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22 March 2023

Dear Helen

Letter of Support: Proposal for a Pool of Pressure Inverted Echosounders

Sonardyne welcomes the proposal by the Institute for Marine and Antarctic Studies (IMAS) to establish a pool of Pressure Inverted Echosounders (PIES) for use by the Australian research community. PIES is in widespread use with the offshore exploration sector for the in-situ measurement of sound velocity; however, when combined with a single point current meter (C-PIES) and deployed in an array, it can be used for the study of geostrophic currents.

Sonardyne is the only commercial manufacturer of PIES and has recently developed a version of the instrument, which is integrated with a 62.5kHz Acoustic Doppler Current Profiler (ADCP). This has been undertaken in close collaboration with Prof Randy Watts at the University of Rhode Island, who has been the leading proponent of C-PIES for this type of study. The collaboration between Sonardyne and Prof Watts extends back to 2017, when two Sonardyne PIES were deployed for a back-to-back comparison with URI's own PIES. Since then, Prof Watts has acquired five Sonardyne C-PIES, which were deployed in the Gulf of Mexico in depths down to 3,500 metres between May 2019 – May 2021 (<https://www.sonardyne.com/case-studies/unlocking-the-gulf-loop-current/>). The new instrument, Origin-65 is being launched at the Ocean Business trade show in Southampton, UK during April. Prof Watts is in the process of procuring five units, which will be deployed together with his existing C-PIES for a multi-year project in the Gulf of Mexico starting in 2024.

Sonardyne International Ltd. is a privately-owned UK company that is recognised as a world leader in the design and manufacture of underwater acoustic positioning and telemetry, monitoring, inertial navigation, optical communications and sonar imaging systems. With 50 years of experience in developing technology for harsh underwater environments, our company has been recognised four times by a Queens Award; the most recent being an Award for Enterprise in Innovation in 2021 for the development of seabed deformation monitoring instruments (<https://www.sonardyne.com/sonardyne-wins-queens-award-for-enterprise-in-innovation-for-unlocking-the-secrets-of-our-restless-sea-floor/>).



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While we operate across diverse business sectors ranging from offshore energy to defence, the ocean science community are a particularly important area of activity, and we are proud to supply many of the world's leading oceanographic research institutes. In recognition of the important work undertaken by this community, we therefore run an academic discount partnership scheme, which equates to a 20% discount, which has been applied to our quote for the instruments in this proposal.

In summary, we wish IMAS well with your proposal and look forward to the opportunity to work closely in establishing this significant resource for the Australian research community.

Yours sincerely

A handwritten signature in black ink, appearing to read "Stephen Martin", written over a light blue horizontal line.

Stephen Martin
Sales Director