BREAKING THE SURFACE 2015 – List of demonstrations

COMPANY DEMONSTRATIONS:

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- **Maritime Robotics:** Christopher Dahlin and Kenan Trnka
- **Kongsberg / Hydroid:** Richard Williams and Simone Di Giacomo
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Company presentation: EvoLogics
Eugene Glushko and Konstantin Kebkal, Evologics, DE

EvoLogics is a Germany-based high-tech enterprise. It was founded in 2000 by a group of leading international scientists and R&D experts to develop innovative key technologies for the aerospace, maritime and offshore industries through interdisciplinary cooperation between engineering and life sciences.
The driving force behind EvoLogics is the attitude that nature has evolved over millions of years to generate the most efficient design and uncovering these design elements can advance human mankind in their development of technologies that are both superior and also environmentally safe.
By combining applied research with commercialization, EvoLogics can offer the market, the most advanced technologies as they are developed at the research labs. EvoLogics engineers are also involved closely with the commercial market so as to be aware of the needs of the market while developing applications from their research.
S2C technology, the most advanced and most reliable solution to the tasks of hydro-acoustic telemetry, is based on dolphin communication physics and is the basis for our R-series of modems. Our approach to improving engineering by learning from nature also includes a series of new bionic robots with an extraordinary hydrodynamic performance like the award-winning "Manta ray" and the design of underwater manipulators with shape-adaptive gripers driven by fluidic muscles

Company presentation: Maritime Robotics
Christopher Dahlin and Kenan Trnka, Maritime Robotics, Norway

Maritime Robotics is a leading provider of innovative unmanned solutions for maritime operations in harsh environments. With technology developed in close collaboration with both civilian, governmental and military partners, Maritime Robotics focuses on delivering high-quality system solutions and products that are cost-efficient, reduce HSE risk exposure and are highly deployable, in any conditions. Our technologies and products operates unmanned in the air and on the surface, and can gather data ranging from air to subsea. We believe that the future of maritime operations will enable more unmanned data acquisition, driving industry standards and continually broadening operational possibilities in extreme conditions. Our headquarter is situated in Norway's

technology capital, Trondheim, staffed by a highly competent team of engineers and personnel, with a global network of clients and partners.

Company presentation: Konsberg / Hydroid
Richard Williams and Simone Di Giacomo

Hydroid, Inc. (Hydroid) is a US customer-focused, engineering-based manufacturer of REMUS innovative commercial underwater systems commonly known as Autonomous Underwater Vehicles (AUV) systems. Hydroid offers its customers extensive experience in design, manufacturing, and shipboard integration of AUV systems. Hydroid has successfully developed and fielded over 280 AUVs since 2001, along with supporting ancillary equipment including Launch and Recovery Systems (LARS).

A subsidiary of Kongsberg Maritime, Hydroid is the worlds most trusted manufacturer of advanced Autonomous Underwater Vehicles (AUVs). REMUS AUVs provide innovative and reliable full picture AUV systems for the marine research, defense, hydrographic and offshore/energy markets. Along with our success and exponential growth, our product offerings have also expanded significantly. Not only do we offer the REMUS 100 AUV system, a robust, man-portable AUV for shallow water operation we also offer the REMUS 600 and the REMUS 6000 AUV systems. e REMUS 600 and 6000 also include AUV launch and recovery systems, docking systems, and supporting equipment. Similar to the base functions of the REMUS 100, the REMUS 600 AUV system is the mid-range solution for rapid mobilization from vessels of opportunity; and the REMUS 6000 AUV system is the ultimate deep ocean workhorse solution with the ability to reach depths of up to 6000 meters.

Company presentation: VideoRay

VideoRay is the largest volume producer of Underwater ROVs (Remotely Operated Vehicles) in the world. Established in 1999, VideoRay has worked with technology and mission partners throughout the world to develop and prove the small ROV tool for a wide range of applications. With over 3,000 units delivered to a wide range of organizations for a wide range of missions, hundreds of VideoRays work every day throughout the world underwater keeping us free from terrorism, finding and retrieving objects, inspecting infrastructure both inland and offshore, and keeping divers safe from hazardous conditions. We pride ourselves on state-of-the-art customer support and easily operated and maintained underwater robotic systems. Since the first systems were delivered, users have tried VideoRays in increasingly challenging situations and environments. Today, VideoRays can be found on every continent, and owners have learned to trust them to perform in a growing number of industries. VideoRay has established itself as the worldwide leader in observation class ROVs. Underwater accessory manufacturers now develop their sensors around the size and payload capacity of VideoRays. When you purchase a VideoRay Professional ROV system, you have the choice of the best sonars, positioning systems, metal thickness gauges, cathodic protection, water quality and radiation measuring devices, and many other underwater tools and

sensors. VideoRay is located in the borough of Pottstown approximately 30 miles northwest of the city of Philadelphia, Pennsylvania

RobotX Challenge presentation

Kelly Cooper, Office of Naval Research – ONR, US

The Maritime RobotX Challenge (RobotX) is designed to foster student interest in autonomous robotic systems operating in the maritime domain, with an emphasis on the science and engineering of autonomy. e Maritime RobotX Challenge (RobotX) Hawaii will be held on the island of Oahu, Hawaii in December 2016. For more information visit www.robotx.org