



National
Newsletter of
the Mapping
Sciences
Institute,
Australia

Mapping Sciences National

Issue No 17

April 2006

President's Report

On taking office as National President of MSIA at the AGM held in Melbourne 19 May 2005, I provided an overview of a number of goals and objectives that I had set out in a detailed position paper which was published in the April 2005 edition of the MSIA National Newsletter. These goals were focussed primarily on moving the Mapping Sciences Institute Australia forward, initially in partnership with the Spatial Sciences Institute (SSI), but with the longer term view that our members would benefit from being part of this new professional body.

The SSI had been created in 2003 as the result of an Australian Government initiative in the formation of a unified voice to represent the spatial industry since it was recognised that geospatial data was a major foundation of the economy. Under this initiative it was envisaged that the Spatial Sciences Institute would be the single national body catering for the professional people who make up the spatial information industry, combining the disciplines of surveying, cartography, engineering and mining surveying, remote

sensing and photogrammetry and spatial information.

In putting this agenda to National Council in May 2005, with the exception of 2 or 3 other Councillors who could see some merit in pursuing a closer partnership with SSI, the concept continued to receive resistance from the majority of National Council. One of the actions coming from that meeting was to further examine a possible MOU with SSI, but given the somewhat negative attitudes that prevailed I became despondent and lost the incentive to further develop this. A major factor contributing to this loss of incentive was that two previous attempts of formulating an MOU acceptable to both MSIA and SSI had failed. Time to develop a suitable agreement was also running out as the SSI had indicated that 30 June 2005 was the cut off date under which members of the founding bodies could be accepted as foundation members of the new body. (I am sure that if MSIA wanted to actively pursue an agreement with SSI then negotiations on the status of membership could have been

discussed even after this deadline).

Therefore not a great deal of progress on the national level within MSIA during 2005 can be reported, although I made further arguments in support of the above agenda in the August 2005 edition of the MSIA National Newsletter. On the international scene MSIA still has strong representation on the International Cartographic Association (ICA) and the continued involvement of long serving MSIA members Ron Furness, Bill Cartwright, David Fraser and others is acknowledged. A report on the ICA Conference held in Spain in July 2005 was included in the November 2005 National Newsletter and the level of Australian involvement was summarised in this.

MSIA Members will be aware that SSI did manage to run another very successful biennial national conference for spatial science professionals in Melbourne in September and this was reported on by NSW National Councillor, Colin

... to page 2

Inside:

GITA - Peter Batty.....	3
A Virtual Museum.....	6
Natural Earth	7
Event Calendar	8
Book Review	8
Appointments.....	9
Awards.....	11

Notice of 2006

Annual General Meeting

*Notice is given that the
11th Annual General Meeting
of members of the
Mapping Sciences Institute, Australia
will be held at
5.30 pm, Tuesday 23 May 2006
at the LANDCENTRE [Level 1]
Woolloongabba, BRISBANE*

*K H Smith
National Secretary
18 April 2006.*

Mapping Risky Business by Adam Ladhams

Disaster management in various forms is being plied by government agencies and private organisations due to the ever increasing risks to people, resources, infrastructure and the environment.

Recently, the undertaking of various mapping projects has highlighted the need for appropriate solutions to regional and global threats to business, the environment or society. Hazard mapping is being undertaken by local authorities using federal, state and local government funding. The use of two local studies is represented in this article, together with the impact of planning studies within a regional context and the threat of global effects which may trigger a threat within Australia is examined. A number of issues are represented in this article and is a synthesis of recent activities that have occurred.

... to page 4

“Members would have received by now the invitation and registration form for the “400 Years of Mapping Australia” Conference”..

“I still believe that embracing the SSI concept is the way forward for those members of our industry who want a professional body to look after their interest in the future.”

Presidents Report . . . from page 1

Mitford (also a member of SSI), in the November edition of our Newsletter. This is the second successful national conference run by SSI since their establishment in 2003. (The last national conference organised by MSIA was in Melbourne in 2002).

Members would have received by now the invitation and registration form for the “400 Years of Mapping Australia” Conference being hosted by the Northern Territory Division of MSIA in August this year. Trevor Menzies (MSIA and SSI member) and his team are to be commended in organising what appears to be an interesting and comprehensive program for this specialised conference focussing on history of mapping and I would encourage MSIA members to make an effort to attend.

When plans for this were presented to Council in May 2005 there was some suggestion that to foster better relationship between MSIA and SSI it should be considered to be held under the joint banner of both organisations. This did not attract much support from either the organisers or the majority of other National Council members at the time, but following further suggestions from me and the Chair of the SSI Cartographic Commission (Peter Bowen), the concept was revisited by Trevor back in early February 2006. Unfortunately this was finally rejected by the organisers due to certain perceived administrative and financial management problems that could arise in running the event as a jointly “badged” event to attract both MSIA and SSI members. Although personally I believe this would have had a positive benefit in showing a closer relationship between the two bodies, the conference will no doubt be a success.

I still believe that embracing the SSI concept is the way forward for those members of our industry who want a professional body to look after their interest in the future. SSI is a new body that accommodates the changing nature of the industry while honouring and building upon the traditions, values and history of its founding institutions. MSIA is one of those founding institutions, but so far has resisted “coming into the fold”. I have had the opportunity to recently review a position paper by the Institution of Surveyors, Australia entitled “The Future of ISA” which examines their current relationship with SSI and looks at options for the future, including the possible winding up of their organisation. To some extent MSIA has examined similar options via previous reports, MOU proposal documents and the “Moving the MSIA Forward” document in 2004, and it is debateable whether developing a similar position paper for consideration by MSIA members would bring us any closer to a final decision on the future of MSIA. Maybe to reach some conclusive decision on this there needs to be the calling of an extraordinary general meeting of MSIA members at which members would be requested to cast a postal vote on specific motions that would finally determine whether MSIA should continue as a separate body.

**Peter Shaw, FMSIA, FSSI,
National President MSIA**

Honours List

MEDAL (OAM) IN THE GENERAL DIVISION

Mr Mervyn Stanley GODFREY,
Mount Waverley, Victoria.

For service to the community as a cartographer and publisher of city street reference directories.

Merv Godfrey is the founder of Melbourne's Melway street directory which he started about 40 years ago. It is now in its 33rd edition and has been joined by Sydway and Brisway.

He was active in the formative years of the Australian Institute of Cartographers, acting as the Honorary Treasurer of the Victorian Division in the 1950's and into the 1960's, and he is currently a Fellow of the Mapping Sciences Institute, Australia.

We salute him for his enormous contribution to the development of cartography in Australia and congratulate him on this formal recognition.



Original Mud Map of Australia

- Source unknown

**Australian Map Circle 2006
Conference in Perth**

The 34th annual conference of the AMC was held at the Trinity College, University of Western Australia, from 14th to 17th of July 2002.

The conference included an interesting and stimulating program of papers, technical sessions, site visits and social activities.

The 7th annual award of the Estelle Canning Memorial Prize, for the best paper presented at the conference, was awarded to Karen Cook for her paper on Thomas John Maslen and his Map of Australia.

GITA hosts Peter Batty

*Vice President and Chief
Technology Officer, Intergraph*

I attended a very useful Executive Briefing breakfast meeting in Sydney on 8 March 2006, where Peter Batty delivered an insightful synopsis of the trends that he sees as impacting the geospatial industries.

According to his information sheet, Peter Batty brings more than 18 years of technology leadership experience in spatial and location-aware technologies to Intergraph. As the company's chief technology officer he is responsible for helping to direct Intergraph's future technology vision.

Before joining Intergraph in October 2005, he was the co-founder and chief technology officer for Ten Sails, a company focused on building businesses in the area of spatial and location-related technologies and earlier served as vice president of technology for GE Power in the GE Network Solutions group. While at GE, his technical leadership help to established GE Smallworld as a global market leader in geographic information systems (GIS) for utilities and tele-communications. Before Smallworld, he worked at IBM in the spatial and location-based technology field.

Peter is a globally recognised author and speaker on spatial information management and location-aware technology. He has successfully led a number of major spatial software development projects, participated in the Open Geospatial Consortium during its formative years, and is currently a member of the board of the Geospatial Information and Technology Association (GITA). He holds a master's degree in computer science from Oxford University and a bachelor's degree in mathematics, also from Oxford.

Peter entitled his address "Technology Trends in the Geospatial Industry" and began by noting that the geospatial industry has been identified by the US Department of Commerce as one of the top three industries with presently the greatest potential for economic development.

He talked about what he called "commoditization" (sic) of most of the geospatial technology. What cost industry an "arm and a leg" to acquire in the not so distant past, is increasingly seen as a cost-effective commodity. Consider mobile phones, data bases, graphics screens and capabilities and the like. The trend is for prices to fall as overall spending industry-wide, increases.

We are seeking and getting, richer visualisation. Also cost effectively. Any of us with grandchildren can see that the film industry is a prime driver of amazing and richer visualisation capability. Video integration and sophisticated analysis programs are also developing to meet demand. Some of this demand, as seen by this writer, is driven by the security demands of a rather spooked western world, but nonetheless, the needs and demands require spatial capability and innovations that all have spin-offs for the general market place.

Web services and especially service-oriented delivery continue to be areas of significant growth.

Many IT systems, it seems, spend the greatest dollar amounts on integration with 40% of budget being the average. Many systems can cost around 70% of budget and this is not uncommon.

The combinatory potential of various technologies continues to pressure for geospatial capability. The relentless growth of wireless capability, combined with location tracking technology (e.g. RFIDs (like toll tags), UWB, ultra-wide band radio technology and such like), mobile phones and sensor technology brings relentless pressure to bear as industry's demand for location tracking of mobile assets for all manner of strategic business and security reasons spawn a high volume of business opportunity.

It is a small step then to see that the demand for real-time, spatially oriented applications continues apace. Widely available applications such as Google Earth, Windows Live Local and Amazon are out there, intuitively simple to use, and showing anybody who samples them just what potential there is in spatial information. Indeed, the growth of mobile applications, all based on geospatial capability, is simply phenomenal. What this writer finds astonishing is how such capabilities remain no longer the province of any particular professional group. "Geospatiality" (to coin an equally bad neologism to Batty's term "commoditization") has "come out" and consequently attracts the fertile ideas of humankind. Cross fertilisation and combinatory thinking seems the way to go forward in the geospatial industry of today!

GITA is the Geospatial Information & Technology Association and is to be congratulated on facilitating Members and Guests to be able to hear Batty's views and synopsis of where the industry is and where it might go in the near future. GITA's next conference is in Melbourne from 21 – 23 August 2006 and is themed "No Barriers: Connected, Responsive, Prepared" – a theme which neatly summarises this writer's theme in what has been written above. It might or might not come as a surprise that the GITA Conference location for 2006 is none less than the Melbourne Cricket Ground.

Details for those interested will shortly be available from <http://www.gita.org.au>.

Or meanwhile, one can email Anne.mundy@gita.org.au or Chris.stoltz@gita.org.au.

Ron Furness - Chair Executive MSIA

Sydney 9 March 2006



Peter Batty

"... the geospatial industry has been identified by the US Department of Commerce as one of the top three industries with presently the greatest potential for economic development."

"... such capabilities remain no longer the province of any particular professional group. "Geospatiality" (to coin an equally bad neologism to Batty's term commoditization) has "come out" and consequently attracts the fertile ideas of humankind."

“.. local government is required to adequately consider natural hazards when making decisions about development and to incorporate appropriate guidelines ..”

“.. councils have been passive in allowing development that, highlighted by the created hazard maps may not have been allowed ..”

.. from page 1

Case Studies: Local Urban Hazard Mapping

Two projects recently completed were commissioned to satisfy the requirements of the State Planning Policy 1/03 – Mitigating the Adverse Impacts of Flood, Bushfire and Landslide. Under the policy, the local government is required to adequately consider natural hazards when making decisions about development and to incorporate appropriate guidelines in their Integrated Planning Act (IPA) Planning Scheme. More distinctly, the mapping project was accompanied by specific development advice such as guidelines on mitigation measures. In both case studies, urbanisation of sensitive areas highlighted problems in the form of flooding, evacuation planning, natural terrain hazards and boulder/rock falls.

Prior to the establishment of hazard maps, councils were assessing developments with limited information and based on the merit of the development. By doing so, councils have been passive in allowing development that, highlighted by the created hazard maps may not have been allowed without appropriate measures.

In the first case study, the popularity of the coastal region precinct as a tourist destination and property investment haven heightened the immediate need for a risk assessment of natural hazards or hazards caused by development. The other case study region extended from the coastline to challenging terrain inland, also boasting a surge in population growth. Both case studies have remarkable similarities and much of the technical issues associated with one project were introduced into the other; developing on the overall effective analysis of the principles associated with hazard mapping.

In relation to both case studies, the mapping component included the following key phases:

- Data collection including review of existing information and assessing gaps;
- Stability analysis;
- Field investigation;
- Natural terrain hazard map production; and
- Datasets for total zonation purposes for inclusion in a GIS.

Diagram A shows the case study phases in greater detail and the actions taken to complete the project. Furthermore, the Diagram displays the process from inception to completion, emphasising the spatial analysis process involved in the case studies. The digital elevation model (DEM), street names, suburb boundaries and cadastral information provided the foundation for the case studies. The other relevant themes incorporated into the case studies included aerial imagery, town planning uses, defined watercourses, geological classifications and slope analysis. From the provision of the base mapping, secondary layers were created to develop a comprehensive dataset for determining natural hazards. Existing hardcopy maps were scanned and digitised into the GIS and the layers were populated with attribute data to assist with the weighting

of the data elements. The integrated hardcopy and digital layers were refined and corrected for anomalies.

Commercially available GIS software and two additional add-ons (one a specialist terrain application) were used for the spatial analysis of the case studies and map production. The algorithms in the terrain application enabled the production of a sophisticated watershed analysis to delineate the areas that are subject to various categories of slope relative relief, and also the conversion of height data creating an accurate terrain model.

The process of determining the weights to the layers was able to be automated through intelligent database design and allowed for the expedition of product deliverables. An analytical hierarchy process assessing the weights of the contributing layers was determined by the practitioner. Raster processing was enabled to ensure the discreteness of values and to filter out uncertainty from the model. The formation of the resultant zonation assessment layer was eventually converted as a vector layer, retaining values for thematic mapping. Using the aerial imagery and site verification, the weightings of the contributing layers were refined and a total hazard zonation map was produced.

In these case studies, GIS once again has proved that it an extremely valuable tool to organise spatial data visualise complex spatial relationships of a region, forming spatial queries about region characteristics, combining of datasets from various sources, inferring the meaning of the data and creating predictions by combining data layers according to the need of the user. Through the use of mapping, predictive analysis can be successful in determining areas or elements at risk prior to an event occurring. Using a GIS provides significant cost and time attenuation and the accuracy of the model can be quantified. The zones can be introduced into the local government system for use in the assessment of land development impacts and for emergency planning.

Regional Planning

The recent concentration of regional mapping to alleviate the impacts of population growth, particularly in Queensland is evident by the number of projects recently undertaken. In South-East Queensland, a number of critical assessments have been completed including the South-East Queensland Regional Plan (March 2006 Update), the Australia Trade-Coast Precinct Infrastructure Plan and Brisbane City Council Long-term Infrastructure Plan. The emphasis on these strategic plans is to provide adequate development, aligned with delivering appropriate infrastructure needs, population growth in line with social, economic and environment constraints. The emphasis of the South-East Queensland Regional Plan is to delineate the urban footprint and the corridors of development growth. Through the use of maps, large tracts of land (green-space) that may have been secured for private speculation are unable to be developed. The importance of regional mapping has assisted various players in deciding their future needs and goals.

The Future in Mapping...

In Brisbane, a bomb threat in November 2005 caused mass transit problems and logistical problems for emergency services. Also in 2005, state and local governments joined forces to provide a seamless approach to provide a common platform and data exchange of mapping data to combat a natural disaster or terrorism threat. The number of international terror incidents has increased from 1272 in 1998 to 3991 in 2005. Governments are responding to potential threats to ensure they are prepared for such an event. Rather than responding to potential threats, the long-term solution is to eliminate the threat. This may, for example track the flight patterns of birds to limit the dispersion from affected areas. One solution suggested by Jack Dangermond to reduce terror attacks from religious fundamentalists is to engage people of all nations through culture exchange – a propaganda campaign if you like. The integration of western ideals from people who studied in Australia under the Colombo Plan in the 1950-70's was successful. To introduce one political thought into this article, the current form of foreign aid needs to be evaluated more rigorously.

Whether mapping is used to disperse limited bird flu vaccines to infected communities or for locking down areas to limit the spread of infection. Terror and evacuation mapping projects is the next era in major mapping projects. The advent of the Hurricane Katrina in the United States, 9-11 attacks, London bombings, SARS and the avian bird flu have brought hazard mapping to a new level. The threat of disease, mass migration, border closures and economic fallout associated with a global impact requires deserved attention. Ultimately, people are demanding timely and effective response to a natural or human caused disaster.

Closing Remarks

There are numerous elements that need to be considered to counter threats that exist either at the local, regional or international level. The risks as highlighted above can be based on natural terrain issues, from population growth or terrorism. This article has briefly touched on the impacts of natural hazards and how they can be mapped appropriately. Mapping is but one component in a risk management study, however is integral in ensuring that information supplied for evaluation and formulation of identification of risks, mitigation measures and strategic plans. The formalised and systematic process of GIS provides an accurate and

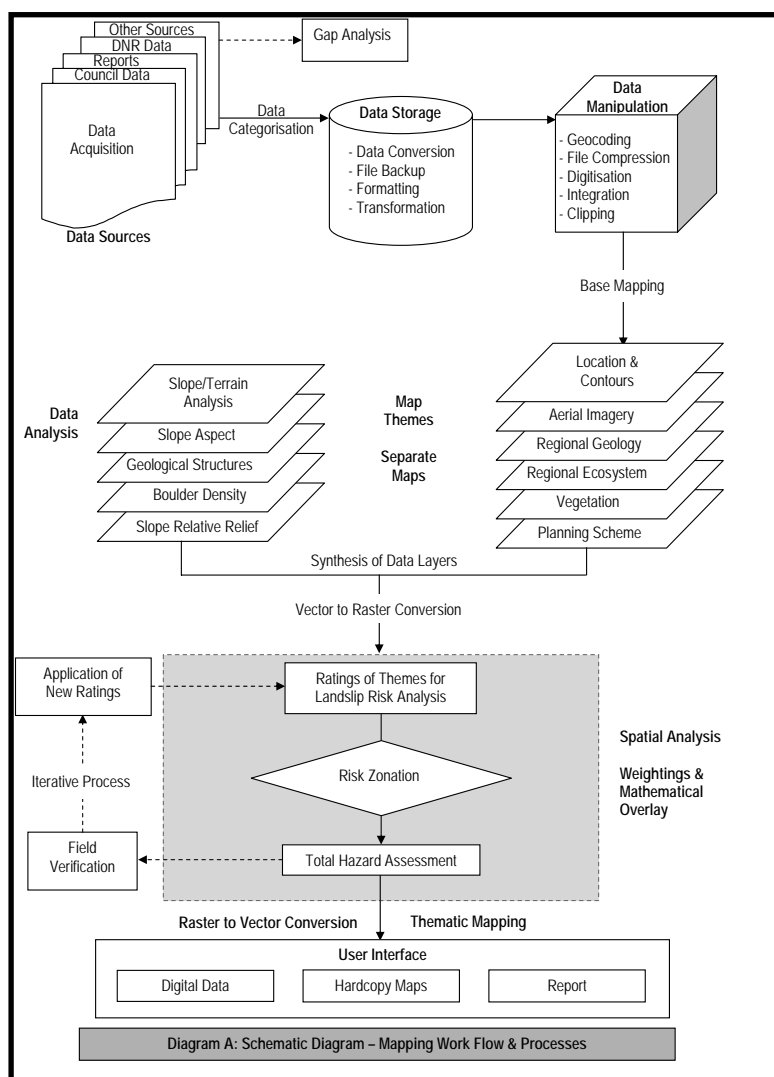
This is the transcript of the ACTUAL radio conversation between a US Naval ship and the Canadians, off the coast of Newfoundland, Oct 1995 that was released by the Chief of Naval Operations 10-10-1995.

Canadians: Please divert your course 15 degrees to the South, to avoid collision.

Americans: Recommend you divert your course 15 degrees to the North, to avoid collision.

Canadians: Negative. You will have to divert your course 15 degrees to the South to avoid collision.

Americans: This is the Captain of a US Navy ship. I say again, divert your course.



quantifiable approach to risk assessment. Mapping is and should continue in being a significant part of any risk study.

References

Office of Urban Management, (2005) *The SEQ Regional Plan: Building a better future for South East Queensland*, Queensland Government Office of Urban Management, Brisbane.

Departments of Local Government and Planning and Emergency Services, (2003) *State Planning Policy 1/03 Guideline: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (SPP 1/03 Guideline)*, Queensland Department of Emergency Services, Brisbane.

Canadians: Negative. I say again, You will have to divert your course.

Americans: WE ARE THE AIRCRAFT CARRIER USS LINCOLN, THE SECOND LARGEST SHIP IN THE UNITED STATES ATLANTIC FLEET; WE ARE ACCOMPANIED BY THREE DESTROYERS, THREE CRUISERS, AND NUMEROUS SUPPORT VESSELS. I DEMAND THAT YOU CHANGE YOUR COURSE 15 DEGREES NORTH, I SAY AGAIN, THAT'S 15 DEGREES NORTH, OR COUNTER MEASURES WILL BE UNDERTAKEN TO ENSURE THE SAFETY OF THIS SHIP.

Canadians: We are a lighthouse. Your call.

Humour

THE HISTORY OF SURVEYING AND MAPPING IN QUEENSLAND – A VIRTUAL MUSEUM

www.nrm.qld.gov.au/museum/index.html

The Department of Natural Resources, Mines and Water determined that there was a need to correlate and publicly showcase the valuable historical information resource currently contained within the department's Museum of Lands Surveying and Mapping.

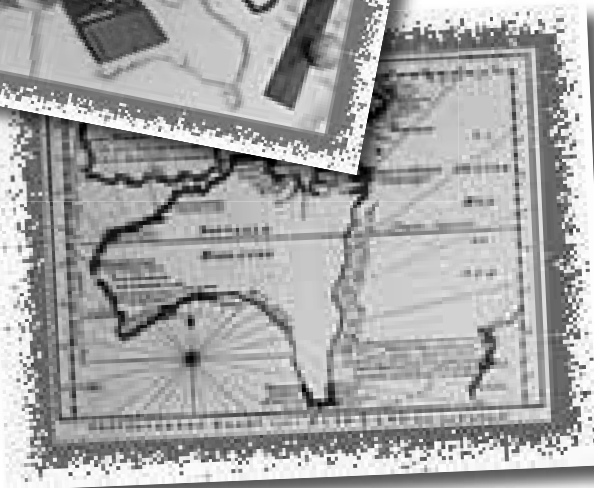
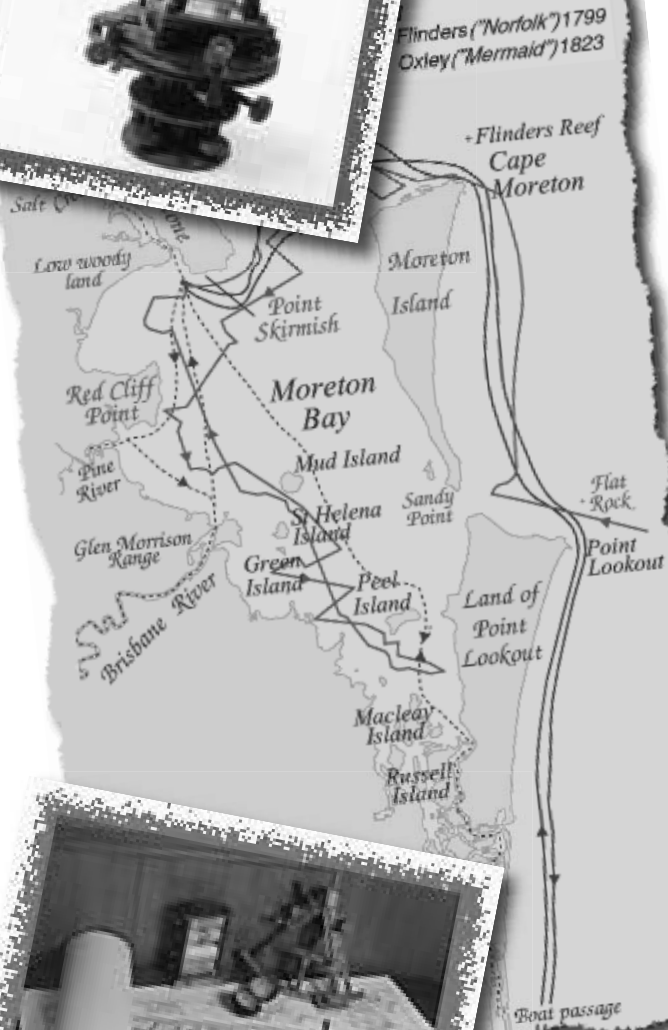
Facts, anecdotes and images have been pulled together from numerous sources, and are presented as web pages appended to the departmental site. Navigation of the content is by way of a timeline structure depicting Queensland mapping and surveying history from the early 1800's and described as story themes within predefined 'time blocks' or eras. Access is also available to the themed chapters as complete articles.

To perceive a sense of time relativity, the visitor can view pages of general world and local events that made headlines at the time.

Themes include early mapping of Australia, life as a surveyor, progression of the various mapping strains, aboriginal cartography, place names, instruments used, printing procedures and many more. Animations of Queensland settlement expansion and the formation of Australian States are viewable.

The site is expected to capture an audience from the education sector and also from individuals and groups interested in the history of how surveying and mapping played their part in forging the progress of Queensland. New information will be periodically added to the site in an attempt to exhibit a more complete picture of the fascinating past of our forebears.

The site is now published and viewable at <http://www.nrm.qld.gov.au/museum/index.html>



Natural Earth

World physical map at 1.24 km resolution
www.shadedrelief.com/natural

Introducing Natural Earth

I created Natural Earth as a mapping resource for the US National Park Service (NPS). The 388 parks in the NPS System span a wide expanse of Earth's surface - 11 time zones in all - from the Caribbean to arctic Alaska to the South Pacific. The aim of Natural Earth is to show the parks not as isolated places but in an interconnected context on a world map with major environmental zones.

Made primarily from data and imagery collected by NASA satellites and graphically enhanced by the NPS, Natural Earth is a base for general mapmaking. The combination of shaded relief and landcover colors brings the physical world to life and encourages readers to explore. You are invited to visit the gallery, download and print the poster image, and download the high-resolution data for making maps of your own.

Tom Patterson
US National Park Service
Harpers Ferry Center

Features - designed for cartography

FREE – Natural Earth derives from multiple data sources, all of which are in the public domain. Use it however you wish.

High-resolution – The dimensions of Natural Earth in pixels measure 32,400 wide x 16,200 high. Each pixel on the map represents 1.24 km (0.77mi) on the surface of Earth at 40-arc-second resolution. It is suitable for small-scale mapping of Earth's entirety or of continent-sized areas.

Map projection – The map extends from 180 degrees West to 180 degrees East longitude and 90 degrees North to 90 degrees South latitude and uses the plate carrée (geographic) projection, the standard format for delivering raster geodata. A World File (.tfw) and projection and datum information accompany all downloads of Natural Earth. You can easily georeference and then reproject Natural Earth, or cropped sections of it, to any other map projection.

Shaded relief – Natural Earth is available with or without embedded shaded relief.

Water layer – Download Natural Earth with or without embedded water bodies and drainages. The water layer also is available as a separate download. Use the provided water layer or swap in one of your own.

Shoreline buffering – Landcover data extend offshore for 20 kilometers into oceans and seas. Interpolated landcover data also fill in the voids behind all lakes, including the Aral Sea. You can use Natural Earth with highly generalized coastlines obtained from other sources and still maintain leak-proof land/water registration.

Natural color – Based on the palette developed by the late Hal Shelton of the USGS,

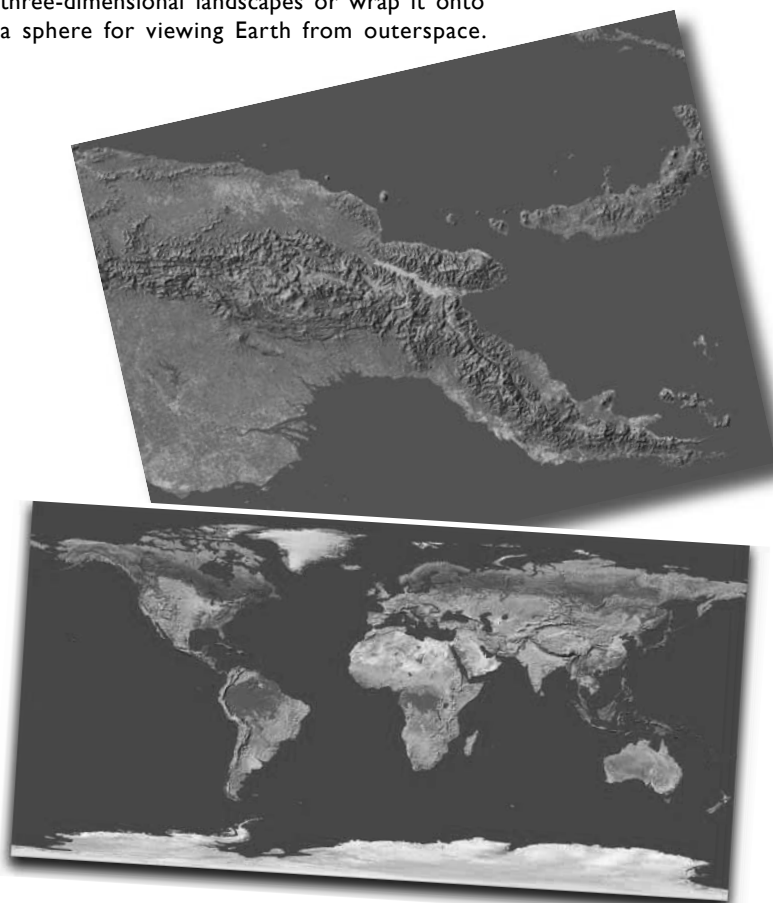


map colors mimic those found in the natural world, making it easier for readers to identify environmental zones - even without a legend. The light background colors are receptive for displaying type, linework, and other map elements.

Extras – Accessorize Natural Earth with supplemental overlays, including urban areas, international boundaries, Antarctic ice shelves, and arctic multi-year pack ice.

3D applications – Use Natural Earth with a Digital Elevation Model (DEM) to create three-dimensional landscapes or wrap it onto a sphere for viewing Earth from outerspace.

***“Natural Earth
derives from
multiple data
sources, all of
which are in the
public domain.
Use it however
you wish”***



BOOK REVIEW & COMMENTARY

"Unknown Lands: The Log Book"

Bellec, Francois (2002) South Yarra: Hardie Grant Books. [Hardcover, 250 x 345mm, 216 pages ISBN: 1 74064 072 1, RRP AU\$80]

by Adam Ladhams

"A consistent theme as with similar books is the savagery of the locals, the demons of sea and land and the dangers of the open seas . . "

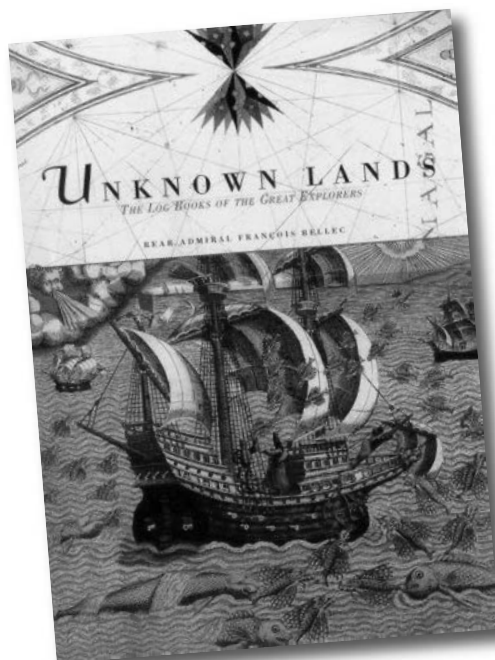
The content extends from the usual exploration text into a fascinating account of the explorers, fellow colleagues and local inhabitants of the places that are visited and/or conquered. The author Bellec, recounts the experiences from the eyes and pen of many a person, in which each story is seldom consistent with other witnesses. What has been left off in some other publications transpires in this book. A consistent theme as with similar books is the savagery of the locals, the demons of sea and land and the dangers of the open seas is recounted with consequential tragedy.

The book is abound with magnificent colour sketches and drawings, many of which are unique and in full-page detail. Of particular interest to local historian buffs is the inclusion of various drawings of Australia, New Zealand and Pacific Islands. The types of drawings used in this book would most definitely reside (and if not, be on the requested list) in Kerry Stokes collection of original prints, paintings and books. The book covers over five centuries and provides the account of Vasco de Gamma, Christopher Columbus, Ferdinand Magellan and Captain James Cook, amongst a myriad of explorers. Furthermore, Bellec evaluates the pursuits for new trading lands, religious imposition, discovery of precious metals and spices, slavery and general navigation.

The use of various equipment is intriguing, the culture of the world's people will astound and exploitation of words will entertain the mind. The log extracts are often replicated verbatim and limited commentary is entered into, limiting the research quality of the publication. One misgiving however is that the book lacks a chronological history that is assumed standard in exploration publications, however is rather an anthology of drawings, scarce maps and sketches.

Whilst the book lacks some structure to the arrangement of the content, the rating is deservedly receives a 4 out of 5. This book was recently purchased perchance at an annual book sale at a major department store, and is available "where all good books are sold. This book is the ideal publication for the coffee table or as a prized collection of your private library

Rating 4 out of 5.



"The use of various equipment is intriguing, the culture of the world's people will astound and exploitation of words will entertain the mind."

CONFERENCES

BRISBANE

July 3 - 7, 2006

IGU 2006 Regional Conference

www.igu2006.org

WOLLONGONG - SYDNEY

July 13 - 17, 2006

CoastGIS 06

www.coastgis.org

SURFERS PARADISE

July 18 - 21, 2006

IGNSS 2006

www.ignss.org

See page 6 for details

DARWIN

August 23 - 25, 2006

MSIA Conference

"400 Years of Mapping Australia"

menzies2@bigpond.net.au

SINGAPORE

November 14 - 17, 2006

IMTA International Global Conference

www.maptrade.org.au

GITA Events:

New Zealand, Darwin

Florida, Brisbane

Professorial Appointments

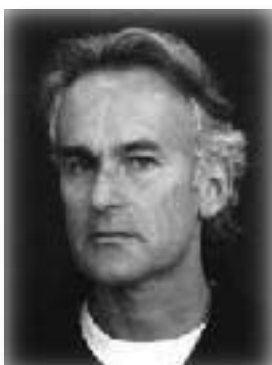


Graciela Metternicht

Last December Dr Graciela Metternicht, of the Department of Spatial Sciences, Curtin University of Technology was promoted to Professor of Geospatial Science (personal chair). Dr Metternicht joined the Department in 1996, after completing a PhD in Physical Geography (summa cum laude) at the University of Ghent in Belgium, and since that time has developed national and international leadership in Remote Sensing, Cartography and Geographic Information Science, with thematic applications largely focused on land degradation and agriculture.

Over the last 9 years Graciela has established successful alliances and partnerships with Australian industry, national and international government agencies, and research institutes. She has generated \$3,000,000 of research funding during the period 1997-2004 through national and international competitive grants, enabling the conduction of independent and collaborative problem-oriented research, which often involves doctoral and master students as research partners. She is one of the leading contributors to the research output of the Department of Spatial Science, and has developed international standing and professional leadership resulting in invitations as Guest Professor and visiting scientist of European, Japanese, Chinese and African Universities and Research Institutes; membership to editorial boards of international journals in GeoSpatial Sciences; appointment as Editor of the International Cartographic Association Newsletter; as well as acting chair of the Commission on Cartography from Satellite Imagery of the same association.

Graciela is one of few women working as full-time academic at University level in Geospatial sciences, considered a non traditional area of work and study for women in Australia, and with high involvement in international activities. Since 2001 Graciela has been coordinating all postgraduate activities by coursework offered by the Department of Spatial Science, being instrumental in the creation of the new Master of Professional GIS. Currently she is leading four research projects funded by the CRC for Spatial Information, the Australian Research Council and the State Government of Sarawak



William Cartwright

William Cartwright is Professor of Cartography and Geographical Visualization in the School of Mathematical and Geospatial Sciences at RMIT University, Melbourne, where he specialises in the application of New Media technologies to Cartography. He joined the University in 1979, after spending a number of years in both the government and private sectors of the mapping industry.

He holds a Doctor of Philosophy, Doctor of Education, Bachelor of Applied Science in Cartography, Diploma of Applied Science in Cartography, Graduate Diploma in Education (Tertiary), Graduate Diploma in Media Studies, Graduate Diploma in Information & Communications Technology Education and a Graduate Diploma in Graphic Communication Education.

His research and development activities have been widely disseminated in over 200 academic publications, conference presentations and keynote addresses. His research in the area of multimedia cartography was formalised with his role as lead author in *Multimedia Cartography* (Springer-Verlag), which brought together theory and praxis of the application of multimedia to cartography. A second edition of *Multimedia Cartography* and a companion book, *On-line Cartography*, is under development.

He is the Vice-President of the *International Cartographic Association*, Chair of Working Group 5 – Communication and Visualization of Spatial Data, Technical Commission II, the *International Society for Photogrammetry and Remote Sensing* and National Councillor and International Programs Manager for the *Mapping Sciences Institute, Australia*. He is a Hon. Fellow of the Mapping Sciences Institute, Australia, a Fellow of the Royal Geographical Society, a Fellow of the British Cartographic Society and a Hon. Fellow of the Spatial Sciences Institute. He is a member of three Editorial Boards of internationally recognised journals: *The Cartographic Journal*; *Transactions in GIS*; and *Cartographica*. He is also a Member of the Advisory Panel and a contributor to *The History of Cartography Project, Vol. 6*, an international project documenting the history of the discipline, with the University of Chicago Press.

“Graciela is one of few women working as full-time academic at University level in Geospatial sciences . .”

“. . (Bill) is the Vice-President of the International Cartographic Association, Chair of Working Group 5 – Communication and Visualization of Spatial Data, Technical Commission II . .”

The Newsletter Story

As far as we know, our first national newsletter was issued in June, 1954. It was titled "The Australian Institute of Cartographers Australian Newsletter" and it had the stated aim "... to keep members abreast with the activities of the Institute in Australia." However, this was not the first known publication of the AIC. This distinction goes to the first [and only] edition of the journal, "Graticule" produced by the New South Wales Division in May 1954. We also know that later that year, the national body published the first edition of its technical journal, "Cartography". It is also noteworthy, that the Institute of Cartographers Western Australia published its first "Cartographers' Bulletin" in November 1955.

Although from its beginning, "Cartography" included a small Bulletin section dealing with national news items, the major component comprised technical articles. Thus, reporting of local news largely fell to the Divisions. This role seems to have been taken up with considerable enthusiasm so that as soon as they became established, Divisions kept their members apprised of activities through regular newsletters. Much individuality was displayed in the naming and designing of these publications, some of which have survived to this day. New South Wales, for example, adopted the name "CartoCourier", while Queensland opted for "Scribeshet". Late in the piece, a competition was conducted to decide which Division was producing the "best" newsletter and I seem to remember that the Northern Territory won hands down.

The Council of the Institute always placed great score on communicating with members at national level and persisted with the bulletin section of "Cartography". Indeed, an attempt was made to give greater breadth and depth to its content by appointing a "Bulletin Correspondent" in each of the Divisions. This system worked well for a time, but proved difficult to coordinate and gradually fizzled out. Then we introduced the concept of distributing Annual Reports to the membership. This too was short-lived, and in 1995 we turned full-circle and resorted to the original idea of producing periodic national newsletters.

The first editor was David Taylor [Bathurst] who was then the Manager of the Marketing Program. David's effort was well received and we have continued with more or less the same format until the present time. Editors/compiler have included Graham Baker, Greg Heron, Peter Bowen, Andrew O'Dempsey, Alan Unkles, John McCormack and Mark Reed. During the past decade we have managed to roll out 16 editions which falls considerably short of our original intention. However, given the decimation of the Divisions in the wake of the 2003 tsunami and the consequent demise of most local newsletters, the national newsletter is playing a more important role than ever.

An informal "editorial board" comprises Greg Heron [editor/compiler] John McCormack [printing and distribution] and Keith Smith [responsible for harassing potential authors]. We are grateful to our numerous contributors and would welcome others to join them. Our aim remains as it was in 1954: "To keep members abreast of activities of the Institute".

"it had the stated aim '... to keep members abreast with the activities of the Institute in Australia."

"We are grateful to our numerous contributors and would welcome others to join them"



Humour

Have you heard about the Two Duck Hunters from Wisconsin? Heard on a Wisconsin Radio Station Reporting on the Incident

A guy buys a new Lincoln Navigator for \$42,500.00 (with monthly payments of \$560.00). He and a friend go duck hunting in mid-winter; and of course all of the lakes are frozen. These two guys go on a lake with their GUNS, a DOG, and of course the new NAVIGATOR. They decide they want to make a natural looking water area for the ducks, something for the decoys to float on. Now making a hole in the ice large enough to invite a passing duck, is going to take a little more power than the average drill auger can produce. So, out of the back of the new Navigator comes a stick of dynamite with a short 40 second-fuse. Now our two Rocket Scientists afraid they might slip on the ice while trying to run away after lighting the fuse (and becoming toast, along with the Navigator), decide on the following course of action: they light the 40 second fuse; then, with a mighty thrust, they throw the stick of dynamite as far away as possible.

Remember a couple of paragraphs back when I mentioned the NAVIGATOR, the GUNS, and the DOG. Let's talk about the dog: A highly trained Black Lab used for RETRIEVING. Especially things thrown by the owner. You guessed it: the dog takes off across the ice and grabs the stick of dynamite with the burning 40-second fuse, just as it hits the ice

The two men swallow, blink, start waving their arms and, with veins in their necks swelling to resemble stalks of rhubarb scream and holler at the dog to stop. The dog, now apparently cheered on by his master, keeps coming. One hunter panics, grabs the shotgun and shoots the dog. The shotgun is loaded with #8 bird shot, hardly big enough to stop a Black Lab. The dog stops for a moment, slightly confused then continues on. Another shot, and this time the dog, still standing becomes really confused and of course terrified, thinks these two geniuses have gone insane. The dog takes off to find cover, under the brand new Navigator. The men continue to scream as they run. The red hot exhaust pipe on the truck touches the dogs rear end, he yelps, drops the dynamite under the truck and takes off after his master.

Then "BOOOOOOOOOOOOM" ! the truck is blown to bits and sinks to the bottom of the lake, leaving the two idiots standing there with "I can't believe this just happened" looks on their faces.

The insurance company says that sinking a vehicle in a lake by illegal use of explosives is NOT COVERED by the policy... And he still had yet to make the first of those monthly \$560 payments...The dog is okay...

Awards

Meridian Maps - Australia Wall Map

The winner of the ICA's Mapping Excellence Award in 2005, the Avenza 2004 MAPublisher Awards, and runner-up in the IMTA's Best Sheet Map Awards 2004, the Meridian Maps Australia Wall Map is a unique map of Australia highlighting both topographic and bathymetric terrain, country comparison and territory maps, time zones, temperature and rainfall graphs, as well as many other features.

Meridian Maps was started as Meridian Productions in 1999 by Simon Spivak and Craig Molyneux, two former RMIT Cartography graduates. Craig and Simon realized that there was a lack of quality mapping available across Victoria, and with their experience in cartography and sales & marketing, coupled with their mutual love of bush walking, they could produce what the market needed.

Meridian Maps now has 17 products across 6 ranges of maps including walking maps, 4WD Maps, Regional Maps, State Maps and National Maps. Meridian Maps has been recognised for its easy to read, up to date, well designed and functional maps with multiple awards from the International Map Trade Association (Asia Pacific Region), and in the Avenza MAPublisher Awards for its Australia Wall Map, South East Australia Wall Map and Otways 4WD Map. Meridian Maps continues to grow its range of products, building its reputation as one of Australia's finest boutique map publishers.

Other notable awards

Tasmania Wall Map

The Tasmania Wall Map won the Avenza 2005 MAPublisher Award for General Purpose Mapping. The map is the first to cover the entirety of Tasmania's territory in correct geographical position on a single sheet.

The Otways 4WD Map

This popular map, won the Avenza 2004 MAPublisher Award for Best Topographic Map is the ideal 4WD and touring travel companion...

Adelaide-Melbourne Touring Map

This new guide to one of Australia's busiest touring routes won the 2005 IMTA Best Sheet Map Awards.

South-East Australia Wall Map

For the first time a map of south-east Australia which covers the Adelaide-Sydney corner in suitable detail for use by business and tourist alike. Award Winning Website

Website

Meridian Maps website won the IMTA's Asia Pacific Best Website Award for 2005 with its innovative and easy to access website. Designed for the retailer, map enthusiast and end-user the website is easy to navigate and clear of unnecessary information.

<http://www.meridianmaps.com.au/>



International Cartographic Association Vice President Bill Cartwright presents Simon Spivak and Craig Molyneux with the ICA 2005 Mapping Excellence Award.

Long Live(d) Cartography

One of our senior members was among those whose work was displayed in the International Map Exhibition of the XXII International Cartographic Conference, held July 9-16, 2005, in the City of A Coruña, Spain.

Les Isdale has continued mapmaking, after retirement in 1988 from what is now the Queensland Department of Natural Resources and Mines. He uses an Apple iMac with Adobe Photoshop and MacroMedia Freehand.

Two small maps from two history publications by Queensland authors were accepted as maps from 'independent' cartographers. The maps were:

1. Map No. 2 India and South-east Asia is one of five maps provided for the publication 'The Fell Tyrant, or the Suffering Convict', edited and annotated by Jennifer Harrison and J.G. Steele, Royal Historical Society of Queensland 2003.

2. Leichhardt's Monumental Expedition is one of four maps provided for the publication 'Up the Palmerston, a history of the Cairns hinterland up to 1920 Vol. I', Mike Rimmer, published by the author 2004 (email to Mike Rimmer, mikerimmer43@hotmail.com).

Computer graphics seems almost too easy to cartographers of Les's generation, producing with great simplicity and accuracy maps which would have involved much time and effort using pen and ink. He finds it very satisfying to have control of every stage of production, with tools and resources immediately available - and always the challenge of discovering new techniques from the huge range offered by the software. Transmitting drafts and images by email makes it all so simple.

Les has continued his interest in Institute affairs, with invitations to contribute to technical seminars. But travel in Australia, and a few offshore trips, have given him plenty of incentive for photography and image manipulation. Otherwise, he keeps busy with duty as a Volunteer Guide at the City Botanical Gardens, Brisbane, with a Mac computer club, and with three energetic grandsons.



Les Isdale

Fellow of the Royal Geographical Society Queensland, and a Life Fellow of the Mapping Sciences Institute of Australia.

Mapping Sciences Institute, Australia

www.mappingsciences.org.au

National Secretary: msiau@gil.com.au - GPO Box 1817, Brisbane, Queensland, 4001, Australia

"The mapping sciences are those disciplines that deal with the acquisition, management and communication of geospatial information. The Mapping Sciences Institute, Australia promotes the theory, practice and understanding of all facets of the mapping sciences".

NATIONAL OFFICE-BEARERS

President - Peter Shaw [WA], **President-elect** - Vacant,
Executive Chair - Ron Furness [NSW], **Past President** - John Mc Cormack [Q]
Secretary - Keith Smith [Q] **Treasurer** - Alan Armitage [Q]
Councillors - David Adams & William Cartwright **Victoria/Tasmania**
 Colin Mitford & Michael Turner **New South Wales**
 Greg Heron & Trevor Menzies **Northern Territory**
 Adam Ladhams and Alan Unkles **Queensland**
 Ric Mahoney and Graeme Wright **Western Australia**

PUBLICATIONS

The journal "SPATIAL SCIENCE" is published in June and December in cooperation with the Spatial Sciences Institute. The Editor-in-Chief is Dr. Graeme Wright [WA].

"MAPPING SCIENCES NATIONAL" is a newsletter issued three times a year.

Editor is Greg Heron [NT] gph@octa4.net.au

DIVISIONAL ADDRESSES

New South Wales: GPO BOX 4365, SYDNEY 2001

Bathurst Group: PO BOX 370 BATHURST 2795

Northern Territory: GPO BOX 3693 DARWIN 0801

Queensland: GPO BOX 1817, BRISBANE 4001

Victoria/Tasmania: GPO BOX 1155K MELBOURNE 3001

Western Australia: GPO BOX H592 PERTH 6001

Members in the **Australian Capital City** and **South Australia** are administered by the National Administration Group – MSIA, GPO BOX 1817, BRISBANE 4001.

Contact: John McCormack - johnmack@vti.com.au

INTERNATIONAL AFFILIATION

MSIA is affiliated with the International Cartographic Association [www.icaci.org]. Dr. William Cartwright is a vice president and Graciela Metternicht is the editor of "ICA News".

ICA Commission participants:

David Fraser **Education**; Dorothy Prescott **History**; Abbas Rajabifard **Standards**;
 Ron Furness **Marine Cartography**; Bill Cartwright **Geographic Visualisation & Virtual Landscapes** and **Maps & the Internet**



ABN 53 004 301 811

ACN 004 301 811

www.mappingsciences.org.au

400 Years of Mapping Australia

Darwin Conference - 23 to 25 August 2006

Visit www.mappingsciences.org.au

or contact Trevor Menzies at menzies2@bigpond.net.au

