

## Long Beach Police Department use Underwater Inspection System (UIS) to obtain rapid post hurricane damage assessment of Long Beach breakwaters

Coda Octopus Group, Inc. (CDOC) reports Long Beach Police Department (LBPD) employed their UIS with its Echoscope® 3D imaging system to provide rapid, real time damage assessment after Hurricane Marie impacted Long Beach Breakwaters.

The Port of Long Beach and the Port of Los Angeles are two of the busiest seaports in the United States. Any disruption to vessel traffic transiting the approaches to these sister ports can have a significant economic impact in the magnitude of billions of dollars. In late August 2014, the remnants of Hurricane Marie created large swells and waves that relentlessly pounded the Southern California Coast. Twenty foot waves disrupted operations at the Ports and caused damage to coastal infrastructure. According to the *Long Beach Press Telegram*, two cargo terminals at the Port of Long Beach were forced to halt operations late on Tuesday August 26, due to concern for worker safety in the face of 10-15 foot waves. Additionally, these waves caused extensive damage to two of the three breakwaters in San Pedro Bay that are designed to protect the harbor and Ports from storms. Damage was sustained primarily to the middle breakwater.

The U.S. Army Corps of Engineers (USACE) Los Angeles District maintains the three breakwaters and began assessing damage in the days after the Hurricane Marie intensity subsided. Faced with a priority to repair the breakwaters quickly, USACE opted, in this instance, to ask LBPD to assess the breakwater using its UIS™. LBPD purchased the UIS using port security grant funds primarily for its security mission but also for response to manmade or natural disasters. The Coda Octopus UIS is a turnkey solution that provides a complete underwater and above water geo-referenced image in real-time. At the core of the UIS is the Echoscope® real time 3D imaging system. This sonar system displays 3D underwater objects as they are scanned, whether they are static structures or moving objects. The image supplied by the Echoscope® can be rotated in all three dimensions and measurements can be taken while bringing in data. LBPD conducted a dynamic survey of the breakwater to assist the USACE engineers and provided detailed high resolution mosaic images that clearly showed the overall extent of damage. This information enabled the USACE to quickly ascertain what repairs were required and to accurately define repair requirements, potentially reducing repairs costs.

Sergeant Steve Smock said "this high resolution imagery aided the Army Corps of Engineers to better understand the extent of damage below the water's surface. Furthermore, it demonstrated LBPD's capability to respond quickly to dynamic requirements and provide detailed underwater mapping with our UIS"

Blair Cunningham, our President of Technology, said, "We are extremely pleased with the continued successes achieved by LBPD and our other UIS users. This dynamic survey is an example of how the UIS and Echoscope® real time 3D sonar are, day in and day out, helping to reduce port operating costs and to ensure ports experience no downtime".

## **About Coda Octopus Group, Inc.**

Originally founded in 1994 as Coda Technologies, the Coda Octopus Group is now headquartered in Lakeland, Florida.

The Group consists of a Marine Products business located in Lakeland, Florida, Edinburgh, Scotland, Perth, Australia, and Bergen, Norway, and engineering businesses, Coda Octopus Colmek in Salt Lake City, Utah and Coda Octopus Martech in Weymouth, England. Each of the Group companies are technology innovators with a particularly high level of sonar expertise. The Group has facilities in Florida, Utah, the UK, Australia, and Norway.

Alongside providing bespoke engineering and development for defense applications one of the Group's key products is the patented Coda Echoscope® - the first real time 3D sub-sea sonar which is used in oil and gas, underwater construction, search and rescue operations and port and harbor security and constructions. The top end software which runs on the Echoscope® (Underwater Survey Explorer) is also proprietary to Coda Octopus. The Echoscope® is also at the heart of the Underwater Inspection System which is being adopted for port and harbor security, and other applications globally. We have a number of products which are based on our real time 3D technology (Echoscope®, Underwater Inspection System and Dimension® (the latter being a forward looking real time sonar targeted at ROV applications)).

With this patented revolutionizing sub-sea visualization capability, and the existing systems integration skills within Coda Octopus Colmek, Inc. and Coda Octopus Martech Ltd., the Coda Octopus Group believes it can become a world leading integrated sonar technology supplier.

For further information, please visit <a href="http://www.codaoctopusgroup.com">http://www.codaoctopusgroup.com</a> or contact Coda Octopus at <a href="mailto:info@codaoctopusgroup.com">info@codaoctopusgroup.com</a>.

## **Safe Harbor Statement**

This press release contains certain forward-looking statements. These forward-looking statements can generally be identified as such because the context of the statement will include words such as Coda Octopus Group plans, expects, should, believes, anticipates or words of similar import but all statements other than of historical fact could be deemed forward-looking statements. Stockholders, potential investors and other readers are cautioned not to place undue reliance on these forward-looking statements that are predictions and opinions based only on current information as of the date of this press release that are inherently subject to risks and uncertainties that could cause future events or results to differ materially from those set forth or implied by the forward-looking statements. Certain of those risks and uncertainties are discussed in registration statement on Form SB-2 and include, but are not limited to, market acceptance of CodaOctopus' planned products and their level of sales, access to the capital necessary to finance and

grow the business, ahighly competitive environment in the security field that includes numerous large and well established companies much larger than ours, and our ability successfully to deploy our technologies and products to meet the technical demands and market requirements of our customers. These forward-looking statements are only made as of the date of this press release and Coda Octopus Group does not undertake any obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.