow). Since January 2009, nke has developed its offer by integrating a range of profilers and drifting buoys. instrumented buoys, acoustic buoy and profilers of all kinds.

In this issue...



nke – Monitoring systems, data loggers



nke - Case Studies & Research



ASB at Underwater Technology 2015



Hypack 2015 released!

Customer satisfaction is our prime objective

1. Case study - nke Instrumentation supplies multiparameter probes for Veolia environment

Veolia Environnement, a main French company, is setting up a monitoring station on the Blavet river, in Brittany. The aim is to control and analyse raw water supplies before it arrives in a drinking water plant for the purpose of detecting the modification of water and adapting the treatment. SAMBAT from nke, an innovative equipment, self-sufficient in energy, continuously gives information on numerous parameters.



NKE has developed a buoy, self-powered, to measure several parameters continuously: temperature, dissolved oxygen, pH, conductivity, organic matter through the Total Organic Carbon (TOC). In addition, a hydrocarbon detection probe to the surface of the water is added to the buoy. Through wireless communication, the values of these parameters will be seamlessly integrated with the remote Veolia. Beyond certain thresholds, the operator of the plant will receive information in the form of an alarm. The modification of a parameter can for example be an indicator of pollution coming at the factory. The operator will then be more vigilant about the quality of incoming water : visual aspect, further analysis in the laboratory of the plant , etc.

(The SAMBAT is capable of measuring temperature, depth, conductivity for the calculation of salinity, turbidity, fluorescence, dissolved oxygen and pH)

2. Research - NOSS Sensor (an alternative to CTD)



nke Instrumentation is involved in several research projects, both nationally and internationally, and works in partnership with scientific institutions such as Ifremer and CNRS.

nke has opted to develop research led by ENST Bretagne (a high standard research centre providing high level training in Information Technologies and telecommunications).

The NOSS project will employ optical density measurements to determine salinity and to perfect an operational sensor for coastal use. The company will be incorporating the new optical measuring feature into its probes and buoys and will launch a fully tried and tested product.

Optical salinity sensors measure directly the seawater refractive index and thus enable a measurement of the seawater density and composition variation. The research details the measurement dependence to environmental parameters (in particular temperature and pressure) compared to conductivity sensors, and demonstrate that it may be advantageous to directly measure refractive index rather than electrical conductivity and so obtain a more direct route to density and absolute salinity.

(The NOSS sensor can measure absolute salinity from 15 to 42 g/kg with an initial accuracy of +/- 0.005)

ASB at Underwater Technology 2015 (UT 15)



The UT 15 (Underwater Technology 2015) symposium was held from 23 to 25 February 2015 at the National Institute of Ocean Technology (NIOT) Chennai.

The symposium was organized by NIOT, IEEE/OES Japan Chapter and IEEE/OES. The vision for this symposium was to provide a thematic umbrella for the researchers working in underwater systems across world to discuss the problems and potential long term solutions that concern not only the Indian Ocean regional countries, but the world ocean in general.



ASB Systems and Teledyne RD Instruments were among the co-sponsors for the event.

ASB's booth show-cased the latest products from their OEM portfolio, in the fields of Hydrography, Hydrology, Oceanography and Geophysical. Videos highlighting various instrument features became one of the unique features of ASB's booth.

Focus was given to new products from Teledyne Blueview* for imaging sonars, SBG Systems for MEMS based INS systems, NKE instrumentation for multiparameter probes, Biosonics for scientific echosounders, and dotOcean products for the Geotechnical community were presented to the visitors.

** - Teledyne Blueview provides sonars for underwater acoustic imaging and measurement. BlueView delivers mission critical instruments for subsea navigation, monitoring, survey, and detection. Blueview sonars enable the user to see even in zero visibility conditions, and are used for applications like ROV/AUV navigation, target tracking and high resolution 2D & 3D imaging.*

Among the instruments on display at the ASB booth were RDI Doppler velocity log, the SBG series of INS sensors, and TRDI Sentinel ADCP. These displays received a good response from the visitors as they were able to get a feel of the instruments.

Hypack 2015 released

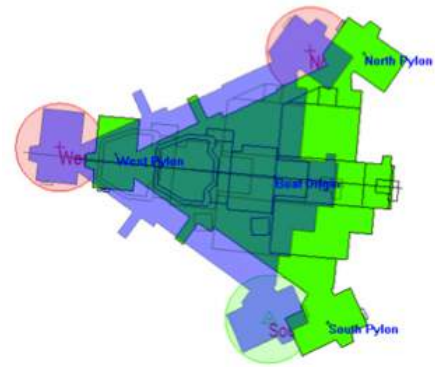
The new release of HYPACK® 2015 software offers users cutting-edge technology including Real-time Point Cloud visualization, and multibeam and water column data integration and playback.

Hypack 2015 changes -

.Web Maps - The HYPACK 2015 interface includes an easy, process that automatically downloads and displays the latest NOAA (National Oceanic and Atmospheric Administration) and ACOE (Army Corps of Engineers) charts in the area currently shown in the Map window. HYPACK automatically converts the charts to project geodesy as you download them to your project.

.Multiple Tracking points - In HYPACK® SURVEY, you can configure up to 15 additional tracking points and the display of any number of these 16 locations in SURVEY

Application - One application of tracking multiple points is in rig positioning. You can use the Barge device driver to display the target position of your rig and mark targets where your tracking points should be when the rig is correctly positioned. Using the same boat shape for your rig mobile, move your rig to directly overlay the displayed target position.

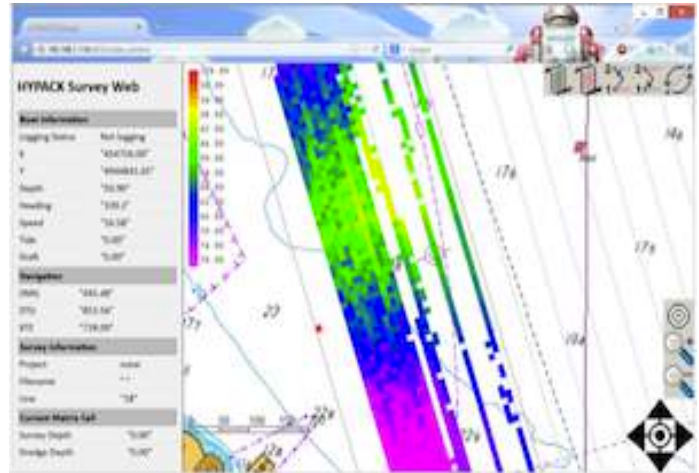


.Anchor Handling - When you have created a boat shape file with anchors in the BOAT SHAPE EDITOR and loaded it in SURVEY or DREDGEPACK®, you can drop and raise its anchors in the map windows. Each vessel configured with anchors has an Anchor Manager, accessed through the Vessel Setup dialog, with the controls to move any anchor from the vessel to any location and raise it back to its original anchor attachment point. You can also set display properties for each anchor: name, color, marker position, radius and floats.

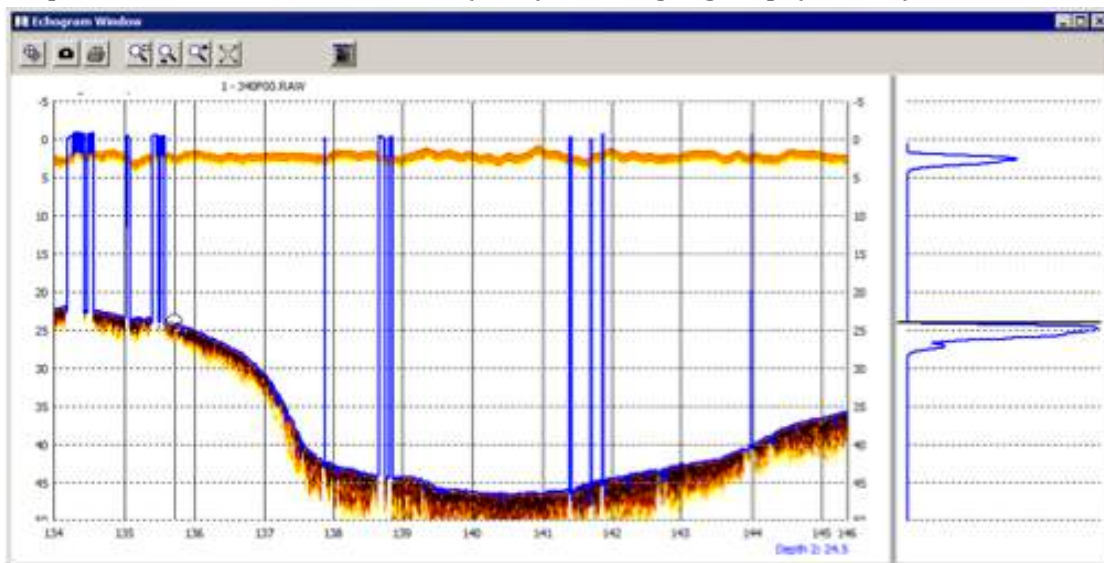
.Remote access through Web Browser - invite anyone with Web access to view your Survey map from devices other than your Survey computer through a Web browser using the Remote Access option. Using this method, each viewer can have their own screen display with tools to zoom in/out independently of other displays and perform basic survey tasks on their computer, tablet or smart phone. All they need is an Internet connection.

Each remote viewer can use the zoom and pan tools to customize their own display. The Remote Access view also enables the viewer to do any of the following:

- Customize the display with zoom and pan tools
- Start and stop logging
- Increment and decrement lines
- Swap line
- Toggle vessel tracking
- Mark targets. Targets marked through a Remote Access window are named *WEB Time* and stored in the Survey target group.



.**Single-beam editor** - Target Support: A Target dialog appears with the XYZ coordinates of your selected position and the default name (time) and target group (SBMAX).



Edit your Target Name (Description), Position and Group information (Optional) and click [OK]. SINGLE BEAM EDITOR saves your target to your target group and displays it in the SINGLE BEAM EDITOR editing windows.