

CEE NEWS - January 2018



We're Developing Single Beam Mapping - Still

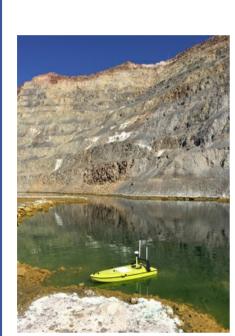
With new vehicles, new echo sounders, new software and continuous improvement of existing products CEE HydroSystems is serious about single beam (SBES) surveying in shallow water. Sometimes one might be forgiven for thinking that every echo sounder should be a multibeam these days but single beam will continue to have a valuable place - especially for inshore hydrographic surveying. It is fast, easy to operate, affordable, and for many applications the only real option. While others may have stopped any meaningful SBES product development, we intend to keep on developing the art as if SBES was only just invented!

Product Focus - Industrial Water Surveys



Industrial Water Surveys?

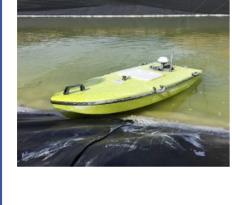
Survey systems using the CEESCOPE and CEE-USV provide a "low hassle" option for firms who aren't professional surveyors - maybe the site operator or a sub-contractor without previous hydrographic experience. If you are looking to do industrial water surveys and are new to the topic, take a look at our new <u>TECHNICAL ARTICLE</u> HERE.



Surveying in a Pool of Acid

Among the worst environment for hydrographic surveying is sulfuric acid in a heap leach pad at a copper mine. The CEE-USV was in action late in 2017 on these ponds, where going for a survey trip on a small boat or inflatable is not a good idea, although not as bad as doing so and falling in.

Usually, the mine operator is interested in the solution volume in the various reservoirs on site. These ponds may evolve quickly and volumes may be completely unknown. Read the <u>CASE HISTORY HERE</u>.



Soda Encrustation at Solvay Colorado The CEE-USV was used to survey effluent

lagoons filled with waste from the sodium bicarbonate production process. Not hazardous water, but difficult to access safely and a perfect application for a USV survey of the 0.5km long ponds. And it's a soap so the boat stays clean. Read the <u>CASE HISTORY HERE</u>.

Customer News

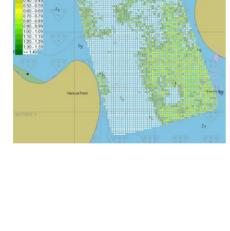


Thanks to Cory Hughes at Hughes & Associates for

contributing a Case History describing their

CEE ECHO Replaces Ageing Sounders

experiences getting a new CEE ECHO for single beam surveys in place of their older gear. Maybe it would be difficult to defend ourselves if our brand new equipment did not outperform older - but still available - designs. Nevertheless its nice to hear that it does. Read the CASE HISTORY HERE.



The CEESCOPE echo sounder was paired up with HYPACK to test the process for quantifying eelgrass

extent and canopy height in San Diego Bay, USA. With a detailed high definition echogram, eelgrass is easy to pick out of the sonar record leading to a fantastic clear picture of vegetation extents. Read the TECHNICAL ARTICLE HERE.



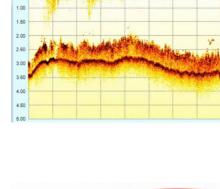
CEE were on hand in Myanmar recently conducting training on new RTK CEESCOPE systems and HYPACK

New WiFi RTK CEESCOPES for Myanmar

software. The Ayeyarwady River project called for multiple users accessing data from each echo sounder. This was achieved courtesy of our new WiFi CEESCOPE-USV but installed on a manned boat not a remote boat. WiFi connected network HYPACK viewers could keep an eye on the survey progression. Learn more about the Myanmar project <u>HERE</u>.

Hydromagic CEE Echogram Digitizer

Software & Hardware



ITS HERE! The latest version of Hydromagic includes an echogram digitizing tool for the first time. Now,

CEESCOPE and CEE ECHO users can re-digitize soundings based on a very high definition water column echogram. Great for editing difficult surveys. Download version 8 <u>HERE</u> to keep up.

QPS QINS The first derecently be

QPS QINSy Driver Available

The first dedicated CEESCOPE driver for QINSy has recently been made available for QPS users. The new driver allows recording of the CEE water column and soundings. <u>CONTACT US</u> for details.

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New Compact 200/24kHz Transducer

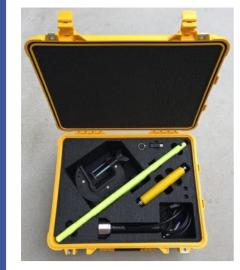
frequency in a small form factor. We now can supply the popular M42 shape 200/24kHz with 5/20 degree

The new M563 transducer offers a 24kHz low



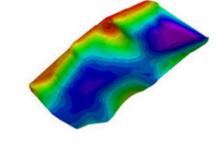
beams and the new M563 200/24kHz with 5/25 degree beams. The M563 is useful when portability and weight are key factors.

Conferences and Demos



CEE LINE Kits Available for Demo

The new CEE LINE echo sounder kit is ideal for use with GNSS data collector acquisition. With a simple interface and no batteries of Bluetooth to worry about, just plug it in and off you go. Demo kits are ready in the US office. It looks weird but it works. **CONTACT US** to try one out.



HYPACK 2018 Release

With the imminent release of HYPACK 2018, CEE HydroSystems and Bruttour International in Australia will again be holding the annual training seminar in Sydney. Additionally, we expect some substantial changes and improvements for the CEESCOPE driver in 2018. Details will be in the next newsletter.

Video Library - New Releases

CEE-USV: Acid Pond and Tailings Surveys

The CEE-USV in action on several mine ponds of varying degrees of unpleasantness!



Compare a "digital depth" basic echo sounder output with the CEE ECHO and CEESCOPE using

CEESCOPE Versus BASIC Echo Sounders

Hydromagic software during the eelgrass survey. See what is really down there!



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