ASEG-PESA-AIG 2016
25TH GEOPHYSICAL
CONFERENCE & EXHIBITION
Interpreting the Past, Discovering the Future

ANNOUNCEMENT

AIRBORNE GRAVITY 2016 (W10)

Adelaide, Australia

Sunday 21st August 2016

You are invited to Airborne Gravity 2016, a one day forum on airborne gravity / gravity gradiometry will be held on Sunday August 21 in conjunction with the 25th International Geophysical Conference & Exhibition (Adelaide, 22 - 24 August 201).

In this forum, we will review advances in airborne gravity and airborne gravity gradiometry since the last Airborne Gravity forum of 2010. Attendees will receive a copy of the proceedings as a high quality, peer reviewed publication. The proceedings of the previous two workshops in this series can be downloaded as background reading and to gauge the scope of the upcoming workshop.

2004 workshop – Geoscience Australia Record 2004/18

2010 workshop – Geoscience Australia Record 2010/23

Airborne Gravity 2016 is organised around three themes:

- **Hardware**
  - **Currently operating** airborne gravity and gravity gradiometry systems
  - **Next generation** airborne gravity and gravity gradiometry systems under development
- Advances in **processing** and **interpretation** methodology
- Petroleum and minerals **case studies**

Attendees to the forum will hear first-hand from the **local and international leaders** representing the exploration industry, acquisition, processing and interpretation contractors, equipment manufacturers, universities and government. Following the presentations (oral/poster) these leaders will conduct Q&A sessions with the attendees of the forum.

Register for Workshop 10 (W10) at http://www.conference.aseg.org.au/workshops.html

Airborne Gravity 2016 Committee – Mark Dransfield, Bob Smith, Richard Lane, Theo Aravanis, Terry Crabb and Simon Wetherley.

Oral Presentations

Theme	Title	Presenter	Affiliation
Hardware	Recent advances in Lockheed Martin's gravity gradiometer technology	Thomas Meyer	Lockheed Martin (**USA**)
	Recent developments with Falcon AGG	Chris van Galder	CGG
	First data from the HD-AGG instrument	Brian Main	Gedex (**Canada**)
	VK1 - A next-generation airborne gravity gradiometer	Frank van Kann	Rio Tinto
Processing & Interpretation	Reducing noise by transforming and combining gravity gradient components	James Brewster	Bell Geospace (**USA**)
	Equivalent source and Fourier transform techniques in Falcon AGG data processing	Tianyou Chen	CGG
	Referencing airborne gravity and airborne gravity gradiometer data to the gravity datum - the options and implications for combining airborne data with ground data	Richard Lane	Geoscience Australia
	An overview of airborne gravity gradiometer data inversion	Yaoguo Li	Colorado School of Mines (**USA**)
	An investigation of the effects of filtering in the analysis of airborne gravity gradient data	John Paine	Scientific Computing Applications
	Constrained stochastic inversion of gravity gradients	Helen Gibson	Intrepid Geophysics
	The VOXI approach to modelling 3D density and magnetic properties of the R. J. Smith Test Range	Ian Macleod	Geosoft (**Canada**)
Case Histories	Airborne gravity case histories	Luise Sander	Sander Geophysics (**Canada**)
	Applications of gravity gradient data for hydrocarbon exploration in the Canning Basin	Tony Rudge	Buru Energy
	Mapping gravity over inhospitable terrain	Asbjorn Christensen	Nordic Geoscience
	The value of airborne gravity gradiometry to exploration in the Pilbara	Mike Haederle	Rio Tinto
	Recent applications of airborne gravity gradiometry in mineral and petroleum exploration; examples and lessons learned	Kit Campbell	Campbell & Walker Geophysics (**Canada/Scotland**)

Posters

Theme	Title	Presenter	Affiliation
Hardware	FALCON airborne gravity gradiometer data acquired over the Kauring test range	Simon Wetherley	CGG
	Results from SGL's AIRGrav airborne gravity system over the R. J. Smith test range at Kauring	Luise Sander	Sanders Geophysics (**Canada**)
	A quantum sensor: simultaneous precision gravimetry and magnetic gradiometry with a Bose-Einstein condensate	John Close	ANU
Processing & interpretation	Inversion comparison of ground gravity and airborne gravity gradiometry at the R. J. Smith Gravity Test Range at Kauring, Western Australia	Cericia Martinez	Colorado School of Mines (**USA**)
	Optimising trend removal for the inversion of Airborne Gravity Gradiometry data – The example of the R. J. Smith Test Range, Kauring, Western Australia	Gaud Pouliquen	Geosoft (**UK**)
Case Histories & Other Topics	The R. J. Smith Airborne Gravity and Airborne Gravity Gradiometer Test Site at Kauring, Western Australia	John Brett	GSWA
	Application of airborne gravity gradiometry survey to geothermal exploration in Japan	Chiba Akihiko	SRED (**Japan**)
	The US National Geodetic Survey's Gravity for the Redefinition of the American Vertical Datum (GRAV-D) Project: Background and Status Update	Vicki Childers	NOAA NGS (**USA**)
	Physical fundamentals of gravity	David Blair	UWA
	Tunable superconducting gravity gradiometer for climate and gravity field investigation for the Earth and Mars	Shin Chan Han	U. Newcastle