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**Australia's Representative
International Cartographic Association**

MSI-*Connected!*

Newsletter of the Mapping Sciences Institute, Australia
Editors: Les Isdale and Keith Smith

“ VISION: The aim of ICA is to ensure that Cartography and GI are employed to maximum effect and full potential for the benefit of society and science through promotion and representation of the discipline and profession of Cartography and GI science internationally. ”

The ICA Strategic Plan : 2011-2019

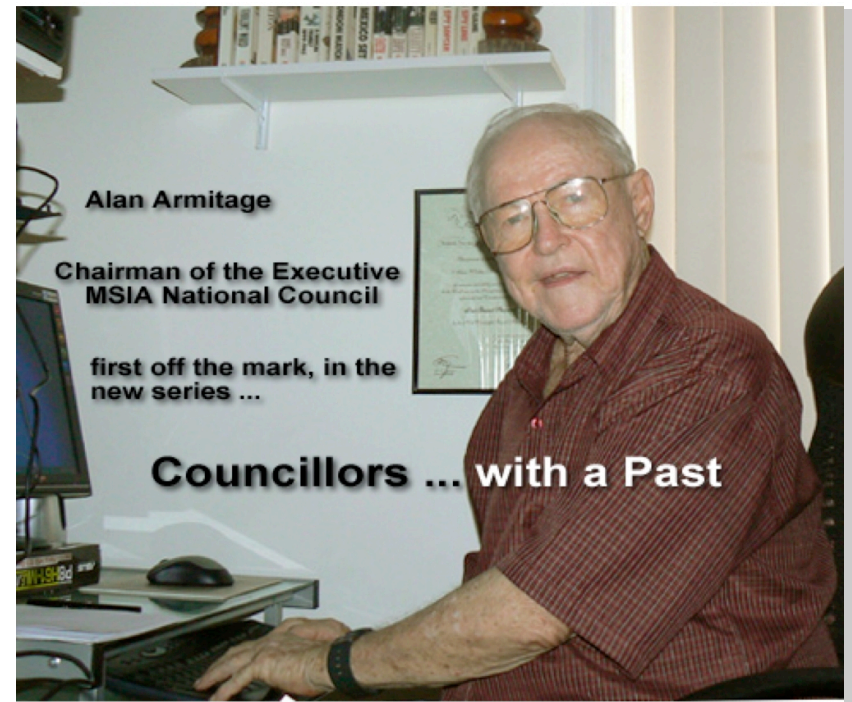
February 2013

FRONTING UP AT THE SURVEY OFFICE

Alan Armitage

This is an account of my early days, not in a cartographic mode which would be pretty boring, but in a more general way, which I hope might hold some interest.

I started off as a Cadet Survey Draftsman somewhere in the early part of 1945. On my first day I fronted up to Mr Tom Holdaway, the Chief Draftsman, and was allotted Compiling 1 as my work base. Bob Goakes, the then junior staff member, was to be my mentor.



Bob's first duty was to take me into the Lithographic Section to meet Joe Hall, the O/C and the issuer of all stores required for the operation of the Survey Office. Joe handed to me my instruments of trade which encompassed various pens, nibs, pencils, inks, erasures, tiny pads of sandpaper, a large enamel mug and a large black apron.

As all staff engaged in mapping areas wore white shirts and ties, and the apron was to be protective of such clothing. Being a fifteen year old lad of reasonably short stature, this apron not only reached to the ground but dragged along it somewhat like a bridal gown. I smartly took it home and had my mum shorten it.

My duties as the reigning junior cadet covered such things as

- Running all the general messages within the Survey Office and Lands Department.
- Searching at the Titles Office and the Mines Department.
- Collecting laundered, detachable white collars twice a week.
- Ordering and collecting lunches. This being towards the end of World War II, shortages and rationing were still in vogue. Hamburgers etc had to be ordered early before the meat ran out. I still remember those hamburgers ... three inches high, delicious and costing 6p. Cadel pies were also the rage. Sandwiches, however, were placed in the one big paper bag and had to be sorted on return to the office
- For the boss, a once a week trip to a chemist up the end of George Street, to procure his special mixture. It was here I also acted as cupid for Keith Wallace, delivering his love letters to his girl friend, who also happened to work at the same chemist. She promptly wrote a note which I safely delivered back.
- For the boss also, a twice weekly trip to the café across the road to have his enamel mug filled with his favourite milkshake.



When time permitted I practiced lettering in accordance with the standard lettering sheet. For all this I received the fortnightly salary of 4 pounds, 9 shillings & 6 pence.

At times I was called upon to help out in the Photographic Branch, when one of its members went on leave. This encompassed.....

- Operating the Photostat machine. I virtually had this all to myself as the stand-in operator found it necessary to make frequent trips across the road to top up on "chemicals" readily available there after 10.00 am.
- Working the sun generated dyeline and blueprint apparatus. This was generally in winter, so I quite liked this.

I started part time night study, pretty well as soon as I started work. I finished my Senior and went on to complete the Certificate in Survey Drafting at the Central Technical College.

In the office it was a great celebration for me to complete my first official map ... the Town of Kalpowar. I was very gratified to print my name as “Delineator” under the title.

There were many “characters” in both the mapping and surveying sectors of the Survey Office. I did, at one stage, produce a booklet titled “*Reminiscences*”, which highlighted many of the interesting and humorous incidences that occurred. It was recently resurrected.

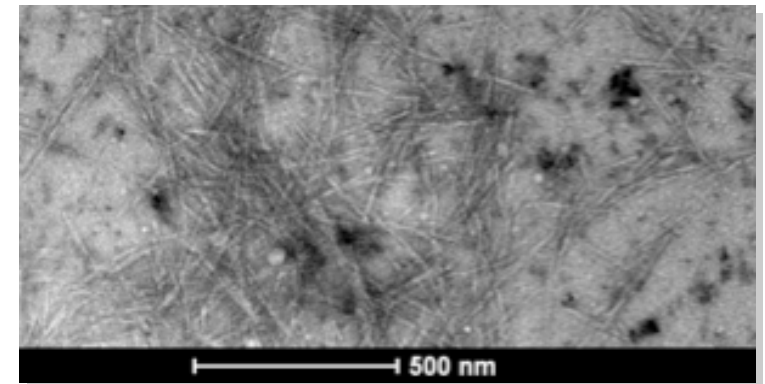
One of the characters I met was Keith Smith ... familiar? When he started at the Survey Office he was living in the suburb of Wynnum, next door to a family named “Wright”. They had a daughter named Peggy, who I married in 1956 ... small world. The friendship with Keith has lasted all these years, and is one that I still value. .

MAP SHEETS FOREVER?

Just when broadsheet maps seem to be eclipsed by electronic displays, someone comes up with an idea which may give them new life – long, long life.

Nanocrystalline cellulose (NCC), according to the article at – <http://www.newscientist.com/article/mg21528786.100-why-wood-pulp-is-worlds-new-wonder-material.html> “... could be used to reinforce conventional paper ” ... says Lars Berglund from the Swedish Royal Institute of Technology in Stockholm, Sweden.

“NCC has eight times the tensile strength of stainless steel.” We may finally have orienteering and tour maps that won't self-destruct in use. And it's all made from wood waste. Sounds like a win all round.



TOP SCHOLAR



Kathryn Holdsworth is the 2012 winner of the David McInnes Memorial Prize, which has been awarded to top-performing RMIT students over many years.

Kate is a Cartographer/GIS Analyst at Spatial Vision, Melbourne Area, Australia, Information Technology and Services. Her LinkedIn profile lists her skills and interests as – Cartography, GIS, Spatial Analysis, ArcGIS, Georeferencing, Adobe Creative Suite, Geocoding, Illustrator, Spatial Databases, ESRI, Data Management, Geomatics, Geography and ArcMap.

RMIT GEOSPATIAL SCIENCE STUDENT AWARD

*Awarded by the Mapping
Sciences Institute, Australia*

*Dave McInnes Memorial
Prize for the most
distinguished student in
Cartography*

Dave McInnes was Chief Draughtsman of the Victorian Mines Department and was a Foundation Member of the Australian Institute of Cartographers. At its first meeting in June 1953, Dave was appointed to the position of Secretary and he continued to serve on the Vic. Division Committee for many decades being President in 1961 and then continuously from 1967-75. He was a Member of Council from 1959 and served as Federal President in 1973-74.



RECOGNITION

... The Mapping Sciences Institute, Australia's donation of the MSIA – David McInnes Memorial Prize to Kathryn Holdsworth is highly valued. We believe that the awarding of academic prizes encourages students to strive for excellence and strengthens their drive towards high academic achievement. ... ”

Chris Bellman

Associate Professor Chris Bellman
Head of Discipline, Geospatial Science



COUNCILLORS MEET

Photographed at the Council meeting in Brisbane in July were Councillors
(top, L to R) John McCormack, Adam Ladhams, Prof. Graeme Wright, Pat Killoran, Alan Unkles;
(front) Alan Armitage, Trisha Moriarty, Les Isdale, Dr David Fraser, Trevor Menzies



Missing from the photo are Secretary Keith Smith and Councillors Colin Mitford and Michael Turner.

ANNUAL GENERAL MEETING

Members are invited to attend the 2013 Annual General Meeting of the Mapping Sciences Institute, Australia, to be held at the State Library of Victoria (Seminar Room 4) Swanston Street, MELBOURNE, on Tuesday, 9 April 2013, commencing at 4.30 pm.

Keith Smith
Secretary (msia@gil.com.au)

BUSINESS

The Meeting will receive the AUDITED FINANCIAL STATEMENTS OF MSIA for the year 2012, presented by the Honorary Treasurer, John McCormack. (Copies of the statements will be distributed later).

Councillors for 2013 will be announced at the Meeting.

Absent from the new Council will be Trevor Menzies, who has indicated his intention to stand down after a long and notable term of service on Council, including the Presidency.

Secretary Keith Smith on behalf of Council has accepted Trevor's resignation with regret, acknowledging the memorable contributions he has made over the years, expressing –

“... our gratitude not only for your initiatives but also for your extraordinary ability to see them through to successful completion. From all of us: Well done! We note your intention to continue to manage our Heritage Program and we thank you for that and wish you well” – sentiments shared by Trevor's friends and colleagues everywhere.

Footnote:

The ANZMapS Conference reception commences 6.00pm Tuesday 9 April, at the State Library of Victoria right after our AGM. Conference ends with the bus tour on Friday 12 April.



HONOURS

MSIA members were delighted at the news that a leading member of the Institute had been honoured in the Australia Day list, which reads:

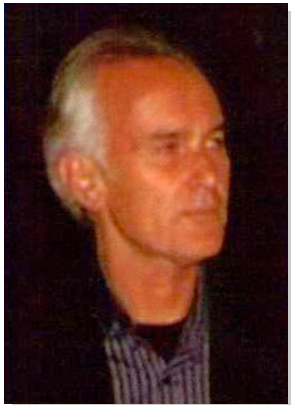
MEMBER (AM) IN THE GENERAL DIVISION OF THE ORDER OF AUSTRALIA

Professor William Edward CARTWRIGHT, Windsor Vic 3181 For significant service to cartography and geospatial science as an academic, researcher and educator.

Professor of Cartography, School of Mathematical and Geospatial Sciences, RMIT University, since 1979.

President, International Cartographic Association, 2007-2011; Vice-President, 2007-2011; current Chair, Working Group on Art and Cartography; Member, since 1989. Current Chair, Joint Board of Geospatial Information Societies (coalition of leading international geospatial societies).

Current Member, United Nations Committee of Experts on Global Geospatial Information Management.



President, Mapping Sciences Institute, Australia (formerly known as the Australian Institute of Cartographers), 1998-1999; Councillor, 1989-1991 and 2001-2012; President, Victorian Division, 1991-1992; Member, since 1989. Victorian Regional Committee Member, Spatial Sciences Institute, 2004-2005. Vice-President, Australia and New Zealand Map Society, 1980; Secretary, 1978-1979; Member, since 1976.

Has written approximately 300 publications in peer-reviewed journals and book chapters. Current Member, Editorial Board, British Cartographic Society, *The Cartographic Journal* (Pacific Rim). Current Member, Editorial Board, Journal of the Canadian Geomatics Association *Cartographica*. Member, Advisory Panel, *The History of Cartography Project*, Volume 6, University of Chicago Press.

Awards/recognition include: Spatial Professional of the Year, 2011.

The congratulations and good wishes of Council and MSIA members have been extended to Bill at this welcome recognition of his achievements.

OBITUARY ... Kevin Davies

Former Queensland Surveyor-General, Kevin Davies, passed away at the end of last year after a short illness. He was a practising surveyor until 1978, when he joined the Public Service and became Surveyor-General in 1982.

Kevin was a member of the Australian Institute of Cartographers and, in his official capacity, was a strong supporter of its activities. He was fond of referring to cartographers as “penmen”, but always held them in high regard.

Kevin Davies receiving from Queensland Governor Sir Walter Campbell the Medal of the Royal Geographical Society of Queensland.



CONFERENCE DETAILS & DATES ... Adam Ladhams MMSIA

Date/ Place	Conference event/ Website
27 February 2013 Australian Technology Park Sydney, Australia	GeoNext 2013: the State of Cartography map exhibition http://www.geonext.com.au/the-state-of-cartography/
February to March 2013 - various locations in Australia	Directions 2013: ESRI Australia's Tour de Force http://esriaustralia.com.au/events-directions
24 February- 1 March 2013 Nice, France	GEOProcessing 2013. The Fifth International Conference on Advanced Geographic Information Systems, Applications, and Services

Date/ Place	Conference event/ Website
	http://www.iaia.org/conferences2013/GEOProcessing13.html
6-8 March 2013 Hamburg, Germany	GeoViz_Hamburg 2013: Interactive Maps That Help People Think http://www.geomatik-hamburg.de/geoviz/
12-16 March 2013 Luxor to Aswan Nile Cruise	IMTA EAME Conference http://www.imtamaps.org/docs/events/NileCruiseConferenceRegistrationFormversion310812.pdf
8-12 April 2013 Tunis, Tunisia	Tunisian Association of Digital Geographic Information. GeoTunis 2013 http://www.geotunis.org/
9-13 April 2013 The State Library of Victoria, Melbourne, Australia	The Australian and New Zealand Map Society (ANZMaps) 40th annual conference <i>The Metropolis and Beyond: mapping the built and natural environments</i> http://www.anzmaps.org
15-19 April 2013 National Convention Centre, Canberra, Australia	Surveying and Spatial Sciences Conference 2013. <i>Collect, Connect, Capitalise</i> http://www.sssc2013.org
24 – 28 April 2013 Dead Sea, Israel	EMBO Conference. Spatial 2013: From Spatial Signalling to Sensing Spatiality http://events.embo.org/13-spatial/
13-16 May 2013 Rotterdam, The Netherlands	Geospatial World Forum 2013 http://www.geospatialworldforum.org/
4-7 June 2013 Columbus, Ohio, USA	Spatial Statistics 2013 <i>Revealing intricacies in spatial and spatio-temporal data with statistics</i> http://www.spatialstatisticsconference.com
18-21 June 2013 Victoria, British Columbia, Canada	CoastGIS 2013: 11th International Symposium for GIS and Computer. Cartography for Coastal Zone Management. <i>Monitoring and Adapting to Change on the Coast.</i>

Date/ Place	Conference event/ Website
	http://coinatlantic.ca/index.php/coastgis-2013/
30 June – 5 July 201 Helsinki, Finland	The 25th International Conference on the History of Cartography http://ichc2013.fi/conference
8-12 July 2013 San Diego Convention Center, USA	2013 ESRI International User Conference <i>You are GIS</i> http://www.esri.com/events/user-conference/index.html
21-26 July 2013 Melbourne Convention and Exhibition Centre, Australia	IEEE International Geoscience and Remote Sensing Symposium <i>Building a sustainable earth through remote sensing</i> www.igarss2013.org
25-30 August 2013 Dresden, Germany	26th International Cartographic Conference, <i>2012 from Pole to Pole</i> www.icc2013.org
2-6 September 2013 Scarborough, North Yorkshire, UK	COSIT 2013. Conference on Spatial Information Theory http://www.cosit.info/
5-8 November 2013 Orlando, Florida, USA	21st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2013) http://sigspatial2013.sigspatial.org/

The International Cartographic Association website maintains a calendar of commissions and conferences – refer to <http://icaci.org/calendar/>. For a list of Worldwide conferences, refer to the Geoinformatics website <http://www.geoinformatics.com/event-calendar>. A list of American events and conferences is located on the URISA website <http://www.urisa.org/node/148>. FUNGIS also lists events hosted by various associations – <http://www.fungis.org>.

Know about or want to promote an upcoming conference or event? Contact Adam Ladhams by email on adam.ladhams@hotmail.com. Disclaimer: the event details and registration fees are indicative only and should not be relied upon. For information about the event, contact the conference organizers or website provided.

Darwin Attack – Commemorative Exhibition 70 years on

Trevor Menzies, Heritage Program Manager for MSIA, reports that the exhibition “Mapping for the War in the North” is ready to open. He has been working with Greg Heron, long-time editor of the MSIA Newsletter, to present the story of the wartime mapping of Northern Australia.

It will be set up in the NT Parliament House as one of the events in the program for the annual commemoration of the bombing of Darwin.

The exhibition will run for about 5 weeks in February/March. Trevor will subsequently produce an article for the newsletter on the exhibition theme.

The NT Region of SSSI has accepted our invitation to jointly sponsor the exhibition. A short account has been posted on the internet by the ANZAC Day Commemoration Committee (Qld) Incorporated, at <http://www.anzacday.org.au/history/ww2/bfa/attack.html>



EARTH PLATINUM TO SAUDI ARABIA

Gordon Cheers, Managing Director, Millennium House, advises that the Earth Platinum atlas is on its way to Riyadh this month. This spectacular volume should do well in the Middle East, where the purchase price of \$100,000 is unlikely to diminish interest.

The press release at http://tradedarabia.com/news/MEDIA_229941.html provides a brief specification of the atlas, 'the world's largest, ever' – it is “leather-bound, weighs 200 kg and measures 6ft x 9ft (1.8m x 2.7m). Only 31 copies of the atlas exist, making each one as rare as it is valuable”.



ArcNews, Spring 2011 reported that "A team of cartographers around the world worked together to create the book. This process took two years from data collection to final production. Demap, one of Australia's leading custom mapping service companies, spearheaded the effort. Working as the chief cartographic consultant, Damien Demaj, former director of Demap, oversaw the collection and management of the data. Demaj was able to collect source map data from 60 collaborating cartographers around the world and manage it using ArcGIS—primarily ArcMap and Maplex." Damien is an alumnus of RMIT.

THE CHANGING SCENE

Reflections from Adam Ladhams, National Councillor and President of MSIA Queensland Division.
Adam's un-edited contribution – looking back, looking forward.

Hello members,

I have penned a number of short passages to discuss a range of topics. A few weeks ago, I was asked to write about some of the new techniques used in the wider mapping sector, so here it goes...

A review of 2012

To begin with I would like to share with members the year that was. 2012 was a year of great change. The highlights for me in 2012 were MSIA celebrating its 60th anniversary as an institute and of course the hugely successful Brisbane International Geospatial Forum (BIGF). The BIGF was held at the State Library of Queensland formed from an unprecedented partnership between ANZMaps, IMTA and MSIA. It was great to see a few familiar faces at the conference and I would like to see even more MSIA members in the future at these types of events. 2012 was also a year of change. The Queensland State election brought about a new conservative government with a huge parliamentary majority. In response to an ailing State budget, the elected government introduced funding cuts. Over 14,000 public sector positions were considered redundant and 10,000 public servants, including spatial professionals, were retrenched. The government also replaced the 'Beattie burger and fries' Smart State logo with the State's coat of arms (featuring the brolga and red deer). Many departments were renamed, including the Department of Natural Resources and Mines where most of the remaining State's cartographers still reside. Many in the public sector have commented that the more that things change, the more they stay the same.

Technology is a-changing

The mapping industry has experienced remarkable changes in technology and business practices. Recent Westpac advertorials indicate that if you do business like it is the 1980's, then you will be left behind (this is not an endorsement for the bank). This mantra rings true in today's business and work environments, requiring cartographers to retrain and move with the times. During 2011, there was a concerted focus on transferring spatial data from repositories to web based applications. Last year, a number of new initiatives looked to cloud computing and smart phone apps to offer mapping interfaces to the community. Allow me to travel back in time to the previous decade, when the spatial industry was attempting to predict advancements over the following decade. In 2000, I helped organise the Spatial Information in the New Economy seminar. The topics that were impacting on the industry back then were mobile phone technology, data warehousing (anyone remember datamall.com?) and the increasing affordability in spatial datasets (ERSIS promoted their road centreline and streets directory value added data) – many of these datasets are now free or free to use. Similarly, at the 2000 MSIA National conference in Sydney (where the Honourable Tim Fischer was a keynote speaker), the topics discussed by presenters included WAP, multimedia and mapping, spatial data infrastructure and 3d models of buildings. These topics are still current today -the biggest significance is that other people, not cartographers, are engaged in developing and creating these technologies.

Virtual reality a virtual dream

During my final year at QUT (in the late 90's) I researched the application of synthetic environments/ virtual reality/3D visualisation. Unfortunately, augmented reality never become a mainstream tool mainly, I suspect, due to the cost of implementing the technology, the lack of innovative thought and perception about the technology being purely experimental - which to an extent is a valid statement. The International Cartographic Association boasts a Commission on Visualization and Virtual Environments. The last Commission workshop conducted in September 2011 (Ohio, US) focussed on the 'temporal characteristics of geographic information' – using the dimension of time. The advanced level of discussion during the Commission workshop underpins that virtual reality has well and truly matured over the last few years.

Image source: <http://geoanalytics.net/ica/jvlc11-pgva.png>

Possibly the greatest use for 3d visualisation is not just in mapping, but for use in tactic connectivity or teledonics or tactile response (avoid Google searching that word at work) and the billion dollar video gaming industry.

Anyone for Call of Duty: Black of Ops 2?

Lost in the crowd(sourcing)

In their predictions, Vector1Media published the Ten Predictions for 2009 (refer to





<http://www.vector1media.com/article/feature/ten-predictions-for-2009/>).

One of those predictions was the advent of ‘crowd sourcing data’, due to the ‘explosion of handheld mapping devices’. An application for crowd sourcing, as stated in the article, was for emergencies. In a recent new article published in the Australian Financial Review (AFR, Wednesday 14 November 2012, www.afr.com ‘Help in a heartbeat’) crowdsourcing is defined as ‘a technique in which the public conducts tasks traditionally done by a company, individual, individual or a group with special skills’. The article discussed a spatial problem: 1,400 defibrillator machines were publicly available in Philadelphia but there was no central database to locate their location.

Using a mobile app(lication), people both young and old used the app to photograph and map the site of the defibrillator, providing information to others in the event of a medical emergency. There are a number of other uses for crowdsourcing – favourite dining

experiences, location of specific consumable products, alternative routes due to traffic accidents, location of speed cameras and collect other features. Governments should look to crowdsourcing as a form of developing social and community data, and infrastructure locations. For example, the toilet mapping of Australia (www.toiletmap.gov.au) commissioned by the Federal Government in the early 2000s could be maintained and updated by ‘users’, providing information for what could be for some, an emergency situation. There are some 14,000 public and private toilets in Australia for public convenience. With an increasing aging population and the associated incontinence issues, any attempt to improve access to toilet facilities would be welcome relief (sorry for the pun:- toilet humour!).

Bad start to 2013

Bushfires, cyclones, tornados and flooding have once again scarred the Australian landscape and displaced people. Specialists have once again been engaged to help with mapping affected areas. To the victims of the natural disasters and those assisting in the relief efforts, our hearts and minds go out to you.

Wrap-up

Mapping outputs are extending far beyond the paper products we are all accustomed to. Technology is becoming increasingly difficult to shy away from. The use of Google Earth to overlay layers, web based interactions, cloud computing and digital maps should form part of what we do, rather than tasks that are being performed by others, including novice mappers. To accomplish this, we, as cartographers and spatial professionals, need to acquire new skills and embrace technologies such as crowdsourcing and mobile phone apps. Since 2000, technology has skipped along at cracking speed and greater things are in store for us over this decade. Now where did I put my chalk and slate board?

[Adam recently completed a Master in Business and is looking forward to new career opportunities in 2013.]