



This issue of *Preview* is chock full of news and commentary. Michael Asten (*Education Matters*) has tracked down some of the postgraduate students who missed out on the December 2015 summary of student projects in geophysics in Australia. Mike Hatch (*Environmental Geophysics*) invites Members to assist with the interpretation of radar data acquired over a glacier. Mick Micenko (*Seismic Window*) considers wavelets, sandy beds and spectral decomposition and Ian James (*Webwaves*) and Guy Holmes (*Data Trends*) challenge our way of doing business. We also feature the life of Lewis Albert (Lew) Richardson – a pioneer of exploration geophysics in Australia.

One of the things that struck me as I read through the account of Lew's life was that his clients obviously valued

experience over qualifications. Lew did not have many formal qualifications but he had a wealth of experience. He worked in remote areas under what were difficult, not to say dangerous, circumstances – as the photographs that accompany the article attest. The career of his son Robert (Bob) Richardson also suggests that experience is valued over formal qualifications in exploration as he rose from being his father's sidekick to being, currently, the Chair of the Board of Crossland Strategic Minerals Ltd.

The old adage that the best geologist is the one who has seen the most rocks might be translated for exploration geophysicists as the best exploration geophysicist is the one who has spent the most time in the field – and who learnt long ago never to go anywhere without a roll of duct tape!

Sadly it would seem that the younger members of our profession are missing out on field experience. I recently discovered – much to my astonishment – that it is possible to graduate with a degree in geology from a number of our biggest universities with only a week or two of experience in the field. It would seem that one of the biggest limiting factors in this regard is the cost of complying with Occupational Health and Safety considerations. Even the psychological health of students is of

concern to bureaucrats in some institutions and they require that an 'independent' student advisor or mediator accompanies students and their lecturers on field trips.

Once students graduate their options for gaining that all important experience in the field are currently quite limited. The old BMR was once valued by the exploration industry as a training ground but that august institution has dwindled into Geoscience Australia and fieldwork, particularly fieldwork in remote areas, is strictly limited. The state surveys now seem to be most active in that regard and I suspect that industry, once it sputters back into life, will be mining the state surveys for personnel.

In the interim there are some amazing opportunities out there. Michael Asten (*Education Matters*) features one of these; the Collaborative Australian Sea Training Alliance Network (CAPSTAN), which is a sea-based training programme for post-graduate students on-board Australia's principal research vessel, RV Investigator. Thirty positions are available and if I was just starting out you would have to forcibly restrain me from applying for one of them!

Lisa Worrall
Preview Editor
previeweditor@aseg.org.au



Items donated to the ASEG historic instruments collection being moved into storage. Photographs of items in this collection will occasionally appear in *Preview*.



Letter to the Editor

Dear Lisa

I commend Roger Henderson for all his research and writings on the history of exploration geophysics in Australia; very much appreciated by those of us approaching 50 years of membership of the ASEG! I particularly enjoyed Roger's piece (*Preview* February 2016) on Hal Thirlaway, the first lecturer in Exploration Geophysics at the University of Sydney and in Australia.

The work by Thirlaway and his group led to the installation in the late 1960s of a UKAEA-style 22 km aperture seismic array at Warramunga, near Tennant Creek in the Northern Territory. The array was installed and operated under the direction of Professor Gordon Newstead and Dr Ken Muirhead of the ANU's Department of Engineering Physics. I came to Australia early in

1970 to study for a PhD in that department under the supervision of Ken Muirhead, together with eminent Australian seismologist John Cleary (of the Research School of Earth Sciences). My project was to develop an automatic processing system for processing the Warramunga array data. When I completed my project early in 1974, I was pleased to discover that Hal Thirlaway was one of my two external examiners (the other being the outstanding Norwegian seismologist Eystein Husebye). The examination was conducted at Blacknest, home of the AWRE's seismological unit, a fine old country house near the main UKAEA facility at Aldermaston. After my (mercifully brief) oral examination was completed, Thirlaway invited Husebye and I to join him at the nearby pub 'The Pineapple' for a few refreshing beers. He was a gentleman indeed!

I will defer to Roger's research that Thirlaway first introduced the term 'Forensic Seismology' in 1961. Thirlaway certainly authored a 1973 publication in the *Quarterly Journal of the Royal Astronomical Society* titled 'Forensic Seismology' (Vol. 14, 297-310). I had my own flirtation with semasiology (sic) when in 1977 Cleary and I submitted a letter to *Nature* titled 'Seismological Solitaire'; sadly the letter never saw the presses.

Following my PhD I went on to work on forensic seismology at the large aperture seismic array NORSAR, near Lillehammer in Norway, before returning to a research position in the Department of Geology and Geophysics at the University of Sydney in 1976. Australia has still not got rid of me yet!

David King
DK@kingseis.com.au

AIRBORNE GEOPHYSICAL SURVEY SPECIALISTS



WHAT ARE YOU HUNTING FOR ?

Highest quality and resolution

MAGNETICS
RADIOMETRICS
ELECTROMAGNETICS
 &
GRAVITY

Fixed wing & helicopter platforms.
Cutting edge technologies.
Worldwide deployment.
Experienced personnel.
Quality processing.

Full member of



THOMSON AVIATION

Airborne Geophysical Survey



+61 2 6960 3800
www.thomsonaviation.com.au

David Abbott +61 4 9999 1963 (david@thomsonaviation.com.au) Paul Rogerson +61 4 2768 1484 (paul@thomsonaviation.com.au)

