



FIG Sydney 2010: Surveying History and Congress

By John Brock

GW is indebted to **John Brock** for this report from the FIG Congress that took place in Sydney in April and particularly the special workshop on the History of surveying. Readers, including the Editor, will be envious to have missed this fantastic event.

Having just had over 2000 guests in Sydney from over 100 countries attending the XXIV FIG Congress in Sydney, we are feeling much more relaxed that we have hosted a fine event for the enjoyment of the participants. Some "poor" visitors have been forced to stay in our great city for an indefinite period due to the Iceland volcano eruption. They are so upset!

However, I am very proud to announce that the two-day Workshop conducted on behalf of the FIG International Institution for the History of Surveying and Measurement was most well attended with 108 on Friday 9 April at Parramatta Old Government House and 133 at the Dixon Room of the Mitchell Library on Saturday 10 April. Seeing that the slogan of the Congress was "Facing the Challenges – Building the Capacity" we went "beyond the capacity" of 130 at the second day of the event!

Chairman of the History Institution, Professor **Jan De Graeve** from Belgium, led the delegation with inspirational introductions on each day along with a brilliant presentation on Gerhard Mercator, Surveyor and Map Maker (1512-1594) on the second day. On the first day he was joined by our impressive New South Wales Surveyor-General **Warwick Watkins**, who told us about our most famous S-G Sir **Thomas Mitchell** in stirring style.

Surveyor-Generals day

Day one was the reserve of the Australian Surveyors-General with all the S-G's from each mainland State and territory giving a presentation about their own first or most renowned predecessor, apart from the Tasmanian S-G **Peter Murphy**, prevented by a funeral on his island state.

On arrival guests were greeted with early morning coffee as well as the poster display featuring the first Surveyor-General of New South Wales **Augustus Alt**. Our second speaker was **John Tulloch** the Victorian S-G who gave us a colourful account of his state's first surveying leader **Robert Hoddle** followed by the S-G from the west **Mike Bradford** passionately extolling the tale of his own first S-G of Western Australia, **John Septimus Roe**, before we feasted on scones with jam and cream in true English tea style.

Session two saw the current S-G from South Australia, **Peter Kentish**, introduce another former SA S-G, **John Porter**, whose authoritative narrative on the first S-G from their state Colonel **William Light**, was enough to pump up the pride of any raw blooded

surveyor. SA historian **Kelly Henderson's** enduring campaign to have Light's design for the City of Adelaide enshrined on the UNESCO World Heritage List garnered much support from the crowd.

Our northernmost S-G from the Northern Territory, **Garry West**, related the hardships and determination displayed by the SA S-G **George Woodroffe Goyder**, who was the intrepid explorer who succeeded in settling the Northern Territory after others had failed.

Session three saw a most rousing joint presentation by the S-G of the Australian Capital Territory **Bill Hirst** and Dr **David Headon** on the design and survey of our national capital Canberra, which was an exhilarating eye-opener to all present.

It would not be a true blue Australian surveying history seminar without the pre-eminent individual on the subject, **Bill Kitson**. He gave us a glowing testimonial of his state's first S-G, **Augustus Gregory** and was introduced by his state's incumbent Chief Surveyor Dr **Russell Priebbenow**, who provided an insight into the early surveyors of Queensland.

Homage to Augustus Alt

With the completion of our final speaker, it was time to take 108 guests to the grave site of the first Surveyor-General of Australia (New South Wales at the time) Augustus Alt, who was buried in St John's Cemetery in 1815, to raise a toast to him and all Surveyors-General who have been an essential element in the formation and development of our great country. Wine was generously donated by one of our own legendary surveyors **Bob Linke** from his own family winery.

On the return to Old Government House we viewed the only remaining artifact from Governor **Brisbane's** Astronomical Observatory. This is the telescope mount, bearing in its upper base the broad arrow placed by S-G Thomas Mitchell during his conduct of the Trigometrical Survey of NSW in 1828.

It was now time for a magnificent cocktail party sponsored by the NSW Surveyor-General **Warwick Watkins** – a special welcome to Australia, in advance of the official FIG Welcome Reception held at the exquisite Sydney Town Hall on Sunday evening for about 1800 guests.

International day

On Saturday it was the turn of the international surveying leaders to treat the audience to a day of presentations about the

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prominent surveyors from their parts of the world. Immersed within the ambience of the historic Mitchell Library the visitors were captivated by the floor mosaic tile map of Tasman's epic 1642 voyage to Australia, sold to the curators by the granddaughter of **Napoleon Bonaparte**, as well as the large door at the entry depicting many surveyors and explorers of Australia in relief.

The Dixson Room is adorned with beautiful oil paintings of early Australia and some of its most prominent settlers. Again opened by Professor Jan De Graeve, our first speaker was **Richard Hucker** from the UK who highlighted the advanced skill of the ancient Roman surveyors in setting out their many aqueducts all over the world. This was followed by presentations on two of the most famous surveyors the world has ever seen – **Leonardo da Vinci** by **Brian Blevins** from the USA, and **Gerhard Mercator** by Jan De Graeve from Belgium.

Morning tea at the opposite side of the premises allowed everyone to gaze upon the elegant internal fixtures of this nineteenth century landmark. Next came the former Chief Surveyor of Hong Kong, **Gordon Andreassend** to detail the work of the colonial surveyors of the Asian nation before its repossession by the Republic of China, followed by the Chief Surveyor of the Bureau of Land Management of the USA, **Don Buhler** who give us a fascinating biography of America's first President, Surveyor **George Washington**. I then provided some comic relief with a ten-minute edited excerpt from the satirical series "The Games" about the setting out of the Sydney 2000 Olympic track along with the real story of the precise work which I supervised.

After lunch we heard about **Albert Einstein's** theories, which were essential for the development of accurate modern surveying equipment by Brian Blevins followed by an entertaining account of the surveyors of New Zealand by former Surveyor-General from that nation, **Bill Robertson**. Head of the National Geodetic Survey of the USA, **Dave Doyle** gave an hilarious history of the US Geodetic Service before afternoon tea.

Our final session for the day started with a dual paper by **Ken Leighton** from Western Australia and **James Canning** (Victoria) about his great uncle **Albert Canning's** Stock Route through the north west of our big country followed by the President of the Nigerian Institution of Surveyors, Dr **Olusola Atilola** who went through the history of Nigerian surveying.

To wind up the session it was left to me to give a super-quick presentation of the "Five Surveyors of the Gods" in 20 minutes so that everyone could slip in a drink or two before security closed the building. All participants left with an immense feeling of pride and exhilaration in their profession, while non-surveyors were left spellbound about our rich tapestry of world history.

Doing the Sydney walk

On Sunday 11 April I took 27 visitors on a walking tour of Sydney, which started with a monorail ride from the Convention Centre to the city centre. Walking along Pitt Street I highlighted many historic buildings and sites including Australia Square and the Old Lands Department building in Bridge Street on our way to the Museum of Sydney, erected on the site of the first Government House.

Within this relatively recent repository, a brand new exhibit had been set up only the day before to commemorate the 200th Anniversary of the governorship of the Scotsman **Lachlan Macquarie**, which features a special display dedicated to the Irish convict **James Meehan**

who rose to the ranks of Deputy Surveyor-General in New South Wales. In honour of this "most excellent surveyor" (in the words of Macquarie himself!) our incumbent S-G Warwick Watkins commissioned a sculptor to carve a statue of him which is to be erected into one of the vacant niches on the façade of the Old Lands Department building upon which many statues of other surveyors and explorers also stand. This is the first such statue in over 120 years to be so affixed.

We then went to History House around the corner via the Palace Gates on the opposite side of the road. **Wal Knowles** gave the tragic story of surveyor **Edmund Besley Court Kennedy** who was eventually speared by Aborigines near the top of Cape York in 1848. Following a tour of the historic premises, which are the head office of the Royal Australian Historical Society by Executive Officer **Marie Metzke**, we strolled along the oldest precinct of buildings still remaining in Macquarie Street, Sydney until we reached St. James Church (c.1824) in which a stunning marble wall memorial can be viewed to this intrepid surveyor who died while carrying out his duty. Anyone still able came along with the group to enjoy a wonderful lunch in the city's highest restaurant where 360-degree views can be seen from the revolving floor of Sydney Tower.

Sensational reception

This great lunch was just a warm-up for the



Brocky stands by the newly commissioned sculpture of Irish convict James Meehan who rose to the ranks of Deputy Surveyor-General in New South Wales.

"... sold to the curators by the granddaughter of Napoleon Bonaparte..."



Governor Professor Marie Bashir and her husband, Sir Nick Shehadie (right), former Lord Mayor of Sydney and former Captain of the Australian Wallabies Rugby Union team.

sensational Welcome Reception held in the opulent Sydney Town Hall with its monolithic organ and renaissance ornamentation built around the end of the nineteenth century. Non-stop food and drinks kept the massive crowd of around 1800 going till the end of the event. Monday saw the Opening Ceremony commence with some indigenous

singing and dancing before the Governor formally opened the Congress as well as unveiling the sandstone statue of surveyor James Meehan to the delighted audience. Her excellency was presented with her own bronze miniature of this statue at which she remarked that he was so good looking and she would now have a surveyor with her always! Later that night there was a capacity roll up for the FIG Foundation Dinner Cruise around Sydney Harbour.

Many technical sessions were held with refreshments being provided in the Exhibition Hall where many interesting exhibits were on display for the duration of the Congress especially the imposing sandstone statue of surveyor James Meehan. On Tuesday night about 100 invited guests were treated to a reception in NSW Government House hosted by the Governor Professor **Marie Bashir** and her husband, Sir **Nick Shehadie**, former Lord Mayor of Sydney and former Captain of the Australian Wallabies Rugby Union team.

The only Surveying History Session during the week of the Congress was chaired by me with **Kerima-Gae** as rapporteur. In a room with 100 seats there were 156 attending to experience excellent presentations about early surveying history in Australia. The Technical Tour of Surveying History on Wednesday afternoon of 14 April started with a ferry ride passing under the Sydney Harbour Bridge to Circular Quay. After disembarkation, a visit to Customs House to view the replica Union Jack flag hoisted on the exact spot where **Arthur Phillip** had put up the first one on 26th January 1788 as well as the scale model of the harbour inside the premises.

Then we had a stroll around the foreshore line with its indicator plaques of past (1788 and 1844) and present tide-lines to the Sydney Opera House where selected areas were pointed out and described by the original surveyor, **Michael Elfick**, as to the difficulties of the survey and complex spherical calculations to set it

out enhanced by original photography of the survey work.

From here a short walk along historic Macquarie Street to view the various nineteenth century buildings which adorn this streetscape in preparation for the brilliant Old Lands Department building in Bridge Street, which has its outside walls embellished with statues of explorers and surveyors. A short visit to the third floor to inspect the Old Plan Room with curator **Col King** showed some prized pieces to the guests then back to the ground floor to examine the standard measuring tape baseline. Next we crossed the road to view the 1818 Macquarie Obelisk from which all the distances to and from Sydney are measured and also to see the HMS Sirius anchor and cannon.

A leisurely walk through the picturesque colonial area known as The Rocks took us up to the Bridge Discovery Centre within which can be seen the unique Sydney Harbour Bridge theodolite solely commissioned for this survey by the designer of the icon J.J.C. Bradfield. Archival photography was distributed about the selection of the bridge design tender and its survey by **Edward Albin Amphlett**. On the way back to the hotels a visit to Sydney Observatory revealed some polished brass geodetic and astronomical instruments as well as the early Trig Point as a finale to an invigorating afternoon. Wednesday night was set aside for home visits which were enjoyed by all who participated.

A select group of us went on a Topp Tour of the Blue Mountains which was greatly appreciated by all before the Gala Banquet for over 600 at Dockside Darling Harbour which was well enjoyed by everyone present.

Tight voting

The FIG General Assembly on Friday saw the tightest vote of all decide the next FIG President when **Teo Chee Hai** from Malaysia snatched the prize from the Australian candidate **Matt Higgins** by 33 to 32 votes. **Iain Greenway** from the UK finished up third in the contest. Three vice presidents were elected: Dr **Chryssy Potsiou** from Greece, Prof. **Rudolf Staiger** from Germany and Dr **Dalal Alnaggar** from Egypt.

Then there was another close competition for the 2014 FIG Congress, which was won by Malaysia 35-31 from Istanbul in Turkey. International and interstate visitors were sent off with the Farewell Reception at the Sydney Exhibition Centre, the same place that the main event had begun earlier that week. The Moroccan entourage who will be hosting the 2011 FIG Working Week in Marrakesh were encouraging as many people as possible to attend their event next year with a special piece of Morocco set up serving tea and biscuits to any willing recipient. See you next year in the north of Africa for this exotic excursion!

Kuala Lumpur is next in 2014.

