

Successful Field Trials for Seiche and MOST Collaboration



A collaborative venture between Seiche and MOST (Autonomous Vessels) is combining two leading UK technologies, creating the potential to transform passive acoustic monitoring of sound in the sea. The first trials have been successfully conducted on Roadford Lake, North Devon, UK, in which MOST (AV)'s 3.5m AutoNaut unmanned surface vessel (USV)

deployed Seiche's wireless passive acoustic monitoring (WPAM) system.

The field tests assessed the performance of the AutoNaut/WPAM for: self-noise, data transmission capabilities and optimal array deployment. Seiche and MOST (AV) will be exhibiting their new products together at Oceanology International 2016 at London's Excel Centre in March, stand P551.

Analysis of the trial data showed a very high Signal to Noise ratio. AutoNaut's wave propulsion technology makes it an extremely quiet platform and, with proven reliability for long mission duration, there is clear potential for sound measurement and marine mammal monitoring. The full acoustic signal was transmitted in true real time from the USV by Seiche's WPAM system. The next step will be to build up range capability. During the Roadford trials, up to 50 metres of PAM cable was towed by the AutoNaut to assess the ideal array length for surveying and manoeuvrability. Seiche's analogue array was used and the USV proved perfectly capable of maintaining speed and stability.

These trials showed AutoNaut to be a solid platform for Seiche's analogue array and transmission system. Further development is already underway and the next phase will involve heading out to sea and utilising Seiche's brand new flagship product, the 20mm Digital array, in combination with MOST (AV)'s equally new and more capable 5m AutoNaut.