

Malcolm Cattach, Keith Mathews, Michael Swensson, Edward Campbell and Symon Bouwman (Gap Geopak Pty Ltd)

Grahame Sands Award

Melbourne August 2013

CITATION

This award is based on an endowment made by members of the ASEG and the geoscience profession in memory of the late Grahame Sands, who was tragically killed at the prime of his life in an aircraft crash in 1986, whilst developing and testing new equipment for geophysical survey aircraft. Because of Grahame's abilities to turn scientific theory into innovative application, the award is made for innovation in applied geophysics through a significant practical development of benefit to Australian exploration geophysics in the field of instrumentation, data acquisition, interpretation or theory.

The Grahame Sands Award for 2013 is made to Malcolm Cattach and his team from Gap Geopak Pty Ltd for the development of the HPTX-70 high power geophysical transmitter. The project team comprises Malcolm as Project Leader, Keith Mathews (Chief Engineer), Michael Swensson (Principal Electronics Engineer), Edward Campbell (Software Engineer) and Symon Bouwman who was responsible for much of the intricate manufacture of the HPTX-70

The HPTX-70 has been an innovative and practical development in terms of performance and safety and is likely to have an important role in the future of exploration geophysics as safety compliance and the need for deeper exploration become greater requirements for companies to operate successfully. Users of the transmitter have been impressed with the level of engineering and the attention to detail in the design that has set a new bench mark for safe and efficient operation.

The large increase in power provided by the HPTX-70 has resulted in improved acquisition times and data quality, and companies who have used the system claim that it has been integral in the discovery of a number of deep zones of massive sulphide hitherto undiscovered beneath known ore deposits.

The HPTX-70 is now acknowledged as a large step forward for mineral exploration in terms of safety, efficiency and exploration success at greater depths. The ASEG is pleased to present the Grahame Sands Award for 2013 to Malcolm Cattach and his team of researchers, engineers and technicians.