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Coda Octopus' Patented Real-time 3D Sonar Technology Assessed as the Best Acoustic Imaging-based Technology for Bridge Inspections by U.S. Department of Transportation's Federal Highway Administration

Advances Coda's Strategic Lead Position in New Divers-Augmented Sonar Methodologies

Multi-year, Five-technology Study Now Published and Available Online

ORLANDO, FL, Oct. 23, 2018 (GLOBE NEWSWIRE) -- Coda Octopus Group, Inc. (CODA) (Nasdaq: CODA), a global leader in real-time 3D sonar technology and real-time subsea intelligence, today announced that its proprietary real-time 3D Echoscope® was identified by the U.S. Department of Transportation's Federal Highway Administration (FHWA) as the highest class of sonar for underwater bridge inspections exhibiting "the most desirable qualities for (such applications)".

The FHWA's extensive study, "Underwater Inspection of Bridge Substructures Using Imaging Technology," used eight criteria for its evaluation of imaging technology for bridge inspection applications: Perspective (2D, 3D), Accuracy, Object ID/Resolution, Portability, Cost, Ease of Use, Ability to Image Vertical Surfaces, and Post Processing Time. Coda Octopus' technology scored the highest overall, but scored lowest in the category of Cost and average for Ease of Use. See the summary comparison table on page 35 of the FHWA report on the study.

The FHWA study, including field trials, commenced several years ago using Coda Octopus' second generation (2G) of the technology. Since then, Coda Octopus has launched its fourth generation (4G), which has addressed a number of areas including size, weight, power and cost. As a result, the Company is confident that if this evaluation were conducted today, its sonar technology would excel, as well, in the two categories where the 2G was assessed as uncompetitive.

This is an important study by the FHWA, which is the leading federal body in setting the National Bridge Inspection Standards (NBIS) and the methods for implementing them. The study was commissioned to "support development of guidance for the use of acoustic imaging for underwater inspection of bridges …. and demonstrate how [acoustic imaging data] compare to inspection findings documented by a qualified underwater inspection diver." National Bridge Inspection Standards currently call for trained divers to be used for bridge

inspection. There are limitations associated with current methods – largely due to unfavorable water conditions, specifically “significant depth, swift currents and poor visibility (black water),” which make it difficult, dangerous or impossible to use divers. The landmark FHWA study is an important endorsement of sonar technology and paves the way for the uniform adoption of new methodologies and the application of acoustic-based imaging technology that will create a more effective, efficient and safe method of underwater bridge inspection by divers.

Annmarie Gayle, CODA’s Chairman and CEO, commented: “We are most pleased that Echoscope®, the world’s only real-time 3D volumetric imaging sonar technology, which is a multi-utility tool imaging clearly and to the highest accuracy both horizontal and vertical surfaces in zero visibility underwater conditions with no post processing and which is referred to in the FHWA report as ‘Real-Time Multibeam (3D),’ has been assessed as exhibiting the most desirable qualities for bridge inspection. The FHWA assessment shows that this is an ideal technology for this critical application. While we scored lower in both the cost and ease of use categories, our fourth generation (4G) of the technology, introduced to the market earlier this year, addresses these two areas. Our 4G technology has a significantly smaller form factor, is easier to use, and is more competitively priced than the 2G. This FHWA assessment coming on the heels of the new Divers Augmented Vision Display-Head Up Display System (DAVD-HUD), that we are developing for NAVSEA in conjunction with Naval Surface Warfare Center (Panama City Division), pivots Coda Octopus as the natural frontrunner for working with governments to change the methodologies for bridge inspection. Both programs, while separate, are central to benefiting and assisting divers, who are an integral part of bridge inspection activities. In recent U.S. Navy trials our newly launched Echoscope$^{4G®}$ Surface was successfully evaluated as a handheld sonar for divers.

“We are very excited that our technology is now well placed to be part of the new methodologies for bridge inspections. This is a significant market, given the world’s aging bridge infrastructure, with 500,000 bridges spanning waterways in the U.S. alone. This rating by the FHWA aligns well with our strategy to dominate this market. This strategy is well underway with our 4G technology and our co-development alliance on the DAVD-HUD project. Our next planned initiative is to work with state bodies responsible for both installing and maintaining bridges, to help them implement the new methodologies and standardize Coda’s real-time 3D sonar technology as the tool of choice for this significant application. Additionally, we believe that global adoption will follow the U.S. lead, so this represents a very big opportunity for Coda Octopus that we will roll out to our global customer base,” added Ms. Gayle. “We have already started seeing utilization of our technology for bridge inspections and, as recently as two weeks ago, we supported a project for bridge inspections in and around New York City’s critical infrastructure.”

The FHWA report estimates that, according to the 2011 National Bridge Inventory data, there are approximately 500,000 bridges in the U.S. that span waterways. State highway agencies oversee approximately 31,000 bridges with submerged substructures that require underwater bridge inspection. Approximately 7,600 of these bridges are designated as scour critical. Scour, the removal by hydrodynamic forces of granular bed material in the vicinity of coastal structures and a specific form of the more general term “erosion,” is the number one cause of bridge failure in the U.S. In addition to scour detection and documentation, the report cites the following sonar applications for improving underwater bridge inspections:

rapid condition assessment; underwater construction inspection; security threat assessment; visual representation of the underwater structure, and enhancing diver safety and efficiency.

The American Society of Civil Engineers (ASEC), in its 2017 “Infrastructure Report Card” gave inland waterways a grade of D, and cited C+ for both bridges and ports. There are many factors that lead to bridge failures, including improper maintenance or repairs, along with age. ASEC cited that of the 614,387 bridges in the U.S. alone, almost four in ten were 50 years or older. The most recent federal estimate puts the backlog of rehabilitation projects for the nation's bridges at $123 billion.

For further information, see the FHWA study, “Underwater Inspection of Bridge Substructures Using Imaging Technology, June 14, 2018,” published online October 2018.

For information on the DAVD-HUD program, see CODA’s news release, “Coda Octopus Group Enters into a Navy Cooperative Research And Development Agreement with Naval Surface Warfare Center, Panama City Division for Naval Real-Time 3D Imaging Head Up Display Diver Solution.” (July 16, 2018).

About Coda Octopus Group, Inc.

The Company, founded in 1994, manufactures and markets patented real-time 3D/4D subsea sonar technology, Echoscope®, which enables real-time 3D/4D imaging and mapping in zero visibility conditions underwater, and is used globally in numerous applications including defense, marine construction, oil and gas subsea infrastructure installation and surveys, and port and harbor security. For further information, please visit, http://www.codaoctopusgroup.com or contact us at: coda@codaoctopusgroup.com.

Forward Looking Statement

This press release contains forward-looking statements concerning Coda Octopus Group, Inc. within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Those forward-looking statements include, without limitation, statements regarding the Company's expectations for the growth of the Company's operations and revenue. Such statements are subject to certain risks and uncertainties, and actual circumstances, events or results may differ materially from those projected in such forward-looking statements. Factors that could cause or contribute to differences include, but are not limited to, customer demand for our products and market prices; the outcome of our ongoing research and development efforts relating to our products including our patented real time 3D/4D solutions; our ability to develop the sales force required to achieve our development and other examples of forward looking statement set forth in our Annual Report on Form 10-K for the year ended October 31, 2017, filed with the Securities and Exchange Commission on January 30, 2018. Coda Octopus Group, Inc. does not undertake, and specifically disclaims any obligation to update or revise such statements to reflect new circumstances or unanticipated events as they occur.

Contact:

MDC Group

Investor Relations:
David Castaneda
Arsen Mugurdumov

414.351.9758

Media Relations:
Susan Roush
805.624.7624

Source: Coda Octopus Group, Inc.