blue zone GROUP

UnderCurrents

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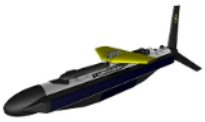
Klein Marine Systems & Ocean Power Technologies Partnership

Klein Marine Systems announces OPT as the leading supplier of side scan equipment & SpectralAi Software.



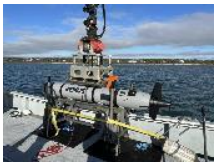
During Hypack 2024 Klein Marine Systems and Ocean Power Technologies (OPT) reached an OEM agreement for the sidescan sonar equipment and SpectralAi Software licencing. In addition to the recent agreement, Klein Marine Systems Director of Strategic Hydrographic Programs, Dr. Peter Ramsay is travelling to Australia in January 2024, to promote and demonstrate the SpectralAi software suite.

BlueZone represents Klein Marine Systems and OPT in Australia and aim to enhance the presence of these innovative companies in the Australian market and contribute to the advancement of marine technology and sustainable energy solutions. By partnering with these globally recognised organisations, BlueZone is reinforcing its dedication to bringing the latest technology advancements to the Australian maritime sectors. These partnerships are expected to drive innovation, improve operational efficiency, and support the commitment to fostering technological advancements for a more sustainable maritime future.

Klein Marine Systems & Ocean Power Technologies Partnership

HII's REMUS 620 UUV Successfully Completes First Sea Trails

Enhanced Endurance, Mission Capacity and Odyssey Advanced Autonomy



HII's newest UUV, the REMUS 620 successfully undertook its first sea trials in December 2023. The sea trials included a series of surface runs and short dives. The recent trials are the beginning of the REMUS 620 production project that is expected to be delivered in mid-2024.

The REMUS 620 is built with modern core electronics, navigation, and communication systems, including the new Odyssey™ Mission Management Software. With a battery life up to 110 hours and a range of 275 nautical miles, the REMUS 620 offers unmatched mission capabilities for mine countermeasures, hydrographic surveys, intelligence collection, surveillance, and electronic warfare. The UUV was built to support current and next generation naval and special operations forces, the REMUS 620 features a modular, open architecture design to facilitate seamless payload integration and HII's Odyssey™ suite of advances autonomy solutions for intelligent, robotic platforms.

HII's REMUS 620 UUV Successfully Completes First Sea Trails

Looking Ahead: The Role of Autonomous Systems in Pacific Defence

The MARTAC T-38 USV aids in closing the gap during Naval missions.

As the autonomous systems are advancing, the Navy is at an inflection point, with several gap closing technologies are readily available for deployment. Previously, the 'gaps' were enlightened through the planning and rehearsals of Naval missions. By changing the approach and technology, it allows a better process to effectively write and plan missions. The driving requirements are outlined by the people in the field and executing the mission. One way of closing these gaps has been to understand the latest technology.

The unique design of the MARTAC T38 USV has demonstrated that the Naval warfare would change overnight by these capabilities. "Closing the gaps" needs to become an acquisition capability rather than a long-range goal. These technologies are viewed through traditional acquisition processes which require long developments to form a platform which the system can be procured with a long-life use expectancy.

Looking Ahead: The Role of Autonomous Systems in Pacific Defence

Submarine Readiness Squadron 32 Successfully Launch & Recover REMUS UUV

U.S. Navy submarine significantly enhances capabilities worldwide with latest mission.

The U.S. Navy has successfully completed a ground-breaking mission: the first end to end submarine torpedo tube launch and recovery of a REMUS medium unmanned underwater vehicle (UUV) using the Yellow Moray System. The crew of the Virginia class attack submarine USS Delaware (SSN 791) tested the Yellow Moray at the start of December 2023 from the Navy's Submarine Readiness Squadron 32. The Yellow Moray system will provide the U.S. submarine force with additional mission capability while enhancing what the U.S. Navy's submarines can provide the nation's unified combatant commands around the globe.

While the exact details of the Yellow Moray launch and recovery are not clear, the Navy's ability to perform these missions offers greater flexibility overall. An uncrewed capability such as this is valuable to a variety of submarine types for different reasons. Depending on the configuration, the REMUS medium UUVs can assist the Navy with applications such as Mine Countermeasures (MCM), anti-submarine warfare (ASW) and intelligence, surveillance, and reconnaissance (ISR).

Submarine Readiness Squadron 32 Successfully Launch and Recover REMUS UUV

Products & Services

Ocean Power Technologies (OPT)

WAM-V ASV

The Wave Adaptive Modular Vessel (WAM-V) is an innovative class of watercraft (both autonomous and manned) using unique suspension technology to radically improve seagoing capabilities.

Key features:

- **Wave Adaptive** - The WAM-V's unique design allows the hulls to move with the waves while the centre platform remains stable.
- **Modular** - Payloads and instrument packages are quickly switched, allowing mission-specific customization in minutes.
- **Stable & Manoeuvrable** - The 2:1 length-to-beam ratio along with the articulation and suspension systems make the WAM-V an exceptionally stable and seaworthy platform.
- **Helicopter-like Functionality** - A WAM-V can pick up and deliver payloads from its centre structure in the open ocean or in very shallow water.
- **Reduced Footprint** - WAM-Vs can be disassembled into components and packed for shipment. Alternatively, they can be designed to fold, reducing their footprint by up to 75%. As a result, the WAM-V has exceptionally low deployment and relocation costs

WAM-V Autonomous Surface Vessel (ASV)

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